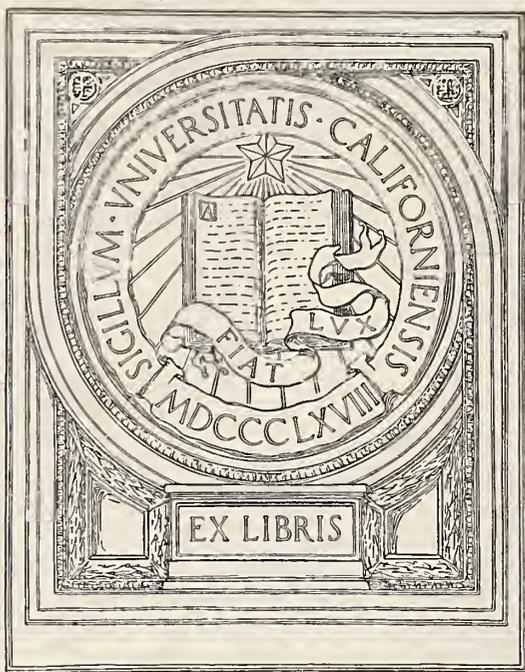


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NEW ORLEANS
MEDICAL AND SURGICAL
JOURNAL

VOLUME EIGHTY-SIX

JULY, 1933

to

JUNE, 1934

(INCLUSIVE)

Louisiana Printing Company



921 Lafayette Street N. O., La.

NEW ORLEANS
Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society
under the jurisdiction of the following named
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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

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JULY, 1933

No. 1

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J. M. ACKER, JR., M. D.

ABERDEEN, MISS.

One of the salient points made by the Commission on Medical Education organized in 1925 by the Association of American Medical Colleges was as follows: "Emphasis must be kept constantly upon the fact that only through a sufficient number of properly trained physicians can a community expect to meet its responsibilities for the care and prevention of illness and the protection of health." In my humble judgment, no community can expect to meet its responsibilities in the care and prevention of illness without both the properly trained physician and the well organized and equipped hospital. What I have to say tonight relates especially to the smaller towns of Mississippi with their large rural territory and not to the few cities or industrial centers. Our state is largely rural and it is to these sections with the small towns of from 1500 to 6000 inhabitants that I wish to call your attention. Each one of these small towns has an outside population of from ten to thirty thousand people who are deserving of hospital care when the occasion arises. In many of these sections there are small privately owned hospitals and in a few there are community, county or municipally owned institutions. These privately owned hospitals have, and still are, doing a wonderful work. They have taken care of their respective territories and in many instances, the owners thereof have suffered severe financial reverses. In my opinion there are few owners of hospitals in the smaller towns who would not gladly give up their hospitals if they could have free and easy access to a well equipped and well-staffed community

institution. The only justification for individual doctor's ownership of small hospitals in small towns lies in the fact that the conscientious, reliable and ambitious doctor must have a place in which he can give his patient, rich or poor, medically or surgically, the best possible service. Since this service cannot be obtained outside the hospital, it becomes necessary that the doctor build, equip and operate his own small hospital. Many are his sacrifices in order that his community may receive the benefits of modern medicine and surgery. How much better it would be if every community or every county could have a hospital to which all the doctors might carry their patients, giving them the advantages of modern treatment at a price that the man of moderate means could afford. These privately owned hospitals, as a rule, are closed institutions, that is, they are not open to other doctors of the community, especially if the other doctors happen to be in the same line of work as the owner. Can you blame them, since the owner has a hard enough time supporting his own hospital in order to meet his own individual responsibilities? As said before, my observations relate especially to the smaller towns with large territories and not to the Mississippi cities. Neither would it apply to any locality, if any there be, where the privately owned institutions are "balancing the budget", and all the doctors as well as the public are satisfied.

A community hospital is an open institution that can provide such diagnostic and treatment services as the majority of doctors in their individual capacities can neither well afford nor conveniently use, and so to attract, hold and develop a medical profession that will serve efficiently not only the few patients confined in

the hospital but the many patients in the community at large. It is only when a hospital exercises its full influence in the development of an efficient medical service that it ceases to be a building for the care of a few sick people, for a few certain doctors, and becomes an important factor in the life of the whole community. In the achievement of this larger purpose two considerations are paramount. The first consideration is that diagnosis is primary to treatment. Therefore the hospital should furnish and encourage the use of diagnostic facilities and service not only for the patients in the hospital but for the sick of the entire community. This will mean a well arranged, equipped and organized outpatient department, properly related to the diagnostic equipment and service of the hospital. Such an outpatient department would encourage the local doctors to use it both for their outpatients and inpatients and through the interest of these physicians thus acquired would serve to maintain a normal occupancy of hospital beds with normal per capita per day cost to patients. The second consideration in the planning of a community hospital is that it shall meet the general needs of the medical profession as a whole and not be designed to meet the particular needs of certain men. The interest alone of the internist, the laboratory worker, the roentgen ray specialist, the surgeon, or the obstetrician, should not be over emphasized. Neither should it be designed and built solely for the doctors of any certain generation. The coming generation of doctors should be thought of, for truly the community hospital should stand and function long after the present generation has passed to the Great Beyond.

Sickness surveys carried out by thoroughly trustworthy agencies have found that from two to three per cent of the population are sick all of the time. This means that from twenty to thirty persons in every one thousand are in bed every day in the year. Of these, it has been found that from 5 to 20 per cent, an average of 10 per cent, are so seriously ill as to need hospital care. To illustrate, if the above rates are applied to a county of 30,000 people, they indicate a bed-ridden illness of from 600 to 900 people daily, that is, a daily average of 750 cases

of sickness. Of these, 10 per cent, or 75, constitute the ones who really need hospital treatment. Of these seventy-five people who are sick, taking a north Mississippi county as a fair example, probably 15 of them are well able to pay for their medical services, 45 belong to the class of moderate means, and 15 come under the head of charity cases. Since the rich can take care of themselves and the poor have always been taken care of, both by the doctors and the private hospitals, even through a period in Mississippi when the small private hospital received no state aid, it is the patient of moderate means that concerns us most. The hospital not only saves the time of the doctor but it saves the money of the town as well as of the rural patient. Take for instance either the urban or rural patient who is sick enough to be in a hospital. If he stays at home, he should be under the care of a nurse and the doctor, feeling the responsibility of his patient's life, makes an increased number of visits per day. Both the nurse and the extra visits call for more expense. If this same patient were entered in the hospital, in the majority of cases, the nursing could be carried on intelligently by the graduate or even the student nurse, and the doctor would be required to make fewer visits. This saving of money in nursing and doctor's visits per day would double what a room in a well managed hospital would cost. This applies to the urban patient but is especially true of patients who live at some distance from their doctor and are not only charged the regular fee for professional visits, but frequently enough, extra mileage to more than pay for their hospital care. To illustrate, a patient living six to eight miles in the country, and that distance removed from his physician, is charged in addition to the professional fee for the visit, a mileage fee of \$1.00 per mile, one way, or a total mileage cost for each visit of from \$6 to \$8. Mind you, I am speaking of what happens in normal times and what we as doctors are really earning and supposed to realize. One readily sees what a hardship this would be on the patient of moderate means, for the extra mileage cost per day would take care of from two to three days in the hospital. The doctor can assemble his patients in a hospital where in a few hours he can

treat under more favorable conditions as many patients as would require his attention in a full day, especially if they were scattered widely around town and over rural territory, and for one-third as much money to the patient.

Another observation from the report of the Commission on Medical Education is, "There are more physicians in the United States than are needed to provide adequate medical service for the country." This is probably true since valuable data indicates that proper medical service can be provided on the basis of one active physician to from one thousand to twelve hundred persons. If it is true, the present number of physicians exceeds the need by at least 25,000. I am of the belief, however, that the number of thoroughly qualified physicians is, and always will remain insufficient. It is known positively that there is an oversupply of physicians in the cities, whereas in some parts of the country districts there is a marked relative shortage. The development and support of better central facilities for medical and surgical practice in the smaller communities will be the most outstanding factor in correcting this uneven distribution. The average young man after finishing his medical education and internship, is ready and anxious for work. Equally true, is the fact that he is short of funds. His first idea is to locate where he can pursue his life's work intelligently and to a fair degree remuneratively. Can he do these things in the country if he is an internist, surgeon, laboratory man, pediatrician, obstetrician or what not without the numerous aids of today in medical practice, as hospitals, laboratory, roentgen ray and the like? The answer is—NO. The ambitious young man must have these things and without funds, unless he is fortunate enough to form an association with some well established poor hospital owner, he goes to the city adding one more personage to the already overcrowded city medical profession. How can such a thing be prevented? The community hospital, open to all ethical and competent men, will induce the young man to settle in the smaller town. As said by no less person than Dr. John Osborn Polak, "The community hospital is the solution of modern medicine for the rural district."

small towns, where neither the medical profession nor the public have become accustomed to the use of a local hospital, that the demand for hospital beds will be in excess of one third of the estimated number of hospital cases, from two to three per 1,000 persons. This would mean that the other two thirds of the hospital cases would continue, for a time at least, and this happens everywhere, to go elsewhere for hospital care. If this reasoning is sound, then an average rural county that never had a hospital could very reasonably build its hospital providing one bed per one thousand persons. This would mean a 30 bed hospital for a county or community institution serving thirty thousand people.

The next thing to consider in your community hospital ideas is the ways and means of providing this thirty bed hospital. There are several ways that the hospital may be built and as each community is guided solely by its own individual circumstances, I shall only mention several different schemes. First, some wealthy person, feeling his obligation to his community and believing that a hospital would be the kindest expression of gratitude, sets aside a certain amount of money and builds for his town or community a hospital. That is, of course, the ideal solution and if this same person would endow the hospital for a certain amount, it would be still better. Second, it may be built by public spirited individuals banding themselves together as a nucleus and building the structure by means of public donations or subscriptions. Third, it may be built by some religious, philanthropic or charity organization, and fourth, it may be done by a county or municipal bond issue. During the present time, at least, this last way, I fear, would be unpopular. Nevertheless, any community hospital is worth the money. I am a great believer in an equal distribution of responsibility when it comes to community obligations,—everybody's hospital, everybody sharing in the payment for same. As to the cost of building and equipment, it can be made to cost anywhere from \$45,000 up. In basing my estimate, I have in mind the average fully equipped thirty bed institution and am striking an average from a number of small hospitals; the same size that has been built in

It is not likely in the rural communities and

this and other states at a total cost of from \$1,400 to \$2,100 per bed.

As a State Medical Society, we are, I believe, striving to give all of the people of the state the best medical service possible under prevailing conditions and to do it so that as a whole they like and approve our endeavors. In preparing our young men for medical service, we all know that a full medical course, better followed by an internship, is absolutely necessary. Up to the present time, we seem to have lost sight of the fact that unless the young physician has a wealthy father, or father-in-law, he cannot equip himself to practice scientifically, so he must locate near a hospital or associate himself with an established physician or group of physicians. These well-established physicians are not always ready to share their practice and influence with the younger men and as a rule they are not located in the smaller communities. If you wish to have rural and small town physicians be what you desire them to be, they must have places in which to do their work. The answer to all these requirements is the community hospital. To my mind, without a doubt, there is a definite field for the small community hospital. I admit there are obstacles in the path of its establishment and operation. First, the building and necessary modern equipment; this is a real problem, but the public recognizes the situation and, if properly approached, can be induced to carry a considerable part of this initial outlay. It is far easier to get donations to establish, build and equip hospitals than it is to get financial aid to operate one. The real burden on the hospital is not the regular cost of operation or the necessary expense but the care of people who cannot pay and those who will not pay. This brings me down to the greatest argument in favor of the community hospital. To me, it is absolutely unjust to add to the hospital expense of the provident patient a certain percentage to take care of his improvident neighbor. If the poor must have help, let the burden fall on the people as a whole. Heretofore, it has fallen directly on the physician or physicians sponsoring the small community institution.

It has been said that we have three classes of people; the rich, the poor and those who still

have their tonsils. The ones who still have their tonsils, I presume, are the people of moderate means. These, and the poorer classes are the ones that are giving the small town hospitals the most concern. I do not know the origin of this community hospital idea, but I suspect it was an evolutionary result of those same forces that caused the first hospital to be created, being a natural consequence of the increasing need for, and appreciation of, hospital facilities. It is not fair to credit the founder of the small hospital with less public spirit or good faith than is claimed for those who build greater institutions, serving larger clientele. I prefer to believe that the small town hospitals exist as a merciful attempt to satisfy a widespread and insistent human demand, rather than as a commercial venture, for it is axiomatic that very few properly run hospitals, large or small, make money, and that the same amount of thought, energy and care necessary to successful hospital administration will bring far greater financial returns in any other sphere of human endeavor, except perhaps in the affairs of the church. There is a desperate need for these small refuges in a sea of trouble. I am convinced that during the last few years, I have seen numbers of patients who would certainly have died if it had not been for one such hospital. Some of these were cases in which the time element was of vital importance; others, deeply prejudiced, were only moved to action by a personal acquaintance with the hospital, the doctors who worked therein, and a conviction of impending personal death. Useless talking of sending these people here or there. In the majority of cases had they been willing to go, there were no funds available for transportation. They simply could not be sent, for they stoutly maintained, even with their lives, that they would rather bear the ills they had, than fly to others, they knew not of. Not all of these so stricken escaped with their lives, but each brand plucked from the fire was a distinct achievement. That the demand for community hospitals is national is abundantly evidenced by the great number of them that have sprung up throughout the land in recent years. It is not probable that this growth would have taken place unless these institutions performed some necessary function, regardless of the fact

that the majority of them were running at a deficit and this deficit was experienced in normal times. In Mississippi, we have approximately 50 of these smaller institutions that are anxious to handle the charity cases of their respective territories. In every one of them the financial problem is considerable. The income from purely hospital facilities is rarely sufficient to meet their needs. The patient of moderate means and the charity patient are ever present problems to be solved in various ways.

In community hospitals, there are four groups of people vitally interested: the board of trustees, the hospital staff, the patients, and the community served by the hospital. Each of these groups sees the hospital from a different angle. Each group must give its whole-hearted and unselfish support, and must do its part towards building up a good hospital. The board of trustees or governing board is usually made up of public spirited men picked from the leaders of the community, who serve from a sense of public duty. This board is often greatly handicapped as to funds and as a result it has to trim expenses even to the extent sometimes of limiting the efficiency of the institution. Would this curtailing of necessary expenses be mandatory if some provision could be made for the handling of the two classes of patients, the ones we are most concerned with, the patient of moderate means and the charity patient? The former may be handled by making the conditions under which he may be admitted to the hospital more attractive. I mean, by establishing more uniform moderate rates per day for hospitalization and professional services. If your community hospital is not running at a great deficit because of charity work handled, this can be done. If the community hospital is handling a great amount of charity work without adequate compensation, necessarily must its rates per day be higher and consequently out of reach of the man of moderate means.

In the United States, there are eight state charity hospitals. Mississippi operates over half of these institutions, or to be exact, our state maintains five charity hospitals for the care of the physically sick. Two other charity hospitals are operated by Louisiana and one by Rhode Island. These Mississippi charity hospi-

tals have been in operation over a period of years and it is not my intention to belittle the work they have done. Living in the northern part of the state, far removed from these hospitals, I have never seen the work accomplished by them, in fact, it has rarely been my good fortune to get a patient in to one of them. Overcrowding, inadequate state appropriations for these five hospitals have been the excuses therefor. In 1931 the state appropriation for these hospitals was \$251,385.00. That same year there was absolutely no appropriation for the privately owned or community hospitals. Did the charity work in the small local hospital stop because of this non-appropriation? A survey of the records of these hospitals in 1931 will show that the work of caring for the indigent sick went on without interruption. These five state-operated hospitals, as we all know, are located in the counties of Adams, Hinds, Jones, Lauderdale and Warren. Of course, it is only the natural course of events that the majority of patients treated in these institutions would come from the counties in which they are located. An examination, however, of the records compiled from these hospitals reveals the fact that 31.6 per cent, \$16,022.29 of the \$50,635.00 appropriation in 1931 for the Jackson hospital went to take care of patients from Hinds county. In other words, nearly one-third of the whole appropriation was spent to care for Hinds county citizens. In the Natchez hospital *over* one-third of its appropriation, \$16,444.18 of the \$41,500 was used to take care of Adams county citizens. In Vicksburg 56 per cent, \$23,484.83 went to care for Warren county people. Similar amounts were paid out at the Meridian and Laurel institutions. In short, an average shows that 41 per cent, nearly half, or \$101,658.59 of the state's appropriation of \$251,385 in 1931 went to caring for the citizens of Adams, Hinds, Jones, Lauderdale and Warren counties.

The state does not own the hospitals at Vicksburg, Natchez or Meridian, but it does own the other two. Even at a valuation of \$150,000.00 apiece, \$300,000.00 for these two hospitals and their equipment, the interest on this investment, at six per cent would amount to \$18,000.00 annually over a long period of years. This interest alone would take care of the charity in a number

of counties throughout the state. A little more than that amount, \$32,426 did take care of, very nicely, in 1932, 1034 patients in approximately 30 counties. I refer to the state aid of \$32,426.93 expended by the state for the care of charity cases treated locally in community and small privately owned hospitals. The average cost per patient for the state owned charity hospitals in 1931 was \$1.95 per day. All praise, where praise is due. That is a wonderfully low price per day. In my opinion, such a cost per day is impossible if the patient gets the real service that he should get. I am sure the cost is too low if the patient receives the same necessary treatment that is accorded him in the charity ward of the small community hospital. This \$1.95 per day cost can probably be explained by the fact that it is very doubtful if half the patients received, spend as much as 24 hours in the hospital.

I am of the opinion, and rightly so, I think, that if the state is to take care of its indigent sick by means of state owned and operated hospitals, far removed from at least half of its population, it should provide some means of transferring the patient from his home to the hospital. I refer to the expense of transporting the charity case to the far distant state owned hospital. In practically all such cases a hundred miles away, even were it possible to secure permission for entrance, it would not be possible, without local contributions, to secure railroad fare for the patient. Also, as a rule, if a person is sick enough to enter a hospital, he is certainly too sick to get on a train, or in a car, and ride 100 to 150 miles alone. The need of an attendant calls for an equal extra expense. These items of expense for a distance of 100 miles will amount from six to eight dollars. This amount should be borne by the state. In the case of the indigent mentally sick patient, the expense of transportation, with an attendant, is borne by the county. If the five hospitals, taking 1931 as an average year, treated 8914 patients from the counties of Adams, Hinds, Jones, Lauderdale and Warren, the counties they are located in, certainly if there are no other charity wards utilized over the state, they should treat equally that number from the other 77 counties. The transporting of eight or nine thou-

sand patients, the majority of them needing an attendant, even over a distance of 50 miles would mean a considerable outlay of money. With the present arrangement, this amount would not be borne by the state, but would have to be secured by local subscriptions, among our state's citizens. Undoubtedly the burden is too great locally on the communities far removed from these hospitals.

Taking into consideration interest on the investment in building and equipping these state-owned institutions, the expense of transporting to these hospitals, borne locally by communities from which they come, I am fully convinced that it would be much cheaper in the end for each county to care for its charity at home by means of the community hospital. At least talk to a prospective patient about it. You simply cannot send them in the majority of cases. Their arguments are many, the expense of travel, the time element, being away from their families and last but not least, they tell you that they will not get the personal attention they get at the nearby county or community hospital.

The community hospital will develop a medical center in each county, or in each two or three counties. The charity hospitals already located could continue to function locally, and could very well take care of a few more counties, not as a state proposition, but as a county, or several county project, getting state aid up to a certain amount, according to the amount of work they perform. The fifteen cents per capita per county idea is the logical solution. At fifteen cents per capita, a county of 30,000 under this plan would expect a maximum of \$4,500 with which it could very nicely take care of all its indigent sick. The total state appropriation under a plan of this kind would run approximately \$300,000. The appropriation of around \$300,000 for the two years, 1932-1933, \$150,000 per year, is not quite enough. This was the depression appropriation, but even so this amount if more equally distributed over the state would largely take care of the charity needs for sickness and injury. In addition to the regular biennial appropriation for these five hospitals, it becomes necessary every few years to make extra appropriations for new equipment

etc. These extra appropriations, in the past, have amounted to around \$25,000.00 per hospital. They are not counted in the regular running expenses, are made rather frequently, and it is suspected that one will be forthcoming at the next session of the legislature, if the state operated charity hospital continues to function. No such extra expense is met, with the state caring for its indigent sick by means of the Community Hospital. As the matter stands, a statement showing the total cost of treating charity patients originating in the five counties where charity hospitals are located, discloses the fact that this contribution by the state as far as the present charity hospitals are concerned, is largely a local proposition. Taking all appropriations into consideration it is 55 per cent local.

I am of the opinion that we can learn to handle patients cheaper than we have. The average cost per day in the privately owned or community hospital in 1932 was \$3.54. This is quite in keeping with the average patient cost per day for state aid hospitals over the entire United States. I believe, however, with more experience in handling these cases, that it will be possible to reduce this average cost at least to \$3.00. I am anxious that this be done, as are the doctors who are closely associated with the Mississippi State Hospital Association. I am not in favor, however, of reducing per capita cost per day with a sacrifice to the patients' welfare and comfort.

Chief among the points stressed in the report of the Hospital Committee of the American Medical Editors Association was the observation that the "open community hospital, in which every member of the profession, every dentist, every pharmacist, every nurse, and every public-spirited layman and citizen has a part, is the solution to modern medicine in the country" We may justly expect the community hospital to be the means of establishing small medical centers, thereby inducing the young ambitious men to locate in the smaller communities. It will furnish the foundation for and the means of cooperative medicine. It will aid each physician to more perfect himself and do better work. His work can be correlated, allowing him to do more, with less cost to his patient. It

will act as a stimulus to the rural doctor. Modern equipment will make diagnosis more accurate for him. Its worth can not be estimated in dollars and cents, its possibilities cannot be fully visualized. We hear of state medicine, medical insurance, and a host of other things that our profession may be drifting to. This has been brought about by the desire for and the necessity of furnishing better medicine and surgery to the masses at a price compatible with their means. Regardless of what may be said or written the answer is *The Community Hospital*.

A LOUISIANA DECREE OF 1770 RELATIVE TO THE PRACTICE OF MEDICINE AND SURGERY

DOUGLAS C. McMURTRIE

CHICAGO, ILL.

The early printed literature of Louisiana is interesting from every point of view. Printing was introduced into the then French province in 1764 by Denis Braud, the first known example of his printing being an announcement to the people of the colony by the King of France that he had ceded the colony to the Spanish crown.

In 1768, Braud printed the rebellious documents of the French patriots which resulted in the Spanish authorities sending into Louisiana an able governor, Alejandro O'Reilly, backed by adequate military force.

O'Reilly was in position to assume authority and did so most decisively. He had real executive ability and proceeded to lay down rules for regulating the varied activities of the community.

The first printed official document issued by O'Reilly which is known to us was dated August 21, 1769, and during the balance of that year he issued varied regulations covering the operations of the policy, the courts, and other essential functions of government.

In the early months of 1770 he got around to dealing with some of the details of public policy. There have been known to us three decrees of this year, two dated February 12, and one February 18. These three imprints I



DON ALEXANDRE O REILLY, *Commandeur de Bensafan dans l'Ordre de Alcantara, Inspecteur Général d'Infanterie, chargé par Commission spéciale du Gouvernement, & Capitaine Général de cette Province de la Louisiane.*

LE premier soin d'un Gouvernement sage, étant de fixer à chacun les bornes de ses propriétés & de veiller à la conservation des Citoyens, j'ai cru devoir établir comme dans tous le États policés, les Règlements suivans, concernant l'exercice de la Médecine & la Chirurgie.

LA Médecine, est l'exercice de l'étude des maladies de la santé, des moyens de conserver de retablir cette derniere, & de guerir les premieres : étude qui renferme trois Parties, Sçavoir, la Médecine particulièrement prise, qui est la science de connoître les maladies & les relations quelles ont avec les remedes, d'ordonner ceux-ci avec le régime. Les deux autres parties qui sont la Chirurgie, & la Pharmacie, en sont les ministres, & ont leur district particulier.

LA Chirurgie, a l'application générale des mains & des remedes extérieurs ; la Pharmacie s'occupe de la préparation des remedes généralement pris.

IL n'appartient point au Chirurgien de décider, ni d'employer aucun remede intérieur, & lorsqu'il prescrit un regime interieur, comme des remedes intérieurs, il n'agit point comme Chirurgien, mais comme Médecin. Dans tous les États policés chaqu'un a son district assuré par des Ordonnances & Règlements, qui previennent les entreprises des États les uns sur les autres ; source de beaucoup de désordre.

LE Pays étant encore dans l'enfance & peu peuplé, il sera permis aux Chirurgiens d'exercer & de traiter les maladies intérieures, sans prétendre cependant déroger aux Règlements concernant l'exercice de la Médecine, dans les Villes de la domination de Sa Majesté, & la subordination que les Chirurgiens doivent aux Mé-

have previously described. Of one, the only known copy is preserved in the Archives of the Indies at Seville, Spain; and two copies each of the other two are known: one of each at Seville and one of each in the library of Edward A. Parsons of New Orleans.

At the time of the publication of my *Early Printing in New Orleans* (New Orleans, 1929), careful search in many libraries and archives revealed no other documents printed in that year. A few months ago, I located in the Archives of the Indies at Seville, another decree by O'Reilly dated February 12, 1770, and printed, in all probability, by Braud. This document, undoubtedly the only copy which has survived, was photographed at my request through the courtesy of Hon. Herbert Putnam, Librarian of Congress, and of Dr. J. Franklin Jameson, Chief of the Division of Manuscripts of that institution.

This decree laid down regulations for the practice of medicine and surgery in the colony, and the text of it may therefore prove of interest to the members of the profession in Louisiana. The original was printed in French, which may be translated as follows:

"Don Alejandro O'Reilly, Commander of Benfayan in the Order of Alcantra, Inspector of Infantry, charged by special commission with the government, and Captain General, of this province of Louisiana.

"The first care of a wise government being to delimit the rights of each individual and to watch over the welfare of its citizens, I have deemed it my duty to establish, as in all civilized states, the following regulations concerning the practice of medicine and surgery.

"Medicine is the practice of studying derangements of health, the means of preserving and restoring the latter, and of curing the former. This study embraces three parts, namely: medicine proper, which is the science of recognizing diseases and the relation which they have with remedies, and of prescribing the latter together with diet. The other two parts, which are surgery and pharmacy, are its attendants and have their special field. Surgery includes the use in general of the hands and of external remedies. Pharmacy is concerned,

generally speaking, with the preparation of remedies.

"It is not the function of the surgeon to decide upon, or to employ any internal remedy, and when he prescribes a course of internal treatment, such as medicines to be taken internally, he is not acting as a surgeon but as a physician. In all civilized states each has its field, protected by laws and regulations which prevent the encroachment of one upon the other—a source of much confusion.

"This country being still in its infancy and but sparsely populated, surgeons will be permitted to practice and to treat internal maladies, but without pretending to detract from the regulations concerning the practice of medicine in the towns within the dominions of his majesty and the subordination which surgeons owe to physicians; intending that the present regulation shall continue during ten years, presuming that the country, by reason of its population and its wealth, will by that time be in position to have a number of physicians sufficient to care for the public.

"In the necessity of employing surgeons for the practice of medicine, it is important for the multiplication and preservation of the human species in this colony to select them, in order to prevent the introduction and establishment of those who usurp the title.

"For this reason, all pretended healers, who are not provided with documents and certificates, will be punished with imprisonment and arbitrary punishment if they are caught abusing the credulity of the people; all the so-called bearers of secrets will be dealt with in the same way; believing it impossible for a man of rectitude to hold back knowledge useful to humanity.

"No surgeons shall have the right to practice surgery and medicine unless he produce his documents, his certificates of study, his books, his instruments; unless he submit to an examination before the king's physician; unless he have certificates of good character, and of Catholic faith. There shall be kept a record of his examination in a special register; certificates which shall be presented, shall be approved by the governors and registered in the office of the clerk of the cabildo.

“The said surgeons when accepted shall not practice any mechanic art or public business under penalty of forfeiting their privileges. The said surgeons shall be obliged, upon the onset of any contagious, epidemic malady, to notify the physician, to report to him the progress of the malady, the good or bad effects of remedies which they shall have used, the discoveries which they shall have been able to make; persuaded always that the most distinguished states are those which are most susceptible to sentiments of humanity and honor.

“The number of surgeons for the town shall be fixed at six until ordered otherwise, not including the different surgeons major; and in the country at two to a parish. The corps of surgeons shall be obliged to serve at the house of charity, and that free of charges, according to arrangements which it shall make for itself in its deliberations on the good of that service.

“Surgeons, as well in the town as in the country, who shall not be found capable of practice shall be obliged to be practitioners either at the house of charity or at the king’s hospital for six months before undergoing a second examination; they shall be estopped and obliged to quit the profession if this new examination is not favorable to them.

“Newcomers, with whatsoever documents they may be provided, unless it be royal brevets or commissions, shall undergo the same examination and shall serve without pay for six months in the hospitals of the city, where there will be opportunity to learn their character and capacities, before being able to obtain permission to establish themselves.

“In the town and up to two leagues distance, whenever after a three days’ illness within the domain of the physician, the patient shall die in the hands of the surgeon without the patient or his attendants having been urged to notify the physician, and whenever the surgeon himself shall not have informed the physician, the said surgeon shall be sentenced to a fine of forty livres for the house of charity, and a fine of a hundred livres when the patient shall die without

having been forewarned of the danger in which he stood.

“Every surgeon who shall treat a free man or a slave for any wound made with sharp-edged or pointed instruments or with firearms without making his report of it to the governor within twenty-four hours, shall be sentenced to thirty livres fine and to more severe punishment according to the circumstances.

“Surgeons shall never depart from the subordination which they owe to physicians, and should reconcile themselves with the latter’s judgment for the good of the patient, especially in the treatment of internal maladies, and if it comes about that, driven by the perversity of envy, they refuse the succor of their hands to a patient attended by a physician, they shall be sentenced to a fine of two hundred livres, towards the house of charity.

“Every surgeons who shall sell suspected drugs and such as can be abused by others than persons of honor, and without having received therefor a certificate in writing, shall personally answer for all evils which shall result and shall be adjudged an accomplice.

“As well as when he shall not notify the police and the physician in case he has suspicion of poison.

“Every surgeon who shall treat or give remedies to children, girls, or slaves, without having permission of guardians, fathers, or owners, shall forfeit his equipment and shall be sentenced to thirty livres towards the house of charity, and to more severe penalties if the girl is pregnant.

“Surgeons shall be always ready to open and show to the physician the place where they keep their remedies so that these may be inspected and thrown out if they are bad. Any bill which shall not be itemized and in which the substances forming the remedies shall not be stated shall not be accepted; and as it is as difficult to make a price list for remedies as it is necessary to prevent the fleecing of the public, bills which anyone shall refuse to pay shall be (after an order of the judge) estimated by the physician as to what concerns drugs, and as to that which

concerns the use of the hands, by him whom it shall please the judge to name.

"To keep up the taste for study, surgeons shall meet on the first Monday of each month, at a definite hour, with the physician for a conference on a disease; the disease shall be chosen among those which are prevalent at the season and in this country, and each one shall be obliged to discourse upon the subject in his turn. The subject shall be given out after the preceding conference.

"These conferences will tend to mutual advantage and more and more to the public good while gaining instruction from the observations of others,

"All surgeons who shall offend, in whatsoever sort or kind it may be, so as to be brought to justice shall be excluded from the body.

"He who shall have been admitted as a single man shall be excluded at the end of fifteen months if he do not marry.

"If one or more discreet women of good character present themselves for instruction in the art of accouchment, the body of surgeons shall be obliged to convene them at the home of the oldest on an indicated day of each week to expound to them the procedure (*pour leau en expliquer le manuel*), and whenever they shall deliver women charitable enough to permit the assistance of these learners, they shall give the latter notice; and the learners shall afterwards undergo an examination to be given them.

"To avoid abuses and to conform to what is customary in the halls of justice, the physician, assisted by a surgeon whom it shall please the governor to name, shall make visits to prisoners ill at the jail, shall make reports of violence, of the removals of corpses, of those poisoned, mutilated, and of others which shall be ordered; every report for the town and its environs, in case the physician shall not have been called in, shall be invalid. It shall be his duty, furthermore, to examine into the credibility of every report made outside of the said environs.

"We order all surgeons to conform strictly with this regulation, and we enjoin very par-

ticularly upon all magistrates of this province and upon the royal physician of this capital to be vigilant about it and apply themselves to its complete execution.

"At New Orleans, February 12, 1770"

DIAGNOSTIC DIFFICULTIES OF DIGESTIVE DISTURBANCES*

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It is a fact, beyond question, that diagnosis is the foundation upon which the successful practice of medicine and surgery stands.

In the earlier days of our professional history every diagnosis was made, if made at all, upon the history, subjective symptoms, objective physical signs, and the course and termination of the disease. As time has passed we have added to the above all the present known laboratory procedure as well as the numerous so-called instruments of precision.

Every good diagnostician develops with time and experience a system of diagnostic methods and procedudes which becomes his own, and really a part of himself. This is developed by having a regular systematic routine which is followed in the examination of every patient. This general principle is never more applicable than when considering for the purpose of diagnosis the various digestive disturbances.

For the purpose of this discussion it is well for us to remember that the diseases of the gastro-intestinal tract proper are comparatively few in number but the conditions outside the digestive tract which are frequently responsible for digestive disturbances are very numerous.

I shall first briefly discuss some of the extrinsic or remote conditions which are responsible for disturbances of digestion. Many of these are so well known and commonplace that they need only to be mentioned. Among these are the so-called gastric crises associ-

*Read before the Pan-American Medical Association in Dallas, March 21-25, 1933.

*To have been read before the Louisiana State Medical Society, April, 1933.

ated with *tabes dorsalis*, exophthalmic goiter and migraine. In many cases of incipient pulmonary tuberculosis, the symptoms that cause the patient to seek medical advice are due to gastric hyperacidity which results from disturbance of motor function.

Many of the passive congestive states which result from cardio-renal disease with failing function produce symptoms referable to the digestive tract that direct the patient's attention to secondary effects rather than to the real source of the trouble.

There is quite a large group of functional disturbances such as anorexia, aerophagia, deviations from the normal motor and secretory functions, which are associated with abnormal psycho-neurotic states. Many of these are due to pathology in the endocrine system and must be carefully considered if we are to arrive at correct conclusions.

Among the specific infectious diseases which are responsible for digestive disturbances there is probably none that plays a more important part than malaria, especially in the chronic form. In support of this statement I shall briefly report a case which is a good example.

The patient, a white male, aged 40 years, complained of severe recurring gastric hemorrhages. These hemorrhages had recurred from time to time over a period of four years. During this time numerous careful examinations of the gastro-intestinal tract had been made which included roentgen ray studies with entirely negative results.

Finally it was observed that moderate splenic enlargement existed and repeated examinations of the blood demonstrated the presence of malarial parasites. The administration of quinine sulphate in doses of ten grains daily for sixty days resulted in complete relief. This occurred ten years ago and the patient is enjoying good health today and has never had a recurrence of hemorrhage.

In a great majority of the cases of disease of the stomach or intestines the clinical manifestations are so clear cut and well defined that a diagnosis is comparatively easy, but this is by no means always true. The following case reports are fair illustrations of the

truth of the latter clause of the foregoing statement.

D. H. H. White male, aged 74 years, farmer, complained of stomach trouble. Family history showed nothing significant. Past history: Had usual diseases of childhood, but no other illness of importance, no venereal disease. Present Illness: Duration, one year. Prior to that time had always enjoyed good health and had no disturbance of digestion whatever. Onset was gradual and the symptoms consisted of a burning sensation in region of the stomach and this condition gradually grew more pronounced and after about six months he developed nausea and vomiting but no marked pain. Very soon after eating he observed a rumbling sensation in the stomach which was followed by nausea and vomiting and apparently very little food was retained. About one month prior to this time very dark coffee-colored material was vomited and at about the same time patient passed very dark colored stools. Appetite remained good, bowels were rather obstinately constipated and there was a loss of about fifty pounds in weight. Physical examination showed a man rather senile in appearance with nutrition markedly below normal and well marked general arteriosclerosis. Mouth and throat appeared healthy with the exception of loss of teeth. Chest showed nothing abnormal except a systolic cardiac murmur at apex which was not transmitted. Abdomen showed some rigidity in upper right quadrant with tenderness to pressure. Liver slightly enlarged, spleen not palpable. Visible peristaltic waves were passing across epigastrium from left to right. Laboratory examinations: Blood showed nothing of importance except secondary anemia of moderate degree. The Wassermann test was negative. Urine showed nothing abnormal chemically or microscopically. Analysis of stomach contents withdrawn one hour after the usual Ewald test breakfast showed excessive quantity, free HCL 12, and total acidity 56. Aspiration of stomach after fasting overnight showed considerable food remnants from meals of the previous day with a strong positive tests for free HCL.

Roentgenologic examination showed the stomach moderately dilated but having rather active peristalsis. The pylorus was almost completely obstructed but the outlines of the pyloric end of the stomach were smooth and regular and showed no indication of being encroached upon by a new growth. Surgical treatment was advised and when the abdomen was opened and careful exploration done, it was the opinion of the surgeon that the obstruction was due to scar tissue resulting from ulcer of the pylorus and probably not malignant. A posterior gastro-jejunostomy was done and the patient made an uneventful recovery from the operation.

Reports from the patient a few months later were to the effect that he had fully regained his weight and strength and was having no digestive disturbance whatever and was able to do active work on the farm. The patient consulted me first on April 29, 1925 and the operation was done on May 4, 1925. On July 27, 1927, more than two years after the operation, he came to see me again. He stated that he had remained free from symptoms until about four months prior to the date of this consultation. During these latter months he had been suffering from nausea, vomiting and pain in the region of the stomach and had lost weight and strength rapidly. On physical examination at this time a well defined easily palpable tumor of irregular outlines was observed in upper abdomen. Roentgen ray examination showed stomach contents passing fairly freely thru gastro-enterostomy opening, but the general picture gave characteristic appearance of a malignant growth involving a large portion of the stomach. Patient died September 11, 1927.

The following case may be of interest as in many respects it is similar to the preceding report.

Mrs. C. B. J. aged 57 years complained of stomach trouble. She gave a history of being troubled with gaseous distention, burning pain in epigastric region, and occasionally nausea and vomiting over a period of twelve years. During this time there had been numerous intervals of comparative freedom from symptoms, but recurrence came from time to time without any apparent cause. The greatest discomfort was present soon after meals, there being no food relief. During recent months the symptoms had become more pronounced. She was suffering severe abdominal pain and frequent nausea and vomiting. Large quantities of food were often vomited which showed fragments of meals taken on previous days. No blood was vomited at any time during illness. The appetite was poor, bowels constipated, and there was considerable loss of weight. Physical examination showed rather marked emaciation, mouth and throat normal, heart and lungs normal. There was rigidity of muscles of upper abdomen with tenderness to pressure but no palpable tumor present. The blood examination showed the usual picture of secondary anemia. The urine was normal. The stomach contents which were aspirated after fasting over-night consisted of large quantities of food which had been eaten on previous days. The analysis of this specimen gave free Hcl 50, and total acidity 85. Roentgenological examination showed a fish-hook type of stomach, abnormally large, mobility free, no peristalsis, tenderness at pylorus. Pyloric area showed constriction with very little barium passing into the duodenum. The duodenal bulb was deformed and tender to deep palpation.

Posterior gastro-jejunostomy was done on Jan-

uary 19, 1920. Obstruction appeared to be due to scar tissue from chronic ulcer. Patient made prompt recovery from operation and has remained well up to this time, a period of thirteen years.

It will be observed that these two cases were very much alike in several respects, viz: Both were well advanced into the so-called cancer age, both gave symptoms of gastric stagnation, both showed the presence of free HCl in their stomach contents, and both gave the appearance of benign pyloric obstruction when operation was done by an experienced surgeon. However, the subsequent histories of the two cases have proven that one was malignant and has since died as a result of this disease and the other was non-malignant and is still living and well thirteen years after the operation.

When we compare the histories of these two cases we see some striking differences. The duration of symptoms prior to operation in the case that proved to be malignant was only one year, while the non-malignant case gave a history of symptoms over a period of twelve years. In the malignant case, the symptoms were continuous and progressively more marked while the non-malignant case showed numerous periods of comparative freedom from symptoms. These are most important and significant differences in history. When primary cancer of the stomach has advanced to the stage that noticeable symptoms result there are no remissions, but the course is continuous and progressively more pronounced. In chronic peptic ulcer the course is frequently characterized by periods of weeks or months of comparative freedom from symptoms. There are, however, borderline cases such as those above reported, the differential diagnosis of which becomes really difficult problems. In such cases it is my conviction that radical resection should be done instead of gastro-enterostomy for the relief of stagnation.

By following this course many patients may be saved who otherwise are doomed to an ultimate cancer death.

In this connection I desire to state that the greatest handicap to early diagnosis of gastric cancer is the fact that the patient does not recognize the gravity of the early symp-

toms and hence does not seek medical advice sufficiently early. I must also confess that some members of the medical profession are inclined to treat these symptoms too lightly even when they are consulted early. I am most emphatically of the opinion that a great majority of the cases of gastric cancer may be diagnosed sufficiently early for successful surgical treatment if the patient is seen early and given the serious, methodical examination and study that he should receive at our hands. We should therefore consecrate ourselves to the task of teaching the public what should be known about the danger signals of malignant disease of the stomach; and, let us regard every case as probably malignant that presents symptoms suggestive of that disease until proven negative by proper study. In this way, and in this way only, many of the difficulties of diagnosis may be overcome.

All the foregoing only serves the purpose of emphasizing the necessity of studying every patient as a whole no matter what the complaint may be or what group of symptoms may be most prominent.

PEPTIC ULCER—PITKIN TREATMENT*

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This is a preliminary report of thirty-six cases of peptic ulcer treated by the intravenous synergistic method of Dr. George P. Pitkin.

Pitkin¹, after curing himself of a duodenal ulcer of 12 years duration, recently made a report of 310 cases treated by himself and co-workers. In this article he sets forth the following:

A therapeutic agent that will render the patient symptom free and induce healing of a gastric or duodenal ulcer must possess the property of regulating the physiological functions as follows:

Stimulation of the vegetative nerves of the

splanchnic plexus must be produced sufficiently to control the gastric motility and regulate the secretory functions of the glands of the mucosa for a period of not less than forty-eight hours; hyperperistalsis must be overcome. A constant stretching and relaxation of the tissues about the ulcerated area will not only increase the pain, but will not permit the ulcer to heal; severe intermittent, persistent tetanic spasms of the gastric-musculature must be prevented to assure the comfort of the patient; hypoperistalsis should be produced to such a degree that the peristaltic wave practically disappears. This is conducive to lessened irritation and rapid healing; general relaxation of the gastric musculature should be produced, as it not only lessens the hypermotility, but causes a dilatation of the pylorus, thereby permitting the gastric contents to pass more freely; extreme hyperacidity must be lessened either by controlling the function of the acid secretory glands or by relative dilution, which is accomplished by stimulating the secretory function of the prepyloric and cardiac glands. Dilution of the free HCl must be carried to such an extent that the gastric contents are only faintly acid or nearly neutral; free HCl not only irritates the ulcerated surfaces, but increases the pain. Hypoacidity should be produced to such an extent that the amount of free HCl is much below normal. The total acidity of the stomach does not need to be considered, as the free HCl is the agent that produces irritation and delays healing; there must be an increase of the non-irritating digestive enzymes to facilitate gastric digestion when the stomach is devoid of peristaltic action. This secretion must be sufficient to liquify the contents of the stomach to such an extent that they will pass through the pylorus with lessened peristaltic movements. Alkaline secretions and digestive enzymes may be increased from twelve to eighteen times by sufficiently stimulating the vegetative nerves. This can be accomplished, as shown by animal experimentation, with certain proteins.

Before treatment, of course, it goes without saying that all possible infectious foci in the

*Read before the Winona District Medical Society, Kosciusko, Miss., February, 1932.

teeth, tonsils, and sinuses, should be removed.

I believe we can make a diagnosis of peptic ulcer in the majority of cases when the roentgenogram and other laboratory facilities are not available, by the following method: Give synodal, the preparation used by Pitkin, composed of lipins, lipoids, emetine and a protein, 6 cc. intravenously, every third day for three doses. If an ulcer is present, I believe practically every patient with peptic ulcer will be symptom free, provided, of course, the diet is confined to the one recommended by Pitkin, which is: fresh or malted milk, cream, buttermilk, soft-boiled or raw eggs, broths and soups, cereals, starch, rice and bread puddings, baked or mashed potatoes, plain ice cream, ices and sponge cake. Coffee, tea and alcoholic beverages are prohibited.

After the sixth dose, baked, broiled or boiled fresh fish and chicken (white meat), peas, squash, spinach, mashed carrots, asparagus, fruit juices, and stewed fruits (except berries) may be added. After the fifth week, all dietary restrictions are dismissed, with the exception of alcoholic beverages and preserved meats or fish.

It is preferable to give the injection when the stomach is empty, as the reaction is almost immediate, and if it is given after meals, vomiting may occur. Not infrequently after the intravenous injection, the patient complains of feeling a little light-headed, or possibly nauseated. Occasionally slight dizziness may occur. A few deep breaths will usually control these symptoms. These symptoms rarely occur if the patient is recumbent at the time of the injection and remains so for ten minutes. If the patient be dehydrated or has acidosis, a teaspoonful of soda bicarbonate, given five to ten minutes before the medication, usually prevents nausea or vomiting. Another reaction not mentioned by Pitkin is a neuritis below the knees. In these patients I extended the time of treatments for a day or two in lessened doses.

The milder cases are free from pain after the first injection; but the severe ones, or

those with chronic lesions, are not as a rule completely relieved until after the third and sometimes the fourth treatment. In two patients I discontinued treatment after the third dose. One of the patients had a chronic appendicitis and cholecystitis. The other was a neurotic woman who had undergone several operations.

Mrs. J. E. L., aged 27 years, Canton, started treatment September 12, 1931; relieved after first injection; received ten in all; symptom free and on full diet.

G. B., Jr., aged 7 years, Lexington, pain, vomiting, frequent hemorrhages, loss of weight; appendix removed 1927; hunger pains; started treatment August 12 1931, received nine injections; relieved by first injection; symptom free for four months; complained of some gas but restricted diet for one week seems to have corrected it.

Mrs. J. R. B., aged 48 years, Lexington; gastroenterostomy 1914. Began treatment October 29, 1931, received 8 doses; symptom free after fourth dose; reports stomach normal for first time in 30 years.

J. S. M., aged 52 years, farmer, Black Hawk. Treatment began October 10, 1931; symptom free after third dose; nine injections; symptom free to date.

S. F. H., aged 48 years, barber, Lexington; gastric hemorrhage, 1929; last hemorrhage August 3, 1931; roentgenogram demonstrated ulcer of duodenum; frequent hemorrhages over a period of one year; began treatment August 13, 1931; eight injections of synodal; symptom free after fourth dose; has remained so to date; gained 20 pounds in weight; now on full diet.

Mrs. G. S., aged 45 years, Pickens; operated upon in 1914 for appendicitis with relief; four years later pain developed in gall bladder region; gall bladder removed seven years ago, pain continued; operated upon for adhesions two years ago; pain continued; several roentgenograms showed no ulcer; pain, gas, indigestion, more or less continuous with attacks of vomiting; began treatment August 17, 1931; relieved by first dose; now symptom free; on full diet.

Six injections at intervals of three to four days usually suffice in the milder cases. Patients who have suffered for a long time with marked gastric or duodenal lesions may require eight doses, the subsequent doses being given a week apart. The maximum number of injections for one course is ten. If a second course of treatment is required, six to eight weeks should intervene.

If for any reason the intravenous injection cannot be made, the solution may be injected

into the muscles of arm or buttock. The pain is very slight, according to Pitkin. I have only given the solution intravenously.

In hemorrhagic cases, synodal is repeated every second day. In three cases treated by Dr. Pitkin, the vomiting ceased immediately. The stools were negative for blood in from three to five days.

CONCLUSION

The series of cases that are reported here, thirty-six in number, is far too small from which to draw final conclusions. I have discontinued other methods of treatment because practically all my patients are symptom free within three to six days. The patient is not compelled to discontinue his usual vocation. He does not lose time, does not have to be hospitalized, and can be permitted a fairly liberal diet. As to the end results, time will demonstrate it. I think this method is a great advance in the treatment of this very troublesome condition.

REFERENCES

1. Pitkin, Geo. P.: A new treatment of peptic ulcer. *Am. Jour. Surg.*, 12: 466, 1931.

JUST AN APPENDIX*

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The remarks contained in this paper are the result of reflections which have arisen following an interesting and what came near being a disastrous experience.

The title is suggested by the attitude which most men assume with regard to cases which are being operated for a supposed or frank case of appendicitis. I say supposed appendicitis because I know of no condition for which an operation is so frequently performed on supposition rather than on definite evidence.

My remarks are not intended to do more than to insist that these patients are operated too frequently without sufficient data, and that all too many return later to have someone else

find that there has been overlooked a ureteral stricture, a renal or ureteral calculus or pyelitis. It may be found too that the patient has some other intraabdominal condition not so easily eliminated as those just mentioned.

Probably the reason for this state of affairs is the ease with which an appendix can in most instances be removed. Just here I am reminded of a visit which I once made to a distant city. After watching one of my friends do an appendix through a small button-hole like incision we retired to a restaurant for lunch. At the table my friend said: "Tell me what you think of my procedure?" It is easy to appreciate my dilemma, as I personally did not approve of the method, yet I was his guest and, therefore, felt it incumbent on me to look, listen and be quiet. When he insisted upon a reply I told him that my one objection was the fact that through the incision which he used no examination of other organs could be made. To this objection he replied—that when he makes a diagnosis of appendicitis he is satisfied that the patient has no other condition. Of course under those conditions one cannot interpose an objection; yet how many of us can be so sure of our diagnosis. Utopia has not yet arrived.

A great deal can be said about the difficulties of diagnosis and also about the ease with which some operators say "You must be operated upon", but watch, if you please, the meticulous care which characterizes the attitude of these same men when a member of their family is to be operated upon.

Let us assume that the diagnosis of appendicitis is correct. All would be well if the appendix constantly occupied a fixed position,—this any one except the most highly ignorant tyro knows is not the case. When a normal, undiseased appendix is found its removal is a thing of extreme simplicity. Unfortunately, trouble for both operator and patient may be brewing as soon as the abdominal incision is made. Bleeding seems so much greater in some instances than in others, especially if the incision happens to be placed so as to encounter some of the larger vessels of the abdominal wall.

Now the peritoneum is open and the search begins,—some times after careful inspection by an experienced eye the bands on the cecum can

*Read before the Orleans Parish Medical Society, February 13, 1933.

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be seen, and then if the appendix is not bound down and if the cecum is mobile, an easy delivery is accomplished. If the opposite conditions exist—an inexperienced eye and an untrained hand with forcep begins the search for an appendix, a great amount of time can be consumed and a needless amount of trauma to the bowel and the vascular network is done. Such prolonged search and trauma make for many disagreeable and at time fatal complications. Even if the patient survives, convalescence is tedious and stormy.

Delivery of the appendix, like every other surgical procedure, should be done with gentleness and not by force. It should be remembered that through a large incision an organ may be delivered with ease, whereas through a small incision force would be required. After delivery a hurried and improperly placed forcep or needle puncture through the meso-appendix may initiate a hemorrhage that will tax the ingenuity and anatomic knowledge of the operator to control. If some surgeons were asked the question—what is the origin of the appendiceal artery—I am afraid that their chagrin would be great.

This brings to mind the greatness of some surgeons as Dr. Matas and the late Dr. James E. Thompson and many more of our leaders who were great because of their knowledge of anatomy. Knowledge of anatomy made them masters of their field and enabled them to be deliberate and accurate in their actions.

It should not be forgotten that massive transfixion sutures placed without due regard for blood supply to the contiguous portions of bowel may cause gangrene of the bowel, secondary to mesenteric thrombosis, and this process once initiated may be progressive. We all know too well the result of this unfortunate complication.

After the appendix has been removed there are many important decisions to be made which are dependent on the age of the patient, peritoneal reaction present, and whether or not there has been spilling into the cavity.

The age of the patient determines whether a prophylactic enterostomy should be done or not. We all know that elderly patients have a better chance if enterostomy is done at the time of the operation. Time will be saved and a smooth

convalescence ensue when otherwise a stormy seige will follow and a delayed secondary operation prove fatal.

To drain or not to drain—that is the question which arises in some cases, particularly if there is evidence of peritonitis. It should be remembered that drainage of the abdominal cavity cannot be done for any length of time, and even if it could be done it would not solve our problem, as the cause of death lies more in absorption of toxins within the loops of gut which are paralyzed. Therefore drainage of one or more loops of bowel will be of greater value than all of the varieties of garden hose sometimes introduced into the cavity of the abdomen.

Should one attempt to introduce drains within the abdomen because of the spilling of small quantities of pus, or if one has found free fluid in the cavity? I think one can safely say that many of these cases will do better without leaving foreign material in the belly. We know that the defense mechanism of the peritoneum is highly organized and that in the past this particular virtue of natural defense has been greatly underestimated. Drainage often means secondary operations.

Having finished the operation the question of the aftercare is of more importance than the casual attention which is all too often given. So little importance is attached to the aftercare that some surgeons leave the writing of orders to the youngest member of the staff who writes a few P. R. N. orders, particularly for morphin and liquids as desired and tolerated. I believe that use of routine orders is a bad practice. Patient do not follow a definitely charted course, if they did everything would be simple.

Supplying fluids is a matter of great importance and more care should be given to see that the supply is adequate and that it is retained. Oral administration is not a dependable and satisfactory means in many instances.

Important information, which can be obtained by proper laboratory determinations of the chloride balance, should be utilized. Loss of chlorides by vomiting should be replaced before it becomes a serious menace to the patient's welfare.

Post-operative care to prevent pulmonary complications should be more seriously consid-

ered. The use of carbon dioxide inhalations should be more frequently resorted to. Evidence of collapse of lung can be obtained and should be sought for. It is not sufficient to rely on physical examination; the roentgenogram will give earlier definite data.

The phase of the subject which I wish to particularly stress is the grave abdominal manifestations which one is too often confronted with. The end result may be dependent on prompt recognition of the true condition, even if that condition seems to be a reflection on the surgeon. Few of us like to think of one of our own patients developing peritonitis, a subphrenic abscess, a ligature slipping and thus causing a spilling in the cavity, or possibly that terrible cast-atrophy—hemorrhage.

If we want to help the patient we must not wait for the pathologist to give us the data at autopsy. All of the available diagnostic measures must be used promptly.

Signs of hemorrhage occurring soon after an operation may be due to hurried operating, careless use of instruments, or to rough handling of tissue. Many times after a meso-appendix has been transfixed and all bleeding apparently effectively controlled one will notice a bloody trickle when traction on the cecum is released. A few moments devoted to observing the field before closing the peritoneum will not be wasted. A troublesome amount of bleeding sometimes follows puncture of the epigastric vein. If the peritoneum is closed while there is still some bleeding from this source, one need not be surprised if symptoms develop within a short while. Recently while closing an abdomen the epigastric vein was punctured. When it seemed to be controlled and the peritoneum was being closed I noticed a small quantity of blood welling up in the wound. The sutures were removed and then we could see a large hematoma forming between the peritoneum and the rectus muscle. Failure to have taken this precaution may have caused a disaster.

Immediate attention to signs of hemorrhage by effective measures to control and replace the blood lost is necessary.

When after a few days the patient persistently vomits, even larger quantities at times than he takes in and there is abdominal distention, our

attention must of necessity be directed to such disagreeable complications as acute dilatation of the stomach, which may be but a part of a dynamic or adynamic ileus, retroperitoneal hernia, or a localized collection of pus in some fossa within the cavity.

The differential diagnosis between an acute dilatation of the stomach and an obstruction at the ligament of Treitz has been well illustrated in a recent experience. In acute dilatation of the stomach one would expect distention of the upper abdomen to be associated with persistent vomiting or regurgitation of fluid. In a recent experience where we were called upon to differentiate the two conditions there was no distention of the upper abdomen, fluid would be retained for several hours, then the patient would either vomit large quantities or large quantities of fluid could be siphoned off with the Levin tube. There was a sausage-like mass palpable at times in the transverse axis of the body. The absence of distention of the stomach, and the persistent vomiting, together with the sausage-like mass suggested the diagnosis of a retroperitoneal hernia with obstruction at the ligament of Treitz.

In such instances where the patient is dehydrated fluids must be supplied, the chloride balance must be maintained and the obstructed loops must be drained. To meet these indications a jejunostomy is advocated.

All are familiar with the use of jejunostomy where gastro-jejunal ulcers exist or where a gastroenterostomy is not functioning, as well as with its use post-operatively to reintroduce bile in cases of persistent biliary fistula or duodenal fistula.

When the jejunostomy tube has sufficiently drained the previously obstructed loops it may be used as a means to supply fluids. The apparatus used is identical with the continuous Matas intravenous drip. Foods of high caloric value, as well as the ordinary glucose and saline solutions, are used.

Kelling in 1923 was one of the earliest advocates of this method.

In August 1932 Stewart of the Massachusetts General Hospital advocated again the gravity method of introducing fluid through the jejunostomy tube. It has proven to be a very satis-

factory means of maintaining the fluid balance.

The Witzel method of jejunostomy has been done in our recent cases. Leakage usually occurs about eighth post-operative day, at which time the catheter should be removed. By this time the patient is usually in a satisfactory condition, no longer needing tube drainage or feeding by this route.

Recently we have had the good fortune to have these fistulae close promptly following removal of the tube. While the sinus persisted suction, heat and protection of the skin against irritation, was used. In this connection it is important to test the reaction of the drained material. We have found this to be acid in some instances, indicating that all of the hydrochloric acid of the gastric juice has not been entirely neutralized. In these cases acetic acid cannot be used. Zinc oxide ointment for the protection of the skin, as well as egg albumin provides a material to be ingested by the gastric juice which had not been neutralized before reaching the fistula.

In our recent cases there has been no digestion of the skin.

All too little attention has been given to recent developments in roentgen ray interpretations of flat plates. Laurell and Wasterborn of Upsala, Sweden have made notable advance in his field, and the information which may be gained by this method deserves more general use. The elevation and fixation of the diaphragm, the finding of wedges of exudate between the loops of bowel and the finding of fluid levels in several loops of gut are significant findings when peritonitis or obstruction are suspected. If an abscess is suspected the roentgen ray examination gives convincing confirmatory data by showing homogenous shadows which may or may not indent the contour of the distended loop of bowel. Recently it was interesting at the operating table to see roentgen ray evidence of exudate between loops of bowel confirmed.

When a patient, who has had peritonitis in association with an appendicitis, recovers, the end of the chapter has not been reached. The possibility of obstruction developing at a later date may arise and demand carefully planned methods of handling if we can hope for eventual recovery of the patient.

Since the subject is—"Just An Appendix"—it might be well to digress long enough to discuss a recent experience.

In this instance we were confronted with an acute appendix in which the first difficulty encountered was the location of the appendix, the tip reached almost into Morrison's pouch, thus necessitating considerable technical difficulties in the removal. Following the operation there was a persistent temperature of 100° or more, suggesting a wound infection. This was investigated but nothing was found except a small amount of blood. After removal of a few sutures and the introduction of a probe into the wound there was nothing to suggest either a thrombophlebitis of the abdominal wall or a deep thrombophlebitis.

Suddenly on the sixth day the patient had a chill and a temperature of 104°. The pulse rate increased, and the volume diminished. There was intense abdominal pain radiating to the genitals. Distention of the abdomen and rigidity of the muscles were noted. The urine showed neither evidence of pus nor blood. Physical examination did not indicate pulmonary involvement. The patient had neither thoracic pain nor respiratory distress. There was no cyanosis.

Clinically we were dealing with peritonitis. Was it local or general, and what was the cause, and what was there to do about it?

All that I knew was that I seemed to be facing a great tragedy. Our patient was a young man who had recently completed his preparation for the practice of medicine and he seemed to be in great danger of losing his fight for life. The cause of the disaster was not clear. Here was a real great problem. One can at least hope for some measures of success if he knows what he is fighting, but if the enemy strikes a blow and vanishes combat is impossible. Carrying the simile further, we sought by every detective measure to ferret out the culprit. Blood examinations only discouraged us. The roentgen ray was utilized. It gave us valuable data which certainly helped to avoid errors of clinical interpretation. Clinically he had peritonitis, but not an adynamic or paralytic ileus because the patient continued to evacuate flatus. There seemed to be evidence of peristalsis. The abdomen was not the silent abdomen of a mesenteric thrombosis. With the persistence of vomiting and regurgitation there had to be considered some method of management which would prevent dehydration and a consequent chloride deficiency—alkalosis.

Believing that I was dealing with peritonitis I could not see any particular point in operating at the time. Morphine was supplied freely as I am convinced of the efficiency of this drug in peritonitis. This is not a startling observation as Alonzo Clark advocated this treatment many years ago. Physiological rest is obtained in this manner.

At the same time that we were giving morphine we supplied fluid freely by the intravenous route. In all 27,000 cc of saline and glucose were given. When there was a spilling over of glucose in the urine, saline alone was given. The vascular volume was maintained in spite of the persistent regurgitation and vomiting in this way. We realized that even though the records showed that flatus was being expelled and the abdomen was softer, the patient could not be kept up continuously on infusions.

The roentgenogram showed distended loops of bowel with various fluid levels and wedges of exudate between respective loops. There was no fixation of the diaphragm, and no evidence of pneumoperitoneum.

We decided, on the basis of both clinical and roentgen ray findings, to see what benefit could be obtained from a jejunostomy.

Just at this juncture there were many questions to be decided, the type of anesthetic and the amount of surgery to be done.

The anesthetic to be used should be the one which can be most easily induced, one that will overcome psychic reactions best and that one which will produce the least shock. I believe that gas and local meet this requirement better than any other agent. Gas and local permit more expeditious handling and thereby diminish resultant shock impulses.

It must be taken for granted that a minimum amount of inquisitive surgical investigation should be done.

A desperate condition confronts both the surgeon and the patient. The immediate problem, therefore, is to relieve the dehydration. Therefore the surgical indication is that operation which provides an immediate means of supplying fluids.

One should not, under the circumstances, attempt to follow the dictates of the late Joe Price with regard to the toilet of the peritoneum. Protective adhesions should not be disturbed. A simple form of jejunostomy should be done, either the Witzel type or the Pezzer catheter with a purse string. On opening the abdomen in this case we found evidence of a diffuse exudative peritonitis with wedges of exudate between the loops of gut. A Witzel type of jejunostomy was done. The temptation was great to determine the cause of the peritonitis, but we felt that the effect would be too disastrous, accordingly the abdomen was closed promptly.

When the patient was returned to his room it was important to supply heat, fluids, and provide rest. Fluids were administered during the first 24 hours after the jejunostomy by the intravenous route only. During that period the jejunostomy was allowed to drain. This it did effectively. Subsequently a drip containing 10 per cent glucose

was given through the tube to supplement the intravenous fluid intake.

The patient's condition steadily improved. During the next six days large quantities of fluid were given through the enterostomy opening. Then there was a leakage around the tube. The tube was found lying loose in the bowel, acting as an irritant. It was therefore removed immediately.

The next important consideration was to try to avoid digestion of the abdominal wall. For a few days egg albumin was applied so as to avoid digestion of the abdominal wall. Weak solutions of acetic acid are often recommended for this purpose, but it could not be used here as the reaction was already acid. Accordingly a light cabinet, suction and zinc oxide ointment were applied to the abdominal wall to protect the skin. There was no digestion of the skin. The jejunostomy closed after a very short time.

When the patient was apparently on the way to recovery surgically, the pulse rate remained very high and the volume was poor. A cardiogram indicated the existence of what we suspected, a myocarditis.

At this juncture we enlisted the cooperation of Dr. I. I. Lemann. After prolonged rest and subsequent graded exercises under Dr. Lemann's care the patient steadily improved.

On October 24, 1932 he was allowed to go home and did not return to the hospital for duty until December 1.

On December 22, 1932 he felt perfectly well until about 6 P. M. Did not complain to anyone until about 8:30 P. M. when he complained of an intense cramp-like abdominal pain. Following a bowel movement he felt nauseated and extremely weak. He was first seen by Dr. Kaplan who gave him morphin and had him admitted to the hospital.

Enema was given and the bowels acted promptly. Blood count taken immediately revealed red count 5,100,000. Total white cells 8,500, 82 per cent lymphocytes. Young forms 20 per cent. Temperature was 98.6°, pulse 120. Temperature rose during the night to 100.6°, pulse to 130.

On the following morning the abdomen was rigid, tender to the touch. Dr. Kaplan's comment at that time was that the picture was one of general peritonitis.

A roentgenogram was taken during the morning. The report stated "Diaphragms smoothly contoured and movement normal with respiration. Moderate dilatation of the descending colon with an accumulation of gas, but no fluid levels demonstrable, and no change sufficient to make a diagnosis of obstruction."

At noon the abdomen was full, marked tenderness over the entire abdomen, particularly, however, in the right quadrant and into the right lumbar region. There was no fulness in the costo-

vertebral angle and no spasticity of the muscles.

A roentgenogram was requested to be taken about 4 P. M., that is after five hours. The report at this time was "Several loops of what is considered to be small bowel markedly distended by gas. These are in the ladder form commonly associated with obstruction. Most of the dilated loops occupy the upper left quadrant."

Blood count at this time revealed 21,000 white cells, neutrophils 90 per cent. Young forms 20 per cent.

Examination of the abdomen at this time, 5 P. M., revealed more distention, rigidity more marked in the lower quadrants. A note was made on the Progress Record that "the roentgenogram showed what looked to be evidence of exudation by large irregular shadow."

Operation was done at 7:15 P. M., December 23. Diagnosis: Acute general peritonitis, intestinal obstruction. Peritonitis of unknown origin. Post-operative diagnosis identical.

Midline incision below umbilicus. As soon as the peritoneum was opened a dilated loop of the ileum presented itself into the wound. A large amount of sero-purulent material was immediately evacuated through the peritoneal opening. On the ante-mesenteric border of the ileum there was a string of organized peritoneal adhesions about 1/16 of an inch wide and 4 inches long. This band extended from the ante-mesenteric border of the ileum to the parietal peritoneum and thence to another loop of bowel. This band was cut after ligating it close to the bowel. As soon as the adhesion was liberated the distention of this loop of bowel disappeared. The bowel was covered with exudate and in places there was reddish-brown appearance, almost strawberry like, on the surface of the bowel.

Because we had felt, by rectal examination, a mass in the lower right quadrant I introduced my hand into the right lower quadrant and there found coils of bowel matted together by thick exudate. Peritoneal fluid in large quantities was removed by suction both from the pelvis and from the upper watershed in the right kidney region.

An ileostomy was done of the Witzel type.

Abdomen was closed in tier sutures with no other drainage than in the bowel.

Operation was done under gas-ether anesthesia.

Following the operation temperature was 104°, pulse 140 and very irregular. Respiration 24. He was extremely restless during the night. Intravenous infusions were begun at once. The enterostomy tube began to drain well after the first 24 hours.

On December 24 the abdomen was still distended, but soft, the upper abdomen was more distended than the lower. The ileostomy tube had drained about 3,000 cc. by this time. He was mentally alert and not irritable. Large quantities of gastric

contents were aspirated through the Levin tube. Some of the material had a feculent odor.

Three days after the operation intravenous drip had to be discontinued because of a phlebitis which had developed.

December 28, five days after operation, the bowels moved spontaneously twice. He was by this time taking plenty of fluid by mouth and the enterostomy tube continued to function well. There was no distension and no tenderness over the incision.

January 2, 1933. Temperature was normal, pulse 80, respiration 20. The enterostomy tube was removed on the ninth post-operative day.

Roentgenogram of the abdomen was taken on January 4. This revealed that "there is still considerable dilatation of the stomach with gas, but the intestinal tract at this time does not show any unusual dilatation or collection of gas. Some is present, however, upon the left side of the abdomen, but this is not greater than normal."

Even though the examination stated there was dilatation of the stomach the abdomen was soft, the patient was nourishing well and having no discomfort so far as the stomach was concerned.

An electrocardiogram was done for the purpose of comparison with the cardiogram made in September and for the purpose of determining whether there was any evidence of the myocarditis remaining. The report on January 4, signed by Drs. Wirth and Heninger, state "very questionable evidence of myocardial disease." This is of importance because it indicates that the myocardial changes which the patient had, following the original operation, was a result of the toxic absorption at the time of the first peritonitis.

This case has been detailed because it proves clearly the importance of preparedness for the handling of any of the complications which might arise in connection with surgery of "Just an Appendix."

TREATMENT OF AMEBIC ABSCESS OF LIVER BY ASPIRATION*

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Amebic dysentery must still be considered a relatively common disease in Louisiana and it's most important complication, abscess of the liver, a comparatively frequent sequela. Simon quotes the following: "McDill in a statistical review of over 100,000 cases of

*To have been read at the Section on Medicine of the Louisiana State Medical Society, April, 1933.

dysentery in the East, found approximately 4,000 cases of liver abscess; Rogers, noted hepatic involvement in twenty per cent of his large series of cases." In private practice, the percentage of liver involvement is of course less, due undoubtedly to earlier and more efficient treatment.

In the formation of amebic liver abscess, the amebas are carried to the liver by the portal vein, where they become entangled in bloodclot in the small interlobular veins. There may result a simple hepatitis or pre-suppurative stage, the result of a diffuse spreading of the vegetative organisms. This stage is controlled very readily by active treatment, especially the use of emetine. But, if the amebas reach some part of the liver in such numbers as to cause clotting of several contiguous small veins so as to interfere with the blood supply sufficiently to produce a small focal necrosis with consequent softening of the wall of the veins allowing the escape of the ameba into the soft liver tissue, the commencement of an abscess results. Concentric breaking down of the liver tissue results, until, if the patient survives long enough, a fibrous capsule develops, when the abscess only increases by distention of the cavity by continued formation of pus from its walls, but without further destruction of liver tissue.

The contents of the liver abscess is of a characteristic thick viscid consistency and of a chocolate color. Rogers reports them as sterile in eighty-six per cent of the cases. The amebas are difficult to find in the pus, though very numerous in scrappings from the wall of the cavity.

The large solitary abscess develops rather slowly. Hepatic symptoms may be present from two weeks to two months before definite localization is possible. It may occur in the presence of active symptoms of dysentery in which there is involvement of the rectum, and sigmoid detectable by sigmoidoscopic examination. It may develop during a quiescent period following an active dysentery when you may or may not be able to find lesions in the lower colon, or may or may not find the amebas in the stools. It may

develop in patients who give no history of active dysentery. In our series of four cases, one gave no history of diarrhea at any time. Examination of the stools and sigmoidoscopic examination were negative in two cases. In one case the stools were positive for ameba.

According to Rogers, Maclean in 1871 advocated the aspiration of amebic liver abscess and in 1886, reported its frequent successful use; and in 1892, Lawrie reported eighteen cases treated by aspiration with fifteen recoveries. With the development of asepsis, open drainage was advocated, but has always been attended by a high mortality due to secondary infection with pyogenic organisms which are able to spread through the thick fibrous wall of the abscess, producing multiple secondary abscesses, peritonitis and even infection of the pleura through the diaphragm.

Simon quotes the following statistics on cases treated by open operation:

Observer	Cases	Country	Mortality
Rouis	203	Algiers	80 per cent
Castro	125	Egypt	72.5 per cent
Rogers	64	India	53 per cent
Megaw	292	India	60.1 per cent
Rogers	52	India	73 per cent
Futcher	27	U.S.A.	70 per cent
	<hr/> 763	<hr/> Average	<hr/> 68.1 per cent

Because of the thick fibrous wall, the sterility of the pus, and the high mortality from open drainage, Rogers, in 1922, as a result of his work in India, advocated the closed drainage or aspiration of amebic liver abscess. His collected statistics showed 2661 cases treated by open drainage with a mortality of 1511 or 56.8 per cent and 111 cases treated by the closed method with a mortality of 16 or 14.4 per cent. It is Rogers contention that by destroying the causative protozoan parasite in the walls and by removing with the aspirator, the dead detritus in the form of pus which becomes steadily thinner and less in quantity with each evacuation in successful cases, cure by encystment is hastened.

Thurston, in 1914, reported (101) cases treated by himself with the following results:

	Cases	Death	Cure	Mortality
1. Open drainage	46	18	28	39
2. Aspiration	50	12	38	24
3. Aspiration and Open Drainage	5	3	2	60

Talbot in 1919, reported 11 cases treated by aspiration with no deaths. Mason-Bahr, Low, Pratt and Gregg, in 1923 reported 15 cases treated by aspiration with no deaths.

On the basis of the lowered mortality by aspiration, we felt justified in trying the method and wish to report four cases.

We use the ordinary 20 to 50 cc. Luer syringe, with a needle about four inches long and of sufficient caliber to permit aspiration of the thick viscid pus. The bevel of the needle should be fairly blunt. Under novocain anesthesia, we aspirate over the tenderest point or in the 8th to 10th interspace in the mid-axillary or posterior axillary line. Usually you can readily detect when the needle has entered the abscess cavity, when slight suction should produce pus. We then empty the cavity as completely as possible and usually irrigate with normal saline, Dakin's solution, or 1:1,000 emetine solution. The irrigation is continued until the return is reasonably clear. A solution of emetine, anayodin or quinine may be left in the cavity. Following irrigation with 1:1,000 emetine, we usually left 10 to 20 cc. in the cavity and in one patient, injected anayodin into the cavity. The value of this local treatment is debatable, but in every case active anti-amebic treatment should be instituted, using emetine hydrochloride, grains one daily for 6 to 10 days, followed by ipecac anayodin, or Aspiration is repeated at 3 to 5 day intervals as indicated. Invariably at subsequent aspirations the pus is thinner, less viscid and smaller in quantity.

All liver abscesses cannot be treated by aspiration. It is generally conceded that open operation should be employed:

1. In all abscesses of the left lobe,
2. Whenever the abscess bulges anteriorly,

3. When, after aspiration, pyogenic organisms have been found in the pus.

In our series of five cases the treatment has been successful in every case. There was no appreciable amount of pain incident to the aspiration and no untoward symptoms developed. Invariably following the first aspiration, the patient has felt much better, the temperature has returned to normal within one to four days, the blood picture gradually improved and the patient's general condition, appetite, color, weight, improved steadily. The number of aspirations have varied from 3 to 8. Repeated bacteriological examinations of the aspirated fluid have failed to show any contamination.

CASE REPORTS

1. J. O., colored male, aged 47 years, was admitted January 11, 1931, complaining of dyspnea, edema of legs, and pain in the region of the liver. In November 1930, he had a bloody diarrhea of four weeks' duration. Since January 1, 1931 he had had pain along the right costal margin with high fever and dyspnea. Physical Examination: T-102 P-120 R-20. There were impaired resonance and decreased breath sounds at the base of the right lung. The heart was slightly enlarged, with a systolic murmur at the apex. The lower border of the liver was just above the iliac crest and very tender. There was slight edema over the region of the liver.

January 20, 1931 Total White 18,250 N-77, Total Red 4,335,000. Hb. 70 per cent—Stools negative for ameba.

Aspiration: Mid-axillary line, 10th interspace.

DATE	ASPIRATED	IRRIGATED
1-23-31	2000 cc	
1-26-31	700 cc	1½ oz. Anayodin 2 percent injected
2- 6-31	250 cc	
2-16-31	500 cc	
2-20-31	200 cc	10 cc Lipiodol Injected
2-27-31	NONE	

He was given emetine and anayodin, during course of treatment. Discharged March 14, 1931. Temperature normal since January 26, 1931. Up and about ward for past three weeks and had gained considerable weight.

2. L. D., colored male, aged 35 years, was admitted January 30, 1932, complaining of pain in the region of the liver and right shoulder. There was no history of diarrhea at any time. Physical Examination: T-100 P-100 R-24. The liver was enlarged and tender with slight bulging in the right

costal margin. Sigmoidoscopic examination and stools were negative for ameba.

On February 1, 1932: Total White 18,300, N-77 percent, Total Red 4,280,000, HBO₂ 70 per cent.

Aspiration:

DATE	ASPIRATED	IRRIGATED
2-9-32	480 cc	
2-12-32	50 cc	
2-17-32	200 cc	
3-2-32	200 cc	
3-2-32	50 cc	10 cc. Anayodin injected
3-10-32	75 cc	
3-17-32	40 cc	
3-23-32	NONE	

He was also given anayodin, emetine and Blaud's pills. He was discharged March 25, 1932. His temperature had been normal since February 9, 1932. He had gained considerable weight and had been up and about the ward for the past three or four weeks. He returned in May and August, 1932, for a check up, having had no recurrence of symptoms, and having worked daily.

3. A. W., white male, aged 22 years, was admitted August 3, 1932, complaining of pain in right shoulder and right hypochondriac region and diarrhea. He had a bloody diarrhea in November 1931. The pain in the right shoulder and along the right costal border began in December 1931. In April 1932, his abdomen began to swell. Physical Examination: T-100.4, P-140, R-32. There was lagging of the right side of the chest with decreased fremitus, dullness and decreased breath sounds below third interspace. The liver was enlarged three fingers below costal margin. Sigmoidoscopic and stool examinations were negative.

On August 5, 1932: Total White 10,200, N-73 percent, Total Red 2,800,000 HBO₂ 50 per cent. September 13, 1932: Total Red 5,650,000 HBO₂ 90 per cent.

DATE	ASPIRATED	IRRIGATED
8-5-32	870 cc	1:1000 emetine
8-8-32	540 cc	2 per cent anayodin
8-10-32	500 cc	1:1000 emetine
8-12-32	NONE	
8-18-32	NONE	
8-25-32	500 cc	1:1000 emetine
9-2-32	NONE	

He was given emetine, anayodin and Blaud's pills. He was discharged September 4, 1932. His temperature had been normal since August 9, 1932, he had gained considerable weight, and had been up and about the ward for the past two weeks.

4. H. L. G., white male, aged 51 years, was admitted August 18, 1932, complaining of pain along the right costal margin, mass in right side of

abdomen, and diarrheà. He had had intermittent diarrhea for past two years, with pain along right costal margin and mass in upper right quadrant of abdomen since January 1932. Physical Examination: T-100, P-100, R-24. There was lagging of right side of chest, with bulging of right costal border and right side of abdomen. The liver was enlarged, extending to iliac crest and rather tender.

On February 27, 1932; Total White 6,350, N-73 percent, Total Red 2,445,000, HBO 34 per cent. The stools were positive for ameba.

Aspiration:

DATE	ASPIRATED	IRRIGATED
8-24-32	250 cc	1:1000 emetine
8-29-32	100 cc	Normal saline
9-6-32	75 cc	Normal saline

He was given emetine, anayodin and Blaud's pills. On September 5, 1932, he was given a blood transfusion, 25 cc. whole blood.

He was discharged October 1, 1932. His temperature had been normal since August 24, 1932. He had gained weight and strength and had been up and about ward for two weeks prior to discharge.

CONCLUSION

Aspiration of amebic abscess of the liver in selected cases is a safe and practical method of treatment. It is not attended by any untoward symptoms, the patient is not subjected to the dangers of an open wound into the liver and the mortality is reduced considerably.

BIBLIOGRAPHY

1. Rogers, Sir Leonard: Amebic Liver Abscess, its pathology, prevention and cure—*Lancet*, March 11, 1922—1:463-469, March 25, 1922—1:569-575, April 8, 1922, 1:677-684.
2. Manson-Bahr, Low, Pratt and Gregg: Treatment of liver abscess by aspiration. *Lancet*, 941-943, 1923.
3. Thurston: A series of 101 cases of abscess of the liver—*Indian Medical Gazette*—March, 88-96, 1914.
4. Pannett, C. A.: Solitary abscess of the liver. *Clinical Journal*, 49:261-267, 1920.
5. McEachern, John D.: Closed drainage in subphrenic abscess—*Surg. Gynec. and Obst.* 43:215-219, 1926.
6. Ochsner, Alton: Surgical treatment of subphrenic infection—*N. O. Medical & Surgical Journal*—82:752-757, 1930.
7. Simon, Sidney K.: *Tice-Practice of Medicine*—Vol. IV—310-318.

MUMPS ENCEPHALITIS:
REPORT OF A CASE WITH BILATERAL
OPTIC NEURITIS, RAPID AND COM-
PLETE BLINDNESS AND COM-
PLETE RECOVERY

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That the various types of acute infectious diseases are capable of, and do produce encephalitis we all know, but, in reporting this case, I find that it differs in some respects from the cases reported^{1, 2} in that the seriousness and severity were more marked and because of the complete recovery that was made by the patient.

The Yearbook of Nervous and Mental Diseases³ quotes a British editorial writer of the Lancet⁴ as saying that the encephalitis or meningo-encephalitis of mumps has more claim than any other to a direct relationship with the virus of the disease. He further quotes H. L. Haden in 1919, as reporting nine cases of encephalitis among 476 cases of mumps. He states that frequently an increase in spinal fluid cells was found in cases which presented no nervous symptoms. The editorial writer also quotes Weissenbach, Bach and Bach who reported cases in which the nervous symptoms precede or replace the parotid swelling. The editor also quotes Mervyn Gordon who, in 1914, reported that he had produced a fatal meningo-encephalitis in monkeys by intracerebral inoculation of filtered saliva from cases of mumps.

An article by Milo K. Miller⁵ presents an interesting case of mumps meningo-encephalitis which was exceptionally well studied, and who states that the spinal fluid in mumps has been studied by a number of observers and mentions that Monod wrote his inaugural thesis in Paris on this subject in 1902, when he described a cerebrospinal lymphocytosis even in absence of meningeal symptoms. Miller states that Feiling corroborated the findings of other observers that a lymphocytosis may occur without meningeal symptoms.

CASE REPORT

F. M., aged 10 years, referred by Drs. Woolworth and Simmons with a diagnosis of optic neuritis of 4 diopters. The history is as follows: Thirteen days previously the patient had mumps affecting both parotid glands; was confined to bed for several days and then was up and about the house. He was cross and irritable and somewhat drowsy. Several days after the swelling disappeared, the patient was allowed to go swimming. The blurring of vision appeared several days after the swelling of the parotid gland disappeared. No headaches, diplopia, nystagmus, dizziness, vertigo nor ataxia were noted.

Family History: Irrelevant.

Past Diseases: Measles at age of 2; chicken pox at 5; attacks of tonsillitis. Tonsils were removed several years ago. Patient's infancy and childhood normal.

Neurological Examination: Cranial Nerves: V. O.D. 20/60; V.O.S. 20/200.

Pupils are slightly dilated, reacting to light and accommodation. Ophthalmoscopic examination shows a bilateral optic neuritis, of about four diopters, complete obliteration of disc margins, increased size tortuosity of the veins; no hemorrhages or exudates.

Ciliospinal Reflex: present and active. Consensual Reflex: present and active. Concentric contraction of the visual field.

Station, gait, and co-ordination are normal. There are no tremors.

Sensation: Normal except sight. Reflexes were active and about equal on both sides. An occasional Babinski could be obtained, but was not constant; no diplopia; no Kernig nor Brudzinski sign.

Mental Examination: There was no impairment of the mental faculties. Patient was bright, active and talkative.

Physical examination was entirely negative. X-ray examination of sinuses and mastoid by Dr. J. R. Anderson was essentially negative. Examination of the nose and throat by Dr. John T. Crebbin was negative.

Laboratory Examination: Urine: Sp. Gr. 1018, reaction acid; albumin negative; sugar negative; microscopical negative. Blood: Hemoglobin 70 per cent! red blood cells 4,655,000; white blood cells 8,500; small lymphocytes 33 per cent; large lymphocytes 5 per cent. Blood Chemistry: Sugar, 101 mgm. per 100 cc; uric acid, 2.1 mgm. per 100 cc; urea 13.3 mgm. per 100 cc.

Spinal puncture was made the first morning after the patient entered the hospital and reported the following: Cells 53 (all lymphocytes); sugar 39 mgm. per 100 cc.; globulin negative; chlorides 590 mgm. per 100 cc.; Wassermann negative; colloidal gold: 00000000.

Course: A diagnosis of mumps encephalitis

*From the North Louisiana Sanitarium

was made. Dr. A. A. Herold was called in consultation and agreed with the diagnosis.

At the time of entrance, the patient ran a temperature of 99.4°, respiration normal, but the pulse varied from 48 to 90. He was placed on a light diet.

Patient was given 4cc. of 1 per cent mercurochrome on July 2, 1932. No reaction. During the time the sight was failing rapidly.

July 4: 5 cc. of 1 per cent mercurochrome was given again.

July 5: 5 cc. lactigen was given intra-gluteally, produced muscular soreness and temperature of 100.2°. Sight still failing.

July 6: Spinal puncture with following fluid report: Cells, 29; globulin slight increase; sugar 35 mgm. per 100 cc.; chlorides 620 mgm. per 100 cc.

July 7: 10 cc. Lactigen; white blood cells 18,220.

July 10: 7 cc. mercurochrome given. At this time light perception was present in right eye, but not in left. The swelling of the optic nerve heads had begun to subside.

July 11: Spinal puncture was again done and the following fluid report made: Cells, 13; Globulin: slight increase; sugar 41 mgm. per 100 cc; chlorides 670 mgm. per 100 cc.

July 13: Lactigen, 10 cc. was given.

I left the city for a few days and Dr. Herold took care of the case during my absence. *At this time light perception was gone in both eyes*, although the swelling of the nerve heads was distinctly better. *The patient was totally blind.*

July 15: 8 cc. mercurochrome was given.

July 16: 10 cc. lactigen was given.

July 17: Ophthalmoscopic examination showed no swelling of nerve heads nor increased tortuosity of the veins. There was a marked pallor of both nerve heads and there was light perception of both eyes.

July 19: The patient was allowed to return to his home where he was visited twice weekly for about eight weeks, during which time he received weekly injections of mercurochrome and lactigen. He made a gradual but steady improvement. He was discharged as normal in every way except for a pallor of the optic nerve which I am sure will complete the stage of regeneration.

The following report from Dr. J. D. Woolworth was received just before discharging the patient on September 26, 1932:

"Vision: Right eye: 6/6 partly. Left eye: 6/6 partly. Pupils active. Tension normal.

Field, right eye: with 10 M.M. white disc; normal.

Field, left eye: with 10 M.M. white disc: normal.

Fundi examination: Media clear. Pallor of the discs more marked, more especially on the temporal sides. Deep physiological cupping. The outline of the disc is clearly made out. Lamina cribrosa well marked and distinctly seen. Blood vessel normal in size."

BIBLIOGRAPHY

1. Zemke, E. E.: Meningo-encephalitis, A complication of epidemic parotitis. *Minnesota Med.* 13:107-109, 1930.
2. Mayrhofer, Grunbuhel Hobanna: Encephalitis after parotitis epidemica. *Wein. klin. Wehnschr.* 37:1165, 1924.
3. Yearbook Nervous and Mental Diseases, 1930, p. 130.
4. *Lancet*, London: Vol. 1, May 31, 1930.
5. Miller, Milo K.: Four types of encephalitis, *J. A. M. A.* 97:161-1931.

SYNOPSIS OF A STATISTICAL SURVEY OF THE MEDICAL PROFESSION IN LOUISIANA DURING THE YEAR 1932: ITS RELATION TO THE GENERAL POPULATION OF THE STATE AND TO MEMBERSHIP OF THE LOUISIANA STATE MEDICAL SOCIETY, WITH OTHER DATA OF INTEREST TO THE MEDICAL PROFESSION OF THE STATE*

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The conclusions of this report are based upon the following series of statistical tables:

Table I shows the proportion of registered physicians of Louisiana to the population of the state and of the 64 individual parishes stated in actual numbers for the year 1932.

These statistics were obtained from the following sources: Population, from the estimate made by the Registrar of Vital Statistics of the State Health Department for the year ending July 1, 1932, which agrees with that made by the United States Bureau of the Census for the same period. The number of physicians from the 1932 report of the Licensing Board of the State of Louisiana.

The sum total of the population of Louisiana is 2,138,000; total physicians, 2,008.

The parishes showing the smallest number of physicians to population are:

St. Bernard: Population, 6,800; Number of physicians, 1,

St. Helena: Population, 8,500; Number of physicians, 2.

The largest number of doctors to population is shown in:

Orleans: Population, 474,500; Number of physicians, 693,

Caddo: Population, 133,800; Number of physicians, 181.

Table II. shows the ratio of physicians in Louisiana to the population of the state and of the 64

*Supplement to the report of the Committee on History of Louisiana, submitted to the House of Delegates of the Louisiana State Medical Society, April 24, 1933.

†Chairman of the History Committee of the Louisiana State Medical Society.

individual parishes for the year 1932.

In the State of Louisiana as a whole, the ratio of physician to population is 1 : 1,064.74.

In 1 Parish the ratio is above 1 : 6,000: St. Bernard, 1 : 6,800.

In 1 Parish, between 1 : 5,000 - 1 : 6,000: Jefferson, 1 : 5,512.5.

In 1 Parish, between 1 : 4,000 - 1 : 5,000; St. Helena, 1 : 4,250.

In 3 Parishes, between 1 : 3,000 - 1 : 4,000: Evangeline, 1 : 3,700; St. Martin, 1 : 3,627.83; Terrebonne, 1 : 3,040.

In 10 Parishes (15 per cent of the 64 Parishes) the ratio is between 1 : 2,000 - 1 : 3,000. : 3,000.

In 27 Parishes (42 per cent of the 64 Parishes) the ratio is between 1 : 1,500 - 1 : 2,000.

In 15 Parishes (23 per cent of the 64 Parishes) the ratio is between 1 : 1,000 - 1 : 1,500. 1,500.

In 6 Parishes, the ratio is between 1 : 600 - 1 : 1,000.

In parishes where the largest cities are located, namely, Orleans with New Orleans, Caddo with Shreveport, East Baton Rouge with Baton Rouge, Calcasieu with Lake Charles, Rapides with Alexandria, and Ouachita with Monroe, we find the lowest ratios of physicians to population. To illustrate:

Five parishes come in the group of lowest ratios, namely, where the ratio is between 1 : 600 and 1 : 1,000:

Orleans with the City of New Orleans, having a ratio of 1 : 684.7

Caddo with the City of Shreveport, having a ratio of 1 : 739.2

Ouachita with the City of Monroe, having a ratio of 1 : 977.04

Rapides with the City of Alexandria, having a ratio of 1 : 982.35.

Two parishes come in the group of second lowest ratios, namely, where the ratio is between 1 : 1,000 and 1 : 1,500:

East Baton Rouge with the City of Baton Rouge, having a ratio of 1 : 1,005.47

Calcasieu with the City of Lake Charles, having a ratio of 1 : 1,100.

Only two other parishes come within the group of lowest ratios and these are great industrial centers, namely; Concordia, with a ratio of 1 : 984.6 and La Salle with a ratio of 1 : 930.7.

It will be further noted that the two parishes having the highest ratios are St. Bernard with a ratio of 1 : 6,800 and Jefferson with a ratio of 1 : 5,512.5, while the lowest ratio of 1 : 684.7 occurs in Orleans Parish.

If the statistics concerning these three closely associated parishes are combined as if for one parish we have the following:

Parish	Estimated population	Physicians	Ratio
Orleans	474,500	693	1 : 684.7
St. Bernard	6,800	1	1 : 6,800
Jefferson	44,100	8	1 : 5,512.5
Total	525,400	702	1 : 748.43

Table III shows constants and variants in ratio of physicians to population in the five year period: 1928-1932 inclusive.

In the state of Louisiana as a whole:

Number of physicians in 1928, 2,001; ratio to population in 1928, 1 : 999.5

Number of physicians in 1932, 2,008; ratio to population in 1932, 1 : 1,064.74.

In this table a comparison is established in the ratios of the 64 Parishes for the year 1932 with those of 1928, covering a period of five years. A ratio has been considered to vary if there has been a decrease or increase of more than 1 : 300; any variation smaller than this has been disregarded and the ratio has been considered stationary.

Synopsis: *Thirty-one Parishes* where the ratio has remained stationary:

Twenty-seven Parishes in which each physician serves a larger population than five years ago, either because of increased population alone, or because of both increased population and, at the same time, a decrease in the number of physicians:

In 13 Parishes, in which the increased ratio is due to increased population alone; for example:

Bossier: Ratio in 1928, 1 : 2,053; ratio in 1932, 1 : 2,700; Physicians in 1928, 11; Physicians in 1932, 11.

Jefferson: Ratio in 1928, 1 : 2,951; ratio in 1932, 1 : 5,512; Physicians in 1928, 8; Physicians in 1932, 8.

E. Carroll: Ratio in 1928, 1 : 1,871; ratio in 1932, 1 : 2,800; Physicians in 1928, 6; Physicians in 1932, 6.

Fourteen Parishes where the increased ratio is due to both an increased population or decrease in the number of physicians; for example:

Bienville: Ratio in 1928, 1 : 1,165; ratio in 1932, 1 : 2,440; Physicians in 1928, 18; Physicians in 1932, 10.

Grant: Ratio in 1928, 1 : 847; ratio in 1932, 1 : 1,600; Physicians in 1928, 17; Physicians in 1932, 10.

Six Parishes where the ratio has decreased, with the stated amount of decrease.

From the above tabulation we find that in 31, or 48 per cent of the Parishes, the ratio of physicians to population has remained stationary in the last five years; that it has increased in 27, or 42 per cent, and has decreased in 6 Parishes, or 9 per cent.

Table IV gives a classification of Parishes in

three groups, showing the Parishes in which the number of physicians has remained stationary, has increased or decreased in 1932 as compared with 1928.

Group 1, showing that in 21 Parishes the number of physicians practising in the parish in 1932 was the same as in 1928. Although the intervening years may show some variations, at the end of the five year period (1928-1932) 21 parishes remained stationary.

Group 2, showing 18 Parishes in which the number of physicians has increased in the period of 1928-1932. The figures for 1928 and 1932, respectively, are given with the percentage of increase in 1932. While the percentages are high, the actual figures are small.

Group 3, showing 25 Parishes in which the number of physicians has decreased in the five year period with the percentage of decrease in each parish.

Note: If the 21 stationary and the 25 decreasing parishes are combined, the result will show that in 46 parishes (46 : 64) or 71.8 per cent of the parishes, there has been no advance or increase in the medical population, and that in only 18, or 28.2 per cent of the parishes, has the number of practitioners actually increased.

Table V presents statistics for Louisiana as a whole.

In this table the following statistics are exhibited for each of the five years, 1928-1932:

- (1) The total population of the state.
- (2) Total registered physicians.
- (3) Ratio of physicians to the total population.
- (4) Total membership of the L. S. M. S. in the state.
- (5) The physician non-members.
- (6) The percentage of physicians who are members.

The actual tabulations follow:

	1928
Population	2,000,000
Registered physicians	2,001
Ratio physicians to population.....	1 : 999.5
Members L. S. M. S.	1,307
Non-members.....	694
Percentage of physicians who are members....	65%
	1929
Registered physicians	2,019
Members L. S. M. S.	1,334
Non-members	694
Percentage members	66%
	1930
Registered physicians	2,039
Members L. S. M. S.	1,288
Non-members	751
Percentage members	63%

	1931
Registered physicians	2,014
Members L. S. M. S.	1,215
Non-members	799
Percentage members	60%
	1932
Population	2,138,000
Registered physicians	2,008
Ratio physicians to population.....	1 : 1064.74
Members L. S. M. S.	1,176
Non-members	832
Percentage of physicians who are members....	58%

If we compare the figures of 1928 through 1932 we will note:

- (1) The total population of the state has increased from 2,000,000 in 1928 to 2,138,000 in 1932, an increase of 6.9 per cent.
- (2) That, despite this increase in population, the number of physicians has not notably increased, 2,001 against 2,008.
- (3) During the same period the ratio of physicians to population has barely increased, that is, from 1 physician : 999.5 in 1928 to 1 physician : 1,064.74 in 1932, an increase of only 65.24 population to each doctor.
- (4) As far as the membership of the state society is concerned, there has been a notable decrease in the membership of the state, from 1,307 in 1928 to 1,176 in 1932. This shows that during these five years, with the exception of 1929, the society has made no numerical progress, and in fact there has been a gradual but appreciable decrease in membership. Thus, in 1928, 64 per cent of the registered practitioners in Louisiana were members of the Society. In 1932 only 58 per cent were members. It is evident that the interest in the society is waning, and there is some defect in the organization that calls for serious investigation.

Table VI with a map of Louisiana in colors, gives the classification of the Parishes into groups, showing the actual and proportional relationship of the members of the state Society to the number of registered physicians in each parish.

- Group 1 (colored red) increased membership in 9 parishes.
- Group 2 (colored blue) stationary in 13 parishes
- Group 3 (colored yellow) decrease in 42 or 65 per cent.

Table VII presents a classification of congressional districts as to parishes with increased, decreased or stationary membership over the five year period 1928-1932.

District I:

- (1) Parish with decreased membership—
Plaquemines.
- (2) Parishes with stationary membership—
Orleans, St. Bernard.

Orleans appears in both the first and second districts.

District II:

- (1) Parish with decreased membership—
St. John.
- (3) Parishes with stationary membership—
Orleans, Jefferson, St. Charles.
- (1) Parish with increased membership—
St. James.

Conclusions derived from a Study of the Preceding Statistical Tables.

District III:

- (6) Parishes with decreased membership—
Assumption, Iberia, Lafayette, Lafourche,
St. Martin, Vermillion.
- (1) Parish with stationary membership—
St. Mary.
- (1) Parish with increased membership—
Terrebonne.

1. In Louisiana, when considered as a whole, the number of registered physicians and their average ratio to population in 1932, is 1 : 1,064.74. This estimate is based on the registration of the regular physicians exclusive of the osteopaths, chiropracts and other sectarians, cultists, christian scientists and healers of various sorts who practice with and without license and whose number it is difficult to estimate with any degree of accuracy, but who constitute a large body of irregulars who figure legitimately, or illegitimately, before the public as a part of the medical population of the State.

District IV:

- (4) Parishes with decreased membership—
Claiborne, Webster, Bossier, De Soto.
- (2) Parishes with stationary membership—
Caddo, Red River.
- (1) Parish with increased membership—
Bienville.

If we restrict our calculations to the regular physicians, licensed by the State, we find that the mean ratio of physicians to population is more than adequate to meet the medical needs of the general public in normal conditions.

COMMENT

District V:

- (9) Parishes with decreased membership—
E. Carroll, W. Carroll, Jackson, Lincoln,
Morehouse, Richland, Franklin, Tensas,
Madison.
- (3) Parishes with increased membership—
Ouachita, Caldwell, Catahoula.
- (2) Parishes with stationary membership—
Concordia, Union.

According to available data collected by the Commission of Education in 1932, "proper medical service can be provided for the public on the basis of one active physician to 1,000 to 1,200 persons, depending on the size and type of the community, the organization of the service and other factors. In this connection it may be stated that the number of persons per physicians in the United States is approximately 780 (1:780)." According to the same authority the present number of physicians in the United States probably exceeds the needs of the population by at least 25,000.

District VI:

- (9) Parishes with decreased membership—
E. Feliciana, W. Feliciana, Pointe Coupee,
E. Baton Rouge, W. Baton Rouge, Livingston,
Tangipahoa, Iberville, Ascension.
- (2) Parishes with stationary membership—
Washington, St. Tammany.
- (1) Parish with increased membership—
St. Helena.

It is estimated that there are 55,000 sectarian practitioners of the healing art of all sorts, in addition to 156,440 licensed physicians in the United States.

District VII:

- (5) Parishes with decreased membership—
Beauregard, Calcasieu, Cameron, Evangeline,
Jefferson Davis.
- (2) Parishes with stationary membership—
Acadia, St. Landry.
- (1) Parish with increased membership—
Allen.

On a basis of physicians to population (125,036,000 to July, 1932) the United States has more physicians per unit of population than any other country in the world, twice as many as the leading countries of Europe.

The statistical studies of the Commission of Medical Education show that present (1932) medical schools in the United States are producing more physicians than the country needs or can adequately support.

District VIII:

- (7) Parishes with decreased membership—
Avoyelles, Grant, La Salle, Natchitoches,
Rapides, Sabine, Vernon.
- (1) Parish with increased membership—
Winn.

If the annual addition of graduates is increased (there were 4936 graduates of approved schools in the U. S. in 1932) it seems probable that the number of persons per physician will be below 750 (1:750) in the next few years.

The comparison of the number of deaths with the number of graduates of approved schools, in this country, reveals that during the last ten years

Total—65. This total is 65 instead of 64 because

the new graduates (medical births) have exceeded the number of deaths by 832 a year. During 1932, the graduates of approved schools in the U. S. were 4936, practically 5000, and the number of physicians who died was 3142,—an excess of 1794 medical births over deaths.

In view of these facts, which show a great excess of supply over demand, it is not surprising that in this as in other countries, the question of reducing the number of graduates from the medical schools is being seriously agitated. The proceedings of the International Congress recently held in Geneva to consider the causes of, and the remedies for, the existing medical plethora show plainly the distress that is prevailing in the medical profession of the more densely populated districts and cities of Europe. In consequence of this overplus of doctors, many of them have been put on the bread line of the unemployed or compelled to abandon their profession in order to make a living in other often less dignified pursuits.

II. While in Louisiana, as elsewhere in the United States and in Europe, the supply of doctors is in excess of the demand, especially in the urban and metropolitan centers, the general average ratio of doctors to population is not evenly or equally distributed. Here in Louisiana, as in other states, the census of the profession shows that there is a plethora of doctors in the larger and more populated districts, while an anemia and atrophy is going on in a number of the rural parishes and country districts. Thus our survey of 1932 shows that in six parishes (10 per cent of the parishes) the ratio of physicians is far below the normal requirements (for instance, 1:6,800 inhabitants in St. Bernard; 1:3,040 inhabitants in Terrebonne). In ten parishes (15 per cent) the number of practitioners is below the normal ratio of 1:2,000—1:3,000. In twenty-seven (42 per cent) the number of physicians is about the normal ratio (1:1,500—1:2,000); that is, there is an adequate supply of doctors. In fifteen parishes (23 per cent) the number of practitioners is in some excess of the normal requirements of the population (1:1,000—1:1,500). In six parishes (cities and industrial centers) there is a very notable excess of doctors to population (1:600—1:1,000). In this group are included, Orleans, 1:684.7; Caddo, (Shreveport) 1:759.2; Ouachita, (Monroe) 1:977.04; Rapides, (Alexandria) 1:952.85.

This survey confirms the statement that while the medical population of Louisiana is, collectively, fully adequate in numbers to meet the requirements of the people, the unequal distribution of practitioners causes a deficiency of service (anemia of doctors) in 25 per cent of the parishes. In 42 per cent there is an adequate or healthy standard and in 33 per cent an excess, or plethora which suggests the need of depletion.

III. In comparing the medical population of the state as it has been registered annually in the reports for the last ten years (1923-1932 incl.), we find that in twenty-one parishes the number of physicians has remained stationary and in twenty-five it has actually decreased despite the increase of population in many of them.

We may therefore state that in 46 (71.8 per cent) of the 64 parishes there has been no numerical increase in the medical population during this period and that only in 18 (28.2 per cent) has there been any notable increase in the number of practitioners.

These figures suggest that the conditions of medical practice are not attractive to the regular graduates in the large majority of the parishes and that only in a minority the conditions exist which attract and increase the medical population of the parish.

COMMENT

The steady depopulation of the rural districts and the crowding of practitioners to the cities and in growing industrial centers is an old problem that has confronted the people of this and other countries for the last fifteen years. Our survey confirms the existence of the same conditions in other and especially the agricultural states, namely that the young graduates of the present generation, educated and trained for practice in modern medical schools are attracted and cling to the cities where hospitals, nurses, laboratories and other auxiliary aids exist and are adapted to the new methods of practice which they have been taught. The cities also attract because they offer greater advantages for professional, economic, social, and cultural advancement which are lacking, more or less, in the isolated country districts.

This awkward situation has been well recognized and serious efforts have been made to relieve it and there is good reason to believe that the problem of securing satisfactory medical service for most rural districts is gradually being solved.

Apart from the constantly improving facilities for communication and transportation which have enormously expanded the radius of the physician's area of service, the rapid rise and development of hospitals and infirmaries in the smaller communities throughout the State is by far the most important single factor in correcting the uneven distribution of physicians in the rural parishes.

It must be recognized, however, that some remote communities cannot support medical service on a basis of private practice. The solution in such districts appears to be the employment of a physician on a salary with reasonable provision for an adequate diagnostic and therapeutic equipment.

There is no evidence to support the suggestion that shortening the medical course or giving pre-

ference to students from rural districts will help correct the present uneven distribution.

IV. The feature of our survey which is of special importance to the Louisiana State Medical Society, is shown in the study of the relations of the membership of this Society to the licensed physicians in each parish who are not members.

The table and map which we have prepared show plain that in the last five years (1928-32), no progress has been accomplished by the propaganda for medical organization and the consolidation of the interests of the medical profession of the State in the membership of this Society. If we compare the years 1928 and 1932, we see that in 1928 only 65 per cent of the 2,001 available graduates in the State were members and that in 1932, of 2,008 regular physicians, only 58 per cent were members.

Judging by these facts it would seem that interest in the Society has been declining, and that there is some defect in the organization that is causing an indifference to our membership among the 832 graduate licentiates who are presumably eligible, but who have failed to enlist in the membership of the Society, or who appear indifferent to the advantages of medical organization.

The attention of the officers and members of the Louisiana State Medical Society is especially directed to the supplementary report of the Chairman of this committee published in the June issue of the Journal—pp. 929-932—in which the problems that face organized medicine in Louisiana are historically, statistically and critically considered from the view point of the present needs of the organization.

In addition to the preceding study, the following supplementary data have been incorporated in our report as of general interest to the medical profession.

Table VIII gives an analysis of ages and causes of death of 50 physicians in Louisiana who died in 1932, from the death certificates recorded in the Registrar's office of the Louisiana Department of Health.*

Average age of 50 Louisiana Physicians at Death, in 1932, 59.66 years (1):

BETWEEN:	80-90	—	5
“	70-80	—	6
“	60-70	—	11
“	50-60	—	19
“	40-50	—	6
“	30-40	—	2
“	20-30	—	1

OLDEST: 1 died at 87 years (Orleans Parish)

1 died at 85 years (Bienville Parish)
 1 died at 82 years (Livingston Parish)
 1 died at 81 years (St. Charles Parish)

YOUNGEST: 1 died at 26 years
 (Orleans Parish) Chronic Emyyema
 1 died at 33 years
 (Ouachita Parish) Homicide
 1 died at 36 years
 (Caddo Parish) Accidental Burns

Maximum mortality between 50-60 years,—19 deaths.

Mortality rate to medical population (50:2,008)—2.5 per cent.

Note: Twenty-nine (29) doctors who were members of the Louisiana State Medical Society died during 1932, or 58 per cent of the total 50 deaths occurred in the active membership of the Society. Twelve (12) more died, who were not members of the Society at the time of death. Some had been members previously, but had let membership expire and had failed to renew their membership up to time of death.

Causes of Death: Heart disease, 9; nephritis (chiefly chronic), 6; influenza, 4; pneumonia, 3; diabetes, 3; intestinal obstruction, 3; pulmonary tuberculosis, 2; cancer, 2 (1 bladder, 1 lung and brain); pleurisy, 2; appendicitis and peritonitis, 1; cerebral hemorrhage, 11; cerebral arteriosclerosis, 1; cholecystitis, 1; colitis, 1; cirrhosis of the liver, 1; chronic muscular atrophy, 1; general strepto-septicemia, infection of hand, 1; automobile accidents, 3; burns, 1; suicide, 1; homicide, 1; acute indigestion, 1; total, 50. Mortality rate to medical population in 1932, 2.5 per cent (50:2,008).

Remarks: It should be noted that while there are 9 deaths from heart disease (chiefly, chronic and acute myocarditis, acute and chronic dilatation, endocarditis, valvular lesions and angina pectoris (2 cases), in which this is given as the sole and primary cause), there are in addition, 21 deaths in which cardiac and cardio-vascular diseases are specifically mentioned as contributing to the deaths, including in these 5 cases of senility (arterio-sclerosis) in individuals 81-87 years of age. In addition there are two caused by apoplexy (cerebral hemorrhage) and arterio-sclerosis of the brain (softening) which are essentially dependent on arterial disease. It is also probable that death attributed to “acute indigestion” was, in reality, a cardiac death, caused by coronary thrombosis or coronary disease.

It may be safely said, therefore, that of the 50 deaths of physicians in Louisiana in 1932, no less than 9 were primarily and specifically caused by heart disease and that in 24 other deaths, cardio-vascular disease entered as a decided factor in the death. Altogether, in 33, or 70.2 per cent of the 50

*Transcripts of certificates obtained through the courtesy of Dr. J. Geo. Dempsey, Registrar, Bureau of Vital Statistics of the Louisiana State Department of Health. (1) The average age at death of 3,142 physicians in the United States, in 1932, was 64.1 as compared with 63.8 in 1931.

deaths, cardiac or cardio-vascular pathology entered as a primary or contributing factor in the death.

In this particular, the causes of death among the physicians of Louisiana (for 1932) clearly correspond with the causes of medical mortality in the United States as these have been recently analyzed for 1932 by the Journal of the American Medical Association. (Foot-note 1). These show that cardiac and cardio-vascular disease is a preponderating cause of death in the American medical profession. In 1932, 1,065 out of a total of 3,142 deaths, or roughly, 34 per cent, were caused directly from heart disease, exclusive of apoplexy, chronic arteriosclerotic nephritis and allied diseases in which cardio-vascular or circulatory lesions entered into the pathology of the death. The next factor is pneumonia, chiefly as a complication of influenza, or as a terminal phase of other diseases, (7:50). Diabetes, pulmonary tuberculosis, cancer and accidental deaths enter as minor factors in the mortality; but the appearance of automobile accidents (foot-note 2) is to be noted as a new and increasing factor in the mortality.

The fact that the greatest mortality among doctors (27:50) occurs in the middle and mature life in the two decades, 50-60 and 60-70 is also in accord with the preponderating influence of age as a predisposing factor in cardio-vascular disease and death.

There are many facts of sociologic interest to our profession, especially to the members of the Louisiana State Medical Society, which cannot be extracted from the mere certificates of death, but which, with the valuable cooperation of Dr. Dempsey, Registrar of the State Health Department, we expect to obtain by correspondence with the relatives and interested parties.

It is desirable that an accurate and analytical necrological report should be made annually to the Society, to account for the deaths that have occurred in the profession and in our membership.

Exhibit IX is a report on the Hospitals and Asylums of Louisiana (including 16 in New Orleans and 47 outside of the City), described and illustrated with numerous photographs of the buildings and portraits of founders and historical personnel, bed capacity, etc.,—a supplementary chapter contributed by Dr. James T. Nix, member of this Committee as a contribution to the History of Medicine in Louisiana in preparation by Dr. Matas, chairman.

Table X and bar diagram shows the medical colleges and their graduates represented in Louisiana as recorded in the Directory of the American Medical Association during the year 1932.

The following statistics were compiled from the Directory of the American Medical Association pub-

lished in 1931 and from the special supplement to same in 1932.

No attempt has been made to classify post-graduate work, the first named university in each case being the only one recorded.

Barring corrections for unrecorded deaths, there were in Louisiana at the close of 1932, 2,154 physicians, 1,179 of whom received their degree from Tulane University. In other words, 54.7 per cent of the physicians in Louisiana are Tulane graduates.

The remaining 45.3 per cent received degrees from 120 different universities, the largest number from any one being 182 from the Memphis Hospital Medical College, representing 8 per cent of the total number of physicians.

Forty physicians are the sole representatives of their Alma Mater in Louisiana, while forty others, in groups of two, represent twenty universities. Four did not graduate from any university.

Thirteen foreign universities are represented with 16 graduates as follows:

Canada:

McGill Faculty of Medicine, Montreal.....	4
Medical Faculty of Trinity U., Toronto.....	1
U. of Toronto.....	1
Victoria U. Medical Department, Coburg.....	1
U. of Western Ontario, London, Ont.....	1

Germany:

U. of Giessen.....	1
U. of Berlin.....	1
U. of Bonn.....	1

Italy:

Royal U. of Naples.....	1
Royal U. of Palermo.....	1

Austria:

U. of Vienna.....	1
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Scotland:

U. of Edinburgh.....	1
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Denmark:

U. of Copenhagen.....	1
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Four medical colleges for negroes are represented with 88 graduates:

Meharry Medical College, Nashville.....	46
Flint-Goodridge, N. O.....	32
Howard U., Washington, D. C.....	9
Lincoln Memorial, Knoxville, Tenn.....	1

Due to the large number of universities represented, it was not practical to list all on the accompanying chart. However, every university having a sufficient number of graduates to cover the smallest unit on the scale of the chart, namely ten, is shown.

Note: The discrepancy between the number of physicians in Louisiana listed in the A. M. A. Directory (2,154), and that published by the licensing board of Louisiana (2,008), a difference of 156 physicians, may be accounted for in an approximate way as follows:

125 or more transients (including interns of hospitals) not licensed.

25 or more who are recorded in the Directory but who are not practising.

6 or more who are entered in the Directory but who have not been licensed.

Foot-note (1): The causes of death of United States physicians in 1932, as recorded in the *Journal of the A. M. A.* are: heart disease, leading cause, 1,101 deaths; cerebral hemorrhage (2nd most frequent cause), 346 deaths; pneumonia (3rd most frequent cause), 284 deaths; arterio-sclerosis, 262; nephritis, 259—of which 17 were specified as acute; cancer, 228 (especially of the stomach, intestines, liver, prostate, mouth); embolism and thrombosis, 162 deaths. If we sum together the cardiac cases, 1,101, plus the cerebral hemorrhage, 346, plus the arterio-sclerosis, 262, plus the thrombosis and embolism, 162, plus the chronic nephritis, 242, we have a total of 2,113, or two-thirds of the deaths, caused by primary cardiac disease and cardio-vascular disorders.

Foot-note (2): Automobile accidents accounted for deaths in 158 accidental deaths recorded in 1932 in the United States—6 more than in 1931. Suicide: 87 physicians committed suicide in 1932—23 more than in 1931. Shooting accounted for 36 deaths; poison for 23; incised wounds, 9; hanging and gas, 5 each; drugs, 3; jumping, 2; chloroform and stabbing, 1 each; and in the remaining cases the methods were not reported. Homicides, 8, all by shooting, but one beaten.

ANHYDREMIA: ITS MECHANISM AND TREATMENT*

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Anhydremia, simply defined, is a lack of water in the blood fluid with a resultant concentration of the blood. That the blood may become thick and viscid has been known for a long time. The ancients were also cognizant of this fact. It has, however, only been in recent times, with the aid of instruments of precision, that the subject of anhydremia has received the attention it should. As a result, many hitherto unrelated clinical entities have been shown to possess a fundamental basis and the correction of the anhydremia more or less controls the outcome of the original pathology.

A concentrated blood is a factor that cannot be left out of consideration in the management of any pathological state wherein it is found, because when the blood is concentrated even to moderate degrees, definite recognizable symptoms ensue. The dehydrating effect upon the blood results first in an impairment of the circulation. There is a slowing in the rate of circu-

lation due to the increased viscosity of the blood. As a result the blood rapidly loses its oxygen and it becomes a poor oxygen carrier. The tissues suffer in general from this anoxemia and partial asphyxiation, which in turn produces secondary pathological states. Incidentally such functions as cardiac output, renal circulation, temperature control and the general processes of metabolism are entirely deranged. If the anhydremia results in a more severe degree of blood concentration, all these conditions become even more exaggerated and if persisted in, inevitably result in death.

Blood may be regarded as a complex fluid composed of variable colloids and innumerable electrolytes. The most important factor regulating its viscosity is the capillary, which may be regarded in the light of a semi-permeable membrane, separating the blood from the lymph. The composition of the blood varies according to the laws of filtration, osmosis and diffusion through some process capable of increasing or decreasing the permeability of the capillaries. It is by means of this mechanism that the blood is able to maintain its constancy of water content. This constancy of water content of the blood is one of the most important fundamentals to the organism. Attempts to alter the amount of water in the blood by the introduction of large volumes of water orally have failed to appreciably change the blood composition. Ordinarily changes in the water content of the blood are slight and quickly compensated and it is only under conditions of experiment or of disease that this results. So far studies conducted have been directed towards such conditions which result in concentration of the blood.

The question may be asked: "Since the body is made up largely of water, why is it possible for a condition of blood concentration to arise? Why cannot the blood extract the water that it needs from the tissues to meet its deficiency?" The answer is that up to certain limits the blood does just this, but beyond a certain point this becomes impossible without serious damage to the organism. Water exists in the tissues in two forms, free or interstitial and combined. The latter form of water is inherently a part of the cell structure, and also a part of the various chemical elements of the body. All

*To have been read at the Section of Medicine, of the Louisiana State Medical Society, April, 1933.

tissues have a certain capacity to store free water, but the skin and muscle contain the chief supply. Exactly how much free water is contained in the body for regulating the blood has not been determined. When, however, this supply is exhausted, no more is readily available. The tissues try tenaciously to retain their combined water, for upon this factor resides the safest of the organism. If the cells are made to give up this combined water to any appreciable extent, death invariably ensues with great promptness.

With this introduction to the general thesis, it is natural to inquire to what extent may the blood become concentrated and life continue without too great a hazard, or in other words how can one determine when most of the free water has been utilized and danger is present¹. The answer is of course of great practical concern since it determines treatment and prognosis.

Concentration of the blood is not a serious condition if properly treated. It is only when it is maintained for a period of time that it becomes a serious menace. Study of some years and with various clinical conditions has led me to believe that a blood concentration of 125 per cent results in conditions precarious to life and that a value of 140 per cent of the normal cannot long be survived.

There are many methods in use for determining the concentration of the blood, but of all, the simplest is that of measuring the hemoglobin content. Of all the constituents in the blood only the red blood cells remain within the blood vessels in states of anhydremia. Hence a measurement of the hemoglobin content of a constant unit of measure would serve as an excellent indicator of changes in its concentration. The method used in these studies was that described by Newcomer. It is rapid, accurate and simple and allows for the frequent determinations without especial discomfort to the patient.

In most published discussions on the subject of anhydremia, little attempt seems to have been made to differentiate the various types and to correlate them to the reaction calling them forth. For example, in conditions of clinical anhydremia no distinction has been made between

the state existing in water starvation and that induced by extensive superficial burns. And yet there is a vast difference in the significance to be attached to these two conditions. This is essentially true when attempts are made to restore the blood to a normal level of concentration. Anhydremia due to simple water deprivation becomes rapidly restored with water rapidly administered, whereas in the anhydremia due to extensive superficial burns the restoration is much more difficult. In the two instances cited, the mechanism is totally different.

There are three methods whereby anhydremia may result. The first is the simplest to describe and to treat and is that due to water deprivation. The withholding of water soon results in a concentration of the blood that may be as serious as the other two types to be described. It is usually found induced by the thirst on the desert or in the mentally deranged who starve themselves of water and in the inanition fever of infants. The water loss to the body through the urine, sweat and lungs eventually consumes the free water of the tissues. In dogs, after a period of 5 to 7 days, simple water deprivation produces a dangerously concentrated blood. The simple administration of water orally promptly reduces the blood to normal without deleterious effects².

The second type of anhydremia is that due to loss of body fluids in excess of the intake either in experimental or clinical conditions. These may be generally defined as water lost by profuse sweating, vomiting, diarrhea or through the various gastro-intestinal fistulae. In this group the mechanism becomes complicated by the fact that water is not the only factor lost. For example, in the mines of Salford, England, where coal miners work about 1 mile under ground Haldane reports a loss of 18 pounds of sweat in a miner in the course of a shift. This sweat contains one ounce of salt³. The rapid loss of fluid through the sweat in conditions of hyperthermia is described by Van Zwalenberg in a case of heat prostration⁴. His patient received 4640 c.c. of fluid in the course of 17 hours and had a total urinary output of only 450 c.c. In this group of conditions, sweat is lost only through actual response

to a natural physiological stimulus long continued. That it may result seriously is possible although no record of a case in which death resulted from persistent profuse perspiration could be found.

Anhydremia resulting from profuse vomiting is associated with a loss in chlorine ions as well as water. Gamble and Ross state that death is due to the loss of Na and Cl ions in the vomitus. The loss results in the body tissues being unable to retain water. When water leaves the body it is in the form of a salt solution of various tonicity. Neither water nor salt can be lost alone from any body surface. Vomiting brought about by any condition whatsoever results in a greatly diminished fluid intake. This is especially noted in cases of infants suffering from pyloric stenosis. High intestinal and pyloric obstruction whether clinical or experimental, the toxemias of pregnancy and the vomiting induced by various drugs produce the same pathological state of anhydremia. Just as in simple dehydration, water is eminently necessary for the restoration of the blood concentration, but as there is a loss of the chlorine ion in the vomitus, it becomes difficult and even impossible to merely administer water alone. Sodium chloride or any other electrolyte is necessary to serve as the driving force to enable water to enter the blood stream^{5 6}.

Dragstedt⁷ and his associates have demonstrated that as a result of a gastric fistula with total loss of the gastric juice, the amount of fluid lost per day approximates several liters and death may follow in a few days due to the anhydremia and loss of electrolytes.

The loss of fluids through permanent duodenal and pancreatic fistulae has been shown to result in anhydremia^{8 9}. McCaughan¹⁰ maintains that death which follows the complete drainage of pancreatic fluid is due to the loss of protein as well as water and salt, but the administration of water containing any of the electrolytes is sufficient to maintain life and keep the blood concentration normal.

Large quantities of water may be lost from the intestinal tract due to severe diarrheas. Striking illustrations are those of Asiatic cholera, the various bacillary types of dysentery, tuberculosis of the colon, the diarrheas of in-

fancy and the various purgatives¹¹. Here again it has been found that many liters of fluid are lost daily. The rapid passage of fluid prevents the absorption in the colon and as a result the symptoms of anhydremia arise. Careful analyses of diarrheal fluid show that it contains abundance of salt and proteins as well as water. The striking results in cholera when fluid is given thereby reducing the blood concentration are independent of the main pathological condition.

Up to this point, no mention has been made as to the sequence of events that led to the profuse outpouring of fluid into the intestinal tract. In the case of fistulae, the amount of fluid lost is that which body normally produces and the resultant anhydremia is purely one of water abstraction. However in the case of profuse vomiting or diarrhea the question arises as to the possibility of water and other substances, namely those contained in plasma, being lost through an increase in permeability of the capillaries of the intestines. That infection and irritants can so affect the capillary permeability to the extent that fluids will be poured out on the injured surface and the loss of this fluid to the circulation produce anhydremia, will be shown later in dealing with war gases and influenza.

In the absence of protein intake by mouth, it is difficult to explain the passage of protein into the intestinal content without assuming a change in the permeability of the capillaries of the intestines. The injection of a non-diffusible colloidal dye such as trypan blue and a soluble, diffusible dye such as methylene blue, clearly indicates that an alteration in the permeability does not appear under such circumstances, in several of the experiments thus far conducted^{12 1}.

The third type of conditions resulting in anhydremia has been definitely shown to be due to a change in capillary permeability with an inability of the blood stream to retain its water. These are illustrated by the effect upon the lungs in the lethal war gases; the irritation produced in influenza; the extensive edema and loss of fluid due to superficial burns of the body; conditions of medical shock; and the action of histamine and peptone. Certain studies not yet completed suggest that eclampsia with

edema, the nephroses with edema, and the severe urticarial reactions are also associated with damaged capillary permeability.

During the war it was found that the use of chlorine, phosgene and chloropicrin produced an intense irritant action upon the lungs¹³. This condition has been produced in civil life as occurred in the Cleveland Clinic disaster due to the burning of certain types of roentgen ray films¹⁴.

The first response of the lung to the reaction of these irritant gases is a pouring out of a thin plasma-like fluid from the blood. As stated before, to allow the passage of protein through the capillary wall necessitates an alteration in the permeability of the vessel wall. This outpouring of fluid is the primary protective mechanism on the part of the organism against injury. The amount of fluid which escapes depends upon the extent of the injury. A brief description of the pulmonary pathology due to war gases will serve also for the victim of the Cleveland roentgen ray disaster as the findings were identical.

The immediate response is a dilatation and congestion of the pulmonary vessels. Shortly after a thin plasma-like fluid containing essentially the same elements as blood plasma escapes into the alveoli and interstitial tissue. Soon there appears a definite edema of the lungs and there ensues a distinct mechanical impediment to breathing. Added thereto is a failing circulation because of the increased viscosity of the blood due to the dehydration, and anoxemia results. Unless the circulation is restored to normal, vital metabolic derangement with death occurs.

In influenza, the pulmonary pathology bears a striking resemblance to that induced by irritant gases. Edema of the lungs occurs in the same way, and there is sufficient evidence to demonstrate that here too, the fluid leaves through a derangement in the capillary permeability. The pneumonic consolidation is due to the invasion of bacteria in an already injured tissue. Clinically, it has been found that the extent of the pulmonary edema parallels the blood concentration, and the prognosis may be made in uncomplicated cases on the hemoglobin estimation¹⁵.

The edema fluid in the lungs in influenza is

similar to that due to the irritant action of war gases. The treatment consists in an effort to replace the fluid that has left the blood restoring the concentration, for once this element appears, the course is very rapid. Although anhydremia in influenza is not the only cause of death, it is an exceedingly important factor.

Clinical and experimental studies have revealed that in extensive superficial burns, there is produced a state of blood concentration which appears to be of great significance and cannot be left out of consideration in the treatment^{16 17 18}.

Here also, as a result of the burn, fluid is poured out upon the surface of the body. If the burned skin is broken, the fluid is lost to the body. At any rate extensive edema appears. In experimental animals, a burn involving approximately 1/6 of the body surface causes a loss of fluid to the extent of 70 per cent of the total blood volume in the form of edema within 24 hours or less. The effect of this loss of fluid is of paramount significance.

An alteration in the permeability of the capillaries has been demonstrated in other publications^{12 19} dealing with the fact that injections of phenolsulphonphthalein into the burned area results in only 10 per cent elimination in 24 hours and the introduction of five times the minimum lethal dose of strychnine at the site of the burned skin, fails to elicit convulsions. The demonstration of the action of colloid and diffusible dyes at the site of a burn seems to be conclusive evidence that the anhydremia is a result of fluid leaving the blood through the action of increased permeability. The hemoglobin is an excellent guide to prognosis and treatment, for the more concentrated the blood, the graver the prognosis and the more urgent the necessity for the introduction of sufficient fluids.

Conditions of medical shock seem to have been given only slight attention, but that the same general array of symptoms are present as in surgical shock, namely fall in blood pressure, rapid pulse, circulatory failure due to anhydremia and previously called vasomotor collapse, is obvious.

Atchley has reported a case of accidental intravenous rattlesnake bite with immediate col-

lapse. The clinical picture was identical with experimental histamine shock. In both conditions, the outstanding feature is a rapid anhydremia with dangerously high blood concentration. Only heroic measures saved this patient and the chief form of treatment was the restoration of the concentration of the blood by administering 7200 c.c. of fluid intravenously within the first 16 hours²⁰.

The hypoglycemia and the attendant symptoms in diabetes due to over-insulin offer a clear example of medical shock. Whether in this instance there is capillary damage or not, is difficult to state. That there is an extensive dehydration is obvious and only by replacing the fluid lost as well as the addition of glucose, can recovery be brought about.

Other conditions demonstrating medical shock are pneumonia, cardiac infarct and anaphylaxis. There may be many others. In most of these conditions, there is a definite loss of fluid with reduction in the blood volume due to dehydration. In many, recovery occurs, upon the replacement of fluid, to the pre-existing condition. Atchley states that it is not necessary to assume capillary damage, the treatment however is the same. This form of medical shock may well be termed anhydremic shock.

Treatment depends upon whether anhydremia has resulted from a loss of fluid due to deprivation, abstraction or increased capillary permeability. In general it may be stated that when anhydremia is due to water deprivation, the administration of water or saline through any of the channels usually used is sufficient. However the mere statement that fluids should be forced is not enough. When there is a loss of fluid from the body by way of the viscera as in fistulae of the gastro-intestinal tract, diarrhea or vomiting, normal saline containing sodium bicarbonate or glucose may be given by hypodermoclysis as well as intravenously, since in these conditions fluid is being drawn from the tissue storehouses into the blood. Hence there is no delay in the subcutaneous absorption. When anhydremia results in a blood concentration due to damaged capillary permeability, the subcutaneous administration of fluid is almost useless. The fluid leaves the area only very slowly and with great difficulty. The

same reasoning applies to the subcutaneous introduction of other medication. Nothing is so futile as to see the digitalis bodies injected in these various conditions with a hope of spurring on a heart that is having great difficulty driving about an already markedly concentrated blood. Indeed the use of vasoconstrictors such as adrenalin may even be dangerous, for the vessels are already constricted by a reduced blood volume.

When anhydremia is due to a loss of fluid through the vessel wall, only the *continuous* introduction of fluid *intravenously* will restore the blood concentration to normal most effectively and rapidly. Since this fluid leaves the blood almost as rapidly as it is introduced, it is necessary to force fluid until the capillary wall regenerates itself, which is about 48 hours. At the end of this time, the hemoglobin will have returned to normal and the urinary output will gradually approach the intake and an indication that the volume of fluid may be reduced, is given. Infrequent spasmodic introduction of fluid will not accomplish the object sought.

A word as to the solution to be used. In general, normal saline either containing about 5 per cent sodium bicarbonate or glucose is safer. Hypertonic saline up to 3 per cent or glucose up to 50 per cent may be used in the early cases when fluid has not yet been lost outside the body or the free water in the tissues drawn upon. In this case the hypertonic solution is only a temporary expedient and serves to retain the fluid within the capillary. When the hypertonicity disappears, the usual picture of anhydremia follows. If used at all, it must be only as a prelude to more fluid introduction. The amount depends upon the hemoglobin determination. As a general working rule, it is best to give a minimum of 3 liters a day when the hemoglobin is 115 per cent and an additional liter for every increase of 10 per cent in the reading. Hyman and Hirshfeld have demonstrated in a series of mixed cases to whom they gave continuous intravenous drip that as much as 40,000 c. c. of fluid may be given in 6 days. Glucose in 5 or 10 per cent strength in physiologic saline solution introduced at the rate of 2 or 3 c. c. per minute will supply 3,000 or 4,000 c. c. of fluid yielding from

600 to 1,600 calories per day. To Dr. Matas goes the credit for having demonstrated the feasibility of administering large volumes of fluid intravenously without serious consequences to the organism. His results have really been the incentive in the treatment of the conditions described in these studies (23) (24).

SUMMARY

Anhydremia or blood concentration is a dehydration of the blood. It occurs in numerous unrelated conditions and may be the most important symptom present. More evidence coming to light indicates that anhydremia is actually due to the loss of a plasma-like fluid from the blood because of an increase in the capillary permeability away from the circulation. To restore the blood to a normal concentration, thereby improving the circulation, should be the major primary treatment. Fluid, preferably normal saline, should be administered *intravenously* and *continuously*. A saner attitude towards the subcutaneous introduction of drugs upon which hope is placed, is advocated.

BIBLIOGRAPHY

1. Underhill, F. P.: Significance of anhydremia in extensive superficial burns, *J. A. M. A.* 95:852, 1930.
2. Underhill, F. P., and Kapsinow, R.: Comparative toxicity of ammonium salts, *Jour. Biol. Chem.* 54:459, 1922.
3. Haldane, J. B. S.: *Possible Worlds*, New York, Harper & Bros., 1928, P. 82, quoted *J. A. M. A.*, 97:1506, 1931.
4. Van Zwalenburg, C.: Heat prostration and dehydration, *J. A. M. A.*, 97:1170, 1931.
5. Gamble, J. L., and Ross, S. G.: Factors in dehydration following pyloric obstruction, *J. Clin. Invest.* 1:403, 1925.
6. Editorial, *J. A. M. A.* 95:936, 1930.
7. Dragstedt, L. R., and Ellis, J. C.: Fatal effect of total loss of gastric juice, *Am. J. Physiol.* 93:407, 1930.
8. Walters, W., and Bollman, J. L.: Toxemia of duodenal fistula; physiologic changes concerned in production of its characteristic chemical reactions of blood. *Am. Med. Assoc. Meeting Sect. Obs., Gyn., and Obd. Surg.*, *J. A. M. A.* 89:1847-1853, 1927.
9. Walters, W., and Bollman, J. L.: Experimental acute gastric fistula, *Arch. Surg.* 13:578-587, 1926.
10. McCaughan, J. M.: Experimental studies on external secretion of pancreas with special reference to effect of its complete loss by permanent pancreatic fistula; coincident changes in chemistry of blood; mechanism of death, *Am. Jour. Physiol.* 97:459, 1931.
11. Underhill, F. P., and Errieco, L.: Influence of purgative upon blood concentration, *Pharm. & Exp. Therap.* 19:135, 1922.
12. Underhill, F. P., and Kapsinow, R., and Fisk, M. E.: Studies on mechanism of water exchange in animal organism changes in capillary permeability induced by superficial burns, *Am. Jour. Physiol.* 95:315, 1930.
13. Underhill, F. P.: *The Lethal War Gases*, Yale University Press. 1920.
14. Editorial: *J. A. M. A.* 92:1764, 1929.
15. Underhill, F. P., and Ringer, M.: Blood concentration changes in influenza, with suggestions for treatment, *J. A. M. A.* 75:1531, 1920.
16. Underhill, F. P., Carrington, G. L., Kapsinow, R., and Pack, G. T.: Blood concentration changes in extensive superficial burns, and their significance for systematic treatment, *Arch. Int. Med.* 32:31, 1923.
17. Underhill, F. P., Kapsinow, R., and Fisk, M. E.: Studies on mechanism of water exchange in animal organism and effect on superficial burns.
18. Kapsinow, R.: The toxin of extensive superficial burns, *N. O. Med. and Surg. Jour.* 85:195, 1932.
19. Kapsinow, R.: The rate of absorption from extensive burns, *N. O. Med. and Surg. Jour.* 85:597, 1932.
20. Atchley, D. W.: Medical shock, *J. A. M. A.* 95:385, 1930.
21. Keith, N. M.: Intravenous medication; physiologic principles and therapeutic applications, *J. A. M. A.* 93:1517, 1929.
22. Editorial, *J. A. M. A.* 97:465, 1931.
23. Hyman, H. T., and Hirschfeld, S.: The therapeutics of the intravenous drip, *J. A. M. A.* 100:305, 1933.
24. Matas, R.: Continued intravenous "drip" with remarks on value of continued gastric drainage and irrigation by nasal intubation with gastroduodenal tube (Jutte) in surgical practice, *Annals of Surg.* 79:643, 1924.

NEW ORLEANS Medical and Surgical Journal

Established 1844

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MEDICAL ECONOMICS—AGAIN

Recently the Orleans Parish Medical Society held a special meeting to discuss the subject of medical abuse in the City of New Orleans. The data and the facts that were presented were prepared by eleven different sub-committees. These committees showed how in many ways the doctor is being imposed upon in the City. Many of these abuses were of minor importance, but there are several which seem of such

importance and so wide spread that they deserve special comment.

The special committee to correlate the sub-committees' reports, under the chairmanship of Dr. A. E. Fossier, stated that one of the prime evils has to do with the present method of regulating industrial insurance. This is of importance not only to the New Orleans doctors but the doctors throughout the State. The inability of the family physician to treat and to receive recompense for such treatment in an industrial case is actually prevented or at least made impossible by the present State laws. These laws should be changed in all fairness to the doctors so that justice may be obtained for him. This is a widespread evil, and with the growing and very general use of industrial insurance throughout the United States is a continuous source of friction between the medical profession and insurance companies. Sad to say that in most states the insurance companies are on the crest of the wave. It is hoped that the Louisiana Legislature will be one of the enlightened states that will give justice to the doctor.

The handling of compensation cases is another most unjust and unfair abuse virtually everywhere. The poor physician comes out of the small end of the horn, with the hospitals receiving the bulk of whatever moneys and fees are paid from the appropriate funds; as a rule the doctor gets nothing for his professional services rendered to these compensation cases while in the hospital.

The committee also called attention to many local abuses. There was one abuse of the local profession for which the profession throughout the State is in part responsible, and which it was decided at this meeting might be corrected in part by circularizing the State physicians. This particular abuse has to do with the referring of patients to Charity Hospital who could afford to pay some small fee for the services given to them in the hospital for nothing. It is utterly impossible for the hospital to investigate patients that are sent to it outside of the City, and if these individuals are willing to aver that they are unable to pay, the hospital can do nothing about it. Yet there can be no question but that many people from the surrounding country

could pay for their operations, or for their x-rays, or for the treatment which is given to them by the State free of charge. If the doctors outside of the City would not refer patients into the hospital merely because these patients wish to go there, it would materially help our local profession; in the long run would help the profession as a whole. The growing extent of this evil may be appreciated by the enormous increase in the number of patients treated at Charity Hospital in the last few years.

Many of the abuses that are unfair and unjust to the doctor are often the result of the physician's own carelessness or selfishness. Many of the abuses could be stopped if the profession could act as a cohesive whole. Unfortunately, as Dr. Fossier, pointed out, here and there are small groups who profit by injury done to the profession as a whole. These groups will stand up for their own special privilege, making it extremely difficult for the other members of the profession to obtain a satisfactory and square deal.

AMERICAN MEDICAL ASSOCIATION MEETING

The recent meeting of the national organization in Milwaukee was very well attended, the attendance being nearly double that of the New Orleans meeting the previous year. Undoubtedly this increased attendance expresses a change in sentiment and probably improved economic conditions, which now are becoming stabilized at last. Physicians, as well as other professional and business men, are in a position to realize that quite possibly the slump is a thing of the past. We devoutly hope so. The meeting was truly magnificent, as can be attested by the thirty-six physicians from Louisiana and Mississippi who registered at the Milwaukee Session. The scientific exhibit alone more than repaid the time and the expense of the long trip to the northern edge of this country. The professional papers were of the highest class and while nothing sensational was brought out in the scientific sessions, yet there were innumerable practical and valuable pres-

entations of things new and unusual. The House of Delegates had most active sessions. The economic difficulties in which our medical profession is more or less submerged were discussed and many practical ideas were brought out and advanced, which will supply ammunition to the officers and trustees of the Association to combat the illogical and unjust efforts, as the medical profession sees it, that are being made to socialize medicine. Taking it all in all the members of the American Medical Association have reason to be proud of their organization and of their annual convocation.

ACUTE POLIOMYELITIS

A new conception of the spread of the virus of poliomyelitis has been advanced by Faber* of the Stanford School of Medicine. He points out that there has been no acute infectious disease studied with greater intensity than acute poliomyelitis, and yet there is no infectious disease in the presence of which the physician feels so hopeless and so ineffectual. Part of this feeling may depend upon what the author believes to be an erroneous concept of the manner by which the virus is carried to the central nervous system. For years it has been accepted that there is an "initial blood stream invasion and secondary penetration of the meningo-choroid barrier". The author's idea, and it is well substantiated by argument and clinical inference, is that the infecting virus enters the central nervous system directly and that the disease is purely an infectious disease of the central nervous system caused by a strictly neurotrophic virus. As he says "the mode of propagation is by implantation and multiplication of virus in the ganglionic cell centers along the route with passage from one center to the next through the axons of the connecting nerve tracts." This hypothesis is of more than academic interest, because the treatment will consist essentially of the administration of large amounts of blood serum from a patient who has recovered from the disease or of persons who have a natural immunity. Improvement occurs only through

*Faber, Harold Kniest: Acute Poliomyelitis as a Primary Disease of the Central Nervous System. *Medicine*, 12: 83, 1933.

the presence of large quantities of circulating viricidal substances that can reach the affected cells through the normal direction and conditions of flow from the capillaries. Intraspinial injections of serum are totally useless, if Faber's ideas are correct. Furthermore, if the administration of serum is to be of value it should be

given early and in maximum doses. For the physician who does not have the opportunities of getting serum or of preparing it, direct transfusion is a reasonably satisfactory method of administering the blood serum of the immune patient and can be used for emergency purposes.

HOSPITAL STAFF TRANSACTIONS

BAPTIST HOSPITAL

The monthly meeting of the Clinical Staff of the Baptist Hospital was held on Tuesday, April 29, at 8:00 p. m., with Dr. H. W. E. Walther, Chairman, presiding. Following a brief business session the following program was presented:

Dr. Rena Crawford reported a case of "Mirror Writitng" occurring in a white male four and one-half years old. The child was brought to her because the mother noticed that he wrote all of his letters in reverse, at times writing from the right of the page to the left instead of from the left to the right as is usually done. His family history is negative and his past history is negative so far as any illnesses are concerned. He is mentally alert, very imaginative, and often has bad dreams and cries out during the night. He apparently uses the left hand and right hand with equal dexterity. If he happens to pick up a ball with his left hand, he throws it with his left hand, but if he happens to pick it up with his right hand, he throws it with his right hand, never taking the trouble to change hands. In her discussion of the case, Dr. Crawford brought out some interesting theories advanced by Burchwald, Erlenmeyer, Hale and Calhoun.

Dr. Gilbert Anderson in a discussion of this case, stated that many explanations had been offered, none of which is entirely satisfactory and all unproven; that this condition is supposed to go back to the question of cerebral dominance and one probably with a certain amount of safety could have prognosticated that this child came from a left-handed family.

Dr. W. R. Buffington presented some selected cases of ocular tuberculosis following the study of a series of cases presenting ocular conditions, explicable in no other way than by supposing them tuberculous in origin. In his discussion of the cases he stated that tuberculosis can attack any part of the eye or its adnexa. The order of frequency is choroid, ciliary body and iris. Retinal tuberculosis is rare; the most difficult problem being, in many obscure chronic cases, to determine whether the condition is luetic or tubercular in origin. In bringing out the use of the tuberculin reaction in arriving at a correct diagnosis and the

results obtained when it is given as a therapeutic agent, Dr. Buffington stated that there are some who laud its use to the skies and others who feel that it is a dangerous and treacherous remedy. Limited experience has taught that it is a valuable diagnostic agent and that it has merit in the treatment of uveal tuberculosis, but that it should never be employed except under the careful supervision of a tuberculist or capable internist.

Dr. George B. Collier presented a case of nasopharyngeal fibroma in which he demonstrated the possibilities of deep therapy preceded by radium.

The monthly meeting of the Clinical Staff of the Southern Baptist Hospital was held Tuesday, May 23, at 8 o'clock.

Dr. L. W. Magruder discussed tumors of the chest presenting some selected radiographs demonstrating various types, the most interesting being that of a tumor of the chest in which the tumor mass involved the entire apex and several ribs. A post mortem examination revealed destruction of the lower cervical vertebrae also. This is about the fifth case of this type to have been reported. In his discussion of this condition, Dr. Magruder emphasized the difficulty which is encountered by roentgenologists in establishing a definite diagnosis of carcinoma, unresolved pneumonia or lung abscess and pointed out the importance and diagnostic advantages of the use of the bronchoscope in these cases.

Dr. W. Robyn Hardy presented a case to illustrate some problems in diagnosis. The chief complaint was severe frontal headache of six months duration accompanied by occasional attacks of vertigo. Past history revealed a bronchiectatic cough of twenty years duration and several heart attacks. Physical examination was essentially negative except for a chronic myocarditis. A consulting otholaryngologist reported a cloudy left antrum but did not think the involvement of sufficient extent to cause the headache. A consulting neurologist reported his findings essentially negative. Following hospitalization, a thorough investigation revealed a slightly enlarged heart with general dilatation of the aorta, ileal stasis, chronic cholecystitis, cholelithiasis, a potential appendix, marked

enlargement of the liver and hypertrophic arthritis of the spine; a stereoscopic examination of the skull was negative; Wassermann negative. The diagnosis at this time was brain tumor versus old cerebral hemorrhage versus toxic psychosis. As the patient's condition was growing progressively worse, and due to the probability of lues, mixed treatment was administered, resulting in a dramatic and continued improvement, and on the basis of which a final diagnosis of syphilis was made.

Dr. E. Mc. Connely demonstrated the use of hypnotism in the treatment of a case of hysterical aphonia. The patient's first attack was precipitated by an accidental gunshot wound inflicted while the patient was picking strawberries at Hammond. While under hypnosis the patient spoke in an apparently normal voice.

Following a discussion of the deaths of the month by Dr. Louis J. Bristow, Jr., the meeting adjourned to meet again on Tuesday, June 26, at 8 o'clock.

HOTEL DIEU

The regular monthly meeting of the Hotel Dieu Staff was held on Monday, May 15, 1933, at 8 o'clock p. m., with the President, Dr. P. L. Thibaut, in the chair. The scientific program comprised: Dr. George J. Taquino presented two cases of mastoiditis with complications: The first, an eleven-year-old girl, gave a history of several attacks of bilateral otitis media with purulent discharge. A recent spell of influenza with earache, was followed by spontaneous rupture of the membrane tympani and thick discharge from the left ear. Roentgenograms gave evidence of left mastoiditis; in both plates the slight trabeculae were visible and did not show a complete destruction of the mastoid. Blood count showed total whites 10,000, polys 70.

December 26, there was a chill, with temperature of 104°. Mastoidectomy was advised and performed the same day; lateral sinus exposed and diagnosis of perisinus and extra-dural abscess made. Two days later Drs. Nix and Tedesco did a ligation of the internal jugular vein, and Dr. Taquino an opening of the lateral sinus for possible thrombosis. Temperature continued between 102° and 105°, highly toxic. Blood count at this time showed total whites 25,000 to 32,000 with 80 to 90 polynuclear cells. Repeated blood cultures were negative. One week later, transfusion was given and the sinus re-opened and curetted. This was followed by a violent reaction, lasting one hour. Chest was aspirated on January 8 and 12, and a second transfusion given. Again great reaction followed, with septic temperature. Streptococcus hemolyticus recovered from fluid. Because of pain in right foot, incision and drainage of lower third of tibia was done, with only slight improvement. Arthrotomy was then performed on January 23,

1933. A third transfusion, injection of mercurochrome, and infusions of glucose followed, but toxicity persisted. Two more transfusions produced no reaction. The hip was next drained, because of pain and swelling of soft tissues; this caused distinct improvement. A special metallic tube was inserted in the post-axillary line, and temperature began to drop to normal, with afternoon rise to 99.4°, and occasionally to 102 and 103. Roentgenogram showed no re-accumulation of fluid in left pleural cavity. Blood count: 19,500 whites, 85 polynuclear, 4,240,000 reds, 55 per cent hemoglobin. Patient's appetite throughout was excellent, with slight attacks of anorexia immediately after surgical manoeuvres. For nearly five weeks, the temperature was around 105°, and all this time she was on full diet.

In dealing with lateral sinus thrombosis, we have not merely an acute septic focus more or less walled in by a barrier of inflammatory tissue reacting to the infection and checking its further spread, but an acute focus which has ingress to the whole systemic circulation via the internal jugular vein, superior vena cava, right heart and lung. Our object should be, therefore, to expose the infective focus by performing a thorough mastoidectomy, clearing out all septic bone and pus pockets, from the highest retro-zygomatic gallery of cells (if present, to the tip of mastoid below. The sinus is then laid bare by careful use of chisel and gouge, and its adequate exposure completed by removing the covering plate of bone with suitable forceps. This is what we attempted to do in this case.

The second case, a robust boy of 11, was presented. Four weeks ago the original mastoidectomy was done; two weeks later a facial paralysis developed; the wound had apparently healed. On puncturing it, at the office, some secretion exuded, and the next day the paralysis was better. Then a simple incision and drainage was done, with curettment of a few granulations over the fissure ridge, and a rubber drain inserted. The paralysis cleared up entirely within a week.

Dr. Homer Dupuy: Dr. Taquino did not see this patient (the first case) except in the second week of her profuse ear discharge. He is, therefore, not guilty of a possible procrastination in the presence of middle ear infection, with profuse otorrhea. Such a symptom without any further corroboration, means immediate mastoidectomy. This case teaches the lesson that had this child received attention the first week of her trouble, she might have escaped the lateral sinus thrombosis with its general septicemia and its innumerable life threatening complications.

Dr. Taquino: In the second case, I told the family when they came in the office that, regardless of the roentgenograms, because of the otorrhea I insisted upon a mastoidectomy.

In the first case, when I saw the child, the otorrhea had slowed down considerably; the family had the idea it was the same condition as before, and they treated her at home. It was not until she had a rupture of the ear drum that they brought her to me.

Dr. D. J. Murphy presented a case of malignant endothelioma of the omentum. Patient was a man seventy-nine years of age, whose only complaint was one of weakness. Physical examination showed him unusually well preserved for a man of this age. The abdomen was somewhat distended, with considerable fluid which shifted according to position; when lying on the right side, the fluid was raised to the level of the umbilicus; when standing, the fluid was slightly above the umbilicus.

Roentgenogram and laboratory examinations disclosed nothing strikingly abnormal. Patient was apparently doing well for the four days he was here. One morning about five o'clock, he was sitting up in bed smoking his pipe, talking with the nurse. She noticed he was breathing more rapidly than usual; he said he breathed that way all the time. Then he toppled over. When I entered his room a few moments later he was dead; and the pipe was still smoking. The sudden death was caused by a thrombus in the pulmonary artery. Autopsy revealed a malignant endothelioma of the omentum and small bowel, with metastasis, evidenced by tiny white studdings through practically all the organs of the peritoneal cavity, excepting the liver. It is interesting to note that there was not one of these studdings above the diaphragm. The pleural cavities were free; but the under-surface of the diaphragm was covered with new growths. The capsule of the kidneys peeled off very easily, and the organs at post-mortem looked like absolutely normal healthy kidneys. Yet his P.S.P. showed totals of 12 and 10 respectively.

Dr. M. Couret—The new growth that Dr. Murphy has mentioned in this case is one that is not very common. It was formerly called sarcoma of the omentum; but since we know that the tumor arises from endothelial cells of the omentum, we must classify it among endothelial tumors. These tumors give the omentum a crescentic shape and resemble the short aprons worn by tea girls. Histologically it does not vary in appearance from any endothelial tumor; it may be occasionally confused with carcinoma which it frequently resembles. As the autopsy shows, the growth is one that is easily seated on neighboring structures that loose cells might come in contact with, but frequently (as in this case), the tumor is limited to the abdominal cavity only, and does not metastasize elsewhere.

TOURO INFIRMARY MEDICAL STAFF MEETING

The regular monthly meeting of the Medical Staff of Touro Infirmary was held Wednesday, June 14, 1933, at 8:00 p. m., with Dr. S. K. Simon presiding in the absence of Dr. I. I. Lemann.

As Chairman of the Record Committee, Dr. Simon presented a brief explanation of the new record system to be installed at Touro beginning July 1, 1933. This new system is to use the new Standard Nomenclature, which has been endorsed and adopted nationally and Touro will be among the first institutions in the South to employ this new classification. This was discussed by Drs. Eustis, Heninger, Mitchell, and Pitkin.

Dr. Maurice Sullivan showed a group of juvenile diabetics being treated in the Diabetic Clinic. They ranged in age from 8 years to 18 years, and had been under treatment for periods of time ranging from 1½ to 4½ years. Dr. Sullivan also presented lantern slides of the family charts of some of these children, indicating the hereditary tendencies of diabetes. This presentation was discussed by Dr. Lyons, Cameron, Maes, Eustis, and Heninger.

A case of congenital anomaly of the gastrointestinal tract was discussed by Dr. J. M. Davidson. The patient, a boy of 16 years of age, was a constitutional inferior with a mental age of 3 years. The anomaly consisted of a stricture of the esophagus about 22 cms. from the teeth line. Esophagoscopy and dilatation is being attempted. Drs. Holbrook and Weil discussed the case.

Two cases with autopsy findings were offered for discussion by the Program Committee. The first was a case of acute miliary tuberculosis with very few physical signs, and the second, a case of primary carcinoma of the liver. These cases were discussed by Drs. Maes, Lanford, and Simon.

Willard R. Wirth, M. D.

MERCY HOSPITAL MEDICAL STAFF MEETING

The regular monthly meeting of the Mercy Hospital Staff was called to order Friday, April 21, 1933, at 8 p. m., by Dr. Frank J. Chalaron, President of the Staff, presiding. The minutes of the last meeting was read and approved. Moved by Dr. Leckert and seconded by Dr. Hauser, that minutes be adopted as read. Carried.

The Secretary then read the Hospital Analysis and Laboratory Sheets which were ordered filed. Committee Reports—None.

Communications—Read on applications from outside for internships, ordered filed.

Moved by Dr. Ficklen, that expenses entailed by secretary in answering communications, be borne by the Staff, seconded by Dr. de Verges. Carried.

A note was made by secretary to the staff, that communications were sent advising the new clinical clerks of their appointments as such to the hos-

pital, and that their term of office would begin July 1, 1933, and that they were to contact the Sister Superior of the Hospital; also that all appointees had answered favorably regarding their appointments. Also that a communication had been sent the Deans of the Medical Schools notifying them of the appointment of these various men from their schools.

Applications for Membership—The applications of Drs. Cabibi and Granberry for membership to the Staff were read and same were ordered referred to the Executive Committee for action. The motion was made by Dr. Alsbrook and seconded by Dr. Hauser. Carried.

Unfinished Business—None.

New Business—None.

Reports by Death and Record Committee—Read by Dr. Hauser, Chairman.

Reports quite a few autopsies. Comment—Quite satisfactory, considering the number continuing to be held.

Case 1—Bronchopneumonia—Sepsis of Newborn—Staph infection of nose. Autopsied in full, white female infant, discussion, progress of case and death discussed in full by Dr. de Verges. There was no further discussion of case.

Case 2—Primary Sarcoma of mediasternum—with general metastasis—Sclerosis of coronary vessels. Autopsied in full. Discussed in general by Dr. Hauser. Autopsy and interesting findings cited.

Dr. Alsbrook cited a case of his at Charity of carcinoma of cervix, radium was applied and case reported back in two months with general carcinomatosis and metastasis. No further discussion.

Case 3—Cirrhosis of Liver—Ascites—Chronic Nephritis. Autopsied. Interesting findings cited by Dr. Hauser.

Dr. Tessitore—"How do you account for 10 per cent eosinophile count?"

Dr. Hauser—"No record of any stool examination." There was no further discussion.

Case 4—Coronary Sinus Thrombosis—(Staph. Aureus)—Septicaemia, (Staph. Aureus)—Meningitis. (Staph. Aureus). No autopsy.

History and record by Dr. Hauser.

Case discussed in full by Dr. John Irwin, who gave progress and death of case in its entirety. Dr. Nix, one of the consultants, ligated the angular veins to try and prevent coronary sinus thrombosis. Dr. Anderson, another consultant, recommended a laminectomy, which was done, no result, in fact everything possible was done to aid and assist this case, but the ultimate outcome was the same, nothing helped, and death was the end.

Dr. Ficklin discussed Staph. Hemolytica Meningitis and his experiences, and thinks this case worse than Strep. Reported a case he had similar to this with multiple secondary abscesses—a child—and

he thought that angular ligation and laminectomy desirable in these cases.

Dr. Hauser—It is fortunate that there are not many of these cases, Staph. Meningitis, as they are invariably fatal. What can be done for them? The Staph. group is so large you are hardly able to produce a vaccine that will do any good—hard to isolate.

Dr. Chalaron—Past 4-5 years in consultation 4 or 5 cases, very severe staph. infection—always fatal—none went to meningitis—but all general staph. infection—everything possible done and they died anyhow—he fears it more than strep—has utmost respect for it.

No further discussion.

Scientific Paper—This paper was read by Dr. Sims Chapman on Milk Allergy.

Case was shown at meeting. Had been taken entirely off of milk and put entirely on Sobie. After being read, paper was opened for discussion.

Dr. Upton cited records on allergy and practically read a supplementary paper on this subject.

Dr. de Verges—Paper of Dr. Chapman interesting, especially on milk. Vomiting, pylorospasm, mothers claiming babies can't take milk, protein substance milk allergy at bottom.

Dr. Dimitry—Interesting for some time back—remembered work of Von Pirquet spoke of skin reaction as allergy. Braun at this time, brought forth anaphylaxis. Duke-Elder utilizes eye for detecting allergy. Allergy and anaphylaxis have a definite change in the capillaries, etc., in eye.

Dr. Unsworth—"Was blood chemistry done on child?"

Dr. Chapman—"No."

Dr. Cox—"Could you desensitize the child and how?"

Dr. Chapman—Three methods. Elimination. Another they desensitize themselves. Super heating of milk, 1/20 t.i.d. and gradually increase and in several months desensitize itself. Hypo injections of milk and gradually increase it.

Dr. Daboval—"I would like to introduce one of our former internes of Mercy Hospital, Dr. M. E. de Bakey, and Dr. Gillentine, and have him show and demonstrate his new blood transfusion apparatus. Simplified, direct blood transfusion." Amidst much applause Dr. de Bakey was given the floor, and gladly showed and demonstrated his transfusion outfit, which he and Dr. Gillentine have perfected while at Charity, with which institution they are still connected. This instrument has been greatly simplified by these two young physicians and they have already shown it at a meeting of the Orleans Parish Medical Society, and have received very highly complimentary remarks regarding their excellent work with it. They received the same at the Mercy Staff meeting.

The following men answered to the roll call: Drs.

J. E. Brierre, Burger, Davison, Tessitore, Hauser, de Verges, Leckert, de Bakey, Cox, Daboval, Chapman, Robinson, Ficklen, Kirn, J. J. Irwin, Charlaron, Dimitry, Tate, Armstrong, Johnson, Brierre, Jr., Oriol, Upton, Alsobrook, Unsworth, Lescale, Mailhes, Sharp, Zander, A. F. Hebert.

Frank J. Chalaron, M. D.,
Chairman.
Theo. F. Kirn, M. D.,
Secretary.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING.

Brookhaven, Miss.

The regular meeting of the Brookhaven King's Daughters' Hospital Staff was held on regular date, June 6, 1933. This meeting was called promptly to order at 7 p. m. with the majority of the members answering roll call. The minutes of the May meeting were then read and approved. The letter to the hospital board of May 5, 1933, was then read and passed on by the staff. The contents of the letter were that this hospital staff go on record as being in favor of small community hospitals and small community hospital training schools. The suggestion of considering the R. F. C. fees to be paid physicians was dropped and the staff will not accept the work at the price that the R. F. C. is willing to pay. Hospital record then read and approved.

As this was the annual election meeting there was no scientific program and the election of officers took place with the following elected after due consideration and deliberation: President, Dr. J. R. Marquett; Vice-President, Dr. G. T. Warren; Secretary-Treasurer, Dr. R. S. Savage.

The meeting then adjourned to meet the first Tuesday night in July, where all registered physicians are welcome.

R. S. Savage,
Secretary.

Brookhaven,
June 7, 1933.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING.

Greenville, Miss.

The meeting of the King's Daughters' Hospital Staff on May 3, followed the usual excellent supper at the hospital. Dr. C. P. Thompson, Chairman, presided.

Several items of routine business were despatched. This included donation of a Webster's Unabridged Dictionary to the Nurses Training School, the funds being available as a residue

from funds for entertainment of the Delta Medical Society in Greenville.

Dr. J. C. Archer reported to the staff on three cases of malaria with high leukocyte counts. He was unable to find in available literature, any mention of leukocytosis in malaria. In fact, leukopenia has been considered an aid in diagnosis. Because of a leukocytosis in one case, a search for plasmodia was almost neglected.

Dr. Archer discussed in some detail the newer antimalarial drugs "Plasmochin" and "Atabrine", and reviewed the life cycle of the malarial parasite.

The three cases with leukocytosis were all in coma when first seen; two had subnormal temperatures; all showed their blood loaded with parasites. In none of them was there any discoverable infection, or other cause of leukocytosis which was 24,000 to 26,000, and subsided to normal in the two cases which recovered. These two were men, recovering promptly after administration of quinine intramuscularly and intravenously. Plasmochin was also given. Both retained gametes in the circulation after clinical recovery, and for at least two weeks, or until lost to record. Atabrine, which Dr. Archer thinks might have destroyed the gametes, was not then available.

In the discussion, Dr. G. W. Eubanks mentioned that he had had cases of grave or pernicious malaria, with leukocytosis, which findings had also puzzled him. He was inclined to attribute it to the gastro-intestinal upset which many of the grave cases exhibit.

Dr. E. T. White offered the suggestion that the leukocytosis might be due to protein sensitization from rapid destruction of red cells.

Dr. Davis and others were inclined to the belief that an undiscoverable infection accounted for the exceptional leukocytosis.

Dr. H. A. Gamble presented a paper on the surgical treatment of arterial thrombosis. He discussed the historical background of the operation, the predisposing and etiologic factors, and its symptomatology, characterized by the abrupt cessation of arterial pulse and blanching of the extremity. He recounted three personal cases.

Dr. Gamble stressed the point that thrombosis of a major artery is truly a surgical emergency. Waiting for the circulation to be re-established is futile. Immediate removal of the clot may be life saving. Great care should be exercised not to traumatize the inner lining of the vessel, and in suturing the artery to see that the intima is approximated; otherwise the clot will reform.

John A. Beals,
Secretary.

Greenville,
May 30, 1933.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING.

Greenville, Miss.

The Medical Staff of the King's Daughters' Hospital, Greenville, held its June meeting at 7:30 p. m., Wednesday, June 7. Attendance was excellent despite the warm weather. The chairman, Dr. C. P. Thompson, presided.

No business of general interest was transacted.

Dr. J. B. Hirsch discussed the subject of "Endometriosis." After defining the condition as an invasion or migration of non-neoplastic endometrial tissue, he mentioned several of the synonyms under which the condition has been described. He reviewed briefly the history of our knowledge of the condition, culminating with the work of Cullen and others in 1919 and 1920.

Dr. Hirsch presented the history of a woman, aged 35 years, the mother of several children, whose menstrual history was not abnormal until after her last childbirth. Thereupon her menstrual flow had been prolonged. She complained for months of pain in the right lower abdominal quadrant. For the past three months pain had been incapacitating and sedatives were required. The uterus was moderately enlarged. Supravaginal hysterectomy was performed, leaving tubes and ovaries. Histologic examination showed a hyperplastic endometrium invading about one-fourth of the thickness of the myometrium. The basement membrane was intact and there were no malignant changes.

Dr. E. T. White discussed the pathology of this case, and of the condition in general.

Dr. H. A. Gamble called attention to the possibility of producing an endometrial transplant at the time of operations on the uterus, even the operation of curettage.

Dr. J. C. Pegues presented the history of a woman, aged 38 years, who for years had been in ill health, and whose condition had been diagnosed as pellagra by at least two competent physicians independently. She had been treated accordingly without much improvement.

Her complaint was of progressive weakness, underweight, sore mouth, and dry skin. No typical pellagrous dermatosis had been observed. She was usually constipated; gastric analysis showed absence of hydrochloric acid. Her diet was poorly balanced, especially in the winter.

Dr. Pegues found her allergic to cat hair, goose feathers and several articles of food. It developed that she always kept cats and slept on a feather bed, but that during the flood of 1927, she was separated from the cats and feathers, and had been in better health than before or since.

John A. Beals,
Secretary.

Greenville,
June 9, 1933.

MISSISSIPPI BAPTIST HOSPITAL STAFF MEETING

Jackson, Miss.

The regular monthly meeting of the staff was held at the hospital, May 16, with a dinner served before the meeting. After the dinner the staff was called to order by the new president, F. L. Van Alstine, and the minutes of the previous meeting were read.

The superintendent, Mr. Alliston, made a very enjoyable and instructive talk which was enjoyed by us all because it revealed some of the things in the way of problems that confront the hospital and showed us how they were being so ably handled.

Dr. W. H. Henderson was present for his talk, which was very enjoyable. The doctor talked on the relationship of the doctor and the patient in such a manner that was impressive to us all. He stated that he really hoped to develop the roentgen-ray department of this hospital to such a point that we would all feel that it was merely a place for consultation and the problems of the patient to be considered as well as any personal problems that may develop. He asked us to please not, at any time, look on this department as a prescription one in any form, which point was well taken. At this time he, of course, is having to do a great deal of reorganization and cleaning up of the department, but assured us that at a very near date everything will be in good order.

The staff rules were brought up and read by the secretary and referred to a committee of Wall, Armstrong and the secretary, to revise these and present them back to the staff at the next meeting.

A motion was made and passed, by Dr. Garrison, that a letter be written to Dr. Crisler extending the sympathy of the staff to him.

A similar motion was made and passed, by Dr. Hughes, that a letter be written to Dr. and Mrs. Boswell.

The question of the staff members coming in and leaving early when, in a large number of instances it was not necessary, was brought up and discussed by Dr. Garrison.

The various committees will be announced at a near date.

Lawrence Long,
Secretary.

Jackson,
June 12, 1933.

VICKSBURG SANITARIUM STAFF MEETING.

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on June 12. After the regular business of the staff and the reception of reports from the Records Department, and Analysis of the Work of the Hospital for the month of May, Dr. F. Michael Smith, Director of the Warren

County Health Department, presented a report of vital statistics for the month of May.

Special Case Reports:

- (1) Carcinoma of Female Breast.—Dr. A. Street.
- (2) Carcinoma of Tongue.—Dr. A. Street.
- (3) Stricture of Urethra Complicated by Urethral Calculi, Multiple Perineal Fistulae and Retention of Urine.—Dr. J. A. K. Birchett, Jr.
- (4) Results of the Use of Double Contrast Technic in Roentgenology of the Colon.—Dr. L. J. Clark.
- (5) Diffuse Endothelioma (Ewing) of Tibia and Fibula—End Results.—Dr. G. C. Jarratt.

Three-minute reports of the literature of the month:

1. Dr. A. Street.—Hyperparathyroidism.
2. Dr. L. S. Lippincott.—Anterior Pituitary Sex Hormone.
3. Dr. J. A. K. Birchett, Jr.—Arrhenoblastoma of Ovary.
4. Dr. R. A. Street, Jr.—Roentgenology of the Thoracic Aorta.

The meeting closed with a lunch.

The next meeting of the staff will be held Monday, July 10, at 6:30 p. m.

Leon S. Lippincott,
Secretary.

Vicksburg,
June 12, 1933.

Abstract.—Structure of Urethra Complicated by Urethral Calculi, Multiple Perineal Fistulae and Retention of Urine.—Dr. J. A. K. Birchett, Jr.

Patient—Colored male, aged 60 years, storekeeper admitted to hospital May 5, 1933.

Chief Complaint—Pain in perineum, inability to urinate through natural channel, passage of urine through scrotal sac, severe headache and depressed feeling for past two weeks. History of Present Complaint—Twenty-eight years ago had sound passed for stricture of urethra following gonorrheal infection several months previous. After passage of sound there was severe reaction, high temperature and rigors for several days with inability to pass urine and extravasation into scrotum with abscess formation which eventually ruptured, permitting the urine to pass through several openings in scrotum. At this time he was confined to bed several weeks with marked loss of weight and strength. After this the patient was so glad to be up and about that he was contented to pass urine through fistulous tracts in place of having further treatment. Three years after that he again had dilatation attempted and suprapubic cystotomy and did have passage of urine through urethra for several months but the passage would shut off and the fistulae which would never entirely heal would begin drainage again. About 12 years ago was operated upon in New Orleans, a dilatation of stricture being done and closure of fistulae with un-

happy results, so he decided to continue through life with the fistulae as the only way of urinary outlet.

For past ten years has been wearing pads to keep self dry and at times would have periodic controlled micturition through fistulae. About four months ago he began to have severe pain in perineum with gradual stoppage of urinary flow. For past three weeks has had headache, dizziness and for past three days has been complaining of nausea and vomiting, when he was seen by me in his home. Past History—Gonorrhoea 30 years ago; has lost 20 pounds.

Family History—Irrelevant. Physical Examination—Well developed and nourished male of past 60 years. Teeth, most of them present and in good condition. Tonsils negative, tongue coated, breath heavy. Heart, negative; blood pressure 150/80; slight arterial sclerosis; lungs normal. Abdomen had no masses or areas of tenderness. There was a suprapubic scar where suprapubic cystotomy was done. No inguinal glands; no pain elicited over costo-vertebral angles. Skin dry, not oily. Genito-urinary, scrotum large because of left inguinal hernia which fell into sac but which was easily returnable to abdomen. There were three fistulous openings on the posterior lateral surface of the right portion of scrotum from which purulent exudate and urine trickled. There was a well healed perineal scar where perineal cystotomy had been done and much induration of scar tissue was felt. The penis was apparently normal in appearance but when sound was introduced into urethra there was a hard obstruction met about half way in the penile urethra. The hardness of the mass in the perineum and the clinking elicited by the sound made us suspicious of urethral calculi which had blocked the passage and were gradually cutting off the urinary outflow. To further establish a diagnosis a roentgenogram was made showing calcified shadows in perineum which could easily have been stones.

Laboratory—Urea nitrogen increased, 26.15 mg. per 100 cc.; creatinin, 1.5 mg. per 100 cc.; hemoglobin 57 per cent; erythrocytes 3,150,000; many red cell changes; leukocytes 12,000; small lymphocytes 8 per cent, large lymphocytes 10 per cent, polymorph. neutrophils, mature 65 per cent, immature, 17 per cent. Urine, 150 cc., passed through fistula, albumin 1/20 of 1 per cent by weight, specific gravity 1.022, many fresh and abnormal blood cells, many pus cells, many bacilli, no sugar.

Diagnosis: Urethral stricture, multiple perineal fistulae, urethral calculus, secondary anaemia, acute nephritis.

Treatment—Operation was advised for removal of calculus, reestablishment of urethral continuity and closure of fistulae. Under sacral and parasacral and ether anaesthesia the perineum was opened

and the urethra was identified after passage of sound through the penile portion and by passing a filiform through main fistulous opening which led up against calculus. This mass of scar tissue and what had been the urethra was incised and stones encountered. When these were taken from dilated posterior urethra the finger was easily passed into bladder where prostate was felt to be of normal size and consistency. To reconstruct urethra a No. 20 F. catheter was passed through penis and threaded through the old scarred portion of the urethra into the posterior urethra, where the stones had been and then into the bladder. The perineum was packed with iodoform gauze and loosely drawn together by silk worm sutures after the fistulous tracts had been dissected out.

The urine began to drain from catheter and continued for 17 days only little passing through perineum. On the seventeenth day catheter was removed by patient as he said that it pained him. For four days most of urine was passed through perineum but as the fistulae began to close the urine came from the urethra. I did not attempt to pass another catheter into the newly constructed urethra as I was afraid of trauma and scar formation. Ten days after catheter was removed I passed a No. 22 F. sound easily through urethra into bladder, there being a slight twisting or tortuosity of the urethra at the junction of anterior and posterior portions which kept a flexible catheter from passing.

After injection of sodium iodine solution into the anterior urethra roentgenograms showed outline of a well formed urethra. I am still passing sounds and only yesterday passed a No. 24 F. sound with ease. The perineal fistulae are nearly closed and the general condition of patient is greatly improved. He is happy to again urinate through the normal channel after a lapse of 28 years.

Abstract: Diffuse Endothelioma (Ewing) of Tibia and Fibula. End Results—Dr. G. C. Parratt.

Patient—White male, aged 5 years. This child, first seen in November, 1932, with diffuse endothelioma of tibia and fibula of left leg, was treated by deep roentgen-ray therapy (Coutard Method). A preliminary report was made to the staff in February and published under Hospital Transactions in the March number of the *Journal*. At that time patient had left the hospital, size of leg had returned to normal and child was walking. There was no evidence of metastasis to other parts. Subsequent—February 23—Much swelling of left leg from knee to and including the ankle and foot. Some pain over tibial region. Pulse felt in dorsalis

pedis artery. March 17—Slight swelling in lower end of left leg; no skin involvement. Deep roentgen-ray therapy, which had been stopped in February because of beginning dermatitis, was again instituted, using same technic as before. April 13—Temperature 99°F., complaining of pain in left elbow; no swelling, redness, or pain on palpation of this region noted; no limitation of motion or pain on active or passive motion of left elbow. Beginning redness and scaling of skin of left leg. Has had 13½ hours of roentgen therapy since beginning on March 17. Roentgenograms of left elbow, forearm and wrist were normal.

May 8—Temperature 100°F. Mother stated that for past month child has complained of pain in left elbow, right shoulder, right elbow and right wrist, shifting from one to another. There has been no redness of involved parts and no fever that mother recognized. For past two weeks has not wanted to play as usual and grows tired easily on exertion. For past two days has complained of sore throat, some cough, and fever has been 101°F. at times. An acute naso-pharyngitis was present. No redness, swelling, no rheumatic nodules, no pain on active or passive motion of joints. A soft murmur at base of heart, presystolic at apex and transmitted to axilla and back; no thrill; snappy first sound at apex; no enlargement of heart on percussion. No rales, or dullness of lungs; no bronchophony. Lymph nodes not enlarged. Patient was put to bed and given sodium salicylate and sodium bicarbonate three times a day. May 13—Temperature 101°F. Mother stated child was doing very well since last visit except for pain in joints up to the night before when cough became severe, respiration rapid and child very restless. This morning drowsy and difficult to arouse. Stuporous, pale, dyspnoic, acutely ill. Some stiffness of neck, positive Kernig's sign; no ankle clonus. Numerous petechiae over body. Coarse and fine rales throughout chest but no dullness or tubular breathing. Heart findings same as on May 8. Spinal fluid normal; urine normal; leukocytes 9,600; lymphocytes 7 per cent, polymorphonuclears 93 per cent. Blood culture negative, roentgenograms of chest revealed general metastases of lungs. Child grew rapidly worse and died six hours after admission.

Post mortem examination by Dr. Lippincott showed diffuse endothelioma (Ewing) of diaphragm, both lungs, ribs, pleura, and lymph nodes in region of esophagus; lymphadenitis, chronic hyperplasia of retroperitoneal pelvic nodes and mesenteric nodes. Section of left tibia and periosteum showed no remaining evidence of tumor growth.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

ORLEANS PARISH MEDICAL SOCIETY TRANSACTIONS

During the month of June, besides the regular meeting of the Board of Directors, the Society held one regular scientific meeting and a Clinical Meeting at the United States Marine Hospital. A special meeting of the Society was held on June 8 to consider the report of the special committee appointed to correlate the recommendations of the committees studying the various phases of medical abuse.

At a scientific meeting held June 12, papers were presented by Drs. Louis Levy, Lucien LeDoux and Leon J. Menville. Dr. King was out of town and Dr. Waldemar R. Metz, First Vice-President, presided. The attendance at this meeting was not very good.

The clinical meeting at the United States Marine Hospital was well attended and an excellent program was presented by the Marine Hospital Staff.

There will be only one more meeting this season which will be a quarterly executive meeting on July 10. After this meeting the Society will go into summer recess until October 9.

We regret to report the loss by death of two of our active members, Dr. Adrian Hava and Dr. P. L. Thibaut.

Quite a few New Orleans doctors went up to the meeting of the American Medical Association in Milwaukee: Drs. C. C. Bass, Elizabeth Bass, Clyde Brooks, Homer Dupuy, Joseph A. Danna, Foster M. Johns, H. L. Kearney, Edward L. King, I. I. Lemann, A. L. Levin, Rudolph Matas, John H. Musser, Jos. A. O'Hara, F. A. Overbay, Emile Naef, Wm. H. Perkins, W. H. Seemann, J. T. Nix, Robert A. Strong, Carlo J. Tripoli, Narcisse F. Thiberge, and H. W. E. Walther.

Dr. John H. Musser was elected Vice-President of the American Medical Association.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 4/30/33.....	\$1,193.86
Receipts	664.15

TOTAL CREDITS.....	1,858.01
May expenditures	703.11

ACTUAL BOOK BALANCE: 5/31/33...\$1,154.90

LIBRARIAN'S REPORT

One hundred and twenty-eight volumes have been added to the Library during May. Of these 18 were

received from the New Orleans Medical and Surgical Journal, 79 by gift, 30 by binding, and 1 by purchase. A notation of new titles of recent date is given below.

In addition to every-day calls for particular titles and for material which could be furnished at once, references have been collected on the following subjects:

- Pituitarism.
- Theory of immunity.
- Inverted uterus.
- Treatment of trigeminal neuralgia with trichloroethylene.
- Cancer clinics in the United States.
- Sedimentation test in coronary thrombosis.
- Non-specific protein therapy in peptic ulcer.
- History of protein therapy.
- A. M. A. rulings within the year regarding specialism.
- Banti's disease in infancy and childhood.
- Actinomycosis of ear.
- Incidence and mortality of tuberculosis, venereal diseases and mental diseases in the United States.
- Jonnesco operation.
- Formulation of a list of material on sex information suitable for adolescent boys.
- A. M. A. rulings during 1932-33 regarding birth control.

During May, Miss Marshall was elected President of the New Orleans Library Club, for 1933-34. This group is composed of librarians, book collectors, persons doing editorial work, book selling, printing, binding, etc., as well as dealers in library supplies and equipment. It has a membership of over 80.

After June 1, the Library will be closed at night until October 1.

NEW BOOKS

- Stern, N. S.—Clinical Diagnosis. 1933.
- Practitioner's Library of Medicine and Surgery. v. 4. 1933.
- Bailey, F. R.—Textbook of Histology. 1932.
- Delee, J. B.—Principles and Practice of Obstetrics. 1933.
- American Neurological Association.—Transactions. v. 58. 1932.
- A. M. A.—New and Non-Official Remedies. 1933.
- Fifield, J. C.—American and Canadian Hospitals. 1933.
- A. M. A.—Council on Pharmacy and Chemistry—Report. 1932.
- Herringham, Sir W.—Life and Times of William Harvey. 1933.

Goodman, Hermann—Story of Electricity. 1928.
Ramazzini, Bernardo—Diseases of Tradesmen. 1933.

Bickham, W. S.—Operative Surgery. v. 7. 1933.
Bainton, J. H.—Criteria for Classification of Heart Disease. 1932.

Rothrock, J. L.—10 Years of Obstetrics and Gynecology in Private Practice. 1933.

Cushing, Harvey—Papers relating to the Pituitary Body. 1932.

Clark, Evans—How to Budget Health. 1933.

Shutes, M. H.—Lincoln and the Doctors. 1933.
Jaccho, Julius—Pelvis in Obstetrics. 1933.
Bloomfield, A. L.—Gastric Anacidity. 1933.
Pepper, O. H. P.—Practical Hematological Diagnosis. 1933.

Wong, K. C.—History of Chinese Medicine. 1932.
Krusen, F. H.—Light Therapy. 1933.

Twitmyer, E. B.—Correction of Defective Speech. 1932.

FREDERICK L. FENNO, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

CHAIRMEN OF SECTIONS

The following Chairmen of Scientific Sections for the approaching meeting of the Louisiana State Medical Society in Shreveport, April 10, 11, and 12, 1934, have been appointed by the President, Dr. C. A. Weiss.

Medicine and Therapeutics—Dr. Philip Jones, New Orleans.

Pediatrics—Dr. Robert T. Lucas, Shreveport.

Nervous Diseases—Dr. C. S. Miller, Jackson.

Bacteriology and Pathology—Dr. Rigney D'Aunoy, New Orleans.

Public Health and Sanitation—Dr. C. C. De-Gravelles, Morgan City.

Gastro-Enterology—Dr. W. S. Kerlin, Shreveport.

General-Surgery—Dr. J. Q. Graves, Monroe.

Gynecology and Obstetrics—Dr. Rhett McMahan, Baton Rouge.

Eye, Ear, Nose and Throat—Dr. A. M. Peters, Alexandria.

Urology—Dr. B. M. McKoin, Monroe.

Radiology—Dr. Lester J. Williams, Baton Rouge.

Orthopedic Surgery—Dr. Paul A. McIlhenny, New Orleans.

Those desirous of reading papers should communicate with the various chairmen as promptly as possible. The programs for each Section must be in the hands of the Secretary-Treasurer not later than February 10, 1934.

MADISON, EAST CARROLL, AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its regular monthly meeting at Tallulah, Louisiana June 6, 1933, with the following members present: Doctors L. A. Masterson, Jno. L. Kelly, B. L. Bailey, of West Carroll; Doctors B. R. Burgoyne, W. K. Evans, W. H. Hamley, G. Douglas Williams, B. C. Abernathy, of East Carroll; and Doctors G. W. Gaines, B. T. Ferguson, A. T. Palmer, L. Stevens, E. O. Edger-ton, of Madison.

The Scientific Program consisted of a paper by Dr. Jno. L. Kelly on "Acute Otitis"; also a paper by Dr. B. T. Ferguson on "Prostatic Diseases".

Dr. W. H. Parsons of Vicksburg was the Guest Essayist of the evening and presented a very interesting paper on "Some General Remarks Concerning Acute Abdominal Conditions".

We had as our guests at this meeting Doctors T. P. Sparks, W. P. Robert and W. H. Parsons of Vicksburg; Doctors Joseph Whitaker, and F. A. Thomas of St. Joseph, Louisiana; and Doctor H. A. Stafford of Newellton, Louisiana.

The Society voted to invite the Tensas Parish Medical Society to come into the Tri-Parish Medical Society. The following new members were elected to membership in the Society: Doctors John J. Flake of Pioneer, Louisiana, Dan W. Kelly of Oak Grove, H. A. Stafford of Newellton, Joseph Whitaker of St. Joseph, and F. A. Thomas of St. Joseph.

The next meeting of the Society will be held at Sondheimer, Louisiana.

G. Douglas Williams, M. D.,
Secretary.

THE BI-PARISH MEDICAL SOCIETY

The Bi-Parish Medical Society met in the East Louisiana State Hospital as the guest of Dr. Glen J. Smith and Staff.

There were about 50 physicians and visitors present.

After a most bountiful repast served in the Hospital dining room we adjourned to the Staff room where the scientific program was given. We had as our guests two of our most distinguished physicians and surgeons, both of whom have rendered an important role in organized medicine, Dr. Cecil Lorio of Baton Rouge and Dr. C. J. Miller of New Orleans. Dr. Lorio's subject was "Problem of the Thymus with X-ray Plates". Dr. Miller's subject was "Chronic Cervicitis". Both subjects were ably presented with illustrations by lantern slides. The excellent papers were freely and favorably discussed by members present.

Drs. Miller and Lorio were elected honorary members of our Society, and a vote of thanks given them for rendering us such valuable information. Drs. Glenn J. Smith and Staff and Mrs. Smith

were voted our appreciation for the excellent entertainment they always give us at these meetings.

E. M. Toler, M. D.,
Secretary.

THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society met in Franklin, on Thursday, June 8, at 7:30 p. m., in the Elks' Home. The scientific program was as follows: "Bone Infections," by Dr. Leon J. Menville, New Orleans; "The Correlation of Irradiation and Surgery in the Treatment of Malignancy," by Dr. Maurice J. Gelpi, New Orleans; and "The Treatment of Certain Common Disorders of the Intestinal Tract," by Dr. Daniel N. Silverman, New Orleans. The program was greatly enjoyed and there were about twenty-five members present. A rising vote of thanks was given to the State Secretary-Treasurer for having sent out the program to the various doctors of the District.

SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society held a meeting in Elton, on Thursday, June 22, with Dr. W. A. Fletcher, of Elton, as host for the occasion. The scientific program was as follows: "Some Practical Points on Physical Diagnosis," by Dr. Chaille Jamison, New Orleans; "Use of the Hormones in Gynecological Practice," by Dr. H. W. Kostmayer, New Orleans; and "Infant Feeding," by Dr. Charles J. Bloom, New Orleans. Following the scientific program a banquet was tendered, at which time a select musical program was rendered by the ladies of Elton and local talent. Dr. C. A. Weiss of Baton Rouge, President of the Louisiana State Medical Society, Dr. Lester J. Williams of Baton Rouge, Ex-President of the Louisiana State Medical Society, and Dr. P. T. Talbot, of New Orleans, Secretary-Treasurer of the Louisiana State Medical Society, attended the meeting. Everyone felt that the meeting was most successful in every detail, and left with such fond remembrances of Dr. Fletcher and Elton.

SHREVEPORT MEDICAL SOCIETY

The regular meeting of the Shreveport Medical Society was held on June 6, Dr. F. H. Walke, President, in the chair. Roll call revealed forty members and visitors present.

The minutes of the previous meeting were read and adopted, after which the secretary presented the following report:

Two communications from the secretary of the Louisiana State Medical Society, the first under date of May 6th, asking for the opinion of our society relative to the most preferable time for the meeting of State Society which is to be held in Shreveport in April, 1934, and the second under date of May 12th, informing us that the dates of

April 9, 10, 11, 12, 1934, had been selected by the Executive Committee for this meeting.

The application for membership in the society of Dr. J. B. Birdwell, was presented by the secretary, with recommendations of Drs. W. S. Kerlin and Webb.

The treasurer, Dr. McIntyre, reported that dues for eighty-five members had been collected to date, and showed a bank balance of \$307.85.

Mr. Hoffman spoke for a few minutes regarding the plan of hospital insurance which is now being operated in co-operation with three of the local hospitals. This plan was discussed at length both pro and con by various members, the outcome of which was a motion by Dr. J. D. Young, that a committee consisting both of members affiliated and not affiliated with the hospitals affected be appointed to consider the matter and report back to the society. Dr. Browning amended the motion to provide that a minority as well as a majority report be returned. After further discussion, Dr. B. C. Garrett moved the entire matter be tabled. This motion was duly seconded and passed.

The scientific program which was then presented consisted of a very interesting and well prepared symposium on the diagnosis and treatment of peptic ulcer. The society is indebted to Drs. Riggs, Hargrove, LeDoux, and Edwards for their respective presentations on this program. The papers were discussed by Drs. McIntyre, Knighton, Baker, W. S. Kerlin, and B. C. Garrett.

A committee was appointed to investigate the application for membership of Dr. Birdwell, consisting of Drs. D. L. Kerlin, Edwards, and Hargrove.

Dr. Bodenheimer asked for an appropriation of \$100.00 for the library committee. After discussion, and on motion of Dr. B. C. Garrett, duly seconded, the question was tabled.

Dr. Edwards called attention to a new "Health Agency" now being operated in the city. It was moved by Dr. Cassity, and seconded, that a vigilance committee be appointed to investigate this and similar cases which might come up in the future. The motion was passed, and the president announced that the committee would be named within the next few days.

Dr. Browning announced that Dr. F. M. Johns, of New Orleans, would be present as guest speaker at the September meeting.

It was decided by the society that a summer meeting be held during the month of August, the arrangements to be left to the entertainment committee.

It was moved by Dr. Barrow, seconded, and passed, that the date of the November meeting be given over to the Fourth District Medical Society, and that we meet officially with this society.

Dr. J. M. Bodenheimer was nominated for the chairmanship of the committee on arrangements for the meeting of the State Medical Society next April, and was elected by acclamation. It was decided that the committee should be appointed by Drs. Bodenheimer and Walke, and should begin its work as soon as indicated.

J. E. Knighton, Jr., M. D.,
Secretary.

NEWS ITEMS

Professor Elizabeth Bass, of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana, attended the meeting of the Medical Women's National Association held at Milwaukee, Wis., during the month of June.

Professor H. W. Kostmayer, Dean of the Graduate School of Medicine of the Tulane University of Louisiana, addressed the meeting of the 7th District Medical Society held at Elton, La., June 22, 1933, on "The Use of Endocrines in Gynecological Practice".

Professor Wm. A. Wagner of the faculty of the Graduate School of Medicine of the Tulane University of Louisiana, attended the meeting of the Texas State Medical Association held at Fort Worth, Texas, in May.

In June Prof. Wagner attended the convention of the American Oto-rhinolaryngology Association held at Chicago, Ill.

In addition to the New Orleans physicians whose names appear in the Orleans Parish Section of the Journal, the following physicians from Louisiana registered at the American Medical Association Meeting: Dr. J. S. Parker, Reserve; Dr. W. F. Couvillion, Marksville; Dr. J. Q. Graves, Monroe; Dr. A. A. Herold, Shreveport; Dr. Robert Kapsinow, Lafayette; Dr. W. B. Worley, Shreveport; and Dr. Leon Roland Young, Covington.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending May 13 there were 141 deaths, divided 82 white and 69 colored, giving a death rate for the whole of 16.4, for the white population 12.5, and for the colored 25.8. The infant mortality rate this week was 112, the deaths being divided pretty nearly equally between the two races. For the following week ending May 20, there were only 125 deaths, making the rate 13.5. This small rate was largely due to a decrease in the number of deaths in the colored, there being only 40 such deaths, and giving a death rate of 15.0, whereas the white deaths had increased slightly above the previous

week but still only giving a rate of 13.0. This very low death rate was notably due to an infant mortality rate of only 28. For the week ending May 27 there was an unusually small number of deaths, 103, giving a total rate of 11.2. There were only 48 deaths in the white population with a remarkable rate of 7.3, almost the lowest figures in the entire United States. The colored rate was 20.6 as a result of the death of 55 negroes, 5 of whom were infants under 1 year of age, with an infant mortality rate of 77 as contrasted with the total rate of 56. The low death rate of the preceding week among the white population was apparently not an accident, because in the next week ending June 3 the rate was still low, being 9.0, as a result of the death of 59 white persons. The total deaths were 119 with a rate of 12.9 and an infant mortality rate of only 39. The rate jumped considerably for the week ending June 10, as a result of the death of 154 individuals. This higher rate was dependent largely upon the 80 colored deaths, with the rate of 29.9 as contrasted with a rate in the white population of only 11.3. The infant mortality rate this week was 73.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has issued morbidity weekly reports, which briefly abstracted contain the following information. For the week ending May 20, the diseases that occurred in double figures were as follows: Sixty-five cases of syphilis, 53 of gonorrhoea, 42 of measles, 20 of tuberculosis, and 10 of pellegra, really quite a remarkable record. Of the unusual diseases, 1 case of smallpox, poliomyelitis and undulant fever were reported, and 2 of tularemia. For the twenty-first week ending May 27, the morbidity incidence was considerably higher than the previous week. There were reported 67 cases of syphilis, 33 of gonorrhoea, 34 of pneumonia, 21 of typhoid fever, 23 of measles, 20 of influenza, 13 of diphtheria, 19 of cancer, and 11 of pellegra. For the twenty-second week ending June 3, pneumonia which two weeks previous had been almost unknown to the State had jumped to 59 cases, leading all other diseases. It is possible that this increase in the pneumonia incidence might be dependent upon the large number of cases of whooping cough, 45 of which were reported, of measles, 30 of which were listed, and of influenza of which there were 18 cases. The other diseases reported in double figures were 39 cases of syphilis, 40 of pulmonary tuberculosis, 22 of cancer, 20 of gonorrhoea, 15 of pellegra, and 10 of measles. Two cases of smallpox were reported from Natchitoches Parish and 2 cases of tularemia and 1 of undulant fever were also reported. Pneumonia was still quite prevalent, as shown by the report of the twenty-third week of the year ending June 10, there being 41 cases on the list. Measles had dropped to 22, in-

fluenza had come down to 10 and whooping cough to 17 cases in this week. There was a considerable rise in the number of typhoid fever cases, of which there were 20 from 13 different parishes in the State, Assumption, Caddo, East Carroll, Evangeline, and Pointe Coupee all reporting 4 or more cases of the disease. There were also listed 58 cases of syphilis, 46 of pulmonary tuberculosis, 23 of cancer, 21 of gonorrhoea, 11 of malaria, and 10 of pellegra. For the next week ending June 17 the pneumonia cases had fallen to 27. Thirty-one cases of cancer were reported. Typhoid fever had dropped to 19 cases, Franklin and Pointe Coupee Parishes each with 5 cases having the greatest incidence of any of the parishes. Other diseases occurring in double numbers were 24 cases of syphilis, 25 of tuberculois, 26 of gonorrhoea, 18 of measles, 15 of malaria, 12 of influenza, 14 of pellegra, and 16 of whooping cough. One case of poliomyelitis and 1 of meningitis were reported from Orleans Parish.

WOMAN'S AUXILIARY NEWS—LOUISIANA

Last month's Auxiliary news space was given to the Caddo Parish Auxiliary, and to the splendid report of our past State President, Mrs. Robert Lucas. This month we shall devote the space to the news obtained from the Orleans Parish Auxiliary.

The Annual meeting of the Auxiliary was held at the Orleans Club on May 10, 1933, and the various officers and committee chairmen read fine reports of the good work and many accomplishments that had been done during the year 1932-1933. Mrs. Isidore Cohn, president, has incorporated these very good records in her splendid annual report which is given in full at the end of this article.

Mrs. Cohn welcomed the new State President, Mrs. John H. Musser, and pledged her the support of the Orleans Parish Auxiliary.

At this meeting the annual election of officers took place with the following results:

President, Mrs. Francis E. LeJeune; President-Elect, Mrs. Chaille Jamison; 1st Vice President, Mrs. W. W. Butterworth; 2d Vice President, Mrs. Oscar Dowling; 3d Vice President, Mrs. Jules Dupuy; 4h Vice President, Mrs. J. George Dempsey; Recording Secretary, Mrs. Norman Applewhite; Corresponding Secretary, Mrs. Monte Meyer; Treasurer, Mrs. J. W. Warren; Publicity Secretary, Mrs. Edmond Souchon; Parliamentarian, Mrs. Arthur Weber; Historian, Mrs. Hermann B. Gessner.

After the election, the new president, Mrs. Francis E. LeJeune was presented by Mrs. Cohn and made the Auxiliary a most pleasing address.

A delightful social hour and a beautiful tea was enjoyed by nearly two hundred members and the Auxiliary activities were disbanded for the summer months.

ANNUAL REPORT OF MRS. ISIDORE COHN

The time has come for me to make a report to you of my stewardship as your president. As I look back upon the year's work, which has been one of service and pleasure, I feel that because of the stimulation and co-operation of my board certain results have been achieved and though they may not represent a finality of accomplishments they evidence activity of our Association.

We have felt the unsettled condition in the world at present, as our membership has dropped from 319 in 1932 to 270 in 1933, making a total loss of 51 members. While this does seem to be a goodly number to lose in twelve months, everything considered we should be well satisfied with this splendid showing.

Our meetings, which are held on the second Wednesday of the month at the Orleans Club, have been well attended. An average of 110 have been present and have enjoyed the program. The meetings have been divided into three sections; the first part has been devoted to business, the next part to very delightful musical entertainment and educational talks, and after adjournment, the social hour, one of the main objects for the formation of the auxiliary. The time spent around the tea table has done more to weld the organization into a united and harmonious body than any other single thing.

Considering that Social Hygiene work has been a new venture this year it is with pride that I am able to say that our health work has made great strides. We have had the most splendid co-operation from the Social Hygiene Association of New Orleans and the doctors and social workers throughout the city have been most courteous and generous in giving so much of their time. Under the auspices of our organization, at least four lectures a month have been given on Social Hygiene, and sometimes as many as nine. Through these lectures we have reached persons in different walks of life and as education along these lines is one of the greatest health needs of our community, we had hoped to reach a great many more. With the help of the Hygiene Association we had made plans to underwrite a Social Hygiene Institute here in April. But "the best laid plans of mice and men gang oft agley" and the bank situation in the United States upset our plans. I hope we shall be given the opportunity in the near future of sponsoring and underwriting such an institution and that the good work begun this year will continue to go on.

Another very commendable undertaking was the large bridge party and cake sale given during the summer to obtain subscription to Hygeia. We not only made a social success of the affair, but a financial one as well. A net profit of \$145.00 was realized and with this we were able to get 100

subscriptions and still have a surplus in the Fund. The circulation of Hygeia is one of the pet hobbies of the American Medical Association for auxiliary work and as local subscribers increased from 12 to 100 since May 1932, we may be well pleased with the end results.

This year we turned our attention to new philanthropic fields. Upon the recommendation of the Orleans Parish Medical Society we discontinued the collection of doctors' samples of medicine and a majority of our own members voted to discontinue the collection of clothes. In these times of depression and strain not only individuals, but organizations, have been asked to answer the call to aid the hungry and the unclothed. The National government, as well as the local authorities, have requested our help in one or two projects. The American Red Cross established a sewing room at D. H. Holmes's store to make garments, such as slips, bloomers, B. V. D.'s, from unbleached cotton donated by the government. This work has gone forward with notable success, but so much yardage remains that I understand there is enough material for two years' more work. In January we were asked to help the cause along and by May 10, under splendid leadership, had finished 300 garments. This is an excellent achievement and I trust we shall continue to do our share as a group until there is no longer any need for us. The Mayor organized a volunteer emergency motor-corps and needed autos and drivers to take social workers on their rounds, so that they could make better time and investigate more cases a day. These drivers were not to be remunerated for their work and I am happy to state that the woman's auxiliary responded to the call cheerfully and willingly. Furnishing and delivering food to three clinics once a week for the mothers of new-born babies was another new experiment in our philanthropic work. Due to the untiring zeal and co-operation of our chairman and vice-chairman of philanthropy and chairman of our Social group, these clinics have been well supplied every Monday—Auxiliary Day.

Our Social group, under the able and non-tiring leadership of its chairman, has functioned most successfully. Included in this group are the courtesy, membership, entertainment, hostess and notification committees. Any one knowing the inner workings of our organization will realize how important it is for this group's work to co-ordinate properly and from the report you have just heard you may judge how well this has been done.

Our Commemoration Fund, established to memorialize a member or a member's husband, was in a very flourishing condition as the sum we expected to spend on Hygeia work was not used during the year and \$47.00 more was added. It is rather distressing to relate that our moneys are in a bank not opened 100 per cent and even if the bank opens

it will take some years before we can obtain our full deposits. This is true also of our checking account. We have not paid state or national dues and the prospect is not very bright for an early settlement of these debts.

The newspapers have been very kind in giving us space in two of their editions besides the Sunday paper, and they have been very faithful and accurate in reporting our meetings for which they have our sincere thanks and warm appreciation. To our State Chairman of Press and Publicity we also owe a debt of gratitude, as she has reported our outstanding activities with a facile pen.

The Great Reaper has called from our midst two of our fellow members Mrs. J. A. Gorman, and Mrs. A. Noba. He has also called from the ranks of the National our late President, Mrs. W. J. Freeman. May their memories be an inspiration to spur us on to be of more service to our fellowmen.

This report would be incomplete did I not thank the officers who have served with me for their assistance and patience, my Executive Board and members of committees for their ever ready and able advice and their always cheerful and splendid co-operation. Without the help of these loyal co-workers I could not have undertaken and successfully accomplished this year's work, nor could I, as I hope I have done, increased the interest of the doctors' wives in this organization and in the welfare of this community.

Respectfully submitted,

Mrs. Isidore Cohn,
President Woman's Auxiliary
Orleans Parish Medical Society.

There are five more auxiliaries to be heard from. We would like to know what Calcasieu, Jefferson Davis, Morehouse, Ouchita and Webster are doing!

Mrs. W. R. Buffington,
Chairman, Press and Publicity.

LOUIS A. GAUDIN

Louis A. Gaudin, Convent, La.: Born in 1870, was graduated from the old Jefferson College at Convent, and from Tulane University in 1894. He has practiced medicine in St. James Parish since his graduation. Dr. Gaudin was a well known practitioner, and President of the Board of Health of St. James Parish. He was a member of the Second District Medical Society, the Louisiana State Medical Society, Southern Medical Association, and American Medical Association. He died on June 18, 1933, and is survived by his wife and four children.

LOUIS MURDOCK

Louis Murdock, St. Joseph, La.: Was graduated from Tulane University in 1883 and began the practice of his profession at St. Joseph in 1894.

Dr. Murdock moved to Woodville, Miss., where he practiced for several years. He later located in Port Gibson, Miss., and in 1902 returned to St. Joseph. He served as coroner of Tensas Parish for 20 years. Dr. Murdock was a member of the Louisiana State Medical Society for a number of years, but had not renewed his membership at the time of his death. Dr. Murdock died on June 5, 1933.

EMILE REGARD

Emile Regard, Mansura, La.: Graduated from Tulane University in 1894. Dr. Regard was 61 years old, and had been in ill health for some time. He died at the Baptist Hospital in Alexandria on June 3, 1933. Dr. Regard was president of the Central Bank of Mansura until it was merged with the People's Savings Bank of Mansura, which later closed. He was past worshipful master and treasurer of Marksville Lodge F. and A. M. and had been prominent in Masonic circles for a number of years. He is survived by his wife, three daughters, and one son. Dr. Regard was a member of the Avoyelles Parish Medical Society and the Louisiana State Medical Society.

LEONCE P. THIBAUT

Leonce P. Thibaut, New Orleans: Born in New Orleans in 1876. Graduated from Tulane University in 1900. Dr. Thibaut served during the Spanish-American War just after his graduation. After the war he began the practice of medicine, and gained such fame during the final great yellow fever epidemic in New Orleans shortly after the present century began that he was appointed the first surgeon of the Public Belt railroad, which position he retained until his death. He was also a surgeon for the New Orleans Public Service, Inc. Dr. Thibaut served on the board of Hotel Dieu for almost 35 years, occupying various posts of vice-president, before being chosen president of the Hotel Dieu staff at the beginning of this year. He served on the advisory faculty of the Tulane School of Medicine. He was a member of the Kappa Sigma fraternity, the Tulane Alumni Association, the American Medical Association, Louisiana State Medical Society, and Orleans Parish Medical Society. Dr. Thibaut died on June 14, 1933. He is survived by his wife, Mrs. Loyola Richardson Thibaut, one son, a daughter, and two grandsons.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

FROM OUR PRESIDENT

TO THE MEMBERS OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION:

We are living in an age of change; the old order is passing. The "New Deal" that we hear so much about through the press and from public speakers indicates a feeling of dissatisfaction with the old order that exists among the masses. We, of the medical profession, cannot hope to escape the effect of this unrest that prevades our body politic. It, therefore, becomes necessary that we no longer disregard the signs of the times. We must prepare to meet the issue.

Our first line of defense should be a strong, militant organization, capable of safe-guarding our interest. The foundation upon which is built the structure of medical organization in the United States is the county medical society. Upon the county society rests the first portion of the structure—the state medical association. Upon the state association is raised the final portion of the structure—the American Medical Association. The old saying, "A house is only as strong as its foundation," applies very aptly to medical organization. Organized medicine can only be as strong as its foundation—the county medical society.

I need hardly stress medical organization; it is a self-evident fact known to all of us that as individuals we are powerless to protect our interests.

It is only by strongly banding ourselves together that we may be able to safeguard our rights as physicians, promote the general welfare of our profession, and improve ourselves in the art and science of medicine.

If organization is necessary, and I am sure no one can deny its importance, then the necessity of well organized county societies in the scheme of organization is very evident. Unless we have strong, well organized county societies we cannot expect to have a state medical association capable of wielding influence necessary to safeguard our interests and promote the professional advancement of our members. In order that organized medicine may accomplish the purpose for which it is intended, it becomes necessary for the individual members to maintain great interest in their respective county societies; there should be no slackers in our ranks. Every man must do his part to help build his county society into a militant organization.

There are a number of ways an individual member may help; first, attend the meetings of your society; second, cultivate a spirit of comradeship among your fellow members; third, report to the society any case of interest that comes under your observation in order that you and your colleagues may profit by the discussion of the case; fourth, do your part in making the society programs in-

teresting and instructive, and fifth, swing away from being an extreme individualist. (A certain amount of individualism is not amiss but we should never lose sight of the fact that the good of the whole must always be uppermost in our minds.)

I cannot too strongly urge the councilors and the officers of the component societies that they begin at an early date, an intensive drive for membership. This drive should be continued until every eligible physician in the state has been enrolled in organized medicine.

The laity are in revolt against the increased cost of medical care. Various plans to cure this condition have been offered. These plans contemplate some form of socialized medicine and can never be acceptable to our profession. We must be prepared to offer a satisfactory solution of this problem. We cannot afford to complacently plod along the even tenor of our way ignoring the danger signal. If we pursue this course the laity will formulate their own plan and force our acceptance of it, whether we like it or not. The medical profession can and must take the lead in matters pertaining to the practice of our profession. We cannot expect to establish our right to leadership unless we understand the social conditions that affect our profession. In order that we may effectively combat the trend toward socialized medicine, we must have a clear understanding of the subject. I recommend a careful study of this important subject by our component societies.

Medical economics should have a definite place on the program of all meetings of the medical societies. I suggest that an active committee be appointed in each component society to gather information on the subject of medical economics and present this data to their respective societies for discussion.

I ask the hearty co-operation during the coming year of all of our members in an effort to solve the problems that may confront me. Let us endeavor to cultivate a spirit of comradeship and esprit de corps in order that we may build a strong militant organization capable of protecting and promoting the interests of the individual physician to the fullest extent.

J. W. D. Dicks,
President.

Natchez,
June 6, 1933.

DR. EWING FOX HOWARD
Vicksburg

Dr. Ewing Fox Howard was born in Vicksburg, May 31, 1874, the son of Dr. George Wilberforce and Emily L. Fox Messenger Howard. His grandfather, James A. Fox, a graduate of Yale, was the first Episcopal rector to be ordained in the State



of Mississippi. His father was born in Bradford, England, studied medicine in this country, and served as a surgeon of the Confederate Army during the Civil War.

Dr. E. F. Howard attended grammar school and high school at Sewanee, received a B.S. degree from the University of the South in 1894, and his medical degree from Tulane in 1897. He returned to Vicksburg to practice his profession. He married Miss Cora Partridge of Natchez, who died in 1905, leaving one daughter. He married Miss Fannie Buck Reber of Jackson in 1907. They had one son.

Dr. Howard had served well organized medicine. He was secretary of the one-time Vicksburg Medical Club and a charter member of the Warren County Medical Society, of which he was secretary and president. He was councilor of the Mississippi State Medical Association 1906-7; its secretary for ten years, 1907-17, resigning to enter the medical corps of the army; its president 1930-31; and historian from 1931 until his death. During this time he had a part in the revision of the constitution and by-laws and the reorganization of the state association and for a number of years was editor of the Mississippi Medical Monthly, the official organ of the association. His efforts were largely responsible for the first history of the Association. He was a fellow of the American Medical Association and had served on its committees, having been especially active for the committee to obtain uniform protective lye legislation in the various states. His practice had been limited to oto-laryngology since 1916, and he was certified by the American Board of Oto-laryngology in 1927 without examination. He was a member of the Kappa Alpha fraternity.

He entered the Medical Corps, United States Army, June 15, 1917, as a captain and served until December 10, 1918. During this time he was Chief of the Examining Board, Camp Logan, Texas; Chief of Aviation Examining Unit, Camp Logan, Texas; Chief of Department of Oto-laryngology, Base Hospital, Camp Logan, Texas; and Commanding Offi-

cer of Base Hospital, No. 130, Camp Shelby, Mississippi.

He had served as treasurer of the Episcopal Diocese of Mississippi, treasurer of its pension fund, and in various other diocesan offices. He was a member of Holy Trinity Episcopal Church of Vicksburg, of which he had been warden, treasurer and vestryman.

Dr. E. F. Howard died suddenly at his home in Vicksburg on June 9, 1933. He is survived by his wife, his daughter, Mrs. Lloyd J. Kiernan of Chicago, and his son, George Wilberforce Howard, an engineer graduate of Mississippi A. and M. College.

[REDACTED]

ABSTRACTS:

"I certainly do appreciate your very nice letter that I received from you just a few minutes ago. I cannot tell you how much a cheerful word and pleasant expressions mean to one who almost invariably receives knocks and blows. I am grateful to you for what you said.

"I want to tell you also, that I have been watching your career and your activities during the past year. I think you have been the most active and forceful and the most conscientious President of any State Medical Association that I have ever known. I have enjoyed particularly your monthly letters to your membership." Dr. J. H. Musser, April 24, 1931.

"As the week drew to a close, there passed one of Vicksburg's best and most representative citizens, Dr. Ewing Fox Howard.

"No man ever did his duty, as he saw it, more fully or more conscientiously than he.

"He gave fine service to his country, to his state and his community.

"In war time he served with distinction as a surgeon in charge of important army work: was a distinguished president of the Mississippi State Medical Society; and, as a citizen, quietly and unobtrusively did his full part in community work.

"He helped many and will be greatly missed by his many friends."—Frank H. Andrews in the Sunday Post-Herald, June 11, 1933.

"Polished, refined, well read, affable, simple, Dr. Howard had a wide circle of friends. His home was a center of culture.

"The medical fraternity here has lost one of its outstanding members, the community a fine citizen, and a host of persons here and elsewhere have lost a warm, understanding friend."—Vicksburg Evening Post, June 9, 1933.

HE WILL BE MISSED.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

Mississippi

1933

RESOLUTIONS

DR. EWING FOX HOWARD

WHEREAS, God, in His infinite wisdom, has called unto Himself one of our best beloved and most distinguished sons, and

WHEREAS, we feel that it has been an honor to us to have been associated with one whose every act has been for the uplifting of the medical profession and of all with whom he came in contact, and

WHEREAS, his wife has been deprived of a true and loving husband, his children of a devoted and indulgent father, Vicksburg of one of its most valuable citizens and organized medicine of one of its most enthusiastic and active supporters; therefore, be it

RESOLVED by the members of the Issaquena-Sharkey-Warren Counties Medical Society in regular meeting assembled, deeply shocked and grieved by the untimely death of Ewing Fox Howard, that we offer and adopt these resolutions, and be it further

RESOLVED, That a copy of these resolutions be spread upon the minutes of this society, and that copies be sent to the bereaved family, to the secretary of the Mississippi State Medical Association of which organization our colleague was for many years the efficient secretary and later the president, to the New Orleans Medical and Surgical Journal and to the press.

Respectfully submitted,

Sydney W. Johnston,
Benson B. Martin,
John A. K. Birchett.

Adopted June 13, 1933.

Leon S. Lippincott,
Secretary.

[REDACTED]

AN APPRECIATION EWING FOX HOWARD

The passing of E. F. Howard is one of the greatest losses the Mississippi State Medical Association has sustained in many years. He gave to the organization more than a quarter century of unstinted service, service that was cheerfully given and that was well done, always. There is no doubt that time will show that as Councilor, Secretary, Historian and President he has left an impression upon the Association that few, if any, have equaled and that none have surpassed.

Whether it was a parliamentary tangle, a question of clarifying a constitutional point or a matter

of public policy, unhesitatingly and instinctively Howard could be depended upon to point out the wisest and best way out of the dilemma. Few physicians could equal him in the terse and facile way in which he could express his thoughts.

Always a gentleman, ever a loyal friend, we know we have lost one of the best of soldiers, one of the most efficient of physicians and one of the truest of men.

The Mississippi State Medical Association mourns because of the passing of one of its leaders and regrets that there is no adequate way in which it can show to the bereaved family the true measure of its sympathy.

J. S. Ullman.

Natchez,
June 12, 1933.

A SUGGESTION

As a slight mark of appreciation of the long years of faithful service and loyalty to the Association, of our departed brother Dr. E. F. Howard, whose sudden death brought to a tragic close the task assigned to him of writing a history of the Mississippi State Medical Association, I make this suggestion: That the history be closed as of that date, and that his photograph be made the frontispiece of this book, and that the last words be a mention of his death and services.

Of course, the history would be so written that a supplement could be added from time to time to bring it up to date anyway.

D. W. Jones,
Associate Editor.

Jackson,
June 12, 1933.

WHAT ARE WE GOING TO DO ABOUT IT?

This question was asked last month with reference to the report of the Committee on the Costs of Medical Care, and we are, as yet, in no position to answer it. But one thing is sure: if we are to do anything more than take it lying down, with the certainty of having contract practice and state medicine forced down our throats, we must have an organization with which to do our fighting.

Our council is such an exalted body that we dare not ask its members any questions or insist on their making the reports demanded of them by the By-Laws (Chapter VIII, Section 2) and even if we are sufficiently interested to want to know anything about the condition of the Association, and most of us apparently are not, we have to wait until the *Transactions* comes out, which isn't until a couple of months after the meeting, when such information doesn't do a particle of good except as a matter of record.

We can, however, gather from the little information available, that we have been steadily losing membership for the past three years. Why? Immediate exclamatory replies of "depression." That's plain rot. The condition of some of our societies shows that very clearly. Is Pike County any better off than Lincoln, Copiah or Walthall, or the territory in and around Jackson in any worse fix than that around Meridian and Vicksburg?

The answer is comprehended in one sentence, we have very few real competent societies. Under our original plan we were to have an independent society in every county, except in those places where the professional (medical) population was so sparse that it could not support a real society, in which event a few counties might be grouped. Then, if this did not entirely fill the demand, all the counties in one district might be organized into a district society which would have only social and scientific features, though, of course, business matters might be discussed informally.

Although it holds scientific sessions, the real function of a county society is to get its members together frequently in order that they may become as well acquainted as possible, and this cannot be done by a society covering a large geographical area. A most illuminating side-light on this point was shown recently, when the Clarksdale doctors organized a medical club, in order to get the professional association for which they felt a need and which was not furnished by the Clarksdale and Six Counties Society. Of course, it wasn't! That society meets twice a year and the meetings consist of a dinner and a scientific program furnished largely by Tennessee doctors. It is a remarkable thing that men will come to the State meeting and raise a row because there are too many "foreigners" on the program, and then go back home and invite these same "foreigners" to furnish the county program. The county society, of all societies, should be for and by its own members, and its first duty is to supply that very professional association for which those men in Clarksdale felt a need. If it fails in this one point it has not justified its right to exist.

Therefore, the local society should not cover too large a geographical area. If it is to have monthly meetings, and fewer than this will not accomplish the desired result, seventy-five per cent of its members, at least, should live within a radius of twenty-five miles of the place of meeting. Yet look at the distance some of our men must go. To get to a meeting at Clarksdale, men in north Tunica travel fifty miles; to go to one in Greenville, the Greenwood members travel a bit further; from north Winston to Meridian, seventy miles; from Picayune to a meeting in Laurel, ninety miles; and when the Northeast Mississippi Thirteen Counties met in Starkville, the members who attended from Co-

rinth travelled one hundred and ten miles. And these distances are in direct line on the map, with the return journey to be added.

It naturally follows that, as the distances are so great, the men can't go so often, meetings are less frequent, attendance diminishes, membership falls off and the society fails to furnish that professional fellowship that is, or should be, its chief object. If you doubt this, pick any small society that is at all active, in other words that isn't a mere skeleton organization, and compare it with any of the really large ones. In frequency of meetings, in percentage of attendance, in percentage of membership the smaller organization leads.

This comparison isn't always easy to make, because when membership declines the councilor usually omits figures from his next report and limits himself to pleasing generalities. But such comparisons can be made and the information derived from them shows a distinct difference in favor of the smaller societies.

It would not be necessary to forego such excellent gatherings as, for example, those of the North-east Thirteen Counties and the South Mississippi Societies. These are really district societies and should be handled as such, but they can never fill the place in our scheme of organization originally planned for county societies, and our chief need is for just such groups of members, for they alone can furnish the frequent personal relationship necessary to enable us to act as a unit when the time comes, if it ever does, that we wake up and elect to handle matters for ourselves.

It is not suggested that there should be a society in every county. Some of them would be too small to work satisfactorily. But we can find an approximate satisfactory minimum if we give it a little thought. The Pike County men will tell you that twenty-five is about right—that with a medical population of twenty-five you can have a 100 per cent membership and a rattling good society. They have proved that beyond the shadow of a doubt, and Pike today is in far better shape than at any time in all the years it was joined with Copiah and Lincoln in the old Tri-County.

Because transportation, for anything over ten miles, was a matter of railroad service in the old days, we started out with groups in order to get an attendance that could not be otherwise had except in the larger towns. For this same reason, many could not attend without too much loss of time and quarterly meetings were the usual custom. Today things are different. The automobile has lengthened the road radius and furnishes practically all the transportation. Many of the "old guard" continue to take the long trips, when the meetings are held infrequently, but the average man balks at them, though he would probably go, certainly

oftener, if he could get to the place of meeting in an hour or two.

We need a readjustment and the Council should see that we get it.

E. F. Howard.

Vicksburg,
May 28, 1933.

COMMITTEE ON COMMUNITY HOSPITAL LEGISLATION

The Committee on Community Hospital Legislation which was continued at the last meeting of the Mississippi State Medical Association, is actively working to secure the passage of a law to provide for the care of the sick and afflicted requiring hospital attention in the general hospital and who are objects of charity. The following letters sent to the members of the committee and to the Mississippi State Hospital Association are explanatory of the work that is being done:

"Houston, Miss.,

"June 10, 1933.

"Dear Doctor:

"Lieutenant-Governor Dennis Murphree, whom I know to be a real friend to the community hospitals, has sent me a report of the sub-committee on the Department of Health and Public Welfare containing a proposed bill for a Board of Charities prepared by this Committee to be submitted to the next Legislature.

"Governor Murphree writes me that it is, without a doubt, very vicious and dangerous to the extreme to the community hospitals. He advises us to use every effort to defeat it, and he thinks it can be done if our organization wishes it, and our own bill substituted as far as the community hospitals go. I agree with him entirely, as we shall be dominated almost completely by a political board who will also be in charge of all other state institutions and the community hospitals will indeed, be helpless orphans.

"I am enclosing, herewith, a copy of this bill which I have had made for your careful consideration.

"Some of you who were present at our meeting with this sub-committee some weeks ago will remember that one of these gentlemen informed some of us that it would be necessary for us to conform to Mr. Folse's ideas in reference to our hospital program. This bill is very much in keeping with ideas expressed in one of this man's letters to members of the Legislature, a copy of which I have in my files. May I also state that I have a copy of an old bill for a Board of Charities, advocated by the Bilbo administration which is very similar to the proposed bill above mentioned and which was considered extremely bad by a huge majority of the Legislature at that time, including leaders of the House of Representatives.

"I am also enclosing, herewith, a copy of our bill proposed by the committee on Community Hospital Legislation from the State Medical Association. Of course, we expect to make some improvements on this bill before it is finally submitted, but please compare it with the one proposed by the sub-committee from the Legislature. Personally as I see it, there is no comparison between the two. One under political control where partiality of every conceivable kind can be shown, resulting in inefficiency, turmoil and disaster. The other controlled by organized medicine and hospital bodies, specifically stating that each county shall share alike in keeping with its population; each institution sharing alike in keeping with its territory and people served; free from political manipulations; under the provision of people who know something about hospital problems; all of which means greater progress in bringing scientific medicine to all the people and rendering real service to humanity in every community.

"I have had considerable experience with hospital work both with state aid and without it, and my candid opinion is that we had far better never secure state aid than for our institutions to be controlled as recommended by the sub-committee on Public Welfare.

"Yours very truly,

"V. B. Philpot,

"Secretary,

"Committee on Community Hospital Legislation."
"VBF:ww

"Rosedale, Miss.,

"June 14, 1933.

"It is necessary to call a meeting of the Committee on Community Hospital Legislation in Jackson, Monday, June 19, at 2 P. M., at the Robert E. Lee Hotel.

"The purpose is to have a hearing before the Re-organization Committee of the Legislature.

"Dr. Philpot has sent you a copy of the bill that the sub-committee on Public Health and Welfare will submit at this time. This bill opposes our aims and purposes in seeking to provide fair and equitable means for the distribution of public funds in the hospitalization of the indigent of the state.

"It is extremely important for us to oppose, with all the force that we can exert, those provisions in this bill, which will put the privately owned hospitals of the state under a lay board. Section 6, Section 8, Par. C, and also Section 11, of this bill is inimical to the best interest of hospitals, by making them wholly susceptible to the vicissitudes of politics; the very thing that all our efforts have been directed against.

"I hope you can arrange to be present at this meeting, in order to help us to properly present to this Committee of the Legislature, our views on this particular feature of the bill.

"Very truly yours,

"Eugene R. Nobles,

"Chairman Committee on Community Hospital Legislation."

UNIVERSITY HOSPITAL

"Amory, Miss.,

"June 12, 1933.

"As you know the Mississippi State Hospital Association went on record as in favor of abolition of state charity hospitals. This resolution would also include the building and operation of a state charity hospital at Oxford, Miss.

"A resolution was introduced by Dr. Underwood in the House of Delegates of the Mississippi State Medical Association ostensibly in the interest of saving the University Medical School. This resolution provided the appropriation by the State of Mississippi of \$75,000.00 to be used in equipping the unfinished hospital building as a new medical school building. The joker in the resolution was that it provided that half the building was to be equipped as a medical school and the other half as a hospital, and, of course, it could be no other than a state owned charity hospital. Apparently this joker in the measure was not seen and the House of Delegates voted favorably.

"I wish you would bring this to the attention of the Hospital Association, especially since Governor Connor is now polling the Legislature on this question. A two-year medical school has no earthly need for a hospital and a four-year school at Oxford is not possible at all. This appears to me to be a clever joker for the state-owned hospital crowd.

"M. Q. Ewing, M. D."

WARNING

Dr. Frank O. Schmidt of Ocean Springs, in a communication, warns against certain Insurance Companies. The subject is of deep interest to physicians generally and particularly to those of the State of Mississippi. Below are two letters received by Dr. Schmidt from the Honorable George D. Riley, Commissioner of Insurance of the State of Mississippi, which are fully explanatory. Dr. Schmidt is to be congratulated for his interest and warning to the profession.

“INSURANCE DEPARTMENT
“STATE OF MISSISSIPPI

“George D. Riley,
“Commissioner.

“Jackson,
“May 11, 1933.

“Dr. Frank O. Schmidt,
“Ocean Springs, Mississippi.
“Dear Sir:

“RE: Physicians Health and Accident Insurance
Company, Houston, Texas.

“The above captioned company, which you inquire
about in your letter of the 9th, is not licensed to
do business of any kind in Mississippi. Under its
present plan of operation this organization could
not qualify for a license in Mississippi.

“The laws of Texas, Louisiana, Illinois and a few
other states provide for the organization of assess-
ment associations. Under this assessment plan the
association contracts to pay a death benefit, or
health and accident benefit, but this is paid only in
the event the amount can be collected from the
members of the association. The laws of Mississip-
pi do not permit a life insurance contract to be
made on the assessment plan, but provides that
each such policy must state definitely the amount
to be paid.

“So this company cannot be licensed in Missis-
sippi and it operates here through unlicensed
agents and through the mails. Some months ago I
wrote to the insurance commissioner of Texas ask-
ing for information regarding this concern, and he
advised me that it was operating under a provi-
sion of the Texas law as a mutual assessment
health and accident company and that as printed
in red ink on the face of its policies, the payment
of claims depends on its success in collecting as-
sessments from the membership. He also advises
that the company had had to send out an as-
sessment during the latter part of last year and
that his department was receiving numerous com-
plaints from out-of-state policyholders that it was
not taking care of its claims.

“This department consistently advises against
this type of insurance and against taking insurance
with unlicensed companies, and particularly warns
against transient agents who represent these un-
licensed concerns. Policyholders in these unau-
thorized organizations are at the mercy of the as-
sociation in the event of a dispute over a claim, or
in event of the need of a suit, for the courts of
this state would not be open to them. There is no
designated agent in the state on whom to have
summons served, and the only recourse the policy-
holder would have would be to proceed in the
courts of the state in which the concern was domi-
ciled. Very few can afford to do that.

“If there is any further information that I can
give you regarding this or any other company, I
will be glad to have your request for it.

“Very truly yours,
“Geo. D. Riley,
“Commissioner of Insurance.”

“GDR:AD”

“INSURANCE DEPARTMENT
“State of Mississippi.

“George D. Riley,
“Commissioner

“Jackson,
“May 15, 1933.

“Dr. Frank O. Schmidt,
“Ocean Springs, Mississippi.
“Dear Sir:

“I wish to acknowledge receipt of your letter of
the 13th in which you ask permission to use my
letter of the 11th for publication in your state
medical journal upon the approval of the editor of
your journal.

“I will be very glad if your medical journal
would print this letter or any part of it, for I have
had dozens and dozens of letters from doctors all
over the state inquiring about the Physicians
Health and Accident Insurance Company of Hous-
ton, Texas and the Physicians Mutual Protective
Union of America of Nashville, Tennessee. It ap-
pears from correspondence on file that representa-
tives of these concerns have in some way secured
a certificate or permit with what is supposed to
be my signature. No such permit or certificate has
been given to any person representing an unlicens-
ed concern.

“I have re-read my letter of the 11th, and have
revised it somewhat, and am enclosing the revised
letter herein for the use that you desire.

“With very best wishes, I am
“Very truly yours,
“Geo. D. Riley
“Commissioner of Insurance”

“GDR:AD”

CANCER QUACKS

In the April, 1933, number of our Journal there
appeared an item under the heading of “Cancer
Quacks,” giving an account of an attempt by two
self-styled specialists to perpetrate a cancer cure
fraud in Mississippi. Such items serve as a warn-
ing to the people of a wide area as is shown by the
following correspondence:

“Department of Professional and Vocational
Standards

"BOARD OF MEDICAL EXAMINERS

"State of California

"San Francisco, Calif.,

"May 22nd, 1933

"Re: *Eyesight Swindlers*

"Ewing Fox Howard, M.D.,

"1301 Washington Street,

"Vicksburg, Mississippi.

"Dear Doctor:

"The enclosed copy of a letter addressed to the Sheriff of Fayette, Jefferson County, Mississippi, is self-explanatory.

"We would greatly appreciate your giving us more information regarding this pair of bunco artists, particularly full names of the individuals swindled, description of the swindlers, etc.

"We would also appreciate a copy of the New Orleans Medical and Surgical Journal, wherein this news item appeared.

"Very truly yours,

"C. B. Pinkham, M.D.

"Secretary-Treasurer."

"CBP-MB

"San Francisco, Calif.,

"May 22nd, 1933.

"Sheriff,

"Fayette, Jefferson County,

"Mississippi.

"Dear Sir:

"We were quite interested to read in the May, 1933, Bulletin of the Federation of Medical Examining Boards, Page 137, an account of how an elderly housewife of Fayette, Miss., had been buncoed by a couple of eyesight swindlers.

"We enclose herewith a copy of our second edition of 'Eyesight Swindlers,' drawing your attention particularly to the Wilkerson brothers.

"We would appreciate your interviewing the woman who was swindled, showing her this pamphlet and asking whether she can identify any of the photographs appearing therein as the two swindlers who posed as Dr. Mayberry, Vicksburg oculist, or Dr. W. I. Handlow, 'celebrated Kansas City surgeon.'

"We would appreciate the return of the enclosed pamphlet, with whatever information you can give us and also would appreciate the full name of the woman who had this unfortunate experience.

"Very truly yours,

"C. B. Pinkham, M.D.

"Secretary-Treasurer"

"CBP-MB

"cc to E. F. Howard, M.D."

CENTRAL MEDICAL SOCIETY

The June meeting of the Central Medical Society was held at the Edwards Hotel at 7 o'clock, June 6, 1933.

Clinics were presented by Drs. L. W. Long and Robin Harris. Dr. Long presented two patients, brothers, both of whom had pseudo-muscular hypertrophy. Dr. Harris presented a little girl six years old from whom he had removed a safety pin from the larynx. Case reports were made by Drs. I. P. Burdine and Nathan Kendall. Dr. Leonard Hart of Meridian, visiting reciprocity essayist from East Mississippi Medical Society, read a paper on "Some Cardiac Irregularities and Their Treatment." Dr. L. B. Neal of Jackson read a paper on "Cardiospasm." Dr. W. H. Watson of Pelahatchie read a non-medical paper on medical organization.

The secretary was not present for the business session, therefore has no notes except that the amount of \$2.60 was allowed Dr. D. W. Jones for expenses incurred in making arrangements for the exhibits for the State Medical Association meeting.

Robin Harris,

Secretary

Jackson,

June 12, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The medical institute conducted in place of the regular bi-monthly meeting by the East Mississippi Medical Society was closed Friday night, June 9, with a popular lecture to the general public before an attendance of about 150 people. The physicians and others in attendance stated that this was one of the most successful meetings of this type ever held in Meridian. There was no lack of clinical material, there being presented two cases of rheumatic fever, four cardiac cases and seventeen cases of suspected malignant conditions, six of which were actually malignant.

The institute was conducted by Dr. Joseph Colt Bloodgood, Professor of Surgery at Johns Hopkins University, Baltimore, and Dr. George Herrmann, Professor of Clinical Medicine at the University of Texas, Galveston. The program consisted of four clinics and nine lectures. Cancer was the subject covered by Dr. Bloodgood and medical subjects were discussed by Dr. Herrmann. Dr. D. V. Gallo-way, Meridian, served as secretary of the medical institute committee.

The next meeting of the East Mississippi Medical Society will be held at the Neshoba County Fairgrounds on Thursday, August 17. The program is now in preparation by the secretary of the Society and entertainment will be furnished by the Neshoba County physicians.

T. L. Bennett,

Secretary

Meridian,

June 12, 1933.

HARRISON-STONE-HANCOCK COUNTIES
MEDICAL SOCIETY

June meeting was held at the Biloxi Hospital, Biloxi, Wednesday, June 7, 1933, at 7:30 p. m.

Clinic—Dr. R. W. Burnett.

Paper—To be announced.

Report of delegates to State meeting.

E. A. Trudeau,
Secretary

Biloxi,
June 3, 1933.

HOMOCHITTO VALLEY MEDICAL SOCIETY

The next meeting of the Homochitto Valley Medical Society will be held at Centerville, on Thursday, July 13, at 6 p. m. The program will include papers by Drs. Ochsner and Gage of New Orleans, an exchange essayist from the Central Medical Society, and Dr. Lippincott of Vicksburg. A lunch will be served.

Drs. Richard J. and Samuel E. Field of the Field Memorial Hospital are acting as hosts for the July meeting.

R. J. Field,
Secretary

Centerville,
June 1, 1933.

ISSAQUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg on June 13. After a supper served at 7 p. m., the following scientific program was presented:

1. Presentation of Roentgenograms Demonstrating Unique Fractures of the Upper Extremities.—Dr. D. A. Pettit.

Discussed by Drs. J. A. K. Birchett, Jr., and T. P. Sparks, Jr. Dr. Birchett showed a number of roentgenograms.

2. Dementia Praecox—Dr. H. C. Sheffield, Jackson, introduced by Dr. E. H. Jones.

Discussed by Dr. A. Street. Dr. Sheffield closed.

3. Preventing Diphtheria in Children—Dr. William Pierre Robert.

Discussed by Drs. F. M. Smith, Guy C. Verner, Jackson, and L. S. Lippincott.—Dr. Robert closed.

Dr. E. H. Jones was chairman of the program committee for the meeting.

The Society unanimously endorsed certain changes in the city ordinance regulating food handlers.

Dr. Hugh H. Johnson, Vicksburg, who has been at the Mayo Clinic for three years was re-enstated as a member of the Society.

Dr. William D. Anderson, George Washington University, 1928, and now connected with the Vicksburg Hospital was elected to membership.

A committee consisting of Drs. S. W. Johnston, J. A. K. Birchett, and B. B. Martin presented resolutions on the death of Dr. E. F. Howard. The resolutions were adopted by the Society by standing with bowed heads.

Twenty-one members and seven guests attended the meeting.

The next meeting of the Society will be held on Tuesday, July 11 at 7 p. m. The committee in charge of program consists of Dr. J. A. K. Birchett, Jr., Chairman; Dr. S. W. Johnson; and Dr. B. T. Orendorf.

L. S. Lippincott,
Secretary

Vicksburg,
June 14, 1933.

JACKSON COUNTY MEDICAL SOCIETY

The Jackson County Hospital Staff and County Medical Society held their quarterly joint meeting Thursday evening at 7 p. m. Several doctors were too busy catching fish for breakfast to get to the meeting but those who did get there were well paid for their effort.

Dr. R. G. Lander made a fine talk reporting the results of more than a year of his work in the County Health Department Unit. He felt so good about it that he is trying to improve on it by taking a vacation of ten days visiting points in Texas, among others Houston, Victoria, and Corpus Cristi.

Dr. S. N. McIlwain has had the fortune, whether good or bad, to spend some two or three weeks in a hospital bed, and at home, because of a minor surgical operation. We expect him out in a few days better than ever.

J. N. Rape,
Secretary

Moss Point,
June 12, 1933.

NORTHEAST MISSISSIPPI THIRTEEN
COUNTIES MEDICAL SOCIETY

Second quarterly meeting, June 20, 1933. Greenwood Springs, Hotel Pavilian, 10 a. m. Monroe County Doctors as hosts.

Program

Meeting called to order—President F. L. McGahey.

Invocation—Rev. J. A. Biffle, Greenwood Springs. Reading and adoption of minutes of last meeting. Introduction of guests.

Spinal Puncture—Dr. I. P. Burdine, Jr., Jackson. Discussion opened by Drs. Ewing and Anderson. Recent Developments in the Treatment of Malária—Dr. J. B. McElroy, Memphis Tenn.

General discussion.

Dinner.

Chronic Endocervicitis—Dr. A. D. Hurt, Corinth.

Discussion opened by Drs. J. F. Eckford and L. C. Feemster, Jr.

Agranulocytic Angina—Dr. Thomas Woolfork, Columbus.

Discussion opened by Drs. Armstrong and Dodson.

President J. W. D. Dicks of the Mississippi State Medical Association, made his first official visit.

Dr. I. P. Burdine, Jr., was the exchange essayist from the Central Medical Society.

James M. Acker, Jr.,
Secretary

Aberdeen,
June 14, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society held its quarterly meeting in Hattiesburg on June 8. The following program was presented:

1. Summer Diarrhoea.—Dr. V. Carlton Temple, Hattiesburg.
2. The Problem of Vesiculitis.—Dr. E. B. Vickery, New Orleans, La.
3. Purpura Hemorrhagica.—Dr. A. J. Carter, Laurel.
4. Treatment of Fracture of the Femur by New and Simple Devices.—Dr. E. Denegre Martin, New Orleans, La.
5. Suturing the Heart—Case Presented.—Dr. E. C. Parker, Gulfport.

The Woman's Auxiliary to the South Mississippi Medical Society met at the same time and at the close of both meetings the doctors and their wives enjoyed a most sumptuous banquet.

We were very pleased and highly honored to have the president-elect of our State Medical Association, Dr. E. C. Parker of Gulfport, with us. Our other visiting doctors were Dr. E. Denegre Martin and Dr. E. B. Vickery both of New Orleans.

The meeting was a very interesting and most profitable one.

There were about forty doctors present. Most of them were accompanied by their wives.

The next regular meeting will be held in Laurel on September 14.

J. P. Culpepper, Jr.,
Secretary.

Hattiesburg,
June 9, 1933.

ADAMS COUNTY

Dr. Charles Chamberlain, who for the past year has been connected with the Graduate Hospital, University of Pennsylvania, recently arrived in Port Gibson to spend a short vacation with his mother and sister. They will later come to Natchez for a short visit in their former home.

Mrs. Hattie G. Bauer, Superintendent of the Natchez Sanatorium, and guests recently visited

New Orleans. Mr. Ted Bauer, who has been attending the Tulane Law School, returned home with them to spend his vacation in Natchez.

Mrs. Lyman Darling and young son of Old Hickory, Tenn., are making their annual visit with Mrs. Darling's parents, Dr. and Mrs. J. W. D. Dicks, Mr. George Dicks, who has been attending Vanderbilt University, accompanied them to Natchez and will remain for his summer vacation.

Dr. and Mrs. L. B. McLaurin entertained the seniors of the Natchez High School on May 31, complimentary to their daughter, Miss Lillian McLaurin, a member of the class.

Dr. and Mrs. H. M. Smith have been visiting in Memphis, Bowling Green and other points in Kentucky.

L. Wallin,
County Editor.

Natchez,
June 8, 1933.

DESOTO COUNTY

Mrs. Kountz of St. Louis, wife of Dr. W. B. Kountz, and daughter of Dr. and Mrs. A. J. Weisinger of Hernando, has returned to her home after a visit to her old home.

Drs. A. L. Emerson and L. L. Minor attended the recent meeting of the State Association in Jackson.

Dr. E. L. Wilkins of Clarksdale and Dr. W. T. Wilkins of Arkansas recently visited their mother at Olive Branch.

Dr. O. C. Brewer, formerly of Eudora, has moved to his old home in Southwest Mississippi.

Dr. C. M. Hammond of Walls has been in Memphis for over a week exhibiting his respirator. This apparatus has received many favorable comments from those who have seen it at the Baptist Memorial Hospital.

L. L. Minor,
County Editor.

Memphis,
Route 4, Box 99,
June 10, 1933.

GRENADA COUNTY

There is little of general interest of our county of professional nature. The doctors are all well and at their posts. Some sickness with their family connections. Our "outer circle" has again been invaded by the death on May 28 of Dr. Clanton's mother. She was 78 and truly "a mother in Israel." Mrs. Avent was called to New Orleans recently on account of illness of her mother.

Those of us privileged to attend the recent State Association had and enjoyed a good part of our "vacation" then. It was really a fine meeting and a treat to all present.

We are shocked and grieved by the sudden and

untimely death of our good friend, Dr. E. F. Howard. He was a strong and useful man and will be greatly missed.

In regard to your question, I do not think *everything* is right but an adequate answer cannot be compressed into the time and space allotted me.

We are already "overworked and underpaid." More anon.

With best wishes.

T. J. Brown,
County Editor.

Grenada,
June 10, 1933.

HANCOCK COUNTY

Dear Editor: Since I have not been notified of my reelection, nor paid my last years salary for services rendered, it may be that I am fired, so I am going to write one more time before I am notified, I do feel guilty you see. The Harrison Stone Hancock county medical society, met June seventh 730 p. m. with the Biloxi City hospital at Biloxi. As usual we had splendid attendance and an interesting meeting, every one came away better for having been there, this possibly due, to some extent to the unusually good feed furnished, following the meeting. Dr. M. M. Snelling, of Gulfport, read a paper on Diathermy, paper was good and enjoyed by all liberally discussed.

Dr. Burnnett of Biloxi, gave us a real treat by way of a clinic, especially his case of pernicious anemia, this case he had in unusual good shape by treatment with intramuscular use of liver extract.

Hancock county lost another of its doctors, May 5th past when Dr. S. H. Anderson, of Kiln died of actinomycotic infection of the head, doctor Anderson was of our few most valuable doctors, one of those who do the most good for humanity, one of the doctors who still knew and had the same old time respect for that old fashioned medical ethics and brotherly love for his fellow practitioners, a doctor you could meet in consultation with confidence, both as to his ability and what he would do and say after you left, and all of the rare qualities that belonged to the real old time COUNTRY DOCTORS of years ago, may God help us to keep the R. F. C. with us long enough to starve out all of these new fangled specialists (who do not know that they are supposed to treat doctors like, the country doctor, with respect) and give us some more of the old school doctors again.

Dr. Anderson had a hard country practice, collections were not the best, but I rather have the confidence of friends that he had than the rep, of some specialists. All of our specialists, those I see

so often I mean, are all alright, guess I had better put this in for self protection.

resp. D. H. Ward,
County Editor.

Bay St. Louis,
June 8, 1933.

HINDS COUNTY

The meeting of the State Medical Association was a great success. We of Jackson regret that we shall not have the pleasure of entertaining the members of the Association next year but turn about is fair play. We shall all be delighted to visit Natchez next year and try to have the best meeting ever.

The Central Medical Society held its meeting the evening of June 6. Dr. Leonard Hart of Meridian was the guest speaker and read a most interesting and instructive paper dealing with "Cardiac Irregularities." Dr. Lowry Rush was also with us from Meridian and we hope these doctors may be back with us again.

Dr. J. F. Armstrong recently had troublesome tonsils removed. If you would like to know, ask Joe how it feels to swallow.

The staff of the Jackson Infirmary held its last meeting of the summer the evening of May 30. A most interesting clinic was presented. Everyone, as usual, enjoyed the nice dinner served by the nurses.

The staff of the Baptist Hospital met the latter part of May. A nice dinner was served and a most interesting program enjoyed. Dr. Henderson, who has recently become associated with the Baptist Hospital staff, roentgen ray department, made a very interesting talk.

Mrs. L. W. Long, wife of Dr. Long, Jackson, is enjoying a nice two weeks' vacation in New York City.

Mrs. Margaret Verner, wife of Dr. Guy C. Verner, Jackson, is enjoying a most pleasant vacation in Michigan. Mrs. Verner will return by way of Chicago to visit the World Fair.

Dr. T. E. Wilson attended the heart clinic which was held in Meridian the first part of June. He reports a most interesting meeting. He says, "one can always learn more about the heart." That is true, we can all learn more about everything if we but try.

We regret to learn of the unexpected death of Dr. A. S. Applewhite, Raymond, who has only recently retired from active practice here in Jackson. Our deepest sympathy is extended to his family.

Wm. F. Hand,
County Editor.
Jackson,
June 7, 1933.

HUMPHREYS COUNTY

I regret very much that I was unable to attend the state meeting in Jackson; and sorry indeed that the resolution introduced by my distinguished friend, Dr. L. B. Otken (Greenwood), was given such a solar plexus punch by the House of Delegates.

Gentlemen, this is no time for pussy footing. As I predicted in a paper I read before the Delta Medical Society in 1931, we are headed for state medicine, or worse still, government controlled medicine. Stop—Look—Listen.

Not much sickness. About all we are doing is R. F. C. work at the following prices: Office Call 0.50; City Call \$1.00; County Call \$1.00 plus 15 cents per mile; Labor Case, \$10.00, regardless of number of calls. Just think this over. No exciting news: doctor's wives all playing bridge. Too much water even to fish. We have the finest stock of mosquitoes ever grown in the Delta.

G. M. Barnes,
County Editor.

Belzoni,
June 5, 1933.

LEFLORE COUNTY

Dr. T. C. Hughes of Clarksdale visited his father and mother, Rev. J. R. and Mrs. Hughes of this place on May 12.

Dr. T. R. Montgomery of Memphis visited his mother, Mrs. Julia Montgomery in Greenwood, on Mothers' Day.

Miss Frances Anderson, technician for Dr. J. P. Kennedy, daughter of the late Dr. Robt. L. Anderson of Inverness, was married to Mr. Y. T. Eggleston, Jr., of Greenwood on May 16.

Dr. and Mrs. L. A. Barnett visited their son, Aubrey at "Ole Miss" on May 24.

Dr. R. N. Whitfield of the Vital Statistics Bureau of Jackson, visited Greenwood on May 26.

Dr. O. H. Beck of Greenville attended the Delta Intercity Golf Tournament at this place on June 2.

Dr. Gwin Mounger of this city recently graduated from Tulane, will serve his internship at Hotel Dieu in New Orleans, La.

W. B. Dickens,
County Editor.

Greenwood,
June 9, 1933.

MONROE COUNTY

Your card announcing that it is time to "say something" has come. The question is, what shall I say? Perhaps it were well that I answer "present but not voting".

Wasn't the Jackson meeting great? It was to me; for I had missed the one before. It was like making new friends to meet old ones after so long

a separation. The program was well worth while—in fact it was very good. But the inspiration that comes from touching shoulders with your comrades in arms gives courage for the fray. I am sure those of us who were there are better able to carry on than we should have been had we played the part of hideouts. Personally I have had some letters since returning home that have well repaid me for the outlay in time, effort and money. Why will any one willfully absent himself from these meetings?

I have had a nice visit with Dr. McLester in Birmingham, since my return from Jackson. I always count myself fortunate to contact him or Dr. Seale Harris of that city. I am happy to count them both as my friends. I have other friends there too, but they seem closer than some others.

I had not seen Dr. Jack Barksdale for a year or two until I met him in Jackson. It was a joy to see him looking so well. A princely man is he. Dr. Henry Boswell was looking as fresh and good as new. It was a real sorrow to know that both he and his splendid wife had so recently suffered bereavements.

I wish I might name all my friends one by one—those whom I met during the meeting. But it would become tiresome to my readers. I want each one to *know* that I was made happy by contacting him and that I shall wait expectantly until we shall meet again. Again, I want some who were not there to know that I missed them and regret their absence. When I met dear old Darrington, I asked, at once, if Mrs. D. was with him. And when he said she was not, I told him that I (almost) regretted that I had come. But there were other ladies there whose grace and charm helped to make my stay a joy.

When I learned that Tom Dye was likely to be retired from office because of his inefficiency, I felt personally grieved (for I am very fond of the scamp), but after he had assured me that he would try to do better in the future, I felt no hesitancy in using my influence with my friends for his candidacy. You all know the result—he was elected by a narrow majority. But the man who he beat is up and coming. The dawn of his day is coming. It will not be long until any honor that the Association has to bestow, will be his for the taking.

It has been said that all things come to those who wait—well it was a long wait (for it should have been sooner), but it seems fitting that the presidency should have sought Dr. Parker; for no man has been truer or more constant in his loyalty and devotion that has he.

Nevertheless the Association showed good taste in complimenting, as it did, my good friend Dr. Speck with such a magnificent vote. I hope to

live (and I hope it comes soon) to see him realize every ambition he may entertain and receive every honor that the Association may have at its disposal. He is most capable and surely is worthy of the confidence the membership reposes in him.

Of course I was delighted to see, meet and hear Dr. Evans—now of Chicago but formerly of "Aberdeen". I have frequently heard people express curiosity as to why he ever left Mississippi (Aberdeen). On one occasion he confided, to me, the reason. He said that he had a dream or premonition that Jamie Acker and Felix Underwood would surely crowd him out of notice if he remained—so he left it to them. But I really think in his generosity of soul he left to give them a better chance. But be that as it may, each of them has achieved distinction and we are proud of them; *we love them*. Jamie is the youngster of the trio and he has by his loyalty and devotion to associated duties and interests and by his nobleness of heart as well as his courtly personality, already gone the distance of a life time. But he has not rested from his labors. May he "live long and prosper".

Before closing may I say that I usually go to these state meetings heavily armed. But this time I left my "automatic" at home, because Syd Johnson once assured me that he would protect me from all harm—do my fighting and suffer any and all consequences for my sins and short comings. But had I not left my artillery at home, Vicksburg would have been minus one distinguished citizen and our association would be mourning the untimely end of one of its best known members. The guilty man knows of whom I am speaking and he knows the offense that he committed. There will be another day, and I feel it is enough for me to say, "Claren beware". Thank God for friends!

G. S. Bryan,
County Editor.

Amory,
June 2, 1933.

PANOLA COUNTY

Panola County now has probably the oldest native son in general practice in the state. Dr. J. G. Pou of Courtland was born in Panola County, January 2, 1849. He graduated in Medicine March 18, 1871 at the University of Louisiana, now Tulane. He saw his first patient on April 11, 1871. He has practiced in and near Courtland all the time except four months spent in San Angelo, Texas on account of health, near forty years ago. He has been married twice. His first wife was Miss Mollie Nelms. They had four children, three daughters and one son. The oldest daughter is the wife of Prof. E. M. Moorehead, now assistant superintendent of education and living in Jackson. One

daughter is the widow of the late Sidney Mills. The other daughter is the wife of Mr. Fred Lamb of Courtland. The son died several years ago after attending dental college. His second wife was Miss Glennie McCullough. They have one son fourteen years of age.

To show how kind, active and thoughtful he is, at the time I made a visit to collect this data, while driving through Courtland, I met him on the street going to get his car to drive a lady home who lived some distance from the store at which she had been shopping.

If another county can show a native son who is still in medical harness, keeping the traces taut, champing the bits, ready and anxious to go, as a racer in his sixty-third year of practice we would be pleased to know who it is.

Dr. Pou has always been perfectly ethical and conservative or careful in practice. He sends his monthly morbidity report promptly each month to the county health officer, showing that his mind is clear and that he can remember to attend to business.

We have some other practitioners in Panola County much younger in years, who are unable to think clearly, that is, can't remember to send reports promptly. They should be sympathized with instead of censured for early mental decline, or carelessness.

Panola County has lost a valuable citizen and physician in the death of Dr. J. M. Jenkins of Crenshaw, who died May 21 and was buried near Crenshaw, Monday, 22. He leaves a wife, three daughters and one son.

Dr. A. P. Alexander of Como attended the burial services of Dr. J. M. Jenkins on May 22.

A young Dr. Blount from South Mississippi visited Sardis yesterday looking for a location to practice medicine. Panola county now has thirteen active practitioners.

The more a community is indebted to their local physicians, the easier it will be for a young man to begin to build a practice, in other words, the older man's debts is a younger man's asset, so far as getting practice.

Will not take up any more of your valuable space at present.

G. H. Wood,
County Editor.

Batesville,
June 1, 1933.

PRENTISS COUNTY

Dr. W. H. Anderson had the great misfortune to lose his mother last month. Mrs. Anderson died at her home near Dumas on May 11. The physicians of this county extend their deepest sympathy to Dr. Anderson in his bereavement.

Drs. W. H. Sutherland and R. E. Cunningham,

Booneville, and Dr. R. B. Caldwell, Baldwin, and the following nurses of Booneville, Misses Hester, Sparkes, McCord, Lokey, and Thomas, Mrs. Roberts, Mrs. Nason, and Mrs. Mimms, attended the funeral of Dr. Anderson's mother, Friday, May 12.

Drs. W. H. Sutherland, W. W. Strange, and W. H. Anderson attended the state meeting in Jackson.

Dr. L. L. McDougal, who has recently completed a four months' post graduate course at Tulane University, has returned to Booneville and resumed practice.

Drs. W. V. Davis, W. W. Strange, R. B. Caldwell, R. B. Cunningham and Dr. and Mrs. W. H. Anderson attended the West Tennessee Medical Society meeting at Shiloh National Park, May 25.

Miss Estelle Berryhill of Memphis is now superintendent of nurses at Northeast Mississippi Hospital. Miss Berryhill replaces Miss Hickey who recently resigned to reenter private practice.

Drs. E. J. Green, R. M. Adams, H. S. Ford, and John E. Tate of Tippah County, Dr. N. C. Waldrop of Tishomingo County, Dr. R. E. Honnell of Alcorn County and Drs. R. B. Caldwell, J. L. Kelum and H. A. Stokes of Lee County were professional visitors to Booneville last month.

Dr. W. M. Adams who is serving an internship in Brooklyn Eye, Ear, Nose and Throat Hospital was at home last month visiting home folks and friends in Tippah and Prentiss Counties.

R. B. Cunningham,
County Editor.

Booneville,
June 3, 1933.

SHARKEY COUNTY

Mr. and Mrs. Sam Stribbling and baby of Waycross, Georgia, have been visiting their parents, Dr. and Mrs. E. B. Stribbling, Rolling Fork.

Mrs. B. Goodman has returned to Cary after spending the winter in Mobile, Ala., with her son, Dr. Rex Goodman, who is stationed at the Marine Hospital.

Not much news up here this month. The doctors are not too busy—so there is time to think of fishing.

W. C. Pool.

Cary,
June 10, 1933.

SIMPSON COUNTY

Have you ever visited the State Tuberculosis Sanatorium, dined there, gone through all the buildings, over the grounds, met all the doctors and their helpers; have you met Mrs. Roland, the sunshine of the institution? If you haven't and are planning a short vacation, come to the Sanatorium and you'll be well paid for your trip. That golf

bunch out there play awfully hard for some kind of honors. I do not know the game, but just as soon as I get old enough to learn it, I think I shall take it up, not for recreation, but for "past-time."

Our young twelve-bed hospital at Magee is doing an excellent business, being 90 per cent full all the time. Going some! We need a hospital in every county and not so many state charity hospitals. Let the counties take care of their indigents. This will go a long way in eliminating so much state politics in the profession. Politics, unless judiciously exercised, is a handicap to progress. Our profession is for humanity's sake as a whole.

W. W. Diamond, Jr., son of Dr. W. W. Diamond, Magee, has returned from University of Alabama, bringing with him his recent bride as a surprise to us all.

Prof. R. T. Walker, Honolulu, Hawaii, son of Dr. E. L. Walker, Magee, will sail on the tenth of the month for the states. He will meet his parents in Chicago at the World's Fair.

E. L. Walker,
County Editor.

Magee, June 8, 1933.

TIPPAH COUNTY

Am sending you some news items concerning our Ripley doctors and their families.

Dr. C. M. Murry attended the annual meeting of the State Medical Association.

Drs. C. M. Murray and R. M. Adams, with members of their respective families, by invitation of Dr. W. O. Baird of Henderson, Tennessee, attended the meeting of the West Tennessee Medical Association held at Shiloh National Park on May 18. It was a fine meeting. Dr. Baird is quite frequently a visitor in our town.

Dr. H. P. Clemmer and wife, have been recent visitors here. Dr. Clemmer has been doing some work in the Veterans' Hospital in South Carolina for the past six months. We understood he will be located with a hospital in Paris, Tennessee, in the future.

Dr. J. E. Tate married Miss Kaye Perry at Shreveport, Louisiana, on June 5. Dr. Tate served his internship in the Charity Hospital at Shreveport. Miss Perry was dietitian there and so the romance began.

Miss Mary Miller Murry, who has been teaching in the high school at Kosciusko, came home June 6, for the vacation.

Herman Adams, son of Dr. R. M. Adams, is at home for the summer, after attending "Ole Miss" for the school session.

Dr. Milton Adams was at home recently for a vacation. He is connected with one of the hospitals at Brooklyn, specializing in ear, eye, nose and throat.

The county health officer has planned this week

to begin the giving of typhoid vaccinations, also diphtheria.

Dr. Marsh, accompanied by Dr. Clemmer, Dr. King of Memphis, and Dr. Christian of Baldwyn, have recently been out for a night's camp fish.

County Editor,
C. M. Murry,

Ripley,
June 9, 1933.

TISHOMINGO COUNTY

Tishomingo County doctors are very much delighted to see the Muscle Shoals bill pass Congress. This will give us cheap electric power and farmers cheap fertilizer.

The health department conducting a hookworm campaign in this county has contacted some 2,300 for examination for hookworm and other intestinal parasites.

Dr. A. E. Bostick has moved into his new office which is located on the ground floor, making it much more convenient for his clients.

Dr. D. D. Johnson attended the funeral of Mr. F. E. Quinn at Union City, Tenn., on last Sunday.

Mrs. D. D. Johnson and daughters, Willard and Dexter Dean, spent last Sunday in Columbus visiting Miss Geraldine Johnson, who is in school there.

A number of us are planning to go to Greenwood Springs to our next meeting of the Northeast Mississippi Thirteen Counties Medical Society, and I think it would be real fitting for this society to come to Iuka soon and visit on the same trip the great Muscle Shoals Dam.

Iuka,
May 19, 1933.

Miss Inez McRae, daughter of Dr. K. F. McRae of Belmont, finishes at M. S. C. W. on June 9.

Miss Morella Brown, daughter of Dr. P. J. Brown of Iuka, has completed a business course at Charleston and accepted a position as associate editor of the Iuka Herald.

Dr. A. F. Whitehurst's daughter, Billie Burk, has completed a high school course in Iuka and is preparing to enter M. S. C. W. this fall.

T. P. Haney, Sr.,
County Editor.

Iuka,
June 6, 1933.

WASHINGTON COUNTY

Dr. R. E. Wilson of Greenville, spent a few days with his mother and father in Guntown, the latter part of May.

Dr. R. D. Dickens, formerly associated with Gamble Brothers and Montgomery at Greenville, is located at Monticello, Ark. His many friends wish him great success.

Mrs. Dobson of Leland, attended the Cotton Carnival at Memphis this past month.

Dr. R. N. Crockett of Winterville, has just completed a special course on diseases of the heart at the Medical School of the University of Tennessee.

Dr. and Mrs. T. C. Oliver visited their son, Ferris, now at the Sanitarium, and report a marked improvement in his condition.

The following doctors from Washington County attended the Mississippi State Medical Association meeting in Jackson, May 9-11: Dr. A. R. Perry, Dr. F. M. Acree, Dr. A. G. Payne, Dr. R. C. Finlay, Dr. R. E. Wilson, Dr. J. A. Beals, Dr. D. C. Montgomery, Dr. J. C. Pegues, Dr. Paul G. Gamble, Dr. H. A. Gamble, and Dr. J. G. Archer.

John G. Archer,
County Editor.

Greenville,
June 7, 1933.

WINSTON COUNTY

All the doctors of our section are very anxious to attend the course of lectures in Meridian now going on, but for various unavoidable reasons some of us cannot be there.

We are having an extreme number of boy babies being born in this section this year, the writer having delivered seven babies, five of whom were boys the last ten days.

Dr. W. A. Young of east of Louisville, took a patient to a Meridian hospital last week.

Dr. W. W. Parks recently took a patient to a Jackson hospital for treatment.

Dr. T. C. Suttle of Beth Eden, took his wife to the Long Hospital at Starkville. They are expecting an heir in their home.

Dr. E. L. Richardson and our mutual friend, N. S. Fox, druggist, spent a few days last week on the coast fishing. They report a great time.

M. L. Montgomery,
County Editor.

Louisville,
June 6, 1933.

YALOBUSHA COUNTY

There is not much news to report from Yalobusha County this month.

Dr. S. E. Cooper has resumed his practice after having been confined to his home a few days with a carbuncle of the neck.

Dr. L. S. Brown was away two days last week on a fishing trip to Hampton Lake.

A number of the doctors from Yalobusha County are planning attending the Century of Progress Exposition at Chicago. The medical and biological exhibits will be of particular interest.

A recent surgical clinic held at the Water Val-

ley Hospital constituted some very interesting cases, which were as follows:

1. Suprapubic cystotomy for control of hemorrhage following transurethral resection of prostate.
2. Suprapubic prostatectomy, one stage.
3. Repair of bladder following birth injury.
4. Subtotal thyroidectomy for diffuse toxic goiter.
5. Cystic thyroid; enucleation.

George A. Brown,
County Editor.

Water Valley,
June 5, 1933.

FIFTH DISTRICT MEDICAL SOCIETY

The Fifth District Medical Society of Louisiana, held a most interesting meeting at Monroe on May 30. The program included papers by Drs. Foster M. Johns and Alton Oschner of New Orleans, and Drs. C. P. Gray and D. M. Moore of Monroe. A fine banquet followed the scientific session, after which a number of past presidents of the state society and others made addresses.

As always, our Louisiana neighbors were most cordial hosts and the Vicksburg doctors who were invited and attended received every kindly attention.

Dr. George W. Wright, Monroe, presided as president; Dr. John G. Snelling is secretary.

MISSISSIPPI STATE HOSPITAL ASSOCIATION STANDING COMMITTEES

Dr. R. J. Field, Centreville, President of the Mississippi State Hospital Association, has announced committees for the year as follows:

COMMUNITY HOSPITALS.—Dr. J. M. Acker, Jr., Chairman, Aberdeen; Dr. C. M. Speck, New Albany; Dr. K. T. Klein, Meridian; Dr. J. R. Hill, Corinth; Dr. J. R. Williams, Houston; Dr. J. K. Avent, Grenada; Miss Esther Rohrer, R. N., Gulfport; Miss Mary N. Trigg, R. N., Greenwood; Dr. J. W. Moody, Charleston; Dr. E. W. Holmes, Winona.

LEGISLATION.—Dr. John C. Cully, Chairman, Oxford; Dr. W. H. Frizell, Brookhaven; Dr. W. W. Crawford, Hattiesburg; Dr. H. A. Gamble, Greenville; Dr. S. E. Field, Centreville; Dr. L. W. Brock, McComb; Dr. W. W. McRae, Corinth; Dr. W. H. Sutherland, Booneville.

CHARITY HOSPITAL.—Dr. B. B. Martin, Chairman, Vicksburg; Dr. H. N. Mayes, New Albany; Dr. P. L. Fite, Columbus; Dr. G. L. Arrington, Meridian; Dr. E. S. Bramlett, Oxford; Dr. V. B. Martin, Picayune; Dr. C. A. Everett, Natchez.

INSANE HOSPITALS.—Dr. H. Lowry Rush, Chairman, Meridian; Mr. Robert R. Wallace, Meridian; Dr. M. Q. Ewing, Amory; Dr. Omar Simons, Newton; Dr. L. B. Morris, Macon.

MEMBERSHIP.—Dr. A. M. McCarthy, Chair-

man, Electric Mills; Dr. Frank P. Ivy, West Point; Miss J. Oridge, R. N., Lexington; Dr. Thomas Wolford, Columbus; Miss Mary E. Cook, Tupelo.

PUBLIC RELATIONS.—Mr. Hamilton Crawford, Chairman, Hattiesburg; Dr. W. H. Anderson, Booneville; Miss Catherine White-Spunner, Biloxi; Dr. F. G. Riley, Meridian; Mr. S. A. Head, Columbia.

MINIMUM STANDARDS.—Dr. W. Jeff Anderson, Chairman, Meridian; Dr. John B. Howell, Canton; Dr. Charles E. Catchings, Woodville; Dr. George E. Brown, Water Valley.

NURSES AND NURSING.—Dr. A. Street, Chairman, Vicksburg; Dr. N. C. Womack, Jackson; Miss Kate Lou Lord, R. N., Hattiesburg; Dr. M. D. Ratcliffe, McComb.

CONSTITUTION AND BY-LAWS.—Dr. J. S. Ullman, Chairman, Natchez; Dr. W. H. Frizell, McComb; Dr. F. B. Long, Starkville.

PUBLICATION.—Dr. W. H. Anderson, Chairman, Booneville; Mr. W. Hamilton Crawford, Hattiesburg; Dr. F. J. Underwood, Jackson; Mrs. Maude E. Varnado, R. N., Laurel.

Committees will work under the general direction and be responsible to the members of the Board of Directors as follows:

Dr. V. B. Philpot, Houston—Community Hospitals; Public Relations; Membership.

Dr. J. Gould Gardner, Columbia—Legislation; Minimum Standards; Publication; Insane Hospitals.

Mr. G. D. Stanley, Greenville—Charity Hospitals; Nurses and Nursing; Constitution and By-Laws.

MISSISSIPPI STATE BOARD OF HEALTH

On May 29 and 30, the annual meeting of public health nurses was held in Jackson. Every public health nurse in the State attended and an excellent program was given. Miss Mary Emma Smith from the National Society for the Prevention of Blindness, New York, was the principal speaker. At this meeting, it was announced that the following Mississippi public health nurses have just been awarded scholarships by the Commonwealth Fund for four months' graduate study at the school of their choice: Miss Mary E. Brooke of the Sunflower County Health Department, Indianola; Miss Roberta Mahoney of the Washington County Health Department, Greenville; Miss Fay Miller of the Pike County Health Department, McComb; Mrs. Martha Long Pigford of the Lauderdale County Health Department, Meridian; Mrs. Nettie O. Turner of the Leflore County Health Department, Greenwood.

Miss Inez Driskell, supervising nurse with the Pike County Health Department, has just received word, through the State Board of Health that the Commonwealth Fund will finance a trip for her to Tennessee, for the purpose of studying the public

health program in Sullivan, Rutherford, and Williamson Counties, Tennessee. Miss Driskell will be away about three weeks.

Miss Augustine B. Stoll, State Board of Health, has left for Austin, Texas, to take an extended course at the University of Texas, in Public Health Nursing. Miss Stoll has been with the State Board of Health as Advisory Nurse of the Field Unit during the past two years.

Dr. Wm. R. Wright, dental member of the Mississippi State Board of Health, has just returned from an observation trip. His itinerary included Guggenheim Dental Clinic, Tuberculosis and Health Association Clinic, Metropolitan Life Insurance Clinic and Preventive Dental Clinic of New York; Forsyth Dental Infirmary Clinic, Boston; Rochester Children's Dental Clinic, Eastman X-Ray Clinic and Cleveland and Chicago School Clinics.

Dr. H. C. Ricks, director of county health work and epidemiology in Mississippi, is away on a trip for the purpose of study and observation to the following places: Lansing and Detroit, Michigan; Albany and New York City, New York; Boston, Massachusetts; Washington, D. C.; Montgomery and Tuscaloosa, Alabama.

Both Dr. Ricks and Dr. Wright were given these trips by the Commonwealth Fund.

During the month of May, the following people were visitors to the Mississippi State Board of Health: Dr. J. C. A. Ultee, Inspector of Public Health Service, Dutch East Indies; Dr. Alvin E. Keller, Department of Preventive Medicine, Vanderbilt University, Nashville, Tennessee; Dr. W. A. Davis, State Bureau of Vital Statistics, Austin, Texas; Dr. John W. Brown, State Health Officer, Austin Texas; Mrs. J. W. Brown, Austin, Texas; Mr. V. M. Ehlers, State Health Department, Austin, Texas; Dr. Floyd Warner, Harvard University, Cambridge, Massachusetts; Miss Mary E. Smith, National Society for the Prevention of Blindness, New York, New York.

The State Board of Health will have a meeting on June 21, 22, and 23. There will be a business session the first day, and on the last two days the medical examinations will be held. The number of applicants for license by reciprocity and for written examinations seems to be about as usual.

Recently the State Board of Health was fortunate in securing a copy of its reports for 1890-91 and for 1894-95. Mrs. Thomas L. Bailey found the 1890-91 report in Mr. Bailey's library and was kind enough to present it to the State Board of Health. The New York Academy of Medicine is furnishing us a copy of the 1894-95 report. At this time the file of the State Board of Health reports since organization in 1877 is complete with the exception of the annual report for 1877 and the biennial report for 1886-87. Assistance in locating these State Board of Health reports will be appreciated.

Dr. Felix J. Underwood will attend the meeting of the State and Provincial Health Authorities of North America on June 5 and 6. On the following two days he will attend the meeting of the Surgeon General. From Washington, Dr. Underwood will go to Milwaukee to attend the American Medical Association meeting as a delegate, taking the place of Dr. J. M. Acker, Jr., retiring President, who is unable to attend, from the Mississippi State Medical Association. Dr. Hugh Gamble, also, will attend as a delegate.

Dr. A. E. Keller, Assistant Professor of Preventive Medicine, Vanderbilt University, Nashville, in cooperation with Dr. W. P. Gray and other local physicians of Waynesboro and Wayne County, is treating a large number of individuals who were recently found to be heavily infested with hookworm and showed evidence of hookworm disease.

The work being done in Wayne County is preliminary to a program which it is hoped the State Board of Health will be able to promote in several counties. The carrying on of this additional program will depend on whether or not the State Board of Health is able to obtain cooperation from outside agencies supplying funds to finance the project. State funds with which to carry on the program are not available.

Jackson,

June 2, 1933.

F. J. Underwood,
Executive Officer.

Every member of the auxiliary in the state should read and file the May issue of the A. M. A. Bulletin.

WOMAN'S AUXILIARY TO THE SOUTH MISSISSIPPI MEDICAL SOCIETY

The organization of the Women's Auxiliary to the South Mississippi Medical Society was perfected May 15, at a luncheon meeting at the Forrest Hotel. Officers elected to head the auxiliary are: President, Mrs. C. C. Hightower, Hattiesburg; First Vice-President, Mrs. Thomas R. Beech, Ellisville; Second Vice-President, Mrs. J. W. Horn, Lucedale; Secretary, Mrs. R. H. Clark, Hattiesburg; Treasurer, Mrs. W. W. Crawford, Hattiesburg.

Mrs. Arthur B. McGlothian, of St. Joseph, Missouri, past president of the Woman's Auxiliary to the American Medical Association, and present educational chairman of the national auxiliary, was the principal speaker. She was introduced by Mrs. Mabel Mason of Lumberton, and spoke interestingly, sketching briefly the history of the auxiliary. She said the first auxiliary to the American Medical Association was organized at Dallas, Texas, in 1917, and has increased until at the present there are auxiliaries in 42 states. Purposes and past ac-

complishments of the organization were discussed by the speaker.

The meeting was presided over by Mrs. L. L. Polk, Purvis, councillor for the seventh district of the state auxiliary, who has been active in the organization of the South Mississippi Auxiliary. Eighteen women representing a number of towns in this section attended.

Hattiesburg,
May 16, 1933.

The Woman's Auxiliary to the South Mississippi Medical Society held its second meeting at the Forrest Hotel at Hattiesburg on Thursday afternoon, June 8. The meeting was presided over by the president, Mrs. C. C. Hightower, Hattiesburg, who introduced the new officers. She also introduced Mrs. E. C. Parker of Gulfport, whom we were so happy to have as a guest.

The auxiliary accepted with regret Mrs. W. W. Crawford's, Hattiesburg, resignation as treasurer, and elected Mrs. Grady Cook, Hattiesburg, to serve. Mrs. L. L. Polk, Purvis, was appointed by the president as parliamentarian.

Mrs. Hightower introduced Dr. E. C. Parker, of Gulfport, who spoke interestingly of the excellent work that has been done and is to be done by the auxiliary. Mrs. Leo H. Martin, Hattiesburg, sang two lovely songs, after which Mrs. L. L. Polk conducted a most interesting and instructive round table discussion of the Preventorium at Magee. Mrs. Mabel Mason, Lumberton, gave a brief sketch of the life of Dr. Henry Boswell, of the Preventorium.

Punch was served by Mrs. S. E. Bethea, Mrs. Grady Cook, Mrs. L. B. Hudson, and Mrs. T. E. Ross Jr., to the members and several guests. The next meeting of the auxiliary will be held at Laurel.

Mrs. R. H. Clark,
Secretary.

Hattiesburg,
June 13, 1933.

GULF COAST NEWS

Dr. Elmer Gay, Long Beach, has been assigned to the medical staff at Fort Barrancas, Pensacola, Florida. He will be there six months or more.

Dr. Roland Crawford, Laurel, who is rapidly recovering his health and strength, is in his Long Beach home for the summer.

Dr. Joe Evans, president of the Harrison-Stone-Hancock Counties Medical Society, and Miss Mary Bliss Herves of Gulfport, will be married the last of June.

Master Ed Parker four-year-old son of Dr. and Mrs. E. C. Parker, accompanied his parents to Jack-

son to the State Medical Association meeting in May. Dr. Parker is the president-elect of the Mississippi State Medical Association.

Drs. William and Virginia Hickerson, Nashville, were the guests of Dr. and Mrs. W. A. Dearman for several days in May. Both are employed by the State Board of Health in Tennessee. Dr. Virginia will be remembered by a large circle of friends as Mrs. Paul Pope when she lived in Gulfport during and immediately following the war. After the death of Dr. Pope, she studied medicine, and upon finishing her medical course, married Dr. Hickerson of a prominent Virginia family.

Mrs. A. B. McGlothlan of St. Joseph, Missouri, immediate past president of the Woman's Auxiliary to the American Medical Association, who was honor guest at the state convention in Jackson the first part of May, was the week-end guest of Dr. and Mrs. Dan J. Williams, Long Beach, accompanying them here from Jackson. Enroute to the coast the party, which included Dr. W. A. Dearman were the guests Thursday night of Dr. and Mrs. Henry Boswell, Sanatorium. Mrs. McGlothlan comes from the home town of Mrs. Williams, and had visited Mrs. Williams here last year. Mrs. L. L. Polk, Purvis, former state president of the auxiliary, motored to Gulfport, Sunday, and Mrs. McGlothlan accompanied her to Hattiesburg Sunday night, for the purpose of organizing an auxiliary to the South Mississippi Medical Society. Mrs. Polk is councillor for the eighth district and directed the organization at Hattiesburg.

Mrs. Dan J. Williams entertained Mrs. Arthur B. McGlothlan at a lovely tea while the latter was a guest in her home, so that she might meet Mrs. Williams' friends and auxiliary co-workers. Mrs. Williams was assisted by the following ladies: Mrs. E. C. Parker, Dr. Emma Gay, Mrs. C. A. McDaris, Mrs. Geo. Melvin and Mrs. L. L. Polk. About sixty guests, including doctors from along the coast, called during the afternoon.

Mrs. Dan J. Williams.

Gulfport,
May 29, 1933.

COUNTY EDITOR

Dr. M. E. Arrington, Vaiden, has been appointed by Dr. S. S. Caruthers, President of the Winona District Medical Society, as editor for Carroll County, succeeding Dr. J. P. T. Stephens, who recently died.

E. W. Holmes,
Secretary.

Winona,
May 30, 1933.

FOR THE HISTORY

Dr. Hugh A. Gamble is the only living past president of whom the Mississippi State Medical Association does not possess a photograph.

ACKNOWLEDGEMENT

Acknowledgment is made of the receipt of reprints of the following interesting papers:

The Educational Needs of Present Day Nursing.—H. A. Gamble, M. D., Greenville, Miss.

The Increasing Incidence of Amebic Dysentery as a Warning for More Thorough Study of Diarrheas.—J. G. Archer, M. D., Greenville, Miss.

The Treatment of Infections in Carbuncles of the Face and Lip.—H. A. Gamble, M. D., Greenville, Mississippi.

WOMAN'S AUXILIARY

to the

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson.

President-Elect—Mrs. Henry Boswell.

Mrs. Leon S. Lippincott, Chairman

Press and Publicity



Our State President
MRS. FRANK L. VAN ALSTINE
Jackson.

Lillie McKee Van Alstine was born near Lebanon, Missouri. She was educated in Missouri and

Oklahoma, and taught in the public schools of both states.

In 1918 she was married to Dr. Frank L. Van Alstine, at Garvin, Oklahoma, where they continued to reside for two years. They moved to New Orleans in 1920, and came to Jackson in 1926.

Mrs. Van Alstine has always been active in church and church school work; serving as district superintendent of the adolescent age group of her church in the New Orleans District and the Jackson District, and assisting in the conference work of the Louisiana and Mississippi conferences, as well as the work in her local church.

Mrs. Van Alstine has served as president of the Jackson unit of the Woman's Auxiliary to the Central Medical Society, and as recording secretary of the Woman's Auxiliary to the State Medical Association, for the year of 1931-1932, being elected president-elect in 1932, and entered upon her duties as president of the State Auxiliary May 11, 1933.

OUR NATIONAL PRESIDENT

Greetings to All Auxiliary Women.

It is with a great deal of pleasure and yet some sadness that I turn my steps to the Milwaukee meeting. I have learned to love Mrs. Percy for her sterling worth; she has been tried and not found wanting in any part of our work. It is with the distinct feeling of my shortcomings that I find myself taking over the office as your leader. But, I am happy over the prospect of working shoulder to shoulder with so many wonderful women. Your work is mine, and mine is yours, and as Edgar Guest says, "I certainly will need the team work of every bloomin' soul," to make this year a success.

There is a sort of a challenge in the air these days—but I know our auxiliary women will live up to the challenge. A real auxiliary member is one who can take and grow and give, one who can sense his responsibility to a group and also to each individual in it. The ideal auxiliary woman must at times be a sponge, interested only in absorbing, again she must be a brilliant prism receiving benefits from others and reflecting them back.

In setting your "State Houses" in shape for reports at the Milwaukee meeting, perhaps you will enjoy knowing that I plan to follow Mrs. Percy's lead, and make the year a "State Year."

Shakespeare has a passage, "All the world's a stage, and all the men and women players"—so as your stage manager next year you will always find me ready to prompt your work, and shift the scenery, start the orchestra, or any other thing I can possibly do to help make this year one continuous success for all of us.

May 1, 1933.
Hopkins, Minnesota,

Mrs. James Blake,
National President.

NATIONAL NEWS

Here is an interesting statement from the president of the Woman's Auxiliary to the Chicago Medical Society, Mrs. A. H. Brumbach:

**Rare Exposition Privileges Through Chicago's
Auxiliary.**

"I am most happy to say that the officers and physicians connected with the exhibits have assigned to us jointly with the Chicago Medical Society **Booth 15**, in the Hall of Science. We will endeavor to maintain a general information desk, registration, and will furnish helpful knowledge. Every day an auxiliary member will be in attendance. We will have chairs and other comforts for visiting physicians' wives and hope they will avail themselves of the same.

After the close of the exposition we will separate the registration cards by states, mailing the same to each state president for her files. The Chicago Medical Society is standing back of us and will do all in its power to give our visiting friends a pleasant time."

The above message appears in the Auxiliary Department of the May A. M. A. Bulletin, which should have reached you the first week in June. That issue also carries in our department, a message from Mrs. Percy, one from Mrs. McGlothlan, and an article by Mrs. Williard Bartlett, our national Director from St. Louis, giving you an interesting account of the "Beginning of Things Auxiliary" in St. Louis in 1922, when the Auxiliary to the American Medical Association was organized.

**WOMAN'S AUXILIARY TO THE ISSAQUENA-
SHARKEY-WARREN COUNTIES MEDICAL
SOCIETY**

The months of June, July and August being vacation time for our auxiliary, there will be no news of this kind until September, when the regular meetings will be resumed. Our auxiliary was proud of its capable member and past president, Mrs. W. C. Pool, Cary, who was the president of the Woman's Auxiliary to the Mississippi State Medical Association. Under her leadership the Auxiliary made great progress in growth and accomplishments.

The Auxiliary, both state and local, has sustained a great loss in the death of Dr. Ewing Fox Howard. He has always been our loyal friend and advisor. His sudden death has saddened the hearts of all who knew him.

Mr. and Mrs. Lloyd J. Kiernan, of Chicago, have been with their mother, Mrs. E. F. Howard. Their friends regret that their visit was such a sad one.

Dr. and Mrs. Benson B. Martin, have returned

from a trip to Florida, and from New Orleans, where they were present for the graduation of their son, Benson Martin, Jr., who received the degree of medicine from Tulane University.

Dr. and Mrs. W. H. Parsons attended a meeting of the American Association For the Study of Gout, which was held in Memphis in May.

Mrs. Preston Herring and attractive little daughter, Helen, have returned from a pleasant visit spent with Dr. Herring's mother in southern Louisiana.

Dr. and Mrs. George M. Street and daughters, Pauline and Lois, have been away on a vacation. Dr. Street attended the meeting of the American Medical Association in Milwaukee, and from there he joined Mrs. Street and the children in Chicago where they enjoyed the World's Fair.

Dr. and Mrs. Benson Martin, Jr., gave their friends a big surprise when they announced their marriage. Mrs. Martin, Jr., has had many lovely parties given for her pleasure. The Issaquena-Sharkey-Warren Counties Auxiliary will be delighted to welcome her as a new member.

Mrs. Laurence J. Clark,
Press and Publicity Chairman.

Vicksburg,
June 10, 1933.

HONOR ROLL

The following have contributed to this number of our Journal:

COUNTY EDITORS—Adams, L. Wallin; DeSoto, L. L. Minor; Grenada, T. J. Brown; Hancock, D. H. Ward; Hinds, W. F. Hand; Humphreys, G. M. Barnes; Leflore, W. B. Dickins; Monroe, G. S. Bryan; Panola, G. H. Woods; Prentiss, R. B. Cunningham; Sharkey—W. C. Pool; Simpson, E. L. Walker; Tippah, C. M. Murry; Tishomingo, T. P. Haney; Washington, J. G. Archer; Winston, M. L. Montgomery; Yalobusha, G. A. Brown.—17.

COUNTY SOCIETIES—Central, Robin Harris; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock, E. A. Trudeau; Homochitto Valley, R. J. Field; Issaquena-Sharkey-Warren, L. S. Lippincott; Jackson, J. N. Rape; Northeast Mississippi Thirteen Counties, J. M. Acker, Jr.; South Mississippi, J. P. Culpepper, Jr.—8.

HOSPITALS—King's Daughters Hospital, Brookhaven, R. S. Savage; King's Daughters' Hospital, Greenville, John A. Beals; Mississippi Baptist Hospital, Jackson, Lawrence Long; Vicksburg Sanitarium, L. S. Lippincott.—4.

WOMAN'S AUXILIARY—Mrs. Leon S. Lippin-

cott; Mrs. Frank L. VanAlstine; Mrs. James Blake; Mrs. R. H. Clark; Mrs. Dan J. Williams; Mrs. Laurance J. Clark.—6.

OTHERS—J. W. D. Dicks; J. S. Ullman; D. W. Jones; E. F. Howard; V. B. Philpot; Eugene R.

Nobles; M. Q. Ewing; Frank O. Schmidt; R. J. Field; F. J. Underwood; E. W. Holmes; H. A. Gamble.—12.

GRAND TOTAL—47.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

American and Canadian Hospitals: Edited by James Clark Fifield, with the Cooperation of the Amer. Hospital Assn., Minneapolis. Midwest Publishing Company, 1933. pp. 1560. Price \$10.00.

Comparative statistics of hospitals on this continent have not been available in the past although brief summaries of data have been published annually by the American Medical Association, American Hospital Association, and American College of Surgeons. This volume will serve a useful purpose for ready reference as an institutional "Who's Who" but it is regrettable that so many hospitals have withheld statistical and financial data of importance in their reports to the publishing company. It might be suggested that the questionnaires on which reports were made should, in future, be phrased more specifically in order that the information tabulated be less ambiguous.

The typography is good but, unfortunately, an index is not included and the tabulation is geographical only. Articles descriptive of each of fourteen organizations whose activities affect more or less directly the hospital field, help to clarify the inevitable confusion consequent upon over-organization.

B. C. MAC LEAN, M. D.

Principles and Practice of Obstetrics: By Joseph B. DeLee, A. M., M. D. 6th ed. rev. Philadelphia. W. B. Saunders Co., 1933. pp. 1165. Price \$12.00.

The sixth edition of this classic is just off the press, and has been thoroughly revised by the author, long recognized as one of the foremost obstetricians of the world. Recent obstetrical literature in practically every language has been reviewed in order to accomplish this task. One can only say that the present edition lives up to the high standard of the previous ones, and that the volume really represents the last word in obstetrics. The many illustrations which have always been a feature of this particular text add greatly to its value.

E. L. KING, M. D.

The Pelvis in Obstetrics: By Julius Jarcho, M. D., F. A. C. S. New York. Paul B. Hoeber, Inc., 1933. pp. 365. Price \$6.00.

This is a very complete monograph on the

female pelvis considered from the obstetrical point of view. The various deformities are described, and there is considerable discussion of the incidence of deformed pelvis in various countries and races.

The methods of diagnosis are discussed at length, and are clarified by excellent illustrations. Considerable attention is paid to Roentgen-Ray Pelvimetry and Cephalometry, to which subjects the author has given a great deal of attention. The attention is called to the demonstration of fetal anomalies by the x-ray as well as to the value of x-ray in diagnosing intra-uterine fetal death.

On the whole we can say that this is a very interesting work, bringing together in one volume all available knowledge regarding the female pelvis, and the methods of arriving at proper diagnostic and prognostic conclusions from an obstetrical point of view. It can be recommended without reservation to those interested in this topic.

E. L. KING, M. D.

Ten Years of Obstetrics and Gynecology in Private Practice: By John L. Rothrock, A. B., M. D., F. A. C. S. New York, Paul B. Hoeber, Inc. 1933. pp. 209.

This volume contains a statistical study of cases treated and methods used by the author during a ten year period, together with detailed case reports of unusual pathology encountered. In most instances, conclusions are derived from too small a series of cases. The chapters on Uterine Displacements Following Child birth, and Instrumental Deliveries, are to be commended. This book, per se, is inadequate for students or reference work.

C. G. COLLINS, M. D.

History of Chinese Medicine: By K. Chimin Wong and Wu Lien-Teh, M. A., M. D. (Cantab.), Dr. M. Sc. (Tokio); Hon. Litt. D. (Peking) LL.D., Sc. D. Tientsin, China, The Tientsin Press, Ltd., 1932. pp. 706.

Chronologically Chinese medical history may be divided into four periods:

(1) The Ancient or Legendary Period (2697-1122 B. C.) about which many myths, little history has been written: (2) The Historical or Golden Period (1121-B. C.-960 A. D.) characterized by the philosophical teachings and theoretical speculations of

the Chou dynasty; by the splendor of the Han dynasty during which lived famed Ts'ang Kung, Chang Chung-ching and Hua T'o, proponents of direct observation, and during the T'ang dynasty by the birth of Buddhism with its superstitions, charms and Indian remedies.

(3) The Mediaeval or Controversial Period (961-1800 A. D.) when the writings of the ancients were attacked and controversies abounded, and (4) The Modern or Transitional Period (1801-1932 A. D.) which began with the introduction of Western Medicine and which was marked by the struggle for supremacy between the old and new forces.

This history of Chinese Medicine was fifteen years in preparation and represents a Herculean task beset with so many difficulties that authors less astute than Wong and Wu would have certainly abandoned it in its incipiency.

MAURICE SULLIVAN, M. D.

New and Nonofficial Remedies: 1933, containing descriptions of articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan 1, 1933. Chicago American Medical Association, 1933. pp. 498. Price \$1.50.

The 1933 edition of this most valuable publication of the American Medical Association corresponds to those of previous years. It lists those Pharmaceutical articles and products considered during the year by the Council. It also contains a list of those medicinal substances which were rejected. The book should be in the hands of every practitioner of medicine, because only through this authentic report is the physician able to separate the good from the bad, the malign from the beneficent.

J. H. MUSSER, M. D.

Correction of Defective Speech: By Edwin Burket Twitinger, Ph. D. and Yale Samuel Nathanson, Ph. D. Philadelphia, P. Blakiston's Son and Co., Inc., 1932. pp. 413. Price \$3.50.

The authors state that this volume is offered in response to the existing need for a technique to be used in the correction of speech mutilation. Little or no effort is made to differentiate the many etiological factors causing defective speech, and herein lies one of the weaknesses of the book. Success in correcting stammering and other speech disturbances is in large measure limited by the degree of mental development, the aments make but little progress with any type of speech training. The scope of the thesis does not permit a presentation

of the many factors presented in the children with defective speech.

If success is to reward the effort at corrective training in speech mutilation, the training must be undertaken by one who has had experience in such work. The technique outlined in this little volume is excellent for training those individuals who do not speak plainly, and who can be taught. This work can not be carried on by a busy physician, or by a member of the child's family. For one who has studied corrective speech training, the method outlined in this little volume will be found very useful, and to such a one I can highly recommend the technique outlined by the authors.

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PUBLICATIONS RECEIVED

W. B. Saunders Company, Philadelphia: Collected Papers of the Mayo Clinic and the Mayo Foundation, by Mrs. Maud H. Mellish-Wilson and Richard M. Hewitt, B. A., M. A., M. D. Surgical Anatomy, by C. Latimer Callander, A. B., M. D., F. A. C. S. Obstetrics and Gynecology, by Arthur Hale Curtis, M. D. Surgical Pathology, by William Boyd, M. D.

Lea & Febiger, Philadelphia: Urine and Urinalysis, by Louis Gershenfeld, Ph. M., B. Sc., P. D. A text-book of Neuropathology, by Arthur Weil, M. D.

J. B. Lippincott Company, Philadelphia: Medical State Board Examinations, by Harold Rypins, A. B., M. D. International Clinics, by Louis Hamman, M. D.

The Williams & Wilkins Company, Baltimore: Reflex Action, by Franklin Fearing, Ph. D. Lymphatics, Lymph and Tissue Fluid, by Cecil K. Drinker, B. S., M. D., and Madeline E. Field, A. B., Ph. D. The Vitamins in Health and Disease, by Barnett Sure, Ph. D.

William Wood & Company, Baltimore: Urology in Women, a Handbook of Urinary Diseases in the Female Sex, by E. Catherine Lewis, M. S. (Lond.) F. R. C. S. (Eng.)

The Macmillan Company, New York: Diet in Sinus Infections and Colds, by Egon V. Ullmann, M. D. Psychoanalysis and Medicine, by Karin Stephen, M. A., M. R. C. S., L. R. C. P.

Charles C. Thomas, Springfield: Child Psychology by Buford J. Johnson.

D. Appleton and Company, New York: Diseases of Infancy and Childhood, by the late L. Emmett Holt, M. D., and John Howland, M. D., Revised by L. Emmett Holt, Jr., M. D., and Rustin McIntosh, M. D. Tenth Edition.

New Orleans Medical

and

Surgical Journal

Vol. 86

AUGUST, 1933

No. 2

GASTROINTESTINAL PROBLEMS OF VITAL SIGNIFICANCE*

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It is excellent mental discipline to ponder seriously from time to time the controversial subjects in which the field of gastrointestinal work is particularly prolific; and, therefore, I wish to discuss with you three topics about which the element of doubt still hovers:

- I. Chronic ulcerative colitis,—its etiology.
- II. Gastric secretion,—its diagnostic significance.
- III. Indications for surgery in gastroduodenal disease.

I

CHRONIC ULCERATIVE COLITIS: ITS ETIOLOGY.

There is no gainsaying the fact that during the past fifteen years the prevalence of ulcerative colitis has notably increased; so it is but natural that more interest should have been aroused, and more intensive studies inaugurated. Bargaen, working with Rosenow in the Mayo Clinic, presented a preliminary report¹ in which he stated that it was his opinion that ulcerative colitis is a distinct disease entity, caused by a specific organism,—a gram-positive diplostreptococcus. While Bargaen has described the morphologic characteristics of this diplococcus, yet he has failed to set forth clearly the cultural attributes, knowledge of which is necessary before one can state arbitrarily

that such an organism constitutes the one and only specific etiologic factor in the production of this disease entity. From the bacteriological standpoint it should be emphasized that morphological attributes only will not suffice in establishing bacterial identity.

In regard to Bargaen's studies it has been pointed out by Brown and Paulson² that of seventy-five strains reported as isolated in the first two papers by Bargaen, it appears that only twenty-five were studied culturally; fifty strains, then, seemed to have been established on the basis of morphology,—a method of diagnosis which is regarded by bacteriologists, save possibly those of the Rosenow school, as inaccurate, misleading and untenable. If, as appears at times to be the case, classification was made by agglutination methods, this is likewise inaccurate. Certain it is, that as yet Bargaen is not clear in his description of the cultural characteristics of this "diplococcus."

He further claimed that the organism was heat-resistant; however, in a "typical strain" sent by him to Torrey, the latter found it non-heat-resistant. One will readily see that these variations in cultural characteristics of this "diplococcus" in the hands of Bargaen and others represent different varieties and types of organisms which morphologically are identical. It is to be emphasized that lesions produced in animals by more than one type of organism, as well as similar lesions produced by mixed cultures cannot be regarded as having been produced by one distinct organism.

It is most interesting and illuminating to quote from Paulson (3): "Fourteen cases of acute exacerbations of chronic ulcerative colitis were investigated. Ten types of streptococci, including

*To have been read before the Louisiana State Medical Society, April, 1933.

the 'diplococcus' meeting the original criteria set forth by Bergen, were isolated from 13 cases; in one case, after repeated attempts, *B. coli* only were demonstrable. No one type was found to be present in more than three cases; the 'diplococcus' as originally described by Bergen in his first two papers was isolated from two cases, in one of which it appeared as the preponderating organism. Seven types of the ten varieties of streptococci isolated were intravenously injected into rabbits. Five varieties, including the 'diplococcus' described by Bergen, produced lesions of the type and in locations to be mentioned shortly. Among the five types of organisms were three distinct varieties of chain-forming streptococci which produced lesions, confirmed by microscopic sections, primarily in the lower colon and rectum of 45.5 per cent of animals. These lesions varied from mucosal to submucous inflammatory involvements with the muscularis frequently invaded, and submucous hemorrhages. The diplococcus referred to by Bergen produced one colonic and one rectal involvement in one of six rabbits intravenously injected with that organism.

"It should be added that two types of streptococci and also a dead culture of a beta hemolytic streptococcus (foreign protein) isolated from sources other than ulcerative colitis cases, produced in a large number of rabbits lesions which were confirmed by microscopic section; these were similar in pathology and in location to those to which I have just referred. Also, *B. coli*, from a case of amoebic dysentery and *B. dysenteriae* (Shiga and Flexner), produced like lesions but they were located primarily in the cecum and colon; however, this slight variation in laboratory animals in the location of lesions pathologically similar to those mentioned above, we do not regard as significant or different from the others."

Paulson, in order to ascertain the effect of bacteria (from sources other than ulcerative colitis cases) on the intestine of rabbits, injected intravenously the following organisms: A dead culture of a beta-zoned streptococcus (foreign protein) secured from a scarlatinal sore throat; a beta-zoned streptococcus secured from a patient with puerperal sepsis; *B.*

coli from the swabbing of a normal sigmoid; and an alpha-zoned streptococcus from the author's normal throat. Each of these strains produced in seven of eleven rabbits marked rectal and colonic involvement not unlike that observed in rabbits injected with various strains of streptococci isolated from ulcerative colitis cases. The intravenous injections of *B. coli* isolated from the rectal ulcerations due to *Entamoeba histolytica* or *B. dysenteriae* (Shiga and Flexner), produced like lesions; but they were located principally in the small intestine and cecum of eight of the rabbits.

"In short, this study shows clearly the variety of streptococci found in ulcerative colitis cases, and the production of identical lesions as to pathology and location in laboratory animals by several distinct types as well as by organisms from other sources. This definitely removes the question of specificity in regard to bacterial etiology in the light of our present knowledge."

A fact of importance is that the appearance of a lancet-shaped gram-positive diplococcus with little if any tendency to chain formation is not characteristic of any one type of streptococcus.

It is also of importance to point out a most significant point stressed by this same investigator, concerning the discovery of a preponderance of gram-positive organisms; among these are to be found a large number of cocci; Paulson's explanation is that hypermotility of the large intestine will account for the ileal flora in the rectum and sigmoid; and furthermore, it is well-known that in the presence of mucus, blood, and pus, enterococci and streptococci will thrive.

Garrod⁴ found that by administering saline aperients to patients not affected with organic bowel disorders, he could increase the number of streptococci in the feces to more than 90 per cent and by administering morphia he could reduce the number to very few.

Time will not permit of a discussion of various other factors which have been advanced as possible causes of this condition; among such may be mentioned: *B. coli*, uncommon bacterial types, i.e.: *B. proteus*, *B. pyocyaneus*, and *B. mucosus capsulatus* (Friedlander's group).

In regard to "virulence ascribed to normal bacterial inhabitants of the colon," Thomas R. Brown⁵ asks: "Is it not possible that the cause of the disease is to be found not in the presence of a definite and specific infective agent, but rather in the absence of some protective substance or mechanism, or of something which normally inhibits the bacterial invasion of the intestinal wall, perhaps due to metabolic error, or endocrine disturbance or lack of a specific bacteriophage, or absence of some normal bactericidal substance in the intestinal mucosa?"

The vitamin theory, focal infection, vagotonia, duodenal enzymes, entamoeba histolytica infection associated with ulcerative colitis, and other theories have been advanced; however, we must confine ourselves to a cursory review of these possibilities.

Kieffer⁶ makes the following significant statement: "Bargen's work has greatly stimulated the study of the bacteriology of ulcerative colitis, but the diplococcus which he described has not yet been generally accepted as the cause of the disease. The chief obstacle in the bacteriological study appears to be the difficulty in distinguishing between secondary invaders and primary causative organisms."

It is of interest to note the conclusion reached by Rafsky and Manheim⁷ after a through bacteriologic study: "The Bargen diplococcus is a strain of the enterococcus group. It is not regarded as the specific factor in ulcerative colitis since it is not found in every case of this disease, and in our experiments not even in a majority of the cases. It can be recovered from cases showing no ulcerative lesions of the colon."

"The Bargen organism was recovered in cases of ulcerative colitis and non-ulcerative colitis; from the stomach contents of a patient with gastric carcinoma and from the stool of a patient with chronic arthritis."

Let me give also a quotation from M. H. Streicher and Bertha Kaplan⁸ who for three years carried on a careful survey of all cases of diarrhea observed in their gastrointestinal clinic at the University of Illinois College of Medicine, and the Grant Hospital; their ob-

jects were: first, to confirm or refute the observations of Bargen; second, to determine the specificity and therapeutic value of autogenous vaccine. They conclude: "The green-producing gram-positive diplostreptococcus is not the sole etiologic factor of chronic ulcerative colitis. Similar green-producing organisms are found in amebic dysentery, duodenal ulcer, syphilitic obstruction, hernias and in many other conditions; similar organisms are present in some normal cases."

It is conceivable that in some instances, where the diagnosis of chronic ulcerative colitis is made by a process of elimination, bacillary dysentery brought about by Flexner, Hiss-Russell, Shiga or Sonne organisms, may have been the primary causative factor.

CONCLUSION

Because of the thorough work of the investigators I have quoted, and the opportunity given me of observing studiously at first hand the conclusive work of Paulson, together with the experience gained by personal study, intensive investigations, and prolonged therapy in a large number of these cases, I am entirely convinced at the present moment, that ulcerative colitis is not a disease entity caused by a specific organism, but rather a syndrome brought about by a factor or factors of a non-specific or secondary character.

II

GASTRIC SECRETION: DIAGNOSTIC SIGNIFICANCE

For many years we have been actively engaged in studying gastric secretion, with the object of ultimately reaching definite conclusions in regard to the diagnostic value of this method of clinical investigation. Some years ago, renewed interest in this subject was roused by the work of Rehfuss, who emphasized the importance of fractional extraction of gastric content, and maintained that the information gained by such a procedure was of paramount diagnostic significance.

In direct relation to the claims of this investigator, I shall quote from a paper I presented in Boston in 1922:⁹ "We have become convinced that it is a gross error to endeavor to build a gastric pathology upon secretory

findings, for the reason that there are too many unknown quantities directly affecting secretory functions over which we have no control, and which bring about a labile condition whereby the secretion is continually changing quantitatively and qualitatively;"—"reflex disturbances from other organs, malfunction of ductless glands, blood dyscrasias, and other innumerable extraneous conditions may produce an unstable and ever-changing gastric secretion."

"The advocates of fractional gastric analysis present a weak case when they start with three normals, for if such be a fact, how may we expect to place the abnormal or pathological reactions with intelligence and exactitude?"—and further, "a knowledge of the degree of gastric acidity at best can be only comparative and questionable; it can be of positive value only when considered in conjunction with other findings. And although we feel that no procedure should be despised which promises to be of assistance, however slight, in diagnosis; nevertheless, so far as we are concerned, our experience has definitely proven that of all procedures this approximation of acidities—free and total—is the least helpful, and practically may be discarded for other measures which have been proved to be of far greater value."

From that time, 1922, with an ever-increasing experience in dealing directly with gastrointestinal diagnostic problems, and endeavoring as we might to maintain an unbiased, judicial attitude, we have been totally unable to convince ourselves that independent secretory findings are possessed of true diagnostic worth, except in isolated instances. For the most part, it has seemed that Dr. Brown and myself, in expressing these views, were but voices crying in the wilderness; hence our surprise and gratification on reading in a recent publication the opinions of no less an authority than Arthur Bloomfield of San Francisco¹⁰. He is outspoken and arbitrary in presenting his views, which are based on a most thorough and painstaking research. He first calls attention to a most pertinent fact, which we have maintained as true for many years, namely: the wide variation of

both acidity and volume of secretion existing in healthy people without demonstrable gastric disorder; because of this undoubted truth, no rigid standards of normality can be laid down, and Bloomfield is of the opinion that gastric digestion in man is a matter of no great consequence; this radical statement is, to a certain degree, justified by the further unquestionable fact that many people, though devoid of gastric juice, maintain perfect health and nutrition, and suffer no digestive symptoms.

A noteworthy statement regarding pepsin is that in no case has an abundance of pepsin been found in the presence of either a deficiency or a superfluity, of acid; measurements of pepsin, therefore, serve no diagnostic purpose.

For many years we have noted the interesting fact that after prolonged medical treatment resulting in a complete disappearance of all symptoms, a study of the secretory function would in many instances, show a decided increase in the acid values; this led us to assert that the patient's symptoms were not dependent upon the secretory function, and Bloomfield's work corroborates this view.

On innumerable occasions when making gastric investigations on individuals presenting symptoms and disease of other domains than the gastrointestinal, we have discovered the greatest variations in acidity ranging from extreme hyperacidity to achylia gastrica, yet the patients presented no digestive complaints; and it was because of these findings that we long ago became convinced that it was motor and not secretory dysfunction which played the most important role in the production of gastric symptomatology; in order to stress this point, I quote a paragraph from the conclusions in a paper I presented before a meeting of the American Medical Association in Minneapolis, June, 1928:¹¹ "It has been shown that the widest possible variations in gastric acidity may occur without producing symptoms."

It is Bloomfield's opinion that in only three conditions is there any relation between disease and the type of gastric juice; namely:

pernicious anemia, where an achylia is the rule; carcinoma, where anacidity or low acid prevails in most instances; ulcer, in which high acid is likely to be discovered. However, everyone can without the slightest effort, recall many exceptions among the last two disease entities.

After studying thousands of digestive cases, I am thoroughly convinced that the estimation of the acidity of gastric contents is one of the most inadequate and undependable tests from a diagnostic standpoint. I do not recommend its elimination, but I unhesitatingly advise caution and reserve in regard to its diagnostic value, and I desire to call your attention to a study and consideration of dysfunction in the motor domain as the factor playing the most important role in gastric symptomatology.

III

INDICATIONS FOR SURGERY IN GASTRODUODENAL PATHOLOGY

Consultants and surgeons are continually being interrogated in regard to the indications for surgical therapy and the exact moment for its application in cases presenting evidence of gastro-duodenal pathology.

After many years of extensive experience in the Gastrointestinal Clinic of Johns Hopkins Hospital, and intensive and prolonged observation of patients in private practice, of whom a very large number harbored pathologic lesions of the gastroduodenal area, we have arrived at definite conclusions as to certain objective signs, subjective symptoms, and clinical findings that represent undoubted indications for surgical intervention; these we desire to present at this time for your consideration; however, let me hasten to add that it would be a grievous error to promulgate well-defined, inflexible rules to which all cases must be subjected; for in this, as in all other branches of medicine, we should judge the individual needs, and weigh judicially the pros and cons before arriving at a definite decision, and even then, we can but hope that its wisdom will be proved.

We believe that there are seven indications which constitute the most important criteria

for the application of surgical therapy in gastroduodenal pathology; they are:

- I: Malignancy; suspicion of malignancy.
- II: Perforation; acute, subacute.
- III: Repeated hemorrhage.
- IV: Adhesions resulting in deformities which lead to dysfunction.
- V: Organic obstruction.
- VI: Failure to obtain lasting benefit from medical treatment.
- VII: Postoperative pathology; dysfunction due to deformities, inflammation, ulceration, obstruction, new growth, fistulous communication with other organs.

I. *Malignancy: Suspicion of Malignancy:* It is this class of cases which demands a meticulous attention to the history, an application of the most minutely-detailed clinical investigations, and then a judicial weighing of all established facts; all these measures aid in prompt decision as to the correct mode of procedure. Let us review briefly, in the case of a patient in the fourth, fifth or later decades, the clinical points which in our estimation form a picture calling for immediate surgical interference: A history of recent or prolonged, intermittent or remittent dyspepsia; a decreasing acidity, a hypochlorhydria, or an achylia; evidence of early but persistent obstruction; constant occult blood in the stools; anorexia; loss of appetite; decrease in weight; anemia. Exceptions to some of the above indications, such as variable acidity and lack of obstruction, may be noted; on the whole, however, the picture outlined surely calls for surgical therapy. Malignant degeneration in duodenal ulcer is extremely rare; however, such a process as well as carcinomatous degeneration in gastric ulcer, which is more frequent, should always be given serious consideration. In many instances, we shall be greatly aided in the early stages by radiographic investigations.

II. *Perforation. Acute or Subacute:* This occurrence constitutes a critical emergency, and calls for immediate treatment; therefore it should be our aim to make a prompt diagnosis, for we are well aware that the mortality rate is diminished in ratio to the

promptness with which surgical therapy is instituted. In discussing this complication it is not amiss to direct your attention to the possibility of a resultant subdiaphragmatic abscess.

Subacute perforation is of infrequent occurrence, and Moynihan was one of the first to describe the condition. The symptoms are similar to those of an acute perforation, but not so severe, and they are not followed by evidence of general peritonitis. Hurst states that if the tenderness and rigidity remain localized in the absence of the administration of morphine, it is best not to operate; he states also that in two doubtful cases which were operated, the perforation was so satisfactorily closed by omentum or fibrinous exudate, that nothing was done, and the patients recovered.

We have had under our care several such cases, which quieted down and made a perfect recovery under expectant treatment; however, our attitude in such cases is that if there is the slightest suspicion of a general peritonitis, laparotomy should be performed immediately. These cases are most trying, and call for the closest possible attention and keen judgment on the part of surgeon and internist.

III. *Repeated Hemorrhage*: We are continually meeting with this class of ulcer cases, and during the acute outbreak the hemorrhage constitutes at times our most difficult experience; for on frequent occasions the bleeding is of a devastating character, and we are alarmed lest the patient succumb to the catastrophe. Happily, we know that it is comparatively seldom that the first outbreak proves fatal; but let me hasten to point out the fact that at times it is quite difficult to be sure that the hemorrhage is really due to ulcer of the gastroduodenal area, particularly if the bleeding occurs in a man in the fourth or fifth decade, who presents a history of excessive indulgence in alcohol, who has arterio-sclerosis and hypertension, and in whom no signs or symptoms of gastroduodenal ulceration have previously been noted. In such cases, the outbreaks are frequently due to ruptured varicosities in the esophagus,

stomach, or intestine. Having excluded to our satisfaction the lesion mentioned above, our feeling is that, given a healthy young adult, presenting a severe hemorrhage, but immediately evidencing prompt recovery, a disappearance of subjective symptoms and objective signs, together with an absence of occult blood in the stool,—operation should be delayed. However, if after persistent attention to diet and mode of life, a second hemorrhage should occur, no time should be lost, after recuperation from the acute symptoms,—in resorting to surgical therapy. It is the consensus of opinion among the leading members of the profession, both internists and surgeons, that operation should practically never be attempted during the stage of active bleeding.

IV. *Adhesions: Deformities Leading to Dysfunction*: It is well-known that inflammatory processes originating in ulcerative lesions and quite frequently producing perigastritis, peripyloritis, and periduodenitis, are often progressive, and may reach out to attack regions beyond the confines of the serosa, thus involving surrounding tissues and organs. Under such circumstances it is not difficult to visualize deformities of varying character and degree in different portions of the gastroduodenal area, with resultant marked derangement in the functional domains of sensation, secretion, and motor power. It seems worthwhile to state that while the deformity is in most instances noted in the pyloric-duodenal area, yet on many occasions it is found in other portions of the gastric domain, and hour-glass formations of varying shapes and types are not infrequently encountered. It is in such cases that invaluable aid is afforded by the fluoroscope and radiograph. When such permanent and crippling structural pathology is present, surgery is undoubtedly indicated.

V. *Organic Obstruction*: A hasty diagnosis of this pathology must be warned against, for it has been our experience in not a few instances that what appeared to be undoubted and overwhelming evidence of organic obstruction was eventually overcome most satisfactorily by hygienic, dietetic and

medicinal measures. The type of pathology most likely to come under the heading of organic obstruction is that in which a considerable area of edematous infiltration may surround the ulcer, forming a true mechanical obstruction and bringing about an almost complete closure of the pylorus. Furthermore, with a moderately contracted ulcer, definite spasm and irritability may accompany the injurious process, and here likewise antispasmodic, soothing and restful therapy may restore to normal the motor power, at least to such an extent that all untoward symptoms disappear. In each instance, clinical investigations should be applied from time to time, in the way of motor, secretory, and roentgen ray studies. Should persistent obstruction exist, gastric dilatation being either present or absent,—operative procedure should be applied. Unfortunately, many of these cases do not come for consultation until an advanced stage of pathology has been reached; should we have the opportunity of seeing the case in an early stage, however, it should be our aim to keep the patient under the closest surveillance, in order to forestall untoward eventualities. Repeated studies—roentgen ray, test meals,—should be applied in the endeavor to ascertain with accuracy the number of hours required for evacuation of the stomach; only by such assiduous attention to detail can we hope to avert the advanced pathology to which I have referred. It is our considered opinion that in these conditions of partial or complete obstruction, the unfavorable symptoms are not due to excessive acidity, which we take to be a result of obstruction, but are rather brought about by violent peristalsis, with resultant rise in intragastric or intraduodenal tension. Why it is that at one time intense pain accompanies tetanic peristaltic waves, and at another no discomfort is experienced under the same condition, cannot be definitely stated. However, it may conceivably be due to pyloric gastritis, according to Christensen, and to the greater or lesser degree of tenderness in the inflamed stomach wall due to variations in the circulatory conditions (edema and other disturbances).

VI. *Failure to Obtain Lasting Benefit from Medical Treatment after Repeated Medical Cures:* During the past few years, a radical change has taken place in the attitude of surgeons and internists in regard to the proper time for the application of surgical intervention in uncomplicated cases of ulcer of the gastroduodenal area. It would seem that the two outstanding reasons for this change are: first, while surgery in skilled hands yields in most instances very gratifying results, yet the fondest stretch of the imagination could not enable us to say that the immediate and ultimate results are always desirable; second, it has been amply demonstrated that in not a few cases splendid and lasting results have been accomplished after the second, third, or even fourth attempt at medical cure. All things being equal, we feel that if, after a second intensive, thoroughly and carefully carried out ulcer-cure, there is a re-appearance of outstanding and persistent symptoms—surgical interference is indicated. Finally, it is to be noted that we must quite often be influenced in our decision as to the indicated time of operation, by the economic status of the patient.

VII. *Postoperative Cases in which there is Noted Deformity, Dysfunction, Ulceration, Obstruction, New Growth, or Fistulous Communication with other Organs:* This group is by no means so small as one would wish, and I feel sure we have rather frequently been obliged to recommend surgical interference in cases in which gastroenterostomy and other plastic operations have been performed. Such a procedure may be necessary immediately following operation, that is, a comparatively few days afterwards, where the so-called vicious circle obtains. In these cases, if in spite of gastric lavage, of the withholding of food and drink by mouth, of an abundant supply of fluids intravenously, per rectum and by hypodermoclysis, the blood chlorides decrease, there is an accompanying increase of carbon dioxide combining power depicting a state of alkalosis, then operation is imperative; when there has been a state of marked starvation, with the contrary condition, acidosis, showing a low carbon dioxide combining power, opera-

tion is equally imperative. If, some months or years after surgery has been applied, distress, pain, nausea, vomiting, occult blood in the stool, lack of appetite, loss of weight, anemia, and other untoward symptoms appear and persist, certain it is that operation is indicated. For such symptoms as those enumerated may point to ulceration (reactivity at the point of original pathology, or inflammation or ulceration at the site of operation); or obstruction, new growth, fistulous communication with other organs.

As to malignant affections: We are well aware that prognosis is in every case dubious; yet we feel that practically every individual should be given the opportunity of surgical therapy. In the early or even the moderately advanced cases, we have for the past several years been greatly encouraged by the splendid results obtained by bold resection. The degree to which the process has involved the surrounding or remote tissues, organs and lymphatics, plays a major role in the outcome; but even when operation has revealed the process at a most forbidding stage, surprisingly excellent results have been obtained.

In the case of gastric and duodenal ulcer, we continue to be most optimistic because of the splendid and permanent results we are continually observing; notwithstanding, it is of more than passing interest to quote on this subject no less an authority than Konjetzny of Dortmund: "There is no use mincing the matter. A man who has had a stomach resection is a gastric cripple." He hastens to add, however, "If his postoperative treatment is expert, if he maintains the correct attitude, and regulates his life carefully, he has nothing to fear; he may continue thus indefinitely."

There are four absolute requisites for achievement of successful ultimate results in surgery of the gastroduodenal region; first, correct diagnosis; second, a surgeon possessing knowledge, skill and surgical judgment;

third, careful preoperative preparation; and fourth, meticulous postoperative care.

Even with the knowledge now available, it is at times very difficult to decide wisely and intelligently as to the most advantageous moment for the application of surgical measures; furthermore, even while we acknowledge the superb technical skill of the surgeons, we cannot but observe continuing instances of unfavorable postoperative results. In spite of all this, however, I am convinced that if we persevere in studying our cases with minute care, making every effort to distinguish the subtle differentiations, patiently meditating upon past experiences, holding ourselves in constant readiness to reconsider and perhaps reverse previous ideas and decisions, we shall move steadily forward toward the acquisition of new and invaluable knowledge, and brilliant achievements in the domain of gastroduodenal pathology.

BIBLIOGRAPHY

1. Bargaen, J. A.: Etiology of chronic ulcerative colitis, *J. A. M. A.* 83:332-336, 1924.
2. Brown, T. R., and Paulson M.: Chronic ulcerative colitis, *Internat. Surg. Dig.*, 8:67-85, 1929
3. Paulson, M.: Chronic ulcerative colitis with reference to a bacterial etiology; experimental studies, *Arch. Int. Med.* 41:75-96, 1928.
4. Garrod, L. P.: The control of the intestinal flora, *St. Barth. Hosp. Report*, 58, 1925.
5. Brown, T. R.: Chronic ulcerative colitis, *Ann. Clin. Med.*, 4:425-529, 1925.
6. Kieffer, E. D.: Chronic ulcerative colitis, *N. E. Jour. Med.*, 206:552-554, 1932.
7. Rafsky and Manheim: The significance of the Bargaen organism as an etiologic factor in ulcerative colitis, *Amer. Jour. Med. Sci.*, 133:252-256, 1932.
8. Streicher, M. H., and Kaplan, B.: Chronic ulcerative colitis, *J. A. M. A.*, 94:10-12, 1930.
9. Gaither, E. H.: The advantages of examining the fasting stomach in gastrointestinal diagnosis, *Ann. Clin. Med.*, November, 1922.
10. Bloomfield, A. L.: Clinical aspects of gastric secretion. *Ann. Int. Med.* 6:307-313, 1932.
11. Gaither, E. H.: Effects of surgery of the stomach on its subsequent motor and secretory functions, *J. A. M. A.*, 91:1075-1079, 1928.

THE TREATMENT OF MENSTRUAL
DISORDERS BY THE INJECTION OF
BLOOD FROM PREGNANT DONORS.
A PRELIMINARY REPORT*

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NEW ORLEANS

The role of the sex hormones has become a positive and fascinating factor in dealing with the functional disorders of woman's menstrual and reproductive cycles. In the past ten years accumulative research has offered such conclusive evidence of the powerful influence of these hormones that it is little wonder that many gynecologists have turned toward the problem of harnessing their potential powers in a belief that a significant therapy of adjustment can be brought about with a proper endocrinal relationship. In their simplest forms functional menstrual disorders are due to a lack of balance between the interrelation of the ovarian and anterior hypophyseal hormones, but only recently have the functions of these hormones been untangled sufficiently to understand their actions, and this knowledge affords to the clinician, whose daily routine is filled with cases of endocrinal dysfunction, a tremendous incentive for further investigation.

Twenty-five cases of functional disorders of menstruation are offered, which have been studied and treated over a period of 18 months, but before entering upon a detailed discussion of them, a simple outline of the hormonal control of the normal menstrual and reproductive cycles may be helpful in understanding the rationale of any endocrinal therapy.

It is now generally conceded that the ovary produces two internal secretions during woman's functional years. One has its origin in the granulosa cells of the maturing follicle, and is classified under various names as female sex hormone, oestrin, folliculin, theelin. Its influence extends over the proliferative phase of endometrial growth, that is, the period between the onset of the menstrual flow to about the mid-interval phase, the time of ovulation. In

addition oestrin produces rapid growth, greater motility, and increased blood supply in all accessory genital organs, especially the vagina, uterus and mammary, and it is from the vaginal phenomena of oestrus that the Allen-Doisy smear test for the presence of oestrin is derived.

As opposed to oestrin, experimental studies suggest that the corpus luteum factor, progesterin, is concerned chiefly with the secretory phase of the endometrium, and unless fertilization of the ovum takes place, its hormonal influence ceases until the formation of another lutein body is affected. However, it must be remembered, because of its clinical importance, that progesterin can produce none of the changes specific to it unless the endometrium has been primed, as it were, with oestrin. The influence of oestrin on the endometrium followed by progesterin stimulation, is a one-two type of action, and in this respect the hormones are synergistic. On the other hand their actions may be antagonistic, since progesterin, when it has the controlling influence, tends to keep the action of oestrin in abeyance, or even forces its excretion in the urine.

It has been recently shown by Zondek and Aschheim in Germany, and Smith and Engle in this country, that the anterior pituitary gland plays a dominating role, or is the "motor-control," in the menstrual and reproductive cycles of woman. This gland secretes two hormones, or a quantitative difference of one, which are responsible for the activation and secretion of oestrin and progesterin by the ovaries. It is generally assumed that the first hypophyseal factor, Prolan A, causes follicular maturation and activation of oestrin, while the second hormone, or a greater quantity of the same hormone, termed Prolan B, produces the luteinizing processes in the ovary and the production of progesterin. There is a very small amount of these hypophyseal hormones present in the blood of normal women, but Zondek has shown that the hormonal content increases in an explosive fashion when pregnancy occurs, and on this finding is based the Aschheim-Zondek test for pregnancy.

It is during gestation that the complex actions of the ovarian and anterior hypophyseal hormones become more intricate than ever. The

*Read before the Orleans Parish Medical Society, December 12, 1932.

†From the Department of Gynecology, School of Medicine, Tulane University, New Orleans, La.

corpus luteum, which persists in the secretion of progestin up to the third or fourth month of pregnancy, that is, until placentation has taken place, also secretes oestrin during this same period. When the function of the corpus lu-

teum begins to wane, the secretion of oestrin is taken over by the placenta. This continued secretion of oestrin during pregnancy is the probable cause of the inhibition of menstruation during gestation.

TABLE I
MENORRHAGIA AND METRORRHAGIA—8 Cases

Age	Menarche	Menstrual History (Mos.)	Duration Symptoms	Fertility	No. of Injections	Bleeding Stopped After Onset of Treatment (Days)	Duration of Observation	Objective Results	Subjective Results
32	14	Men.	7 m.	0	4	2 d.	5 m.	4 m. amenorrhoea after 1st. injection. Periods irregular now.	Excellent
26	13	Met.	6 m.	2	3	8 d.	3 m.	3 normal periods	Excellent
27	15	Men.	4 m.	6	1	7 d.	10 m.	9 normal periods	Excellent
24	13	Men.	3 m.	1	4	9 d.	13 m.	11 normal periods	Excellent
27	13	Men.	2 yrs.	0	1	1 d.	6 m.	5 normal periods	Excellent
16	14	Men.	5 m.	0	1	1 d.	4 m.	3 normal periods	Excellent
25*	14	Met.	3 yrs.	1	1	2 d.	6 m.	5 normal periods	Excellent
30	13	Men.	4 m.	1	1	1 d.	6 m.	6 normal periods	Excellent

* D & C for bleeding, 1 yr. previously.

TABLE II
AMENORRHOEA—12 Cases

Age	Menarche	Menstrual History	Duration of Symptoms	Fert.	No. of Injections	Duration of Treatment	Objective Results	Subjective Results
25	12	oligomenorrhoea	12 m.	2	3	3 wks.	9 periods after cessation of treatment	Excellent
36	13	"	3 m.	0	4	4 wks.	0	feels better
29	14	"	4 m.	0	3	3 wks.	4 periods, 1 with, 3 without treatment	Excellent
24	13	infrequent periods	2 yrs.	2	4	4 mos.	0	0
21	17	oligomenorrhoea	1 yr.	0	8	4 mos.	3 periods with treatment	Excellent
24	14	"	7 m.	0	7	3 mos.	0	0
23	14	"	4 m.	0	2	3 wks.	0	0
25	13	"	1 yr.	0	4	4 wks.	0	0
21	15	"	1 yr.	0	17	8 mos.	6 periods with treatment	feels better
23	13	"	6 m.	0	6	12 mos.	0	0

22	16	"	2 yrs.	0	10	4 mos.	2 periods with treatment	Excellent
15	11	"	6 m.	0	3	3 mos.	2 periods; 1 with, 1 without treat.	Excellent

TABLE III
PRIMARY DYSMENORRHOEA—3 Cases

Age	Menarche	Duration of Symptoms	Fertility	Number of Injections	Duration of Treatment	Objective Results	Subjective Results
20	11 yrs.	9 yrs.	1	2	2 m.	0	feels better
20	16 yrs.	4 yrs.	0	4	3 m.	improved	much better
22*	14 yrs.	8 yrs.	0	3	3 m.	0	0

All cases still under treatment.

*Previous D & C and the insertion of Stem pessary.

TABLE IV
MENOPAUSAL DISTURBANCES—2 Cases

Age	Duration of Symptoms	Number of Injections	Duration of Treatment	Objective Results	Subjective Results
46	6 m.	4	3 m.	Good—slight return of flow	Excellent
19*	6 m.	4	2 m.	Asymptomatic 7 mos.	Excellent

*Artificially sterilized.

Because oestrin and the anterior hypophyseal luteinizing factor, the only two sex hormones now available commercially, were not on the market when this treatment was instituted, and because of their present high price, the blood of pregnant women was used as the source of the two hormones. The technic employed was to withdraw 10 cc. of venous blood from the cubital vein of a woman in the early months of pregnancy, and to inject it immediately in the buttocks of the patient. The injections were given at weekly intervals when the treatment was indicated. From the hormonal test described by Frank and Zondek, 10 cc. of venous pregnancy-blood contains 30-100 units of the anterior pituitary luteinizing factor and a variable amount of oestrin. Ten cc. was chosen arbitrarily as the desired dosage because of the lack of local symptoms it produces when injected into the buttocks, and because Zondek has pointed out that smaller doses are safer when the desire is to bring about the normal processes of ovulation and luteinization, since there is danger, if too great luteinization takes place before ovulation can occur, that the ovum will be imprisoned within the luteinized follicle. Also experimentally Frank has shown that excess hormonal concentration of the blood is quickly excreted in the urine.

Twenty-five cases of menstrual disorders were studied and treated, and in all cases no pathology other than endocrinal dysfunction could be found to explain the condition. The cases can be subdivided into four main groups, each of which will be discussed separately.

I. IDIOPATHIC, OR FUNCTIONAL UTERINE BLEEDING, OR HYPERPLASIA OF THE ENDOMETRIUM: 8 Cases.

This condition has been studied in detail by Schroeder and Meyer, R. in Germany, and Novak, Fluhmann, Graves and Burch in this country. These observers agree in general that hyperplasia of the endometrium is produced by excessive ovarian follicle hormone stimulation, in the absence of the corpus luteum factor, and with a possible anterior pituitary causation in the background. Histologically, the endometrium presents a general lack of uniformity of the glandular elements embedded in a dense stromal proliferation. Clinically, the hemorrhage is most frequently found at the extremes of the menstrual life, a period when the one-two action of the ovarian hormones is not rhythmic, a fact which offers an explanation that this type of bleeding is really an exaggerated oestrous, or intermenstrual hemorrhage, since ovulation is known not to occur.

The cause of bleeding in this condition is not

definitely settled. Schroeder, Graves and Fluhmann consider small localized necrotic areas of the endometrium to be the main source of the hemorrhage, while Hartman is of the opinion that the threshold for bleeding is greatly lowered. Novak comments upon a possible increased permeability of the blood vessels of the endometrium, resulting in profuse pouring out of the blood elements by diapedesis. This theory is substantiated by Geist, who has shown that endometrial debris is not cast off in the hemorrhage of endometrial hyperplasia.

The aim of treatment of hemorrhage in hyperplasia of the endometrium is to convert the persisting non-secretory hyperplastic state of the endometrium into the secretory, pregravid or premenstrual type, usually associated with normal menstruation. Progesterin, the corpus luteum factor, is the ovarian hormone controlling this phase of the menstrual cycle, but since this product is not available for human administration, the anterior pituitary luteinizing hormone was substituted.

The following eight patients with excessive bleeding were treated as described, and in every case the hemorrhage was successfully checked and the subjective symptoms markedly improved. In general, it may be said that of all the types of menstrual disorders treated in this series, hyperplasia of the endometrium was the most easily handled. Bleeding in 3 cases was stopped the day of the first injection, while in the remainder, cessation of the flow was obtained in 5 days.

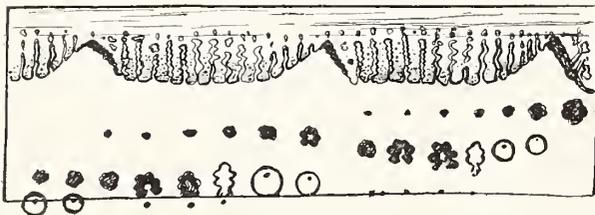


Fig. 1. Diagram showing the parallelism between the phases of the follicle and endometrium during a normal menstrual cycle.

II. AMENORRHOEA: 12 Cases.

Fortunately amenorrhoea is rarely a serious condition even though psychically it may be rather disturbing. Usually lack of menstruation is a manifestation of general hypo-glandular secretion, as shown by an insufficient gonad-stimulating action of the anterior hypophysis,

thyroid, etc., or by the persistence of the corpus luteum with continued progestin activity. The patient is often obese, of sluggish mentality, phlegmatic in nature, and has a negative basal metabolic rate. The rational treatment for such cases is to employ the anterior luteinizing principle after the endometrium has been primed, as it were, with the follicle hormone. Since both of these principles are contained in pregnancy blood in a normal human percentage, injection of blood from pregnant women should take precedence over an artificial mixture of the same hormonal principles. In the following 12 cases definite flow returned in 6 patients, while the subjective symptoms improved in only a slightly greater percentage. I cannot stress too emphatically the psychic enthusiasm over the return of the menstrual flow, especially evident in the negro women; their delight in success radiates from their faces, and joyously they report once again they have "seen."

The main problem is whether or not bleeding produced after an amenorrhoea is normal menstrual bleeding, or if again we are dealing only with an amenorrhic phase of a hyperplastic condition of the endometrium; too few curettements are done in women with amenorrhoea to justify the exact type of the endometrial findings. Also, whether or not the uterine bleeding, if once returned, will remain a permanent rhythmic flow is another speculation. Although 6 patients have been menstruating at regular intervals for an average of $4\frac{1}{2}$ months, with or without monthly injections of pregnancy blood, the time is too short and the patients too few to justify any conclusion. It may seem paradoxical that the same treatment, used to check excessive uterine hemorrhage should be employed to start the menstrual flow, but the old axiom of "a thing is useful as long as it

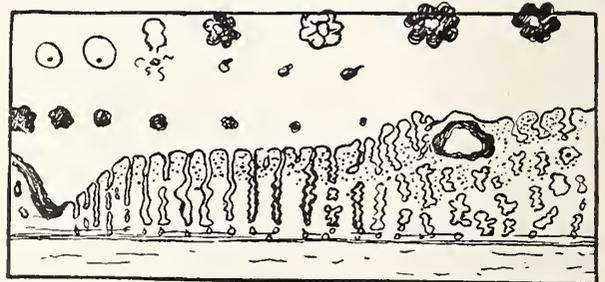


Fig. 2. The ovarian and menstrual cycle during pregnancy.

works" may be applicable to these two conditions.

III. PRIMARY DYSMENORRHOEA: 3 Cases.

This is a condition which has recently commanded much attention with the increasing knowledge of the sex-hormonal action on the uterus. Knaus in Germany, Parkes, Bourne and Burn in England, and Marshall, Dixon, Reynolds and Novak in this country, have contributed important observations. It has been shown that the oestrous phase in the non-pregnant rabbit is associated with marked uterine activity, while anoestrous is characterized by only feeble motility, if any at all. Translated to the human problem, uterine rhythmic contractions increase progressively with maximum muscular activity as the graafian follicle develops. After rupture of the follicle and the corpus luteum formation, the uterine contractions are inhibited, so that during the progestin phase of the cycle the uterine muscle is relatively quiescent. Clinically, the pain in primary dysmenorrhœa is characteristically of a spasmodic, colicky nature, suggesting painful exaggerated contractions of the uterus. The pain begins a day or two before the onset of the flow, theoretically, the time when the lutein body begins to degenerate, and the oestrin ascendancy again comes into its own. Removal of the corpus luteum influence brings about a rapid return of uterine contractions, in fact, as shown by Knaus, this is the period of maximum muscular activity.

The aim of treating primary dysmenorrhœa with the anterior pituitary luteinizing factor is to keep the stimulating uterine action of oestrin in abeyance as long as possible; or if there be an imbalance in the oestrin-progestin ratio at the time of the period, the anterior hypophyseal factor will remedy the deficiency. Only 3 cases were treated in this series, with no definite improvement of the condition, although the injections were given just prior to the menstrual flow.

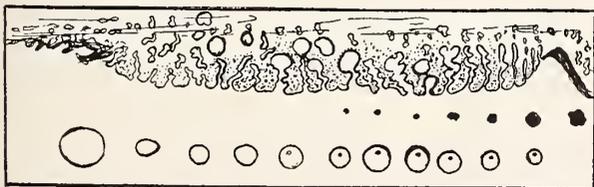


Fig. 3. The follicle and endometrium in a typical case of dysfunctional bleeding.

IV. MENOPAUSAL DISTURBANCES: 2 Cases.

This condition often manifests itself as severe nervous vasomotor symptoms. During the menopause in many women little disturbance is produced, in some there is moderate discomfort, while in a few the symptoms of characteristic vasomotor flushes, dizziness, are so frequent and so severe as to make the patient quite miserable. The aim of the treatment in menopausal disturbances is purely a glandular substitutional one, for at this time of life the whole organism is passing through a readjustment of all the glandular secretions. The anterior pituitary gland hypertrophies and theoretically the amount of its secretion increases. Again some unbalanced ratio between the secretions of this gland and the ovary may follow, resulting in the well known menopausal symptoms.

In the two cases treated excellent results were obtained in both. One case is worthy of notice. The patient, a 19-year-old colored girl, had been artificially sterilized 14 months previously and for 6 months had been unsuccessfully treated by me with sedatives and bromides. Since pregnancy blood was injected she has been asymptomatic for 7 months.

COMMENT

It is most difficult to evaluate the true cure of any menstrual disorder because of the difficulty of estimating the psychic factor, because of the well-known variations in different women, and because of the lack of similarity in the same woman at different times. Nevertheless, the subjective psychic satisfaction that there has been an amelioration of the menstrual disorder, whether or not it can be scientifically proven, is of tremendous gratification to the patient, who, from her point of view, has been greatly benefitted.

When this treatment was inaugurated I had no knowledge that other observers were injecting pregnancy blood in the treatment of menstrual disorders, but on reviewing the literature Maortua, Esch, Maurizio, and Ehrhardt in Germany, and Burch in Nashville have reported encouraging results from somewhat similar treatment.

Several of the advantages of the method of treatment have been noted: (1) its cheapness

and convenience; usually the obstetrical and gynecological clinics are adjacent, and consequently little trouble is found in securing pregnant patients; (2) the normal ratio of the ovarian and hypophyseal hormones is present, a factor which should be considered, since limited encouraging reports have been advanced based on the treatment of similar conditions after the administration of oestrin and the anterior hypophyseal factor, singularly or in artificial combination. However, the disadvantages of this form of treatment far outweigh the advantages: (1) no woman likes to be injected at weekly intervals with different patients' blood, even though the Wasserman test is pronounced negative; (2) the local reaction from the injection is painful to some patients; (3) this treatment might circumvent diagnostic curettages and biopsies, two procedures very necessary to rule out early malignancies; (4) the inconvenience of sterilizing the necessary amounts of blood for private office practice would be disadvantageous, and the stability of the hormone action is known to be only temporary; (5) except for Frank's and Zondek's observations, no exact status of the hormonal ratio in pregnancy blood is known, and consequently this method of treatment is not as scientific as it should be, especially when the influence of foreign protein therapy is considered.

CONCLUSION

At the present day every gynecologist must keep in close touch with the rapid progress that is being made in the experimental and clinical investigations of woman's reproductive cycle, since many conditions formerly thought to be organic in origin are being found to have a functional inception. The present series of 25 cases of menstrual disorders, treated by the injection of blood from pregnant donors, is only a preliminary effort in the treatment of four gynecological disorders by sex-hormonal therapy. No attempt has been made to draw any conclusions, nor has this method of treatment been advocated to supplant others, since the past success of thyroid therapy, especially in amenorrhoea, is only too well known. And finally, any new method of therapy dealing with the disorders of menstruation must fulfil the requirements of 3 tests: (1) that the restored uterine hem-

orrhage is true menstrual flow, not merely menstruation without ovulation; (2) that the menstrual cycle can be regulated to its normal periodicity in order to make future conception possible; and (3) that the menstrual cycle, restored to its normal rhythm, will remain a permanent function.

BIBLIOGRAPHY

1. Bourne and Burn, Synergistic action of oestrin and pituitrin on the isolated uterus. *Lancet*—Nov. 17, 1920, 1928.
2. Burch, J. C., Discussion of paper of Novak, E. The etiology and treatment of functional uterine bleeding. *Southern Med. Journal* 25: 266, 1932.
3. Burch et al. Experimental studies on the etiology of endometrial hyperplasia. *Surg. Gyn. and Obs.* 53: 338-345, 1931.
4. Dixon and Marshall, The ovary and pituitary in parturition. *J. Phys.* 59:276, 1924-5.
5. Ehrhardt, Transfusion of blood of pregnant women. *Verhand. d. Deut. Gesel. f. Innere Med.* 42nd Congress, 87, 1930.
6. Fluhmann, C. F. The interrelationship of the anterior hypophysis and ovaries. *Am. J. Obs. and Gyn.* 22: 803, 1931.
7. Frank, R. T. Role of the female sex hormone. *J. A. M. A.* 97: 1852, 1931.
8. Giest, S. H. The morphology of menstrual blood and its diagnostic value. *Am. J. Obs. and Gyn.* 22: 532, 1931.
9. Graves, W. P. Some observations on the etiology of dysfunctional uterine bleeding. *Am. J. Obs. and Gyn.* 20: 500-518, 1930.
10. Knaus, *Arch. f. Gynak.* 111: 374, 1930.
11. de Maortua, C. Note on the work of Esch on "Hormone therapy through intramuscular injection of pregnant blood in menstrual disorders," published in *Zentralblatt f. Gynak.* 54: 19-26, 1930. *Zentralblatt f. Gynak.* 54: 736, 1930.
12. Maurizio, E. Hematological investigations and treatment of metrorrhagia of puberty by blood grafting or small transfusions. *Zentralblatt f. Gynak.* 54: 1748, 1930.
13. Meyer, R. A contribution to our knowledge of normal and diseased ovulation and the uterine processes related to it. *Arch. f. Gynak.* 113:259-314, 1920.
14. Novak, E. On certain endocrine factors in menstruation and menstrual disorders, with special reference to the problem of menstrual bleeding and menstrual pain. *Am. J. Obs. and Gyn.* 24: 319, 1932.
15. Novak, E. and Martzloff, K. H. Hyperplasia of the endometrium, a clinical and pathological study. *Am. J. Obs. and Gyn.* 8: 385, 1924.
16. Novak, E. and Reynolds, S. R. M. The cause of primary dysmenorrhoea. *J. A. M. A.* 99: 1466, 1932.
17. Parkes, A. S. Synergism between oestrin and oxytocin. *J. Phys.* 69: 463, 1930.
18. Schroeder, R. Anatomical studies of normal and pathological physiology of the menstrual cycle. *Archiv. f. Gynak.* 104: 27-102, 1915.
19. Shaw, W. Irregular uterine bleeding, *J. Obs. and Gyn. Brit. Emp.* 36: 1-69, 1929.
20. Smith and Engle. *Am. J. Anat.* 40: 159, 1927.
21. Zondek and Aschheim, *Arch. f. Gynak* 130; 1, 1927.

DISCUSSION

Dr. Hilliard E. Miller: The work represented in the paper which Dr. Witherspoon has given us tonight is exceptional, original, and most interest-

ing. There is rarely a day in the life of a busy gynecologist which does not bring forth some phase of dysfunction of the hormones which have to do with regulating normal menstrual function, and while the active influence of these activities are fairly well understood, we still have dismal failures in many instances where the commercial preparations are used to inaugurate the various synergistic influences which are necessary for priming and timing of the physiological factors involved. Furthermore, from recent studies it appears that actual harm may result from the wholesale and indiscriminate administration of hormonal products in cases where a false evaluation of endocrinal function is made or where no study has been made of the endometrial pattern. For instance, large and too frequent doses of theelin, not only retard ovulation but actually prevent rupture of the ripening follicle with imprisonment of the ovum. The persistence of the unruptured follicle not only maintains a predominance of oestrin but inhibits corpus luteum formation with consequent imbalance of progesterin and failure to menstruate. In other words, sterility and amenorrhea can follow careless administration of hormones.

As far as our present knowledge goes, the study of the endometrium just prior to menstruation affords the most accurate estimate of hormonal deficiencies and dyscrasias, and I believe, in most cases, a complete study of this structure is requisite to any hormonal therapeutics. Anspach has not only required this study but has insisted upon a quantitative estimation of the hormones of the blood and urine in all cases just previous to menstruation.

In our enthusiasm about sex hormones disturbances we must not forget the many secondary factors, other than pelvic pathology, which influence normal menstruation. A large group which have menorrhagia and amenorrhea are women who lead a very sedentary life, with its consequent train of nervous symptoms, constipation, and secondary anaemias. These cases will only respond and return to a normal menstrual cycle by the correction of their faulty habits and the rebuilding of a red blood cell count to a normal level.

A second group comprise the thyroid deficiencies. The patient presents a typical hypothyroid history and appearance and besides, is usually sterile. The careful and proper giving of thyroid extract will accomplish astounding results in "changing the appearance", improving general health, and in many instances correcting the dyscrasia which has inhibited conception.

I agree with Dr. Witherspoon that in the blood of a pregnant woman we have probably the best admixture of nascent hormones obtainable, and consequently, should expect a more prompt and

decided action from its use. This no doubt accounts for the excellent results which he obtained in cases of menorrhagia and for which I congratulate him heartily.

Dr. H. R. Unsworth: I do not know any closer relationship than that which exists between the female pelvic organs and the central nervous system. This is evident in both the organic psychosis and functional nervous disorders. More particularly is it true in manic depressive psychoses of the female. Irregular menstrual habits of the psychotic female are so common that at the De Paul Sanitarium the condition of that patient, whether improved or not, is often indicated by the character of the menstrual function.

Along with Dr. Miller it has been my experience among psychotics to find the thyroid more particularly at fault in irregular menstrual function. Not alone do we find this to be true in the hyper, but in the hypo-thyroid patients as well, and especially where you have anxiety states attached to the psychosis.

Contrary to Dr. Miller's experience in reference to the use of theelin and corpus luteum, I have had very gratifying results in these patients having menstrual dysfunctions.

I wish to congratulate the essayist on his paper.

Dr. J. Thornwell Witherspoon, (In conclusion): I think the only thing I can add is that possibly instead of giving whole blood injections, to give the serum of blood from pregnant women. I hope within the next year to report something further.

DIAGNOSIS AND TREATMENT OF THE ENLARGED THYMUS*

ROY E. DE LA HOUSSAYE, M. D.

NEW ORLEANS

My interest in the thymus gland dates back to 1921 when as a member of the house staff of the New York Nursery and Child's Hospital, I had the pleasure of assisting Dr. Edward Liss in his remarkable work on the thymic shadow in infants.

Edward Hiram Riede in a "Review of the Advance in the Knowledge of the Thymus Gland" states: "A gland too, that possesses the potentiality of hypertrophy in adult life must, I think, be reasonably assumed to be more than an atrophic remnant. This hypertrophy consistently does occur in certain dis-

*Read before the Orleans Parish Medical Society, April 10, 1933.

eases of adult life, noted among Cushing's cases of posterior lobe deficiency in pituitary disease. Crowe found it recorded in all cases of Addison's disease—Johns Hopkins, and Holstead says it has been found in 82 per cent of exophthalmic goitre patients dying of some other disease.

I do not feel that I am bringing forth anything that is not already known about the thymus gland, but there are a few points that I want to emphasize. Today the laity is beginning to take an unusual interest in the thymus and discussing it very frequently. The doctor on the case must be very thorough. Before making a definite diagnosis of thymus, he should take into consideration the following for a differential diagnosis: congenital heart disease, congenital atelectasis, pneumonia, cerebral hemorrhage, tetanus, congenital laryngeal stridor, tetany, malformations, asphyxia, from aspiration of food into the larynx or trachea, purulent rhinitis with bronchitis, allergy and many others. Dr. Carroll Pounders of Oklahoma City, at the last meeting of the Southern Medical Association reported a case operated on three times for pyloric stenosis when all the symptoms were due to allergy. In the discussion I reported one case similar to this. When the symptoms do not subside within three or four weeks after one treatment with

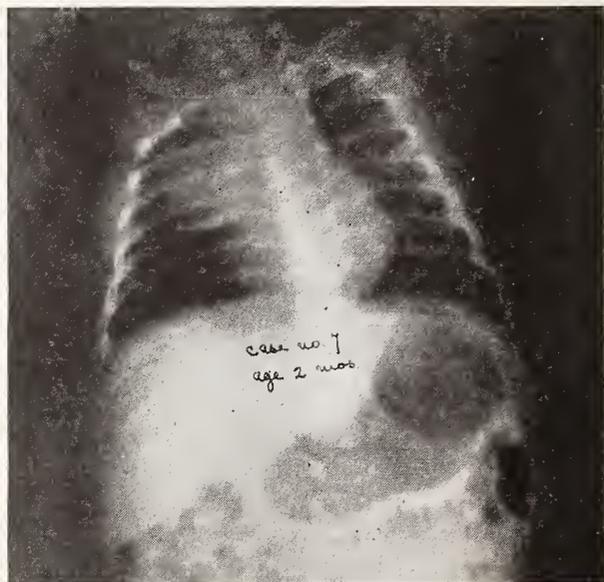
radium, then an exhaustive study should be made for causes other than a thymus.

Our treatment with roentgen ray is: 5 minutes, 140 KV, 5ma, 20 inches from skin, $\frac{1}{4}$ mm Cu. and 1 mm Al. Our treatment with radium consists of: 100 mgms with 1 mm brass filter, 1 inch from the skin for five hours.

CASE REPORTS

NORMAL CHEST, J. R.

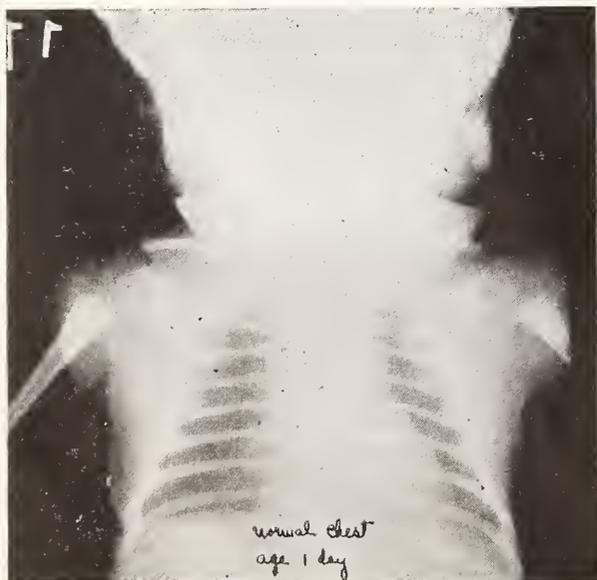
This radiograph is on the sister of Case III and was taken at the age of one day. "Both diaphragms, the heart and aorta are within normal limits. The pulmonary fields are brilliantly clear, there is no evidence of enlargement of the thymus to be observed in the superior mediastinum, but the pulmonary fields are well aerated and well ex-



panded." This infant at the age of six weeks started spitting up small amounts after each feeding. Not on the breast—many different formulas were tried but the child continued to vomit. A later radiograph was not made as the family changed doctors at this time.

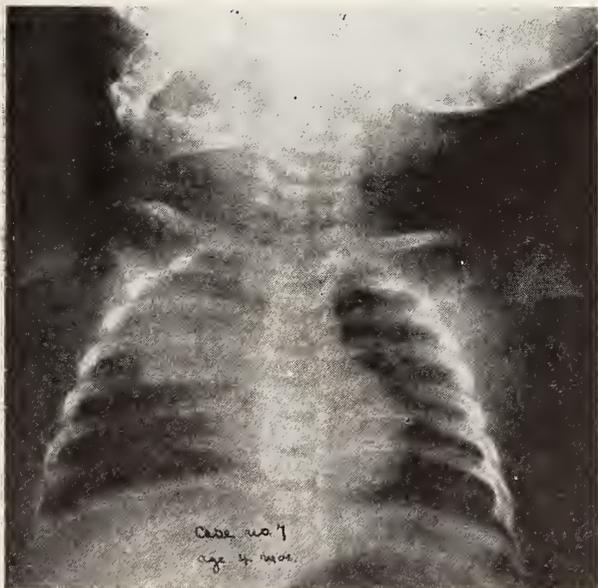
CASE I. E. S., female infant, birth weight 8 pounds 8 ounces, low forceps delivery. At age of six weeks baby weighed 11 pounds 14 ounces; was happy. Had snorting respiration on lying down, mottled skin, dullness on percussion over thymus area. Roentgen ray examination showed a marked thymic enlargement to right and left. Treated by means of radium. The child has developed normally and at the present time is 2½ years old.

CASE II. J. C., female infant, twin, birth weight 5 pounds 11½ ounces, breech delivery. Baby was normal for first two days, slightly cyanosed and



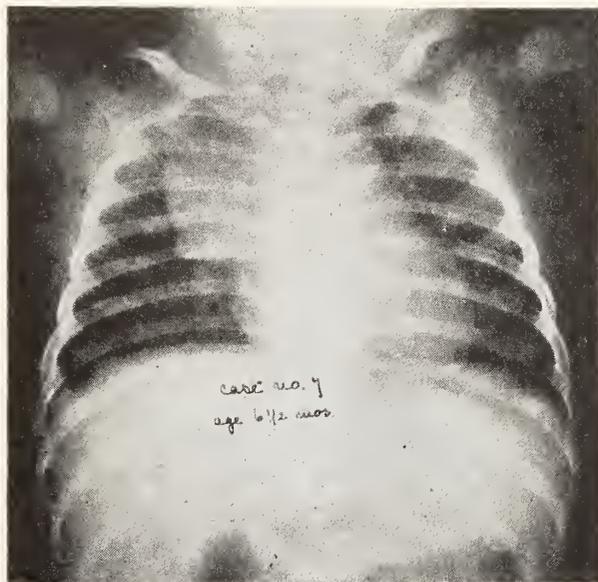
vomited on second night. On fourth day baby was drowsy and had difficulty with nursing. At noon feeding became slightly cyanosed and had labored breathing for about one hour. At next feeding became markedly cyanosed and stopped breathing for several seconds, then respiration became rapid and irregular. Radium was applied and baby had one attack of cyanosis at the time radium was removed. Had none from that time on. The child is now four years old and in splendid health.

CASE III. P. A. R., female infant, birth weight 7 pounds 1 ounce, normal delivery. At age of five weeks baby had developed a cough, was sleeping with head thrown back, and on crying became cyanosed. A diagnosis of thymus was made. Roentgen ray examination showed an enlargement of the thymus to right and left. Roentgen ray treatment instituted. Ten days following roentgen ray therapy baby had slight head cold and I was spraying the nose with pinoleum when the baby became cyanosed, later becoming white and limp. The following day another roentgen ray treatment was given. One week later baby had worst cyanotic attack of all, was unconscious for many minutes. Mother rushed to the Touro Infirmary which is about twenty five blocks from her home. On recovering from this spell the following day one application of radium was used. From this time on the child had no further attacks and has developed normally. Is now three years old.



CASE IV. E. N., female infant, birth weight 8 pounds 10 ounces, normal delivery. Between second and third week baby started with terrible colic, vomiting with almost every feeding. The older sister of this baby had had thymus so it was thought of here. Roentgen ray examination of the chest showed evidence of an enlargement of the

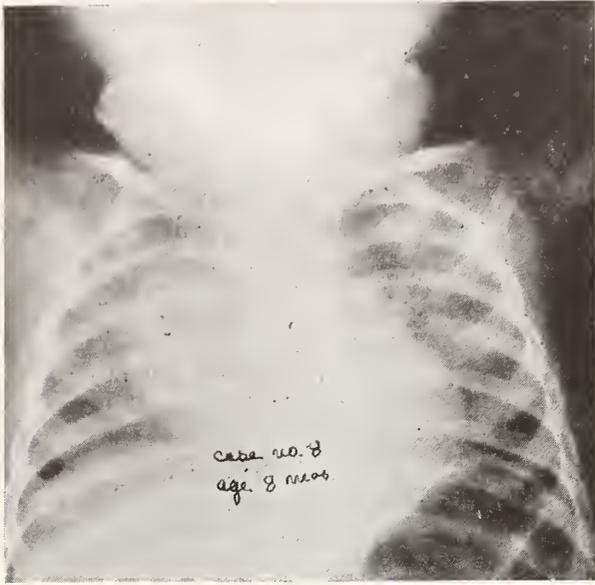
thymus to the right and left. Radium therapy was instituted and two months later baby was perfectly normal. Child is now 2½ years old.



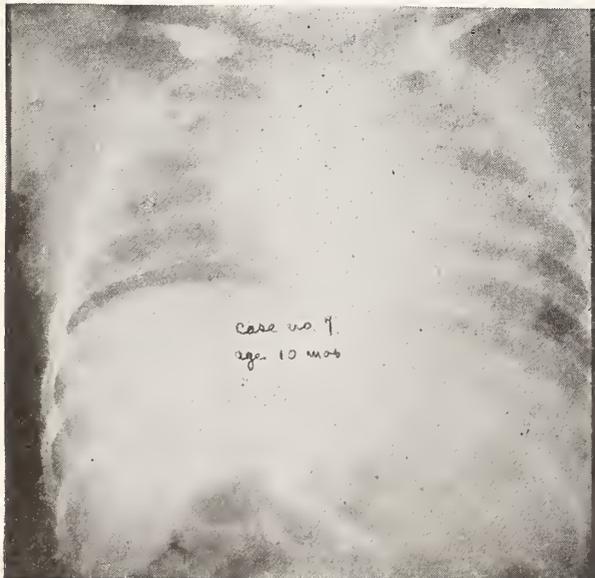
CASE V. J. N., female infant, birth weight 7 pounds 8 ounces, normal delivery. When three weeks old started vomiting after each breast feeding. At times vomiting was projectile in type. Child exhibited marked abdominal distention, was constipated, very restless, pylorus definitely palpated, and at times respiration was loud, noisy, and wheezing in type. Roentgen ray examination showed a very definite thymic enlargement to the right. Child was given three roentgen ray treatments, one week apart. One month from first roentgen ray treatment wheezing type of respiration much diminished, baby happy, no vomiting, spitting up a little after each feeding except night feeding. Five months after first roentgen ray treatment baby was in splendid condition, no vomiting or spitting up, eating well. Child was normal in every way up to 2½ years, at which time became extremely restless at night, cause undetermined, general condition good. Child is now four years old, well and happy. Sister of Case IV.

CASE VI. L. R. S., female infant, birth weight 6 pounds 12 ounces, normal delivery. At age of one month came to see me with following symptoms: coughing for one week, loud, brassy type, from birth had had deep snore, very restless, coughing and choking spells; baby would get almost black with some of these attacks of coughing. Breast fed. Physical examination: On percussion there was a dullness over thymus area and a diagnosis of enlarged thymus was made. Roentgen ray examination showed evidence of a distinct thymic enlargement to the right. Two roentgen ray treatments were given, one week apart. After

the first treatment there was no further coughing. From this time on baby was perfectly normal. Child is now three years old.

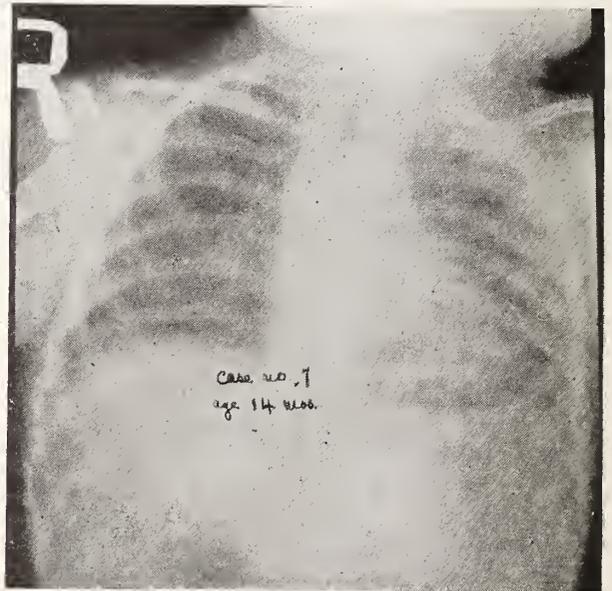


CASE VII. B. B., premature infant, male, twin, birth weight 4 pounds 4 ounces, induced labor. For six weeks baby did beautifully, gained weight daily and was happy. At six weeks baby started crying with colic for two or three hours a day, later developed noisy respiration, occasional vomiting, and sleeping with head thrown back. The latter condition gradually became worse. He developed such a marked opisthotonus that the father, at my suggestion of thymus and advising a roentgenogram of the chest, insisted that his whole spine be radiographed due to the marked curvature. Roentgen ray examination of the chest showed a



marked thymic enlargement confined entirely to

the right side. The shadow extended well down to the mid portion of the chest. The dorsal spine was negative. Radium therapy instituted the following day. Almost like a miracle the symptoms enumerated above cleared up and the child progressed in a normal manner. Two months later a second radiograph of the chest showed evidence of a persistent thymus. At this time there were no symptoms whatsoever. Two and one half months from the date of the second picture, a third was taken, which still showed evidence of a very large thymus to the right and left. Eight months from the date of the first radiograph a fourth one was made. This still showed no appreciable change in the size of the thymus. At this time there were no symptoms noted at all. A blood count made on this date showed: WBC 13,750, N 28, L 72. The family had been insisting that I give the baby further treatment due to the persistent roentgen ray appearance of the thymus and as this fourth picture showed no improvement I had to accede to their demand. A second application of radium was made. Four months later the fifth radiograph was made, which showed no evidence of thymic enlargement. The child is now two years old and has just recovered from an attack of bronchopneumonia with definite consolidation of the entire left lung. He never appeared desperately ill and ran temperature 102-104° for eight or nine days.



CASE VIII. E. H., male infant, birth weight 8½ pounds, normal delivery. At the age of five months when first seen by me my findings were as follows: general physical condition good, two teeth, mild catarrhal otitis, red throat, and phimosis. He was taking a formula of unsweetened condensed milk with dextri-maltose. This infant was very restless at night, awakening many times and crying out as

if in pain. He seemed to have a great deal of gas. Sedatives, ear drops, everything was resorted to in an effort to overcome this extreme restlessness. A change of formula was suggested, but the mother, having had so much difficulty in the beginning, called her former pediatrician by long distance and it was decided that we would continue with the same formula. I had the infant brought to my home one night with a trained nurse that I might observe his actions more closely. I had previously suggested that it might be a thymus and had advised a roentgenogram, but this had been put off. The mother was just about on the verge of a nervous breakdown and the father was quite upset. A roentgenogram was insisted upon. Radiographic examination of the chest showed evidence of a marked thymic enlargement to the right. Radium applied. After twenty four hours from treatment baby was perfectly normal and mother felt like a miracle had been performed. Baby is now one year old, happy, and in splendid health. I had the mother write a history of her troubles from birth up to the first time the baby was seen by me. "Had trouble from start making him take breast. After week tried him on Eagle Brand which he took but vomited immediately after. Had breast milk analyzed twice, found perfect in every way and a sufficient amount. Take breast few minutes then turn loose and cry. Nurse in charge at hospital said she knew something was wrong but couldn't find out what. Came home on fifteenth day, baby losing weight—still refusing to take breast for more than five minutes at a time. Third week refused breast altogether. Put on bottle which took fairly well but disagreed and bowels became upset. About this time (3 weeks) had first spell being unable to sleep lying down. Would sleep as long as nurse held him in arms. When put on bed would start twitching and throwing hands over head as if he was going to have convulsions. Gave him enema, warm bath and paregoric but still unable to sleep except in nurse's arms. Lasted about three days. During this time had tried several formulas, none agreeing. After week, put him on Pet milk unsweetened with lactic acid drops. This agreed perfectly so gradually added Dextri-Maltose. Have had no trouble with food since that time. At five weeks, still not sleeping as should but much improved. Let nurse go. At six weeks, has another spell. Unable to sleep except in arms. Much more severe than first. Recall nurse. Stools perfect—taking all nourishment given and gaining in weight. No symptoms of colic, but try changing the amount of food and sugar, which has no effect. This lasted about a week or ten days, some days being worse than others. Nurse called my attention to fact that when baby did sleep lying down his face would gradually get as white as chalk. Naturally a very rosy baby. After this had no

special trouble; not sleeping so well but nothing to worry about, gaining in weight. Cut two teeth at four months. No trouble. Weight 16 pounds. Moved to New Orleans, September 1. Baby doing fine, sleeping well. In about two weeks starts being wakeful again, sleeping about half hour or so, waking and crying. Seems perfectly well in daytime, eats and plays normally, except doesn't take his naps properly."

CASE IX. L. K., male infant, birth weight 8½ pounds, normal delivery. Few sibilant rales noted in chest on first examination. At the age of five weeks weighed 11 pounds 12 ounces, sibilant rales still present, loses breath, and becomes slightly cyanosed on crying. Roentgen ray examination of the chest revealed a definite thymic enlargement to the right and left. Radium applied following day. Child has developed normally and been in splendid health since that time, is now 1½ years old.

CASE X. L. B., male infant, birth weight 8 pounds, low forceps delivery. Was seen by me at age of one month. Systolic blow at apex was noted, baby had noisy, nasal respiration and a slight cough. Suction was used on nose with no results. Roentgen ray examination of the chest showed a slight thymic enlargement to the left. At six months the baby still had the noisy respiration but was well and happy, temperature 99-100½. Examination of the chest showed evidence of a marked thymic enlargement to the right and left. Radium was applied after this examination. Breathing at night markedly improved after radium therapy. At the age of nine months roentgen ray examination of the chest was negative for enlargement of the thymus. The child is now three years old.

TABULATION OF SYMPTOMS ACCORDING TO FREQUENCY IN 29 CASES

GROUP I

Restlessness
Noisy Breathing
Cough
Cyanosis
Breath holding

GROUP II

Gas
Vomiting
Labored respiration
Retraction of head
Mottled skin

GROUP III

Sibilant rales
Respiratory crow
Palor
Tendency to strangle

Difficult swallowing
Mental retardation
Flushed face
Free perspiration
Opisthotonus

CONCLUSIONS

1. Radium therapy is superior to roentgen ray therapy.

2. The thymus gland is a gland of internal secretion and as such, produces the symptoms enumerated. (Symptoms subsided too quickly in the most severe cases after one application of radium to feel that a shrinkage of the gland had taken place.)

3. Roentgen ray examination is only a laboratory test in the diagnosis of thymus enlargement.

ROENTGEN RAY AND RADIUM THERAPY*

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HOUSTON, MISS.

Radioactive agents have made wonderful progress in the past few years in the treatment of disease. The action of the rays of radium and roentgen rays in destroying certain types of cells malignant and non-malignant, has led to an intensive study of the biological reaction within the cells.

Biophysical and biochemical changes occur in malignant cells from radiation. Radiation is the process by which energy is propagated through space. Radiant energy is that force, or agent, or action, which is transferred by radiation. Energy is emitted by nearly every substance at the cost of its own energy. The best results can only be obtained by having both radium and roentgen ray at one's disposal. Some cases can be treated more satisfactorily and with better end results with radium, while other cases can be treated better with roentgen ray. Therefore, those who are using radiation therapy should have both roentgen ray and radium at their dis-

posal so that choice may be made in each case.

In general any one thing that interrupts the normal physico-chemical equilibrium of a cell, either by a lack or excess of some important substance, results in dislocating a fine and delicate adjustment. Tissues made up of various organic and inorganic constituents evoke different responses when subjected to radiant energy. Living matter consists of various substances which are transformed into the chemistry and physics of the cell, though the principal substances in the living cell prove to be inconstant. Embryonic tissue, lymphoid tissue, and cells of highly specialized generative organs are especially sensitive to radiant energy. This should, and does, apply to malignant tissue embodying these elements as the chief structure. We therefore conclude that tumors made up of embryonic and lymphoid tissue and cells of reproductive function are especially radiosensitive.

This special sensitivity is probably due to a more or less active mitotic function and to the fact that these cells contain substances which are particularly responsive to radiant energy.

In order to prognosticate the effect of radiation on a lesion or tumor, it is necessary to know the type of tissue contained in the neoplasm. Distance of tube, intensity, filtration, and time enter into the treatment. The skin of different individuals responds differently to radiation, and different portions of skin of an individual respond differently. This is equally true of malignancies. Some malignant conditions yield promptly to radiation while others do not yield at all.

It is well to bear in mind that because of the physiological and biological differences between normal and neoplastic tissues, malignant tissue reacts differently from normal tissue made up of the same cell type. The metabolism of a cancer cell is entirely unlike that of a normal cell. The chief difference consists in the phenomenon that the normal cell maintains itself by respiration, or oxidation, whereas the cancer cell exists chiefly by glycolytic activity, and with a minimum

*Read before the Section on Radiology at the Sixty-Sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

amount of oxidation, therefore the cancer cell is able to live for days without oxygen. Embryonic tissue is also able to survive under anaerobic conditions by splitting glucose into lactic acid. When, however, the embryonic and the cancer tissue are returned to aerobic surrounding, the embryonal tissue resumes normal respiration, but the cancer tissue continues to function by the same cleavage process of splitting glucose into lactic acid. There is a striking difference in the metabolism of normal and neoplastic tissue.

The scientific significance of this alteration in the metabolism of the cancer cell is important because it gives the key to the increased sensitivity of the cancer cell to radiant energy.

Normal tissue grows and multiplies in a medium made up of plasma from the same species of animal from which the normal tissue was taken. Connective tissue from a chick embryo heart grows best in the plasma of a fowl, epithelial tissue of a rat embryo grows best in the plasma of a rat. Unlike normal tissue, cancer cells grow and proliferate in the serum from animals of different species. The increased metabolic activity of the cancer cell accounts, in part, for its increased radio-sensitivity as compared with normal tissue. The result obtained in treatment depends on the wave length used. Short waves may penetrate the entire tissue, while long waves are absorbed at the surface only. The biological reaction in tissue is proportionate to the beam of radiation which is used. If the dose of radiation is sufficiently large it will destroy all the cells in a comparatively short time. On the other hand, a smaller amount will attack only the susceptible cells, the surviving or resistant cells repair the injury. Roentgen ray and radium are recognized by all as good treatment for malignancies. They are in no sense competitors of surgery. The therapist **MUST** work with the surgeon if he does the best for humanity. Radiation often prolongs life for several years in inoperable cases of cancer. Every surgical case of cancer should have radiation before and after operation. It is not necessary to dwell on the beneficial effect of radiation on cancer. This disease is often so intractable, when every agency is used,

that it must be a matter of serious concern to every surgeon or therapist to whom a case is referred. There is certainly no room for petty jealousies or contention as to who did most for the patient, or who is able to do most. When a case is successfully treated "there is glory enough for all." Radium and roentgen ray are successfully used in many diseases both malignant and non-malignant. I mention a few non-malignant. Treatment of subserous tumors in women in their thirties is usually successful. The intramural tumor of the hemorrhagic type is the one most successfully treated. The regression is a little slow, but new growths seldom follow and the patient enjoys good health.

Fortunately the intramural tumor is the one of most frequent occurrence, constituting about 77 per cent. When these occur in women of 40 years or more they are ideal for roentgen ray treatment.

If in treating fibroids in younger women a temporary amenorrhea is desired, the amount of radiation is reduced early and the ovaries are carefully excluded. The primary shrinking of the uterus and ovaries, sometimes seen after roentgen ray treatment is often temporary . . . first, the ovary shrinks to a small indurated mass due probably to the disintegration of the ripe and ripening follicles; second, after some time has passed, the ovary will be found larger and in favorable cases may return to normal size and consistency. The uterus shares this recovery which occurs when the primordial cells develop and begin to function. Since these cells are the last to be influenced, the recovery may be expected in young women, if the treatment was judiciously given. Many ovaries are enlarged in the presence of a fibroid and they usually become normal as the vascular engorgement subsides. There are some ovarian enlargements which indicate moderate tissue change and they may need supervision even after general treatment is discontinued. This group contains the instances of the non-proliferating type of degeneration, in which the ovary may assume the size of a lemon. Such are associated with the graafian follicles and are promptly remedied.

Hemorrhage of the menopause, in which the uterus is enlarged, boggy and fibrosed, is amen-

able to treatment. If accompanied by psychoses the menopause can be hastened considerably.

Women over thirty-five years of age, afflicted with dysmenorrhea that has resisted all measures of relief and is incapacitating, should be given roentgen ray therapy.

Cases so treated do not become obese. The sexual function is not impaired. Treatment does not increase danger of cancer. There is no danger of roentgen ray burns if reasonable care is used.

Erysipelas is generally benefitted by irradiation, so much so that many consider it the method of choice.

Hyperthyroidism is very successfully treated with irradiation. Proper treatment nearly always relieves the symptoms. If surgery is employed later, it does not make the operation more difficult or dangerous.

Roentgen ray treatment is beneficial in many inflammatory conditions. It alleviates pain, reduces fever in the inflamed area, improves the general condition, lessens edema, swelling, and infiltration. The focal changes are increased phagocytosis, decrease of bacterial virulence, and, finally, bacterial disintegration.

Inflamed milk glands, in absence of milk, are often relieved by irradiation. I have seen distinct nodules of several months duration in the breast disappear under roentgen ray treatment. In treating breasts I turn the woman on her side, breast to be treated up, and place a firm support under the breast. This enables one to treat the breast without treating the lung tissue.

The leukemias are characterized by a natural progression to a fatal end in spite of all treatment. Irradiation does ameliorate the symptoms and is the treatment of choice. It maintains the efficiency of the patient to a greater extent than any other remedy. In most cases it produces remission from symptoms and reduces the high leukocyte count. Treatment is given over the spleen and over the long bones. My personal experience favors the spleen. Roentgen ray treatment over the spleen produces a rapid fall in the leukocyte count. The spleen is reduced in size, but not in proportion to the reduction in the leukocyte count, nor is this reduction noticed as soon as the improvement in the count, nor does the reduction keep

pace with the general feeling of improvement and well being that the patient feels. It usually takes about sixty days for the regression of the spleen to be perceptible.

There should be as little roentgen ray given at the beginning as will produce results so that as the case progresses you can increase the amount of irradiation.

Keloids can generally be successfully treated with either roentgen ray or radium. Personally I prefer roentgen ray. It should be treated with small, repeated doses. I say small because one must be careful not to over-treat. You may leave the patient in a worse condition than you found him in. The earlier the scar tissue is treated the better the results.

Keratoses, usually appearing in the exposed surface of elderly people, are usually easily relieved, especially if treated before they become malignant, and even then they usually yield promptly.

Common warts may be successfully treated with either radium or roentgen ray, preferably with radium. The advantage of this treatment of the wart is that there is freedom from pain, no infection, and usually no scar.

Callosities are successfully treated by radiation. Painful callosities, especially on the bottom of the feet are best treated by radiation because of the freedom from pain. Of course they return unless the cause is removed.

Rhinoschleroma can be permanently cured by radiation. The extent of involvement should be determined by a competent rhinologist before treatment is attempted.

Vascular birth marks may be divided into three clinical types: (a) the strawberry lesion, or nevus vasculosus, (b) the irregularly purple tumor, or angioma cavernosum, and (c) the port wine, or nevus flammeus. Results that seem miraculous are secured by proper radiation, if administered in time. Although the general practitioner willingly refers these patients, he often waits until the skin has been tanned and toughened by exposure to weather, or home remedies. The general practitioner should get in touch with a radiologist as soon after birth of the child as possible. He should explain to the parents that it will take time, and perseverance, and patience, and many visits to

the radiologist. If the doctor does not make this explanation in advance, the parents are apt to become discouraged. Some think that the lesion should disappear with one treatment.

There are about ten groups of skin lesions that are due directly or indirectly to the bacillus tuberculosis. Some of these lesions yield readily to radiation, but others are very stubborn.

Properly treated cases of tuberculous adenitis usually yield to treatment. The cases that are radiated early seldom have disfiguring scars and sinuses. Tuberculous adenitis should be early referred to a radiologist. This is one of many cases where the close and hearty cooperation of the doctor and radiologist is necessary for the best results. The patient needs medical treatment and advice while he is taking the radiation.

Radium or roentgen ray therapy is probably the most reliable means of curing excessive sweating in localized areas. One must be careful in treating this lesion because it sometime has to be pushed to slight atrophy of the skin. Fortunately these localized spots are in the axillae and on the feet.

Localized irritated areas accompanied by persistent, and sometimes intense, itching are very common with both men and women in all walks of life. Careful examination of the itching spots show: (a) on the skin, circumscribed hyperkeratosis, (b) on the mucous membrane, well defined leucoplakia. When the superficial areas are treated early, very little radiation usually gives prompt relief. When the lesion is permitted to reach the stage of induration, it is more difficult to relieve. If it is allowed to go too long and the induration becomes pronounced, it frequently becomes cancerous. If the patches are small, radium is the remedy of choice; if the patches are large, roentgen ray is the means to use.

No one can promise much in this stubborn disease, still radiation sometimes accomplishes wonders. This is another disease which requires the cooperation of the radiologist and the referring doctor. Metabolic faults must be corrected and foci of infection removed.

The skin lesions that are grouped under the all-inclusive term eczema frequently respond

well to radiation. Omitting those lesions for which we have specific medication, radiation is our best remedy for eczema. It is also one of our chief dangers from damage suits.

Because of the ease with which one suffering with certain forms of eczema may claim that the condition was caused by roentgen ray treatment, I doubt the wisdom of ever taking such a case.

Ringworm, blastomycosis and actinomycosis are amenable to treatment with roentgen rays and radium. In ring worm of the nails and scalp and beard, it is the remedy of choice.

Furunculosis, streptococic infection, acne vulgaris, sycosis vulgaris respond well to radiation. The latter yields so well that it may almost be called a specific.

The general practitioner and the surgeon are the ones who refer practically ALL the cases that come to the radiologist. Then of necessity they must work together if the best results are to be obtained.

Just a word about the doctor who refers a case to the radiologist. I think that the physician who refers a patient should refrain from telling the patient which form of radiation will, or should, be used. If you tell the patient that you are sending him to the radiologist for radium treatment, and if, for any reason, that is impractical, and roentgen ray should be the proper treatment and entirely practical, the patient will not be satisfied unless the radiologist uses radium. And of course, vice versa. It would shake the confidence of the patient in the skill of the radiologist to insist that he should use a remedy other than that which his physician had recommended.

DISCUSSION

Dr. Leon J. Menville (New Orleans): I was very much interested in hearing Dr. Williams' paper on irradiation therapy. He has splendidly covered the subject. We all appreciate that it would be an impossible task for him in fifteen or twenty minutes, to mention but a few of the many important diseases treated by irradiation therapy.

The doctor mentioned breast carcinoma as one of many conditions treated by radium or roentgen therapy. I am thoroughly convinced that the best results in such a condition is obtained by irradiation before and after operation. Pre-operative irradiation will minimize the danger of metastasis;

post-operative irradiation to affect any malignant cells left at operation. It has been shown experimentally that a rat with a sarcoma irradiated seldom takes by transplantation, whereas a similar lesion in a litter mate unirradiated will take by transplantation in a very large number of cases. A word of caution should be mentioned in regard to the habit of some examiners in roughly squeezing a breast tumor suspected of being a carcinoma, to determine its firmness and whether it is adherent. This sort of practice can be very harmful. There is great danger of spreading cancer cells by rough handling of a breast carcinoma. Some time ago, Dr. Francis Carter Wood in an editorial appearing in the *American Journal of Cancer* stated that, "If a carcinoma of the mouse or rat is massaged vigorously and the animal immediately killed, the lung will be found to contain a considerable number of emboli composed of tumor cells."

In regard to the treatment of toxic goiter by irradiation therapy, I agree with the essayist that splendid results are obtained by using either radium or roentgen rays. There are certain types of toxic goiter that should be sent to a competent goiter surgeon for operation, but to say that surgery is the only and best form of treatment for toxic goiter, is wrong. Roentgen rays or radium will produce magnificent results in a very large number of such cases, obviating operation and hospitalization with its accompanied suffering and expense, and of much importance, with practically no mortality.

Dr. C. C. Hightower, (Hattiesburg): Dr. Williams brought out a great many things that are very common and very imperfectly treated. I have been thinking what a pity it is radiologists can't get help to the people in general and tell them what is being done.

Take that miserable disease acne—it is a horrible situation. Yet the only thing I have ever known to help is roentgen ray. I think very few doctors know roentgen ray will cure it.

Take carbuncle. Roentgen ray will make that carbuncle subside in a few days.

Another disease—whooping cough—roentgen ray allays the symptoms.

It seems to me it is a problem that radiologists should take hold of and put our stuff across—not for our own benefit, but for humanity's sake.

Dr. M. D. Ratcliff, (McComb): I want to ask in reference to treatment of acne. I have had good results with roentgen ray, but in the last few years we have been using ultra violet rays, and think it has preference over roentgen ray. I don't feel quite so uneasy, but feel we have a greater range and can give it more freely. My results have been good.

I want to ask Dr. Menville a question. I have in

mind a patient who was in our institution in January. Her physician, a surgeon, gave a metabolism test. She had plus 51. He desired to do surgery, but the patient returned home and her doctor referred her to the radiology department and gave her iodine and roentgen ray over the thyroid. I would like to hear the experience of others. Would iodine hurry the results of the irradiation? This patient was brought on a stretcher, and we gave treatment every two weeks. When she came in for the third treatment she walked in. Have any of you had any experience in treating patients saturated with iodine?

Dr. Menville: Those of us who are treating toxic goiter have to be cautious because we know too much iodine might cause a serious condition. We never treat patients with toxic goiter with iodine because we don't know how much they may have had.

NEW METHOD OF SYRINGE TRANSFUSION*

WM. H. GILLENLINE, M. D.

M. E. DeBAKEY, M. D.

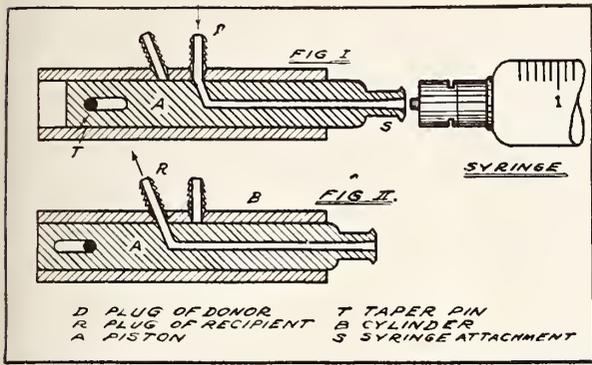
NEW ORLEANS

In the past few years great strides have been made towards the development of an ideal apparatus for the transfusion of whole blood. There are still many objections to be overcome before the Utopian method is developed. The apparatus here to be described is presented with the belief that some of the objections of the appliances heretofore in use are overcome and transfusions can be more simply, more rapidly, and more safely performed.

DESCRIPTION

The instrument consists of a sleeve valve and a 5 c.c. Sana-lok syringe, Fig. 3 and 4. (We have used the Sana-lok syringe because it is readily available and offers the luer-lok attachment). The valve consists of a piston A, containing a channel which communicates at its upper end with the syringe tip and at the lower end with the plugs of the donor, D and recipient, R, fitted in the sleeve, B. A taper pin, T fitting snugly into the sleeve and passing through a slot in the piston, limits the up and down motion of the piston and thus insures the accuracy

*Read before the Orleans Parish Medical Society, April 10, 1933.



of approximation of the port in the piston with that of the donor in the extreme up position (Fig. I) and that of the recipient in the extreme down position (Fig. 2).

To prevent the possibility of the reversal of flow, it is necessary that the valve move before the syringe plunger begins to move in the same direction. To insure this a rubber washer rigidly placed at the top of the syringe and tightly surrounding the plunger shaft increases the friction of the syringe plunger over that of

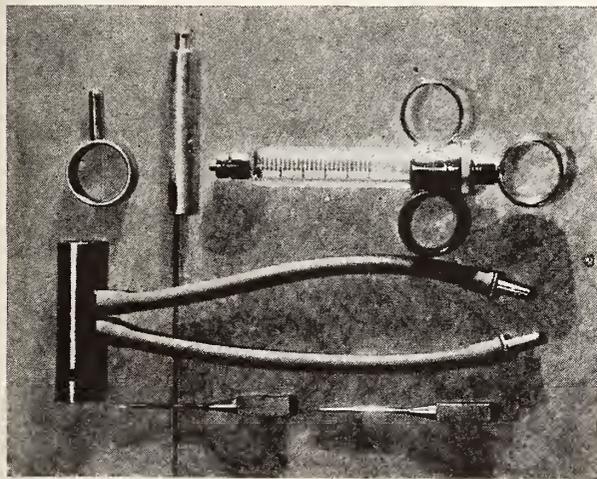


FIGURE 3

the sleeve valve. In actual clinical trial this has proven unnecessary in pumping a fluid as viscid as blood. But this safety device acts as an additional guard against this possibility. The two rings on the syringe barrel (present on the 5 c.c. Sana-lok syringe) may also be used to operate the valve while the thumb moves the plunger (Fig. 6). This makes it absolutely fool-proof.

TECHNIC

After sterilizing the instrument, apply sterile liquid petrolatum to the piston as a lubricant and assemble by slipping the piston into the sleeve

and inserting the taper pin and then attach the syringe to the luer tip of the piston. Two small rubber tubes, about 15 cm. in length, are attached to the donor's and recipient's plugs on the valve. The system is filled with sterile normal saline solution. The vena punctures are then made in the donor and recipient and the needle adapters in the rubber tubes are fitted into the respective needles. The transfusion is now begun.

To operate the instrument merely clasp the

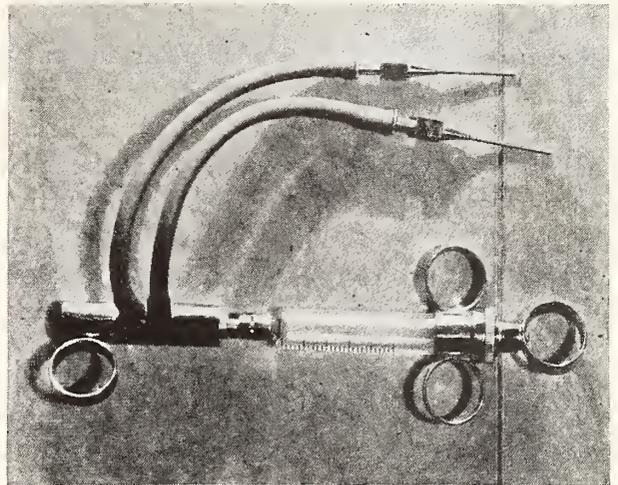


FIGURE 4

cylinder of the sleeve valve by the left hand, and hold steadily, and operate the handle of the syringe plunger with the other hand (Fig. 5). When the handle of the syringe plunger is pushed down, the piston in the valve moves first until it is stopped by the taper pin. The channel now communicates with the recipient's outlet, (Fig. 2), and the plunger of the syringe now moves downward to eject its contents. As soon as the syringe is emptied, force is exerted on its handle in an opposite direction. Again the piston in the valve moves first until it is



FIGURE 5

stopped by the taper pin. The channel is now in communication with the donor's opening, (Fig. 1), and the syringe plunger then moves up, aspirating blood into the syringe. This movement, in reality the push-pull motion employed in operating any syringe, is continued until the desired amount of blood is given. (Each plunge of the syringe gives 5 c. c. of blood.)

Following a successful transfusion on the dog, the instrument was tried clinically at Charity Hospital in New Orleans. A number of transfusions were given and the instrument was found to perform with complete satisfaction.

This apparatus offers the following advantages: (1) It can be manufactured of finest materials at an extremely low cost; (2) the only breakable and necessarily replaceable part, the syringe, is readily and cheaply available; (3) it is operated by the simple push-pull motion of the syringe piston only; (4) the complete in-

strument consists of four parts is readily assembled, requiring no mechanical knowledge; (5) the instrument can be packed in a sterilizing case 6"x2"x1", offering compactness; (6) fragmentation of red blood cells by valve mechanism is practically negligible; (7) shortest blood course outside of body of any syringe instrument in use; (8) no dead space in the instrument, or valve mechanism where clotting may initiate; (9) simplicity of operation increases rapidity of flow, thus diminishing possibility of clot formation.

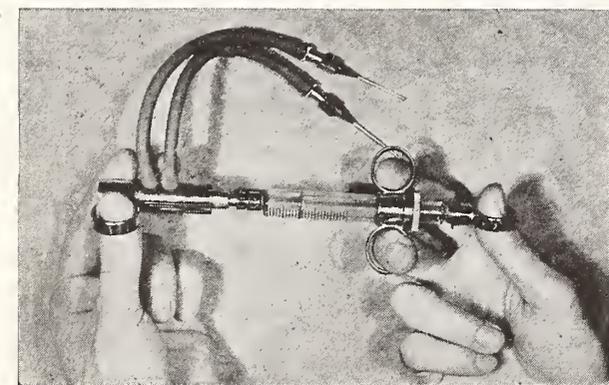


FIGURE 6

strument consists of four parts is readily assembled, requiring no mechanical knowledge; (5) the instrument can be packed in a sterilizing case 6"x2"x1", offering compactness; (6) fragmentation of red blood cells by valve mechanism is practically negligible; (7) shortest blood course outside of body of any syringe instrument in use; (8) no dead space in the instrument, or valve mechanism where clotting may initiate; (9) simplicity of operation increases rapidity of flow, thus diminishing possibility of clot formation.

This apparatus eliminates the more or less complicated maneuvers common to other appliances heretofore in use, such as sprinkling syringe with ether, switching plates, opening or closing stopcocks, clamping rubber tubings,

continuous washing and changing of syringes, and turning plunger in syringe. All the surgeon has to do is insert the respective needles into the veins of the donor and recipient and work the plunger of the syringe back and forth. The simplicity of this apparatus renders it more adaptable for bedside use and thus facilitates the performance of blood transfusion in the home.

In offering this instrument to the medical profession, the writers trust that it will simplify the technical difficulties of direct blood transfusion, reduce the necessity of repair and increase the availability of a direct transfusion instrument to the practitioner of average income.

BIBLIOGRAPHY

1. Head, J. R.: A new apparatus for transfusion of untreated blood. *S. G. & O.*, 44:262, 1927.
2. Kimpton, A. R. & Brown, J. H.: New and simple method of transfusion. *J. A. M. A.* 61:117, 1913.
3. Soresi, A. L.: New instrument for transfusion of whole blood. *J. A. M. A.* 64:582, 1915.
4. Vincent, B.: Blood transfusion with parafin coated needles and tubes. *S. G. & O.* 23:621, 1916.
5. Unger, L. J.: New method of syringe transfusion. *J. A. M. A.* 44:582, 1915.
6. Brines, O. A.: The transfusion of unmodified blood. *Arch. of Surgery.* 7:306, 1923.
7. Herr, E. A.: Blood transfusion to date. *S. G. & O.* 61:513, 1925.
8. Irwin, W. K.: Indications and methods of blood transfusion. *N. O. Med. & Surg. Journal.* 85:97, 1932.

SEPTAL DEFORMITIES*

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The subject of nasal obstructions, as assigned to me, would indeed be one entirely too broad to hope to cover by mentioning even high points, therefore, I have endeavored to narrow my remarks to the channel of septal deformities and offer some suggestion as to the cause of septal deformities and the indication or contra-indication to the remedies.

In the consideration of causes of septal deflections or deformities one becomes confronted with the answering of some or as

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-Sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

near as possible some of the questions that have come up for consideration back through many years, and also to take into consideration various theories that have been brought out, none of which have been satisfactorily explained.

The questions that stand out most vividly to me are:—Why are septal deformities less frequent in some nationalities than others? It is a statistical fact that Europeans present less septal deformities than Americans.

Why did Ballenger make the statement that in the negro there was never a nasal obstruction? Whilst we know that this is not wholly true, on the other hand we know that septal deformities in the colored are very rare.

Why did Jarvis contend that septal deformities were of hereditary origin and mention as many as four children in the same family as proof?

Why did Freeman contend that the lowering of one superior maxillary beneath the common plane produces a septal deformity, with the deflection pointing towards the lower side and show measurements to substantiate the claim, and show that there was a rachitic family tendency in those cases who presented disturbed relations of the superior maxillary bones and cite the barrel-shaped chest and the pigeon-chested individuals as instances? These, and many other questions and theories have been brought up, none of which are wholly unanswered and none of which are completely and satisfactorily answered. To this list of unanswered questions and unexplained theories I am adding some that have occurred in my own mind. Namely, why is septal deformity about equal in male and female?

Why do they occur at an early age and progressively grow more deformed until they reach the period of necessitating relief, this stage being reached usually in early life, we seeing comparatively few troublesome uncorrected septal deformities in the aged. Is it that these deformities become no more deformed after the nose and face is fully developed?

Why are most deflections in the anterior

cartilage, presenting an oval condition on one side and a smooth depression on the opposite, or a ridge or spine running in the A. P. direction just at the junction of the cartilage with the superior maxillary crest and the vomer?

Why are most of the smooth oval cartilaginous deformities pushed to the right side with the depression on the left, and when the ridge or spine at the junction of the cartilage and superior maxillary crest is found, why does it more frequently occur on the left?

Why is it a common and comparative adage that there are no anatomical correct septums? These and many other questions present themselves for consideration within the study of the causes of septal deformities all of which have a possible common answer that I offer to you for your consideration.

Take into consideration the fact that the fetal skeleton is almost wholly cartilage with only a few centers of ossification found at birth and the ease in which the cranial and facial bones are displaced and moulded (to use obstetrical nomenclature). Remember that the obstetrician reports rather a high percentage of shoulder dislocations, fractured clavicles, injuries of brachial plexus, injuries to the vertebra, going through life in the form of a spinal curvature, and the very frequent occurrence of intra-cranial hemorrhage. One might make a practical application of these same principals in the possible production of septal deformity. These thoughts are presented in the possible accounting for the racial difference in the occurrence of septal deformities, in the fact that one has a better pelvic diameter than the other, therefore, making less pressure on the soft cartilaginous frame on the infant's face as it passes through the pelvic strait. This might at least become grounds for argument as to why the colored race has so few septal deformities and the Europeans less than the Americans. It also offers some explanation as to why Jarvis considered septal deformities hereditary and offers some explanation as to family tendency by reporting as many as four children in the same family with the

same type of deformity. Let us remember that it is thoroughly possible that these four children were probably born of the same mother. It would be interesting to know, however, whether the first born was more deformed than the latter. It also becomes probable that these four children occupied the same obstetrical position in labor. I understand from the obstetrician that this usually occurs. It offers some explanation in the findings of Melcker who thought septal deformity due to or at least associated with disturbing relations of the superior maxillary bone. He finds that the deflection was nearly always toward the lower side. It also might account to some extent for the rachitic family tendency mentioned by Loewy, but if this is an explanation, the rachitic pelvis of the mother becomes the offender rather than maldevelopment of the individual who has the septal deformity. It also might account for the apparent equal percentage of septal deformity in male and female, also their moderate appearance at an early age with a progressive deformity up to early adult life followed by the cessation of development of the deformity after this period. It offers some explanation as to why the greater percentage of deformities are found in the anterior cartilage presenting an oval condition on one side, usually the right, with the depression on the left, or the horizontal ridge so frequently found at the junction of the cartilage and superior maxillary crest more frequently on the left. Just here let me call your attention to the fact that these percentages, as given in statistics, match wonderfully well with O. A. position at birth. It offers some explanation for the common but apparent correct adage that there are no anatomical correct nasal septums.

These thoughts come to me when watching the various shapes of the new born head with some of them soon assuming a smooth round contour with well formed fontanels, others remaining distorted over a long period probably throughout life. In the O. A. position the superior maxillary bones are pressed on from above downward, one of them being lowered as would result from the rotation of the head, at the same time the nose is pressed flatly against

the face with sufficient force to wrinkle the septum, and the same force applied laterally could easily produce an angulation of the palate bone and result in the formation of the well known Gothic arch and palate so frequently associated with septal deformity and irregularity of the teeth. Added to this list of causes of septal deformities would be trauma, the history of which is easily gotten.

The diagnosis of septal deformity finally is made by inspection. This may be done with or without shrinkage of the parts depending, of course, on the size and shape of the individual nose and the extent of the deformity. The degree of septal deformity apparently does not bear a definite relation to inconvenience or discomfort. Patients with comparatively slight deformity frequently experience more inconvenience and discomfort than some who show rather a marked deformity. This depends to a great extent on the individual susceptibility to local infection produced by cold and allergy shocks. It has seemed to me that individuals who work in offices, especially furnace heated, complain more with the same degree of septal deformity than those who live an out-door life.

There are many causes to consider when attempting to prescribe a remedy for septal deformity such as the amount of discomfort versus the majority of the procedure. This especially comes up for careful consideration when the individual is getting into the last half of life, however, we see those cases with a progressive loss of hearing of the obstructive type, a sinusitis of the recurring form, ethmoiditis or polyps that would make the consideration of a surgical procedure more necessary.

Personally, I consider the remedy for septal deformity always surgical. I could about as well say submucous or nothing. The advisability of an operation during the years of development of the nasal and facial bones has always been a keenly debated one. When we consider the side of not operating during the years of development we are confronted with the question of a possible facial deformity developing to such an extent that a remedy in later years would become a more serious procedure. We also must consider such things as an acute sinusitis and the resulting maldevelopment of the teeth

probably along with many things that I have not even thought of when we are attempting to defer operation on the undeveloped septum. I must admit that I look on the submucous operation in the undeveloped rather seriously and lean on the side of watchful waiting and proceed with caution. The submucous operation in the child necessarily requires a general anesthetic, this being rather a drawn out procedure, as a rule, and if some post-operative complication should come up, the anaesthetic would have to be repeated. These things are certainly to be considered when prescribing the remedy, nevertheless, I doubt if they are to be considered as seriously as possible maldevelopment of the facial bones following a submucous operation in the child. We do accept the statistical fact that facial bones sometime fail to develop further after their relations have been disturbed by some form of trauma.

DISCUSSION

Dr. C. A. McWilliams, (Gulfport): We should congratulate Dr. Adkins on his presentation of such an original paper to us.

My first impression after reading over his paper was that there was not much to his argument, but going deeper into the subject I believe there may be something to it. An obstetrician expressed the opinion that he could not see how the septum would be fractured or displaced any more in white children than in negroes, as they were all born alike. In my opinion I believe most deviated septums are due to trauma; this trauma begins to take place soon after birth, as most children are apt to fall and bump their noses when beginning to walk. My oldest girl had a marked deviated septum to the left for several years. Not long ago she had a cold and as I was treating her I noticed that her septum had deviated to the right. I began to question her to find out if anything had happened to her nose. She stated that about one month previous she had been hit on the nose while playing ball, causing it to bleed but not having had much trouble with it, thought it useless to mention anything to me about it.

In regard to performing submucous operations on children, I think in some cases where there is a complete obstruction on one side with some sinus infection this operation is permissible. In adults I use an "Odeneal splint" which is very thin and longer than the ordinary splint used. This splint goes far back into the nose and seldom gets stopped up with blood.

Dr. Adkins did not bring out the fact about

cesarean section babies, but he tells me he has a series of such cases that he has been observing over a number of years. If he finds a large percentage of straight septums in these cases, after they reach adult life, I feel that his theory will be proven. I hope that he will continue this study and report to our section at some future date.

Dr. L. S. Gaudet, (Natchez): Dr. Adkins has certainly brought us a very interesting paper. In so far as the difference in septum between the negro race and the white race, we can account for it in one way. When I was on a sugar district, I had many negro labor cases. The negro woman as a rule is a laboring woman, and the white patient as a rule has a longer or rather a prolonged labor, usually more difficult; subject to pressure a much longer time. The laboring class of women have the easiest labors as you know.

Dr. E. F. Howard, (Vicksburg): The question of formatism, whether it be at labor or afterwards, unquestionably may have a whole lot to do with it. I think if we would go into the matter and try to fathom it we would find that the little tot is constantly falling down and bumping his nose dozens and dozens of times.

Dr. Adkins, (closing): That was taken into consideration, Dr. Howard. It was about equal in males and females. It seems to me that in children if playing around and falling down and fighting would cause this, that we would have more of it in males than females. I think Dr. Gaudet is right about the difference between the white and colored race. These are things I offered for your consideration. I have had this in mind for a few years, but this was the first time I have had the nerve to present it. I thank you for the discussion.

THE TRANSMISSION OF TULAREMIA BY THE DOMESTIC CAT*

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The domestic cat (*Felis catus*) has been considered on numerous occasions as a possible carrier of tularemia. McCoy (1) in 1911 reported the inoculation of three cats with an emulsion of splenic tissue from a guinea pig which had died five days after inoculation with *Bacterium tularense*. The cats suffered no ill effects from the inoculation but a control guinea pig died. McCoy and Chapin (2) in 1912 re-

*Read before Fourth District Medical Society, April 4th, 1933.

ported the subcutaneous inoculation of four cats with large doses of an emulsion of liver tissue of a guinea pig dead of tularemia. All of the cats remained well but the control guinea pig died. Wherry, quoted by Simpson, (3), found that virulent strains of *Bacterium tularense* which were capable of producing death in guinea pigs, rabbits, and white rats did not affect kittens. Green, Wade, and Hanson in 1928, quoted by Simpson (3), reported that a woman cleaned a rabbit which was found sick and fed it to three cats. The woman developed tularemia. The cats became ill but recovered in about one week. A fourth cat, belonging to the same household, which did not eat any of the rabbit, remained well. Another woman was bitten on a finger by a cat. The animal died a few hours after biting her. The woman developed tularemia.

Green and Wade, quoted by Simpson, (3), re-investigated the susceptibility of the cat to tularemia by feeding infective material. A young cat was given a carcass of a guinea pig dead of tularemia. The cat was fed similarly on the third, eighth, and thirteenth days and was not affected by these feedings. The cat was sacrificed on the eighteenth day. Its serum agglutinated *B. tularense* in dilutions of 1:80. At autopsy all organs appeared normal. A guinea pig inoculated with an emulsion of the cat's spleen died of tularemia on the sixth day. Francis after considerable experimental work has come to the conclusion that the cat is a mildly susceptible animal.

CASE REPORT

The following case report illustrates that the cat may be an infected carrier.

T. L. J., white male, aged 33 years, came to my office on September 8, 1930, because of an infection following a cat bite. He gave a history of having been bitten on the index finger of the left hand by a six months old kitten, 14 days previously. The abrasion became sore in three or four days and this was followed by a chill, fever, headache and general malaise. Since that time he has had several chills and continuous fever. At the time of examination he had an indolent ulcer on the index finger of the left hand. The epitrochlear gland showed evidence of suppuration and the axillary glands were tender and swollen. An incision was made over the epitrochlear gland and drainage instituted. Further than this the only

treatment used consisted of hot local applications and general systemic measures. He made a slow but progressive recovery. At the time of the first examination a specimen of blood was taken and sent to the U. S. Public Health Laboratory in Washington, and this specimen showed a positive agglutination with *Bacterium tularense*. The cat was secured and a specimen of blood was taken from the heart. This specimen and another specimen of the patient's blood were sent to the U. S. Health Laboratory. A letter from Dr. Edward Francis dated October 7, 1930, reported the patient's blood positive to *B. tularense* in a dilution of 1:1280, and positive to *B. abortus* in a dilution of 1:320. The cat's blood gave a positive agglutination to *B. tularense* in a dilution of 1:80 but was negative to *B. abortus*.

SUMMARY

1. Literature presented indicates that the cat might be an infective carrier of tularemia to human beings.

2. A case is reported proving serologically that the cat may be an infective carrier to human beings.

BIBLIOGRAPHY

1. McCoy, G. W.: A plague-like disease of rodents. Bull., 43, U. S. P. H. S., p. 35, 1911.
2. McCoy, G. W. and Chapin, C. W.: *Bacterium tularense* the cause of a plague-like disease of rodents. Bull., 53, U. S. P. H. S., p. 21, 1912.
3. Simpson, Walter M.: *Tularemia: History, Pathology, Diagnosis and Treatment*, New York. Paul B. Hoeber, Inc., p. 47, 1929.

SURGICAL PAROTITIS WITH REPORT OF A CASE COMPLICATING TONSILLECTOMY*

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ANATOMY

The space in which the parotid gland lies is in close proximity to important structures. The inner surface of the gland extends deeply into the neck, encroaching upon the pharyngo-maxillary fossa which is anatomically and surgically very important. The pharyngo-maxillary fossa is cone-shaped and its boundaries or relations are; externally, the parotid gland, internal pterygoid muscle, and the sub-maxillary gland; internally, the superior constrictor muscle, with tonsil attached (thus

*Read before the Orleans Parish Medical Society, April 10, 1933

the parapharyngeal tissues lie in close proximity to the pharyngo-maxillary fascia); above, (the base of the fossa) the jugular formation; posteriorly, the prevertebral muscles; below, the carotid sheath extending into the mediastinum.

The parotid gland is so placed that it comes in contact with the internal jugular vein and internal carotid artery. Any infection of the gland, because of its proximity to large blood vessels, nerves, and lymph spaces, offers a possibility of serious complications. Connecting lymphatics and veins extend in all directions from the lobes of the parotid and from the area outside of the fascia of the gland.

The pharyngo-maxillary fossa connects with the deep connective tissue spaces of the pharynx so that a pharyngeal or retropharyngeal infection can extend to the parotid gland, or pus from suppurative parotitis may burrow into the tissue spaces of the pharynx. The duct of the parotid gland, known as Stenson's duct, extends across the inner side of the cheek, a finger's breadth below the zygoma, and opens on the inner surface of cheek opposite the second molar tooth of the upper jaw.

INCIDENCE

Secondary parotitis is an occasional and serious complication of febrile diseases and surgical operations, particularly in those cases in which there are areas of sepsis. It has been noted as a complication of typhoid, typhus, lobar pneumonia, scarlet fever, diphtheria, variola, cholera, bacillary dysentery, glanders, malaria, influenza, erysipelas, puerperal sepsis, infectious arthritis, tuberculosis, tularemia, dengue fever, heatstroke, acute parenchymatous nephritis, fracture of the femur, extraction of teeth, traumatism, amyloid nephrosis with hemorrhagic enteritis. It has complicated appendectomy, thyroidectomy, stomach and gall-bladder surgery, gynecologic operations, mastoidectomy, nephrectomy, prostatectomy, exploratory laparotomy in cases of cancer of the liver and gall bladder, following operations on impacted molars. It has followed as simple a process as catheterization, says one authority, though

he does not mention if the latter process was incident to another operation. Blair reported that, of 35 cases seen in adults, 30 developed between the months of November and April, when respiratory infections are more common. In nearly one third of his cases, pneumonia was present, in four cases there was a definite history of a preceding cold or sore throat.

In 705 cases of influenza, parotitis was noted 7 times by MacNalty and Malloch. It was seen twice in the same patient in two clean abdominal operations by H. S. Davidson. He also mentions it as having occurred three times in the same patient, appearing each time after opening of the abdomen. In 6,800 gynecologic operations at the Mayo Clinic it was noted by Humphrey and Sherwood three times. Rankin and Palmer report it twice, in a series of 7,200 surgical operations. D. W. Tuyman reported 46 cases of parotitis, 24 of which developed after abdominal operations.

Rankin and Palmer have said that the incidence of parotitis increases with the development of surgery of the colon. In 78 cases in which this inflammation occurred at the Mayo Clinic during four years, 20 followed major surgical operations on the colon or rectum, this in a total of 2,700 operations. At Mayo, the incidence is almost 17 times as great in operations on the colon or rectum as it is in general surgery.

ETIOLOGY

Secondary parotitis may be a pyemic phenomenon due to embolism of the parotid vessels with a septic clot, derived from the primary focus of infection.

Silberman and Kagan find that the external carotid artery and its branches penetrate the parotid gland, which is contained in a fibrous capsule, the latter emptying through several branches into the parenchyma of the gland. This distinguishes the gland from the other salivary glands and favors embolism after operation. The glandular vessels originate directly from the internal carotid artery before bifurcation of the internal maxillary artery. The transverse facial artery provides

the parotid gland and part of its small branches perforate the masseteric muscle. It is important to note that these properties in the blood supply of the parotid gland and this intimate connections of these glandular vessels with the masseteric muscle are missing in the submaxillary and sublingual glands. They believe that these are etiologic factors of postoperative parotitis, due to embolism from the site of operation. Obstacles in the masseteric muscle caused by muscle contraction prevent the embolus from leaving the glandular blood vessel. If the embolus is infected, it causes parotitis.

It may be produced by direct extension of the micro-organisms along Stenson's duct from the mouth.

Hannau and Pilliet first suggested the possibility of infected organisms travelling up the duct of the gland. The first portion of the parotid duct contains a flora similar to that occurring in the buccal cavity. Seifert said that after operations the buccal cavity is unusually dry and that there occurs a change in the buccal flora, the staphylococcus becoming the predominating organism in contrast to the pneumococcus which occurs as the chief representative in normal nutritive conditions. The germs of the later flora are pushed by the movements of the mouth into the neighborhood of the orifice of the salivary duct and ascend this duct, as there is no flow of saliva to flush them down again.

Against this we observe that the parotid is a serous gland and the submaxillary and sublingual are mucous glands secreting mucin. Further the parotid contains lymph glands and the other salivary glands do not. All of these factors favor the invasion of the gland by infectious agents and the setting up of inflammatory processes.

Acute suppurative parotitis can be produced by injection of bacteria into Stenson's duct or by injection of bacteria into the nutrient artery of the parotid gland.

Claisse and Dupre, experimenting on healthy dogs, could not produce parotitis by smearing the orifice of Stenson's duct with micro-organisms, by injecting virulent organisms into the duct, or by creating an ar-

tificial fistula. They did find that in an animal the general vitality of which was depressed by starvation or by injection of drugs, such as opium, which would limit the flow of saliva, infection of the parotid gland could be produced by any of the three means they tried.

It has been said that, for infection to grow in the parotid duct, one of the following conditions must be present:

Micro-organisms must be present at the orifice of the parotid duct in large numbers or of a more virulent type than usual.

The general vitality of the subject must be reduced so as to render him liable to succumb to microbic infection.

The quantity of secretion passing down the duct and protecting it must be diminished.

The quantity and more particularly the bactericidal proportion of the saliva secreted must be lowered.

Berndt, Buck and von L. Buxton observed that the gland became affected by way of the bloodstream, the opinion being based on the fact that the complication arose more frequently when operation had been carried out in a septic field and that the inflammation did not become apparent until several days after the operation.

Rankin and Palmer said that in the group of cases in which operation was done on the colon, many conditions disadvantageous to surgical procedure were present: for instance, age, debility, dehydration, arteriosclerosis, and long-standing infection. Interference with the motility of the colon and production of obstruction, accompanied by steady absorption and devitalization must influence the production of the complication of parotitis. Likewise, starvation after resection of the bearing.

Experiments on the physiology of the salivary secretions prove that movements of the jaw, such as chewing, causes, by the activity of the muscles in that region, stripping or milking of Stenson's duct. Therefore, any condition accompanied by immobility of the jaws and relaxation of their muscles, such as general anesthesia or extreme toxemia, or colon and rectum may have an important

oral starvation, will remove the mechanical action which prevents infection of the parotid gland by way of its ducts.

There are three factors which predispose to secondary parotitis: decreased bodily resistance to infection, chronic oral infection, and muscular relaxation.

It may be recognized as a parenchymatous degeneration of the gland due to hyperpyrexia.

It may be attributed to infection of the gland, following an unsuccessful attempt to excrete toxins manufactured by the organisms of the primary disease.

It may be produced sympathetically, secondary to operations in the generative organs.

PATHOLOGY

The inflammatory process occurs chiefly in the duct and the gland acini according to C. P. Howard, and not in the interstitial tissue. The gland is hard and enlarged. The interalveolar fibrous tissue is infiltrated with the products of the inflammation. The epithelium of the duct undergoes desquamation. The process may advance to suppuration and gangrene. The parotid is surrounded by a particularly tough capsule, and, therefore, gangrene develops with extreme rapidity. In a series of 10 cases G. V. Lewis reports that the white cell count, when noted, ran from 5,750 to 25,000. The polymorphonuclears ranged from 73 to 88 per cent. In my own case, the total white cell count was 70,000 and polymorphonuclears 87 per cent.

The staphylococcus aureus is generally considered to be the most frequent exciting agent. In the patient I attended, cultures from the parotid gland showed staphylococcus. The consensus of opinion varies as to the frequency with which other organisms are found, but most writers usually mention the streptococcus, pneumococcus, and the colon bacillus in the order named.

SYMPTOMS

The swelling is usually first marked in front of the lobe of the ear, where the capsule is less tense, but subsequently the swelling is evident over the whole gland. In fulminating cases, the swelling may come up very rapidly, and the involvement of the

parotid be obscured by the edema of the cheek and neck. The appearance of the swelling is accompanied by fever and the other ordinary symptoms of septic infection; occasionally by discoloration of the skin, and often there is severe pain and tenderness, most marked over the parotid. These patients frequently present evidence of being extremely ill. Within the mouth there is usually some swelling of the parotid papilla and at its apex may usually be seen a minute, dark-red spot which is a visible part of the swollen mucous lining of the duct. The flow of saliva from the duct may be entirely suppressed, or pus may be squeezed out. In milder cases, the symptoms may subside in a few days or go on to localized suppuration. The infection is often of a severe grade, however, causing diffuse phlegmon of the gland, which may spread to the surrounding tissues. Even these severe cases may usually be spared by prompt treatment, if the infection is confined to the parotid; but fulminating, septic parotitis is frequently but one expression of a general severe sepsis in a debilitated patient, and here treatment of the parotid may do nothing more than contribute to the comfort of the patient's few remaining hours.

DIFFERENTIAL DIAGNOSIS

Syphilis, tuberculosis, and actinomycosis are difficult to differentiate. There may be involvement of both parotids, giving the characteristic pear-shaped appearance. Occasionally there is an enlargement of the buccinator or sinking pad of Bichat, which is a fatty pad between the masseter and buccinator muscles. This may be mistaken for an enlargement of the parotid gland. One must exclude erysipelas, the edema of trichinosis, and the enlargement of the pre-auricular gland which occurs in Parinaud's conjunctivitis, leukemia, or and in connection with subcutaneous emphysema due to gas gangrene or mediastinal emphysema. Tumors and von Mikulicz's disease must be considered. The parotid inflammation may also be a secondary phenomenon in disease of the auditory canal or ear. Kulvin reports a case with a discharging left ear and swelling in

front and below the ear. The location of the mass, the tenderness, and absence of any signs or symptoms involving the mastoid led tentatively to the suspicion of acute parotitis. Incision and probing demonstrated that a subperiosteal abscess was present with mastoid destruction. This was confirmed roentgenologically. It is well to rule out dental infection.

PROGNOSIS

Prognosis is grave. C. P. Howard said the mortality ranged from 50 to 66 per cent, in some series. Henry Joachim found secondary parotitis is always a bad prognostic sign as it is usually evidence of poor resistive powers. Of ten cases reported by C. V. Lewis, three died. D. W. Tuyman reports that in a series of 46 cases of parotitis, there were 11 fatalities, a mortality rate of 24 per cent. Wagner puts the mortality at 30 per cent; Blair and Padgett, at from 42 to 48 per cent.

TREATMENT

Recognition of the importance of prophylaxis of the mouth has done much to lessen the frequency of the condition in post-operative and septic patients. Frequent mastication during the course of any prolonged illness is recommended. Following operations, some mild salivary stimulant should be given to keep the ducts clean. Collins states that the best preventive measure is to keep the parotid gland actively discharging a current of secretion down Stenson's duct into the mouth.

Treatment proper consists in the application of an ice bag and prompt and free incision over the point of fluctuation. Administering of salicylates or urotropin, and the application of iodine preparations are indicated. Ingestion of large amounts of fluid must be encouraged.

If suppuration occurs, it will usually be on the third or fourth day and be accompanied by an increase of all symptoms. This is the proper time for radical treatment. If specially tender or softened spots can be found, these may be opened by an incision down to the capsule. A round-nosed conical

artery forceps should be inserted, but, in the presence of severe symptoms, the surgeon should not wait for definite fluctuation, which, owing to the tenseness of the capsule, may never be evident. In such cases, radical treatment may be urgently necessary within 24 hours after the first appearance of symptoms. Here, in the absence of any local softening, an incision should be made just in front of the ear from the zygoma to the angle of the jaw down to the capsule, and the flap forcefully drawn forward with retractors. If there is edema of the neck, the incision may extend to the clavicle through the deep cervical fascia. The trunk and branches of the seventh nerve lie deep in the gland, near its posterior part and will not be injured by any carefully made incision. In this way, nearly the whole gland may be exposed. By incisions carefully made through the capsule, the swollen gland will be permitted to expand, which will increase its blood supply and lessen the danger of gangrene. If pus does not come on opening the capsule, the substance of the gland may be explored at various points by inserting a round-nosed artery forceps, not overlooking the prolongation of the gland that runs forward with the first part of the duct. If the more radical exposure of the capsule is made, the latter should be incised in a number of places, thus liberating pressure in every part of the gland. The operation requires but a few minutes under gas anesthesia and the wound is packed wide open. If the pus is not liberated by incision, it has been reported to have most frequently ruptured into the external auditory canal, but it may make its way into the deep spaces of the neck, into the postpharyngeal space, into the mandibular joint, or through the olivary foramen into the cranial cavity. By thrombosis of the contained veins, the infection may spread to the cranial cavity. In patients who recover, the incisions close spontaneously with hardly a noticeable scar.

Rankin and Palmer used radium, applied it immediately, within one or two hours following beginning of the swelling in the region of the parotid gland. They report 20

cases treated with radium and in only two was it necessary to substitute surgical drainage.

CASE REPORT

C. B., a white male, aged 52 years, occupation warehouseman, on April 11 consulted the oculist complaining of soreness in the right eye with an accompanying coryza. Both eyes showed a conjunctivitis which improved under treatment, returning two weeks later with a severe acute catarrhal conjunctivitis with involvement of the upper eye lid (meibowmianitis). This condition improved under treatment until May 3, when he developed a superficial ulcer of the cornea. Intervals of improvement and then flaring up of infection continued until May 18. When the condition was thought to have been under control, he again returned with a recurrence.

The patient was first seen by me on May 21. Examination of the ear, nose and throat revealed chronic septic palatine tonsils. The accessory sinuses were negative on transillumination and clinical findings. A casual observation of the mouth did not reveal a possible foci of infection from his teeth and a tonsillectomy was advised. Blood coagulation was two and one half minutes and urinalysis showed the presence of albumin and great many hyaline granular and finely granular casts. With this report, local anesthesia was advised.

The patient entered the hospital on May 26. Novocaine 1 per cent with a few drops of adrenalin anesthesia was employed. The right tonsil was bound down and removed with some difficulty. The left tonsil was easily removed with usual Beck technic. As there was little bleeding it was only necessary to put one suture in each fossa. He remained in the hospital for two days. On the fourth day following the operation, I was called to his home to see him and found edema of the left side of the face with temperature of 100°. His throat appeared like any post-operative tonsillectomy.

He complained of no pain from the swelling in his face only a sensation of tightness. The following day (fifth) the swelling seemed to have grown worse with no particular tenderness or pain, just a discomfort from the general edema of almost the entire left side of his face to the point where the edema was gradually encroaching upon the left eye. There was absolutely no evidence of a localized abscess, no point of pain on pressure at any given spot and the following or sixth post-operative day, marked changes in the patient were

very noticeable of profound sepsis and he was immediately brought back to the hospital.

His temperature was 100.4°, pulse 120, respiration 32. Total white count 10,000, no malaria plasmodia. Differential count as follows: small lymphocytes, 7; large lymphocytes, 3; neutrophils, 87; eosinophiles, 2; basophiles 1.

Under local anesthesia, an incision was made over the parotid gland down to the capsule. The capsule was incised and a sero sanguinous fluid escaped from which a culture of staphylococcus aureus was found. The patient was given the usual heroic emergency treatment for septicemia. He died on the night of the sixth day following tonsillectomy.

REFERENCES

- Berndt, A. L., Buck, R., and von L. Buxton, R.: Pathogenesis of acute suppurative parotitis. *Am. Jour. Med. Sci.* 182: 639-649, 1931.
- Blair, V. P., and Padgett, E. C.: Pyogenic infection of the parotid glands and ducts. *Arch. Surg.*, 8:1-36, 1923
- Cole, Rufus: *Nelson's Loose Leaf Living Medicine*, Vol. 1, P. 246.
- Coleman, Warren: *Nelson's Loose Leaf Living Medicine*, Vol. 1, P. 167.
- Chargin, Louis, and Rosenthal, Theodore; Syphilitic parotitis. *Arch. Dermat. and Syph.*, 24:236-246, 1931.
- Custer, R. P.: Acute suppurative parotitis. *Am. Jour. Med. Sci.*, 182:649-661, 1931.
- Davidson, H. S.: Recurring, P. O. Parotitis. *Jour. Med. Sci. New Jersey*, 28:85-86, 1930.
- Howard, C. P.: *Disease of the Salivary Glands*, Vol. V. P. 23.
- Humphrey, W. R. and Sherwood, K. K.: Acute non-epidemic infectious parotitis. *Minn. Med.*, 11:722-724, 1928.
- Joachim, Henry: *Tice Practice of Medicine*. Vol. VII, P. 4.
- Kulvin, M. M.: A typical mastoiditis. Report of a case, *Laryngoscope*, 39:290-291, 1929.
- Kao, S. E.: Chronic maxillary sinusitis with suppurative parotitis; result of impaction of third molar teeth. *China Med. Jour.* 44:95-97, 1930.
- Lewis, G. V.: Acute suppurative parotitis, *Jour. Arkansas Med. Soc.*, 25:58-62, 1928.
- Lynn, F. S.: Secondary parotitis, *S. G. O.*, 34:367-370, 1922.
- MacNalty, A. S., and Malloch, A.: *Influenza*, P. 622.
- Rankin, F. W., and Palmer, B. N.: Postoperative parotiditis; Treatment without and with radium, *Ann. Surg.*, 112:1007-1013, 1930.
- Schereschewsky, J. W.: The effects of physical agents, light, heat, and electricity. P. 661E.
- Tamraz, J. J.: Parotitis secondary to operation on the ovary. *Military Surgeon*, 67:168-169, 1930.
- Tuyman, D. W.: Pyogenic infection of the parotid gland. *Jour. Ind. St. Med. Assn.*, 24:465, 1931.
- Whitmore, E. R.: *Nelson*, Vol. II. Bacillary Dysentery. P. 1691.

CONTACT DERMATITIS WITH REPORT OF FOUR CASES*

B. G. EFRON, M. D.†
NEW ORLEANS

Coca classifies human hypersensitivity (allergy) into three groups: serum disease, atopy and contact dermatitis.

Serum disease requires no explanation.

Atopy includes such clinical entities as bronchial asthma, hay fever, eczema, urticaria, angioneurotic edema, gastro-intestinal hypersensitivity and others.

Contact dermatitis is defined by him as a dermatitis due to surface contact with an excitant.

There are distinct differences between the atopic and the contact group. Because of the importance of these differences in diagnosis and treatment, it is worth while recording them.

ATOPY:

1. Subject to hereditary influences.
2. Excitants usually water soluble.
3. Skin tests by abrasion or injection fairly constantly present.
4. Specific antibodies can be demonstrated in the blood by passive transfer.
5. Contact of the antigen with the unbroken skin produces no reaction.

CONTACT DERMATITIS:

1. Not subject to hereditary influences.
2. Excitants often not water soluble, very often an oleoresin.
3. Scratch an intracutaneous test negative.
4. No demonstrable antibodies in the blood stream.
5. Contact (patch) is very often positive.

DIAGNOSIS

As in any other form of allergy, the diagnosis of contact dermatitis consists of searching for the responsible excitant. A detailed history is essential. Very often the patient's story discloses valuable clues. The time of the onset of the disease, the time of appearance and disappearance of the lesions, the occupation of

the patient, the relation of the eruption to contact with plants or flowers, and any other pertinent facts, all is important information in the evaluation of the possible causes in each case. The kind of mattress, bed covers, night clothing used by the patient should also be known, as well as the plants, shrubs, flowers and animals about the residence. The interrogation can never be too minute nor painstaking.

PATCH TEST

After a detailed history, one is prepared to test the patient for the suspected excitant or excitants. The patch test is the one of choice. The technic of the contact test as described by Ramirez is as follows:

"A small amount of test material is placed on a clear and apparently healthy area of the skin, and if it is a dry substance, it is moistened with distilled water and covered with a small square of linen and a square of rubber tissue, which is held in place by a patch of adhesive plaster. This is left in place for approximately twenty-four hours, and the reactions are then noted. A positive reaction consists of redness and the formation of small vesicles at the point of contact". At times heat and induration are also present, and if the reaction is particularly severe, swelling may occur. Itching at the site of the test may be very intense. Sometimes it is necessary to continue the test for forty-eight or seventy-two hours before obtaining a positive reaction.

The patch test, like all other tests, has its limitations. First, the material used in testing must not be a primary irritant, second, the test must reproduce the same type dermatitis the patient had originally, third, there should be possible contact with the particular substance.

CASE REPORTS

CONTACT DERMATITIS DUE TO PARTHENIUM HYSTEROPHERA

Parthenium hysterophora is abundantly distributed in this locality. It is most prevalent and is to be found on almost every lot and sidewalk in New Orleans. Locally it is known as the sneezweed or milkweed.

Case 1. Mr. S. M. W., aged 39 years, was seen October 15, 1931. He complained of a severe dermatitis of three years duration which occurred on his legs, hands and face. This dermatitis was present from June to cold weather. The itching

*Read before the Orleans Parish Medical Society, February 13, 1933.

†From the Allergy Clinic, Touro Infirmary.

was very intense and caused great discomfort. He was a railroad yard man by occupation. He noticed that when he was away from work for a week or so, his skin condition improved very much. On examination it was found that he had a marked erythematous papulo vesicular eruption that was limited to the hands, feet and face; being most marked on the hands.

Tests showed the following; ordinary pollen antigens by scratch and intradermal technic negative. Patch test with stem, pollen and leaf of the *Parthenium hysterophora* produced a marked positive reaction at the end of twelve hours. Scratch and intradermal tests with a glycerosaline extract of the *Parthenium* pollen were negative. Scratch tests with other pollens were negative.

Case 2. Mr. E. S., aged 30 years. Complained of a summer dermatitis of several years duration, which occurred on his hands and face. The itching and burning was very severe.

Examination showed a marked erythematous vesicular eruption with much crust formation, localized on the face and hands. The eruption was very marked on the face. Intradermal tests with pollen were negative. Patch tests with the wind borne pollen were also negative, but with the leaves and pollen of the *parthenium* was intensely positive in six hours.

COMMENT

These two patients represent typical cases of contact dermatitis. Because the abundance and distribution of the *Parthenium hysterophora* and the severe dermatitis produced by this plant by contact, I am convinced that it is one of the most frequent causes of summer contact dermatitis in New Orleans.

CONTACT DERMATITIS DUE TO COTTON BLANKET

Case 3. L. G., aged 6 years, was seen January 29, 1932. The complaint was that for the past several months he had been suffering from a rash in the groin and on the face. Lately his eyes had been itching. The rash occurred irregularly. His history was positive for allergic disease, the patient having had urticaria several times. Examination showed an erythematous papular rash in the groin, above the pubis, and about the eyes. Scratch tests with cotton wool dust, feathers, insecticide, dog hair and cat hair, were negative. The intradermal test with cotton and wool were negative. The patch test with samples of his blankets, underwear and pajamas, produced a distinctly positive reaction with the blanket. Removal of the cotton blanket produced a clinical cure.

COMMENT

This case illustrates the necessity for careful testing, only the cotton in the blanket caused irritation, whereas the woven cotton in the clothing and pajamas was harmless.

CONTACT DERMATITIS DUE TO FLANELETTE

Case 4. M. S., aged 1½ year, was seen on November 6, 1931. The child suffered from a rash, which came only in cold weather. In warm weather the rash disappeared; only to reappear as soon as cold weather returned. The mother believed tomato juice made the rash worse. On two occasions the patient awoke with her eyes swollen. The eruption was limited to the thighs and the face; particularly in the region of the eyes. The child used flanelette pajamas in the cold weather and cotton nightgowns in warm weather. Examination revealed an erythematous papular rash located in the groin and on the face. Skin tests by the scratch technic with foods and epidermal extracts were negative. Patch tests made with a sample of the baby's blanket, sheets and flanelette pajamas were done. The flanelette pajamas produced a distinctly positive reaction. Removal of contact with flanelette and unspun cotton produced a clinical cure.

CONCLUSIONS

1. The patch test is a most valuable aid in the etiologic diagnosis of contact dermatitis.
2. The etiologic importance of *Parthenium hysterophora* as a cause of summer contact dermatitis in New Orleans has been discussed.

REFERENCES

- Coca, A.F.: Principles of the diagnosis and treatment of allergic disease. *J. A. M. A.* 79:1201, 1931.
- Sulzberger, M. B. and Wise, F.: Ragweed dermatitis, *J. A. M. A.* 94:93, 1930.
- Ramirez, M. A. and Eller, J. J.: The patch test in contact dermatitis, *Jour. Allergy*; 1:489, 1930.
- Brown, A., Milford, T. L. and Coca, A. F.: Studies in contact dermatitis, *Jour. Immunology*, vol. 20, 1931.
- Stroud, C. M.: Allergic dermatitis, *Jour. Allergy* 2; 119, 1930-1931.
- Rinkel, H. J.: Contact dermatitis and eczema, with report of nine cases, *Sou. Med. Jour.* 25:621, 1932.

DISCUSSION

Dr. Von Mysenbug: Dr. Efron has brought before us something that is not only interesting but of great practical value, especially to those of us who work with babies and children. The skins of these little ones are very delicate and we are frequently confronted by eruptions of one sort or another that do not fit in with any of the text book pictures or the elaborate nomenclature of our dermatological friends. More frequently still do we

meet with great difficulty in clearing up these rashes. Changes are made in the diet, bowel disturbances are corrected, constipation is relieved, alkalis are administered and still the rash persists. Itching is a distressing feature and if sufficient scratching is indulged in secondary infection results. The flaneélete dermatitis that Dr. Efron spoke of is a patient of mine and he demonstrated the patch test in that case to me. It was very definite and corresponded exactly with the original dermatitis.

More recently a little patient of mine developed a severe rash about the gluteal region, associated with itching and therefore scratching to the point of bleeding. So extreme was the itching that he was kept awake at night and literally clawed at himself. Soothing lotions and salves were without the slightest effect. Remembering the other experience I suggested to the mother that she change

the material of his under wear, which was a knitted cotton, to a silk or nainsook. In two days time the rash had completely disappeared. We did not patch test him but the clinical result was so striking that there can be no doubt that he manifested a contact dermatitis due to cotton.

Dr. Efron (In conclusion): The patch test has come into prominence only recently.

An interesting thing about cotton is that when a patient is sensitive to it you will find that he is sensitive to cotton in as raw a state as possible. As demonstrated by the fourth case—the child could wear cotton nightgowns but could not wear flannelette, because of the small particles that come off the material.

We know that cases of dermatitis are due to sensitivity.

I wish to say that controls on non-sensitive individuals were made and all controls were negative.

“DISEASED” BUILDINGS:—Several articles have appeared recently in medical journals calling attention to inaccuracies often noted in scientific terminology, or nomenclature, not only in secular periodicals and newspapers but in technical bulletins as well.

A well-known tuberculosis laboratory has issued a circular announcing that a “Tubercular Building” for children was to be erected. This is a misnomer commonly used even among medical workers. Those who know have repeatedly pointed out that a diseased organ may be “tubercular,” but the patient is “tuberculous.” It is to be hoped that the building in question will not suffer from this type or organic condition, at any rate not for some years to come.

In the field of mental hygiene it has been necessary to explain to the uninitiated the difference between “mental defect” and “mental disease.” But we too have been careless with our psychiatric

vocabulary. Why the “Psychopathic Hospital”? There may be “psychopathic social workers” but state hospitals and mental hygiene clinics try as far as possible to employ safe and sane “psychiatric” social workers. Facetiously, and for the sake of brevity, professional workers have referred to students of mental deficiency as the “feebleminded group.”

“Insane” is a good old fashioned word, try as we might to discard it as a medical term, but why announce, as does a current bulletin that the foundations have been completed for two “disturbed buildings” and two “epileptic buildings” for the blanks “insane hospital”? Have you ever seen a “nervous hospital”? But even the purist is stumped at “mental institutions,” the phrase has come into such general use. The technologists have given us the televox, the electric man and the robot, but it takes a psychiatrist to endow a hospital for the insane with mind.—Bulletin National Committee for Mental Hygiene.

NEW ORLEANS Medical and Surgical Journal

Established 1844

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News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

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Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

TO OUR READERS

Doubtless some of those that saw the June issue of the Journal noted and read the appeal, appearing in the advertising columns, to use those products which are advertised in our Journal. We say **our Journal** advisedly because it is your Journal. It is owned jointly by you readers and you should have a personal interest in patronizing your own advertisers. The firms that advertise in the

State Journal should be given preference, not only because they are helping you in the support of your Journal, but also because every advertisement that appears in the advertising pages of the Journal represents a high grade product, ethical, and standardized, in which you can have absolute faith. There is not an advertisement in the Journal which does not have to pass the American Medical Association's high grade, critical investigations, and if it is not up to the standard or it is not ethical it can not appear in our pages. If drug houses, instrument makers, and food sellers do not advertise in the State Journal, then there is always the question as to whether or not their products are reliable and dependable.

You, who have felt the financial difficulties for the last few years, must realize and appreciate that the Journal likewise has suffered, advertising space has been cut down, and other sources of income have diminished. Why not then help out one of the medical activities in which you are interested without cost to yourself? Buy from these firms who advertise in the Journal. If detail men say they do not advertise in your Journal which you are supporting, ask them why not, and suggest to them that such an advertisement would yield them excellent results. If the several thousand physicians in Louisiana and Mississippi who receive the Journal would adopt this attitude then there would be an urge and a stimulus to those firms that are not helping with the Journal to take space and thus reciprocate with the medical profession upon whose support their livelihood depends. An attitude of healthy skepticism concerning non-advertised products, and a repeated urge by our numerous representatives in the medical profession, would certainly help, aid and assist in the carrying on of one of the important activities of the State Medical Societies.

STATE MEDICINE

An astute business man recently remarked that physicians should be prepared to meet the undoubted changes that will take place

in the relation of the physician and the patient to the State. These comments were based upon his previous statement to the effect that the Government virtually had taken over the running of all business, and it would not be very long before the professions likewise would feel the heavy hand of the Government. Undoubtedly the comments of this observer are worthy of serious consideration. There can be little question but that gradually under our present economic conditions State Medicine to a certain extent is a reality. The State is furnishing medical care for a considerable portion of the population, and while it is true that a considerable group who are the recipients of State aid have been dropped from this free care, nevertheless there still remains a great portion of the population who are taken care of free, gratis, and for nothing when they get sick. This is unfortunate, but it is something that can not be helped. Always in every civilization there is a large group of the population who is not able to take care of themselves financially when any undue strain upon their resources, such as sickness, develops in the wage earner or members of his family.

Possibly one reason why State Medicine, National, Sick and Accident Insurance, and other forms of governmental care have not been more generally advocated than they have been in the past lies in the fact that the cost of illness to the submerged portion of the population is borne very largely by medical men who give their services at charity hospitals and in homes without remuneration. Were they to be paid for the services rendered an enormous accretion to the governmental budget would naturally result. In view of this loss of potential income to the physician, one wonders at times whether or not the medical man is cutting off his nose to spite his face in order to preserve the individual relationship between physician and patient; such a relationship certainly does not exist in a very goodly per cent of the medical service now given to people.

The idea of State Medicine is still abhorrent to the average physician. Yet in some

form or another it is safe to predict that it will come. When it does come physicians should be prepared to stand up for their rights and not meekly accede to ideas and plans of well meaning but impracticable sociologists. It is only through organization and working together that the physician can uphold his individual rights. Now as no other time in the past is the time for every wise physician in this country to tie up and link himself with organized medicine. If he does not just so much will the chain of organization be weakened.

THE ACTION OF RADIUM ON PELVIC TUMORS

On account of the remarkable power of radium and x-rays to destroy living cells, these agents are commonly used to treat certain types of malignant growths. Very generally the idea has been accepted that the beta particles of the electric waves have a peculiarly sensitive action upon malignant cells. Pullinger¹ says that he is not in accord with this concept of the action of beta irradiation. He does not believe that "the cells of malignant tumors are destroyed by an amount of radiation insufficient to destroy normal tissues² He writes furthermore that that in regard to the sensitivity to damage by irradiation, hemopoietic cells are apparently injured more readily than malignant cells. A sarcoma of the tibia may be eradicated locally; its secondary growths are unaffected, but the extensive myeloid tissue throughout the body is so damaged as to show a leukopenia or even an aplastic anemia. He contends that all types of cells may be directly injured or destroyed by irradiation, and no proof, except by inference, has ever been brought forth which shows that one cell is more readily destroyed than another.

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1. Pullinger, B. Davidine: The Action of Radium as Seen in the Pelvis. *Lancet*, 224:902, 1933.
 2. Report of Radium Conference. *Lancet*, 224:44, 1933.

A large number of specimens either from operation or autopsy that had been treated by radium or x-ray were examined microscopically by this author. The most constant morphologic alteration was found to be injury to the blood vessels, which may be so damaged as to produce subsequent changes in the tissues. The author furthermore carried out other experiments to substantiate his ideas. He believes that greater damage occurs to tumor tissue than normal tissue because "(1) the dose is concentrated upon it; (2) the vascular supply of a neoplasm is carried on by means of capillaries which are

imperfect and extremely liable to damage in any event; (3) there is no collateral circulation to compensate for damage." Treatment of carcinoma of the cervix is more favorable because diagnosis is prompt; the growth is on accessible tissue; damaged tissues can be shed, and metastasis is late.

The concept of the author is an extremely interesting one. He seems to have substantiated it by morphological study of the tissue in and around the malignant growth. There is no actual selectivity but merely an apparent selection due to greater vulnerability of the blood supply of the new growth.

HOSPITAL STAFF TRANSACTIONS

KING'S DAUGHTERS' HOSPITAL STAFF MEETING

GREENVILLE, MISS.

The July meeting of the Greenville King's Daughters' Hospital Medical Staff was held at the hospital July 5. The vice-president, Dr. G. W. Eubanks, opened the meeting. It was voted to omit the August meeting.

Following transaction of routine business, Dr. R. E. Wilson reported a recent case of tetanus in which sodium amytal was used freely with gratifying results. The patient, a boy aged 9 years, while playing at school, punctured the skin of the perineal region by a splinter. The wound was considered trifling and a local antiseptic applied. There was only moderate discomfort in walking for the following two days. On the third day the child appeared ill and examination revealed typical symptoms of tetanus. Sodium amytal and tetanus antitoxin were started immediately. The perineal wound was opened, two large splinters removed, and 10,000 units of antitoxin injected in and around the wound. During the first week about 160,000 units were given, about one-half being administered intraspinally. Amytal was given frequently by a nasal stomach tube, by rectum and by vein. Five grains intravenously relaxed the patient for about four hours. During two weeks 250 grains of sodium amytal were given. Recovery was complete with no unfavorable sequelae.

Dr. E. T. White presented the gross specimen, histologic sections and roentgenograms of a sarcoma of the lower end of the femur. The tumor was eight inches in diameter, having almost completely destroyed the shaft and extended to the articular cartilage. It was very vascular and presented a well defined capsule. Microscopically it was composed of malignant spindle cells and was

exceptional in presenting very many giant cells. Dr. White discussed the pathology.

Dr. Beck gave the pertinent history. The man, aged 35 years, was struck by a pick 5½ months ago. There followed a few days of disability, then a short period of recovery, after which disabling pain and swelling developed. Dr. Beck urged amputation which was refused until very recently.

Dr. Beals, in discussing, preferred the designation "osteogenic sarcoma" rather than giant cell sarcoma, because of possible confusion with the benign bone tumor which has borne the latter name. (He suggested registering the case with the Codman registry.

Dr. Payne discussed the poor prognosis of this and other cases which have occurred in this community.

Dr. White also mentioned the recent finding of a larva of pork tape worm in a tissue removed from a healing carbuncle of the neck of an adult man.

John A. Beals,
Secretary.

Greenville,
July 6, 1933.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on June 10. After transaction of the business of the staff and consideration of reports from the Records Department and Analysis of the Work of the Hospital, the following special case reports were presented:

1. Intra-Abdominal Cyst Supposedly of Pancreatic Origin.—Dr. J. A. K. Birchett, Jr.

Discussed by Drs. G. M. Street and L. S. Lippincott.

2. Petit Mal.—Dr. L. J. Clark.

Discussed by Drs. G. M. Street, H. H. Johnston, and R. A. Street, Jr.

3. Toxic Adenoma of Thyroid.—Dr. R. A. Street, Jr.

Dr. G. M. Street made a report of the recent meeting of the American Medical Association at Milwaukee.

Dr. L. J. Clark made a report on Addison's disease, from the literature.

The meeting closed with a lunch. The next meeting of the staff will be held on Thursday, August 10, at 6:30 P. M.

Leon S. Lippincott,
Secretary.

ABSTRACT.—INTRA-ABDOMINAL CYST SUPPOSEDLY OF PANCREATIC ORIGIN.—Dr. J. A. K. Birchett, Jr.

PATIENT.—Colored male, aged 35 years, laborer.

PRESENT COMPLAINT.—Swelling in abdomen.

HISTORY OF PRESENT COMPLAINT.—Four years ago noticed tight sensation in upper abdomen associated with digestive disturbance mostly manifested by heart burn and nausea. In January, 1930, was seen by one of us in this clinic when a diagnosis was made of gall bladder disease and gastric analysis and roentgen ray studies advised. He failed to return. After palliative treatment was given he was completely lost sight of until he presented himself again for treatment. He stated that the medicine which we gave him three years ago relieved his symptoms and he felt fairly well until last fall when he consulted another physician for the same symptoms as the previous disturbance. He now complains that his abdomen is so distended that he cannot sleep well and though his food doesn't actually disagree with him he feels very uncomfortable after eating. He has been working continuously up until the past week. He thinks that the swelling and tightness has increased markedly the past week. He has lost some weight, about 20 pounds. Bowels have been acting regularly. There are no urinary symptoms. Past History.—No serious illnesses; never been sick more than a week previous to this illness and that was an attack of malaria four years ago. Had gonorrhoea twenty years ago; no chancre. Cardiovascular history normal. Respiratory history normal excepting attack of tonsillitis; no cough or bronchial irritation. Digestive history gives evidence of digestive disturbance simulating gall bladder disease as complains of gaseous distention, burning sensation in epigastric region, pain over upper right abdomen and backache. Genito-urinary history negative; nocturia occasionally. Family History.—Irrelevant.

Physical Examination.—Fairly well developed and nourished negro male of medium build, com-

plaining of fullness in abdomen and difficulty in lying down. Abdomen: Distended, tight, with large tumor mass apparently originating in upper left quadrant. From palpation mass seemed to be bilateral. There was a decided ballottement. The remainder of the physical examination was negative. Laboratory Examination.—Blood: Hemoglobin 82 per cent; erythrocytes 5,270,000; color index 0.78; reticulocytes 0.1 per cent; leukocytes 5,500; differential leukocyte count: small lymphocytes, 45 per cent; large lymphocytes, 11 per cent; monocytes, 2 per cent; polymorphneutrophils, mature, 25 per cent; band forms, 15 per cent; eosinophils, 2 per cent. No malaria. Urine: Trace of albumin; many leukocytes; few fresh blood cells. Wassermann, Kline and Young, and Kahn tests, negative.

DIAGNOSIS: A diagnosis was made of intra-abdominal cyst either arising from pancreas or of mesenteric origin. Because of the fluid nature of the growth it was not thought to arise from the kidney or spleen as tumors of these structures would in all probability be of a more solid type with the exception of polycystic kidney and this is usually a bilateral condition. As far as we could ascertain there was no mass in region of right kidney. Hypernephroma was first thought of as a possibility but again the cystic characteristics ruled out this more solid type of growth.

PROCEDURE.—This patient was advised as to the seriousness of his disease and he was perfectly willing to run the risk of operative treatment as a possible source of relief if only temporary as he has been suffering much pain and discomfort the past two weeks because of difficulty of respiration and intra-abdominal tension. Under light ether anesthesia an incision was made over upper left rectus muscle and abdominal wall opened down to the wall of cystic mass which was densely adherent to the parietal peritoneum. An area of the cystic wall was dissected free so that a pouch could be pulled up through the abdominal wall. The cyst was then punctured with size 15 aspirating needle and straw colored fluid was evacuated under great pressure. The cyst was gradually decompressed because of the danger of cardiac shock as the cyst seemed to reach well up into the upper left quadrant with pressure against the heart. Approximately two gallons of fluid were removed by aspiration. The cyst wall was then incised with gush of large quantities of reddish fluid and as the cyst was emptied coffee ground material was removed from the depths of the cyst amounting to several emesis basinsful in quantity. Not until this material was removed could a thorough exploration of the cyst be done. The extensiveness of this cyst was remarkable. The boundaries were from the diaphragm on the upper left to the crest of the ileum and extending

two-thirds across the abdominal cavity. Its capacity must have easily been four gallons of fluid. It was deemed inadvisable to remove so extensive and adherent a sac because of the importance of the structures to which it was adjacent and the danger of hemorrhage. From the appearance of the contents of cyst and possibility of its origin a diagnosis was made of cyst of pancreas of hemorrhagic type. Two large drainage tubes were placed in cyst and a neck approximately three inches long constructed from the redundant tissue around them to act as a permanent fistulous tract and keep the cyst drained.

Operation was well borne. For three days improved but on fourth day began violent hiccough and temperature began to rise as high as 103°F. Hiccough did not respond to any treatment except morphine and this did not control paroxysms longer than two hours. Duodenal tube was kept down continuously and stomach washed with warm soda solution. Glucose intravenously and 700 cc. of blood as transfusion were administered to combat the rapidly developing sepsis.

On eighth post-operative day the left phrenic nerve was sectioned under local anesthesia to produce paralysis of left diaphragm and stop hiccough. The result was dramatic as the reflex ceased almost immediately but alas the relief was only temporary and in 36 hours was present again. Under this constant strain of hiccough and the growing sepsis patient expired 10 days after drainage of cyst was done.

ABSTRACT.—Petit Mal.—Dr. L. J. Clark.

PATIENT.—White male, aged 43 years, married; farmer; first seen May 15, 1933.

CHIEF COMPLAINT.—Paroxysms of cold sensations followed by hot flashes, lasting only a few seconds, and accompanied by considerable dyspnea, acceleration of respiration, redness of face and inability to talk; no pain or discomfort. These paroxysms last about one or two minutes and may occur as often as two hours apart, attacks continuing for periods of about 36 hours. Afterwards he may be free of all symptoms for as long as three months. Paroxysms first occurred about one year ago with no apparent cause for the initial attack. Seems to always have a cold with the paroxysms and dull pain through head. Appetite fair; no digestive disturbance; no loss of weight. Not nervous. Nocturia one to three. No fever; no chills; no joint pains. PAST HISTORY.—Measles and typhoid as a child; no other illnesses except a tendency to colds lately. Had food poisoning about two years ago and was examined thoroughly but nothing found. No operations; no venereal diseases. Three children living and well. Moderate eater of all classes of food; smokes cigars occasionally; does not chew tobacco or drink liquor;

habits always good. FAMILY HISTORY.—Father died at age 73 of "kidney trouble;" mother died at age 70, cause unknown; six brothers living and well; two brothers dead, cause unknown; one sister living and well; one sister dead, cause unknown. No insanity or mental disturbances; no cancer or tuberculosis in family.

PHYSICAL EXAMINATION. — Temperature 93.6°F.; pulse 82; respiration 22; blood pressure 125/90. Well developed and fairly well nourished, apparently not ill. Sclerae slightly jaundiced; tonsils chronically diseased. Slight soreness in right lower quadrant of abdomen; no rigidity or masses. Reflexes normal; no disturbance of tactile, pain, or thermal sensations. Eye grounds negative; visual fields good. LABORATORY.—Urine: Specific gravity, 1.031; trace of indican; trace of acetone. Blood: Hemoglobin 87 per cent; reticulocytes 0.17 per cent; leukocytes 7,800; small lymphocytes 32 per cent, large lymphocytes 6 per cent, polymorpho, neutrophils 60 per cent, eosinophils 2 per cent; no malaria. Wassermann, Kline and Young, and Kahn tests, negative. Blood sugar 118 milligrams per 100 cc. Spinal Fluid: Clear; Wassermann and Kline and Young tests negative; globulin slightly increased (+); protein, slightly increased; colloidal gold reaction negative. Fluoroscopic: Thorax normal. Stomach fills well; medium fishhook; motility and mobility normal; cap normal; slight duodenal stasis.

DISCUSSION.—We have here a case that suggests petit mal. The paroxysms are without aura; there is sudden loss of consciousness without convulsions. It is in this type of case that a paroxysm may occur while in the midst of a conversation, at a meal, while reading, etc. The attack comes on, the patient ceases all activity and is momentarily absent and then resumes where he stopped. The petit mal may be accompanied by pallor or hyperemia, yawning, staring, twitching of eye lids, lips and face, or sudden laughter. There may be incontinence of urine. He may go through automatic but purposeful acts such as dressing and undressing. There may be narcolepsy, certain forms of local epilepsy, repetition of words, dipsomania, etc.—and perhaps sudden, transitory paralyzes or transient attacks of vertigo. This condition undoubtedly has a close relation to an allergic process.

This type of syndrome may be an early manifestation of a brain tumor, and is to be remembered in future observations.

TREATMENT.—So far there has not been sufficient time to demonstrate any treatment. He has been advised to have all possible foci of infection removed. In this case, I have recommended removal of tonsils and a possibly diseased appendix. He has been instructed to begin taking small doses of luminal when he first notices any sensation of

the return of the paroxysms which he may have in the future.

ABSTRACT.—TOXIC ADENOMA OF THYROID GLAND.—Dr. R. A. Street, Jr.

PATIENT.—White female, aged 37 years, married; admitted to hospital on May 19, 1932.

CHIEF COMPLAINT.—Extreme nervousness, swelling over thyroid gland, and attacks of anginal pain. HISTORY OF PRESENT COMPLAINT.—For past ten months had noted increasing swelling over the thyroid, nervousness, occasional dysphagia, palpitation, tremor of the hands, excessive sweating, and exophthalmos. There had been no urinary symptoms and no great change in weight. Appetite was variable and a diet had been prescribed in January because of high blood pressure. Very weak at times and has noted occasional dizzy spells. For about one and one-half months frequent short attacks of precordial pain. Has been on Lugol's solution, 15 drops, three times a day, for past month, with no improvement. PAST HISTORY.—Questioning reveals that patient had noted a lump in region of thyroid for past ten years but this had not increased in size up to onset of present illness. Five years ago was treated for three months for high blood pressure. Menstrual history not remarkable; six living children; two miscarriages, at two and three months respectively. Operation in 1914 for laceration of perineum and again in 1915 for ovarian tumor.

PHYSICAL EXAMINATION. — Temperature 99.6°F.; pulse 84; respiration, 18; blood pressure 190/100. Obese, age apparent, well nourished and well developed, not acutely ill. Extremely nervous and very talkative. Marked bilateral exophthalmos but no lid lag. The pupils are regular and react to light and accommodation. A soft, symmetrical swelling over thyroid, readily palpable. Heart sounds forceful and a loud systolic murmur over entire precordium. Abdomen moderately distended, but no masses found. Marked tremor of both hands; deep reflexes very active on both sides.

Basal Metabolism.—May 23: DuBois standard, + 30 per cent; Harris-Benedict standard, + 40 per cent. Test was reported unsatisfactory because of lack of cooperation of patient.

May 30: DuBois standard, + 39 per cent; Harris-Benedict standard, + 44 per cent.

TREATMENT.—Lugol's solution, 18 drops three times a day, was begun on May 26. On June 2, 20 minutes of deep roentgen ray therapy over anterior neck—200 K. V.; 4 m.a.; F. S. D. 50; Filter, 1.77 mm. Cu., 0.5 mm. Al. This was repeated on June 4 and June 6.

On June 10, the basal metabolism was: DuBois standard + 26 per cent; Harris-Benedict standard + 32 per cent.

Deep therapy was again administered on June 13. June 15, basal metabolism was: Dubois standard, + 14 per cent; Harris-Benedict standard + 22 per cent.

On June 20, a partial thyroidectomy was performed under local anesthesia. Post operative course was very smooth after the first 48 hours. Patient was discharged on June 30 in very good condition.

Pathological report showed adenoma of the thyroid and thyroiditis, chronic.

BAPTIST HOSPITAL STAFF MEETING

The monthly meeting of the Clinical Staff of the Baptist Hospital was held Tuesday, June 24, at 8:00 o'clock with Dr. H. W. E. Walther, Chairman, presiding.

Dr. Charles L. Cox presented a paper on "Stricture of the Esophagus" in which he confined his discussion to that type of stricture caused by corrosive escharotics. The manner of treatment depends upon the degree of stricture formation. If the patient can swallow even a minute amount of liquids, the attempt should be made to have the patient swallow a braided silk thread and if this is successful, graduated bougies can be threaded and the stricture dilated at periodic intervals without much difficulty. Under no circumstances should a stricture be dilated blindly from above. This should always be done through an esophagoscope and there is even a certain amount of danger attached to this; particularly so if there are several strictures. In the event that a string cannot be passed from above a gastrostomy should be done. A urologist should introduce a cystoscope through the gastrostomy wound and pass a filiform through the stricture. A string is then pulled through from below and the retrograde dilations may then be begun with graduated rubber bougies with no discomfort to the patient and, what is more important, with no danger of perforation. In those cases where no vestige of the old esophageal passage is found, the aid of the radiologist must be enlisted. A roentgen ray catheter is inserted from above and one from below and the patient is fluoroscoped and the vertical distance noted between the two tips. This usually is very small and one catheter with pressure makes a dimple which can be burned through with a special diathermy needle. The mortality in these cases is very high but fortunately only about three per cent of these cases present such a condition.

This presentation was discussed by Dr. F. E. Lamonthé and Dr. L. W. Magruder.

Dr. Ansel M. Caine presented an interesting paper on "Oxygen Therapy". This method of treatment is most beneficial in the pneumonias, decompensated heart disease, angina pectoris, cardio-renal edema, diabetes, toxic thyroids, post-operative

atelectasis, and infections with high fever, requiring an excessive amount of oxygen to meet the combustion requirements of the system. A general supportive treatment should be carried out but with oxygen in sufficient dosage to keep the hemoglobin saturated and an excess in the plasma. The disease will not always be shortened, but the morbidity will usually be much less and the chances of recovery will be increased. Encouraging results have been obtained in treating morphine addicts in negative pressure tanks, this idea having been obtained from the observation that it has been noted that the craving for morphine was much less and sometimes disappeared in very high altitudes. The most encouraging results and most satisfactory to all concerned are obtained when treatment is begun early in pneumonias. Probably the most useless calls are those to administer oxygen when a person is obviously dying.

Dr. F. E. Lamonthe presented a pad devised by him, to be used for irrigating purposes. This may be used in any type of irrigation and is of equal value in the office or in those cases in which the patient may be confined to the bed.

There being no further business the meeting adjourned to meet again in October.

HOTEL DIEU

Because of the recent death of the President, Dr. P. L. Thibaut, the official procedure of the Monthly Staff meeting was not carried out, although the members were present in a body, with the new-President, Dr. P. B. Salatich, presiding, and the Secretary, Dr. Ruth Aleman, at the desk.

Dr. Val H. Fuchs, Chariman of the Intern Com-

mittee, read a short article concerning a change in the assignments for interns, as suggested by the American Medical Association during the visit of its representative to Hotel Dieu several months ago.

The Resolutions Committee, composed of Dr. Lucien A. LeDoux, Chairman, Dr. Maurice Couret, and Dr. Homer Dupuy, presented the following resolutions on the death of the President:

Whereas: the Divine Power has taken from our midst our President, Dr. P. Leonce Thibaut, a member of the Staff for over twenty years, and Whereas: in the passing of this true Physician, gentleman and friend, the institution and we have suffered a great loss, not only scientifically but as counsellor and advisor as well, and Whereas: we feel deeply and fully the void that exists and never will be filled in our respect and esteem of this valued colleague,

Be It Resolved: That at this meeting of the Hotel Dieu Staff we wish to give expression to our sorrow and our loss and want to extend to his family our deepest sympathy in their bereavement,

Be It Futher Resolved: That these resolutions be sent to the immediate family and a copy of these resolutions be spread upon the minutes of this meeting.

Respectfully submitted,

LUCIEN A. LE DOUX, M.D., Chairman,
MAURICE COURET, M.D.,
HOMER DUPUY, M.D.

Dr. Maurice J. Gelpi was nominated as Vice-President, and was unanimously elected.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

REPORT OF THE INDUSTRIAL INSURANCE COMMITTEE

The following report was read before the Orleans Parish Medical Society, June 8, 1933 and ordered published in the Journal:

To the Officers and Members,
Orleans Parish Medical Society.
Gentlemen::

Following the preliminary report of December 8, 1932, this Committee has endeavored diligently to obtain information conducive to a more extensive report. It is regrettable, however, to admit that the source from which the greater amount of valuable data should have been forthcoming, that is, the Medical Profession of New Orleans, has been lacking in assistance and interest; so much so that one of the doctors very indignantly accused the Orleans Parish Medical Society as being too personal, and

refused to fill out the questionnaire sent out by this Committee.

Several means have been employed to enlist the co-operation of the physicians engaged in Industrial or Fraternal Organization work but with only a very meager response. Two hundred and seventy-six communications have been addressed to physicians, members of the Orleans Parish Medical Society and to the forty-eight secretaries of the forty-eight State Societies, the latter with a view of obtaining information regarding laws governing the Industrial or Fraternal type of work. Of the 228 communications addressed to members of the Orleans Parish Medical Society, five appeared before the committee and 22 responded by letter. Of the 22 responding by letter, 14 are not concerned with this type of work and only 8 engaged in Industrial or Fraternal organization work answered

the questionnaires. Of the eight answering the questionnaire, four are engaged in Industrial work in addition to Benevolent or Fraternal organization work, the others doing only Fraternal work.

Of the forty-eight letters addressed to the Secretaries of the State Medical Societies, 35 answered but none supplied any information relative to our investigations. Some sent copies of Laws concerned only with compensation work, and in one state at least this type of medical practice does not exist. In perusing several copies of these bulletins no references are found as to Industrial, Fraternal or Benevolent organization work concerning physicians, and only one as far as regulating the responsibilities of the association to the individual members or vice versa. In two states there are some clauses concerning hospitalization. This information was sought because it was reported to the Committee that in one state exists a Law whereby associations operating for profit are prohibited from employing a physician on a monthly salary. The Secretary of that State, however, knows nothing about it.

In New Orleans there are industrial insurance companies that issue certificates or policies concerning with death benefits, sick benefits, others with a funeral benefit and still others with medical and drug benefits. Those operating on a death and sick benefit employ doctors who are paid from 50 cents to \$1.00 for the purpose of examining applicants and the claims of those who have been confined from sickness and in this regard one physician who formerly did this type of work reports that often he had reasons to believe that the diagnosis made by the attending physician were fraudulent.

There are, as far as this Committee has been able to ascertain, eight industrial companies who employ physicians to attend to sick members. The salaries received by the physicians vary from \$35.00 to \$75.00 per month depending on the number of members living within the district assigned to the physicians, but in no instance was it possible to ascertain the number of individuals each physician has to care for though the total number of individuals in these eight companies numbers about 60,000. From the four answers to the questionnaire sent out it was computed that the average compensation a physician received for house or office calls amounts in normal times from 10 cents to 50 cents. Of course during epidemics or in the cold winter days the compensation is even less. In addition to medical attendants some of the organizations furnish medicines, but the limitations of prescribing are totally inadequate for proper medical care since they permit only a certain definite quantity and only from a restricted number of drugs. Surgical operations or obstetrical work is to be paid for by the individual on arrangements independent of the

contract with the association, but the committee is informed that usually these individuals finally apply to free clinics.

Concerning fraternal and benevolent associations, the Committee has encountered great difficulties of ascertaining the number of such associations in New Orleans, 1st, because of the lack of co-operation of the members of the Orleans Parish Medical Society; 2nd, because some of the physicians of New Orleans, not members of the Society the Committee has not approached, and 3rd, because in the report of the insurance division of the State Department not all such associations are listed, but from the few reports of physicians and those obtained from the report of the insurance division of the state there are numerous association groups varying in membership from 10 to 400. It was approximately estimated however, that the total individual membership is about 90,000 and when in addition one may count the dependents who are entitled to medical care in virtue of such individual membership in any particular lodge it may be easily estimated that about 270,000 individuals are eligible for services of this character.

Usually these associations compensate the physicians by sums varying from 50 cents to 75 cents per quarter per individual member or in some few instances at a stipulated salary of \$25.00 to \$125.00 per month, but the one paying \$125.00 monthly averages 220 to 280 office and home calls per month. The information obtained from the physicians engaged in fraternal and benevolent association work varies considerably as to the monetary compensation. Usually they average from 20 cents to \$1.00 office and home visits, in a few instances \$1.50 and in one instance \$4.00. This latter physician receives \$125.00 a quarter from an association having 80 members and the number of calls are few in proportion to the fee received, but in one instance one physician has averaged in one family alone less than one half of one cent a call in one year. During epidemics such as grippe or cold days the average monthly remuneration drops in proportion. Some physicians claim that 50% to 60% of the individuals belonging to these associations could afford to pay the usual physician's fee, others claim that the majority are individuals who ordinarily would apply to a free clinic. In one industrial company with a membership of nearly 40,000 the physician engaged to examine the applicants receiving from 50 cents to \$1.00 per examination, usually arranges the time of examination when 8 or 10 applications aggregate in a certain particular district then he calls on these individuals and within one hour to one hour and a half he has completed what is supposed to be a thorough examination. One may easily assume that such a perfunctory examination would hardly benefit the company, the individual, or the physician who gets in a ha-

bit of making these examinations only with an idea of collecting. One physician who, among his organizations in his care is a colored society which has standing committees composed of members of the organization appointed to determine whether the sick member is in need of medical attention or not. This physician receives \$1.00 for day calls and \$2.00 for night calls and regardless of how ill the individual may be or what the opinion of the physician might be as to whether his return visits would be necessary, the committee first must be called to deliberate on the necessity to allow this doctor to earn the succeeding dollar or two. The reports received by the committee in many instances indeed border on the comedy for instance one physician who cares for an organization entitled also to medicines besides his care has been called to the houses of members for prescribing a five cent bottle of vaseline or castor oil.

Though the greatest majority of the members of the Orleans Parish Medical Society engaged in industrial, fraternal or benevolent associatoin work have not aided the committee to facilitate their report to your honorable body, sufficient evidence has been obtained to condemn this type of practice particularly the industrial as a means only to increase the finances of those who own these organizations and degenerate the morale of the physician engaged to such a low standard of discharging their professional duties.

From the following it must be evident that the task imposed on this committee has not been an easy one and therefore the burden of recommending remedial measures becomes still more difficult;

First, because of the failure of many of the very ones, ones who have been primarily responsible for initiating these investigations have been remiss in their duties.

Secondly, because from the few who have been kind enough to assist this committee the opinions have been quite conflicting as to the harm or benefits derived from this kind of practice.

Thirdly, because the Committee feels that several months of constant investigation must be carried on before obtaining the unanimous co-operation from all physicians engaged in this type of practice notwithstanding that quite a number are not members of organized medicine.

The Committee therefore wishes to make the following recommendations:

1st, that the Orleans Parish Medical Society makes every effort to invite every ethical physician practicing in New Orleans to become a member of this organization.

2nd, that this Body appoint a large standing committee composed of ten or twelve members half of whom to be from among physicians doing industrial, fraternal or benevolent work.

3rd, that this appointed committee gather infor-

mation and evidence of all kinds pertaining to this kind of work over many months until ever physician and every organization has been accounted for. Then it may be possible to formulate some definite concrete measures.

The undersigned wishes to express his sincere appreciation to those physicians who have so kindly appeared in person or answered the questionnaire and to the members of this Committee, namely; Drs. David Adiger, M. P. Boebinger, J. Geo. Dempsey and Frank L. Loria for their untiring efforts in assisting to submit this report.

Respectfully submitted,

Adolph Jacobs, M. D., Chairman,
Committee on Industrial Insurance Abuse.

The following resolutions were adopted by the Orleans Parish Medical Society at the regular meeting held Monday, July 10, 1933.

DR. HENRY DICKSON BRUNS

Henry Dickson Bruns—gentleman, physician, teacher, civic leader, writer—lived four years beyond the period allotted to man and to the end led a busy and useful life.

Born on June 15, 1859, in Charleston, South Carolina, of South Carolina ancestry, he was proud of that fact yet always considered himself a son of New Orleans, where he came as a small boy and remained for the rest of his days. He was educated in its private schools, then at the University of Virginia; also studied medicine first in New Orleans, later at Jefferson Medical College in Philadelphia, graduating in 1881, receiving the Henry C. Lea prize for the best thesis.

He began practice in diseases of the eye and ear in 1883 in New Orleans as visiting oculist and aurist in the Charity Hospital, where he instituted the first organized out-patient clinic.

The next year he was one of the editorial staff of the New Orleans Medical and Surgical Journal and served thereon several years. Later, in 1888, he was one of the founders of the New Orleans Polyclinic, the first post-graduate medical school in the South, which was absorbed by the Tulane University as its Graduate School of Medicine in 1906 and in which he taught ophthalmology until 1920.

In the mean time, about 1890, some public spirited women having founded the New Orleans Training School for Nurses, the first successful school in the South for the education of professional women, Dr. Bruns taught physiology as a member of its faculty and soon, his Polyclinic faculty actively co-operating, the New Orleans Sanitarium was established as a private hospital not in competition with the doctors of New Orleans, and designed to furnish the field for the practical training of the pupils of the Training School. Dr. Bruns

continued his active interest in the affiliated institutions until the absorption of the one by Tulane and the sale of the other to the Presbyterian Hospital closed their respective careers.

In 1893 he was appointed surgeon-in-charge of the eye department of the Eye, Ear, Nose and Throat Hospital, a few years later surgeon-in-chief besides, serving in both capacities and a mainstay of the institution until his resignation in 1930.

Always devoting much time and labor on behalf of civic affairs, he was a leader in all reform measures, including the Young Men's Democratic Association movement, the Anti-lottery Campaign, the Citizen's League, the Ballot Reform League. He served as a member of the Constitutional Convention in 1898 and was largely instrumental in securing the use of the Australian Ballot in Louisiana. Never holding or seeking public office, his efforts were devoted to the benefit of the people of New Orleans, oft to his own financial disadvantage.

Never posing as a philanthropist, he did much for his fellowman through his hard and successful work in the clinics for so many years, as well as the devoted care and tactful sympathy he bestowed upon his private patients, whether or not they were able to compensate him adequately.

He was past-president of the local and the state medical societies, a member of the American Medical Association and the American Ophthalmological Society, as well as of several other national clubs and leagues.

He wrote in a clear, logical and scholarly style, publishing many articles in medical magazines and text-books.

The mere enumeration of Dr. Bruns' principal achievements is enough to indicate what a full life he lived and how much he accomplished despite the handicap of a frail body and frequent illness.

He liked fishing, hunting, the raising of dogs, beagles especially, and enjoyed his vacations in Virginia on his farm. He was fond of the arts, especially of music.

Blessed with a quick intellect, he builded on a solid university foundation by continued, voluminous, selective reading and became one of the best educated of men and an entertaining one. Endowed with an indomitable character, an unswerving feeling of justice, a keen sense of humor, a cheerful philosophy, an innate kindness, he was a delightful companion, an appreciative friend.

He never played to the galleries; he hated the hypocrite and the sycophant, ready to laugh at the man who took himself too seriously.

Reserved in manner, when first met he often seemed cold and distant, but as acquaintance grew he could not but be admired and esteemed more and more. He was held in high regard by the whole profession of the state and his ability and

skill were recognized by his fellow specialists all over the country.

Notwithstanding all his qualities, probably on account of some of them, the prized but ephemeral quality of popularity was not his. He occupied a high social position and had a large circle of acquaintances, yet he formed comparatively few intimacies in the profession or outside. He called friend one "that sticketh closer than a brother," but such he "grappled to his soul with hooks of steel."

He died on May 19, 1933, leaving his wife, four sons, four grandchildren, nieces and nephew, and some old friends, not to mourn his loss but to cherish his memory.

DR. WALDEMAR T. BROWNE

Dr. Waldemar T. Browne, Director of the Bureau of Communicable Diseases of the Louisiana State Board of Health, died at Charity Hospital, May 9, 1933, following a cerebral hemorrhage which occurred the previous day at his home, 1022 Webster Street, New Orleans.

Dr. Browne had been connected with the State Board of Health since January 31, 1929, and served in both Spanish-American and World Wars. He was in charge of similar work at Jackson Barracks. Dr. Browne was a member of the local and state medical societies. He was a great student not only of medical subjects but of other sciences as well. He retired from his work in the evenings to his own library which is filled with many volumes of scientific literature as well as volumes of various other kinds of literature. He had been a student from his earliest childhood as evidenced by the following degrees: College of Physicians and Surgeons, New York City, 1895, M. D.; University of Berlin, 1896, M. D.; University of Heidelberg, 1897, Ph. D.; and Long Island College Hospital, 1900, M. D., where he taught in the Post Graduate School for several years.

Dr. Browne spoke French, Spanish and German fluently. He found great pleasure in teaching the little children in his immediate neighborhood the rudiments of the different languages. He is survived by his wife and ten year old daughter, Waunita T. and two sisters.

DR. ADRIAN HAVA

Dr. Adrian Hava was born in Havana, Cuba, August 27, 1865, and died May 29, 1933, at the residence of his son, Stanley C. Hava in New Orleans.

Dr. Hava was graduated in Pharmacy at the Medical Department of the old University of Louisiana, predecessor of Tulane University in 1878, and received the degree of Doctor of Medicine from

the same institution in 1881. He practiced medicine in New Orleans and on the Mississippi Gulf Coast and in recent years retired to his home "Oblivion" at Waveland.

During the influenza epidemic of 1918 Dr. Hava visited patients in the city during the day and commuted to his home at Waveland in the evening and then visited the sick half of the night—often preparing food for the sick himself and taking it to their doors.

Dr. Hava was a member of the Orleans Parish Medical Society and the Louisiana State Medical Society. He was the descendant of five generations of physicians and men of science.

He is survived by his wife, a daughter, Miss Marie Dolores, registered nurse; five sons Frank C., physician, Walter C., dentist, Stanley C., pharmacist, Henry C. and Clarence C., the latter a resident of Mississippi.

DR. PIERRE LEONCE THIBAUT

Recently, there suddenly dropped from the ranks of the medical profession an outstanding figure. Dr. Pierre Leonce Thibaut died on June 14, 1933 in New Orleans, which was his native city. He was born of French parentage fifty-seven years ago, received his preliminary education at the Tulane High School, and his medical education at Tulane University. Outside of the duration of his service in the Army during the Spanish-American War, practically his entire life was spent in New Orleans. Dr. Thibaut was richly endowed with the qualifications necessary to make not only a scientific, human, sympathetic doctor, but he was also blessed with the devotion, consideration, dependability, and culture which automatically results in the development of a host of friends. These characteristics were no doubt responsible for the large clientele which steadfastly clung to him, and which he enjoyed up to the time of his death.

In a medical way, Dr. Thibaut's talents were versatile. Not only was he well equipped for general practice for which his charming personality and genteel manner were priceless assets, but he was also well posted and experienced in genito-urinary work, and general surgery. This was the result of a long, attentive service on the Visiting Staff of Charity Hospital, on the teaching staff of the Postgraduate School of Tulane, as well as in private practice. But his great passion was for obstetrics. He developed unusual skill and judgment in this field. In emergencies and trying circumstances, he was cool and well poised. While he had a large and varied experience, which might have had a tendency to make him feel self-sufficient, he never failed to seek counsel when the occasion required it. Furthermore, he was always progressive but not radical. His interest, partic-

ularly in this specialty, never waned. This was well exemplified by the fact that a little over a month before he died, he was jubilant because he was able to publish a case report of a rare abnormality in a fetal presentation requiring special technical consideration.

In a personal way, Dr. Thibaut enjoyed the respect and esteem not only of his patients and lay friends, but also of his confreres. He was a member of the Board of the Orleans Parish Medical Society in 1923. He served long and frequently, but uncomplainingly on various committees of both the State and Parish Societies, and he was President of the Staff of Hotel Dieu at the time of his death. Dr. Thibaut had the reputation of always having the courage of his convictions to the point sometimes of being almost intolerant of a dissenting opinion, but he was always willing to acknowledge a mistake, and could always be depended upon to be fair and honorable.

His home life was as felicitous as was his medical career, and his many loyal friends and admirers, as well as the medical profession, sympathize deeply with his family in their great loss.

EDMUND DENE GRE MARTIN

The late Dr. Martin prepared some six years before his death an account of his early life. He wrote this in order that there would be no mistakes or errors in his obituary. This account characterizes so thoroughly the man, his simplicity of soul, his freedom from cant, his absolute honesty that we are publishing it as it was dictated by him. We feel that no higher tribute could be paid to a man than to publish as written by him that which he wished to appear after his death:

"I was born on Monday morning, March 23, 1863, at Eureka Plantation, Bayou Waxia, St. Landry Parish, Louisiana. My father was John Massie Martin and my mother Emma Denegre. They were married in New Orleans on June 23, 1861.

"In infancy we went with my grandfather Denegre to Brussels, Belgium, where the family lived during the Civil War. In 1868 my parents moved to a farm near Springfield, Mo. In 1872 they returned to Louisiana and my father bought back the old plantation home, where I grew up. Here I got my first impression of life: few neighbors, few playmates, no money. Thrown on my own resources I followed in the line of greatest pleasure. My time was spent principally in the blacksmith and carpenter shops, where at an early age I became quite proficient in the use of tools. I could build a house or sharpen a plough before I could write a letter. There were no public nor private schools around. My mother taught me my catechism and an aunt taught me to read and write, but up to the time I was sent off to school I did

neither sufficiently well to be understood. At the age of 12 I was sent to Grand Coteau, to St. Charles College, a Jesuit School, and being deprived of my tools made fair headway with my studies. That was in the year 1875. At the end of the second session the school had to close for the want of students and in 1878 I went to Spring Hill College, Mobile, Ala., where I remained two years. During the latter part of the second session I fell and injured my hip, as a result I was brought to New Orleans for treatment and was sent to the University of Louisiana (now Tulane University) during the sessions 1879-1880 and 1880-1881. At the end of my Junior year I had to return to the plantation to assist my father, and my dream of being an engineer was ended. In 1884 I realized that there was no future for me on the plantation, and early in 1885 secured a position as helper in the shops of the New Orleans and Northeastern R. R., where I worked until that fall, going from helper at 50 cents a day to full-fledged machinist at \$2.50 a day. I again had to return to the plantation to take charge, as my father had been appointed by President Cleveland as Receiver of the Land Office and the family needed the money. The whole country had been overflowed in 1882 and from that time it was most unhealthy. I lost a sister from malaria in 1886. Conditions grew worse all around. No schools, no neighbors, no future. I went to Lafayette, La., rented a farm just two miles from the town and moved the family there. Put a manager on the plantation which was finally sold for one-third its value, but a good riddance at that. The farm was a mere plaything.

"I needed occupation and saw no way of continuing my mechanical training at the time, as it meant starting all over again. In Lafayette I met Dr. Francis Sterling Mudd, a fine old gentleman of the old school who persuaded me to study medicine. I wanted occupation and I knew nothing whatever about medicine so I was easily persuaded. I read in his office until the fall of 1887 when I matriculated in the Medical Department of the University of Louisiana. As I had been out of school for several years and was 24 years of age, it was not an easy task, but I went at it with my usual energy. It was at this time that I first discovered that I had defective eye sight, but this was helped with glasses and I kept up with all of my classes. In November, 1888, there was a vacancy on the staff of the Charity Hospital and I was appointed to fill this position for two months. Up to the first of January 1889 I attended no lectures as all of my time was occupied at the hospital and as the next competitive examination for internes was to take place the following month I spent the interval cramming for the examination. I was one of the lucky ones, and on June 1, 1889, was appointed interne for two years,

serving under Drs. Souchon, Matas, Miles, Bemis and Parham. Here my association with Dr. Parham began and continued uninterruptedly as interne, assistant, associate and partner until his death on May 7, 1927. I finished at the Charity Hospital on June 1, 1891, and was at once appointed a member of the visiting staff, with which I am still connected. At the same time I was made assistant to Dr. Parham, Professor of Minor and Clinical Surgery, in the New Orleans Polyclinic. In 1896 Dr. Matas, who was Professor of Surgery, was elected to that chair to succeed Dr. Miles, deceased, in the School of Medicine of Tulane University and Dr. Parham became Professor of Surgery in the New Orleans Polyclinic, and I was appointed Instructor in Minor and Clinical Surgery. In 1899 I was made Professor of Minor and Clinical Surgery. In 1906 Dr. Parham retired to go on the Board of Administrators of Tulane University and I succeeded to the chair of Surgery in the New Orleans Polyclinic, and still retain the chair in the Graduate School of Medicine of Tulane University. In January 1891, a few months before graduating, I was appointed House Surgeon of the Women and Childrens Hospital, a new institution which was organized for the purpose of training nurses, and was the first training school for nurses in the South. This institution was run entirely by a body of ladies. It ran only two years when it failed. I saw the possibility of such an institution, and decided to start a little hospital of my own. I had little trouble in doing so, backed by Dr. George K. Pratt and assisted by a number of the younger but most active physicians, and the New Orleans Sanitarium was evolved and soon grew to have an influence in the city.

"It later became the Presbyterian Hospital. The New Orleans Sanitarium was not only a success as a hospital, but here some of our best nurses graduated. In 1894 I married and left the hospital as House Surgeon, but retained affiliation until we were all compelled to abandon the institution on account of the action of its new manager. I then became associated with the Touro Infirmary."

Dr. Martin does not write of the honors that came to him in his later life. In 1901 he was President of the Orleans Parish Medical Society. In 1908 he was President of the Louisiana State Medical Society. In 1906 he became Professor of General Surgery in the Post-Graduate School of Tulane University. After a year or two he was appointed also Professor of Clinical Gynecology. In 1919 his title was changed to Professor of General and Abdominal Surgery. In 1925 he became Dean of the Post-Graduate School and head of the Department of Surgery and Professor of Surgery. He resigned as Dean at the close of the session 1927-28,

but retained his Professorship. In 1932 he became Professor of Surgery Emeritus. Dr. Martin was a member of many societies, including local and national organizations, as well as a Fellow in the American College of Surgeons.

His innumerable friends and medical confreres have suffered a very real loss in the death of this always delightful, enthusiastic, sincere gentleman, and enthusiastic and able teacher.

LOUISIANA STATE MEDICAL SOCIETY NEWS

PRESIDENT'S PAGE

THE ADVANTAGES OF AFFILIATION WITH ORGANIZED MEDICINE

Dr. Wynn refers to the widespread tendency of the 17th and 18th centuries to form organizations for friendly intercourse, mutual improvement, and for the purpose of stimulating scientific investigation, medical included, and says such were the German Scientific and Medical Associations founded in 1652. Fielding H. Garrison in his recent extensive book on the history of Medicine says that with regard to Medical Societies in America the following were organized in the 18th century. A Medical Society was organized in Boston in 1735, in New York in 1749, and in Philadelphia in 1765. Of these the Massachusetts Medical Society 1781, College of Physician, Philadelphia 1787, and Medical Faculties of Maryland 1789, are remarkable for solid performances as well as for ancient lineage and continuous descent. The American Medical Association was organized in 1847.

The history of organized medicine reads like a romance, while the heroes of organized medicine are legion. The victories of organized medicine are more productive of good than have been the victories of all the armies participating in all the battles of history. The victories of organized medicine have made possible the victories of the armies and the victories of organized medicine have greatly increased the longevity of man. The conquering of yellow fever, malaria, typhoid, plague, diphtheria, are all the accomplishments of members of organized medicine. Organization is a distinguished mark of civilization; it is as essential for the advancement of science, of education, of social and industrial reform and of philanthropic endeavor as for the promotion of commerce. The history of our profession is the inspiring record of the greatest of all arts, whose basic motive is the principle of unselfish service to our fellow man, a brotherhood which has put ideals before all else. These ideals are promoted by ethics. The basis of medical ethics, like the basis of good manners, is experience, fairness, and kindness.

It is fitting that the activities of members of the medical profession should be properly organized for it is only by concrete effort in the proper direction that the medical profession can hope to ac-

complish those beneficial measures which will rebound to the credit of the individual member or the membership collectively. When one considers the development of the science of medicine and recognizes that it has come through organized medical societies, when one compares the length of time it took for the medical profession to recognize the value of the discovery of ether as an anesthetic, the value of antiseptics on bacteria, by L^ong, Lister, and Pasteur on the one hand, and salvarsan, emetine, and insulin by Ehrlich, Rodgers, and Banting on the other hand, one cannot but be proud to be a member of a reputable medical society.

Ours is indeed a heritage to guard with jealous pride, and it is in our medical societies, where we are brought in touch alike with the great names which have stood out in our history, because of their adherence to the ideals of our profession, and with our fellow practitioners of today, who command our admiration and affection, that we draw our greatest inspiration to hold true to the tenets of our brotherhood. Can you imagine what the conditions would be without organized medicine, without standards for medical education, without principles of ethics under which we practice, without such meetings as this for good fellowship?

Dr. Wm. Osler, in speaking of the advantages of membership in a medical society once said: "It is the most important factor in the promotion of that unity and good fellowship which adds so much to the dignity of the profession." Aside from the great material advantages which our societies provide, there is not one of us, old or young, who can afford to miss the stimulus, which this association with others of our brotherhood so surely brings. The official application blank of the medical society of the state of Pennsylvania sets forth briefly four reasons why every physician should unite with the medical society of his county. First, because it unites the representative men of the medical profession; second, because of its post-graduate work; third, because of its service in advancing and conserving the corporate interests of its membership, and fourth, because of its altruistic interest in public health.

The requirements of organized medicine are not oppressive and the ideals are high. It stands to help him not only to become a better physician, but to protect and promote his every interest.

scientific, social, moral, material, so that he may give better service to those who depend upon him in their time of affliction. The interests of organized medicine are the interests of its members, of the profession, past, present, and future, and of the life and health of the people. It is the duty and privilege of every eligible physician to be a member of the state medical society. Not a mere passive member, but an active member, alive to the possibilities of organized medicine, and energetic in pursuing and furthering those possibilities.

There must be some virtue to organized medicine, for does it not command the unselfish and devoted services of some of the best and busiest men in the profession? These men travel thousands of miles, neglecting their own practice, to give to organized medicine their best efforts in order that organized medicine may reach its highest pinnacle of success and accomplishment.

To those practitioners of medicine who frequently attend the meetings and participate in the activities of the society, both medical and executive, a statement of the value of co-operation with organized medicine is superfluous. However, the advantages of affiliation do not suffer from repetition and it may serve as a gospel to carry to our non-participating eligible professional brethren. The success or failure of an organization is directly dependant upon the individual membership, and if our medical societies are failing to attract non-members to our fold, we must acknowledge that failure is due to the members themselves, who make up the organization, and are dead to the value of organized medicine.

Therefore, let us forget our own selfish ends and petty jealousies and maintain our membership in our parish, district, state and national medical societies. Show our loyalty by regular attendance, endeavor to augment the scientific programs by reading papers, presenting cases, and offering intelligent discussion. Lend our whole hearted assistance to its officers, who are working three hundred sixty-five days a year, and are willing to carry out your constructive suggestions, and by our example induce all eligible physicians to become staunch members of organized medicine. The richest fruits today are plucked from the tree of service. Let us bury our inherited and occasional antagonistic individualism and rear in its place an ever living and co-operative fraternalism.

C. A. Weiss, M. D.,
President.

HOSPITAL RATES IN NEW ORLEANS

According to a request of the House of Delegates at the last meeting of the State Society, the rates charged by the several New Orleans Hospitals are printed below.

BAPTIST HOSPITAL

Major surgical cases for 10 days including room, diet, nursing for mother and baby, delivery room, medicines, and routine dressings:

Ward, \$45.00.

Double room, \$60.00.

Private room, \$70.00.

Obstetrical cases, seven days including room, diet, nursing for mother and bab, delivery room, laboratory, and routine medicines:

Ward, \$35.00.

Double room, \$45.00.

Private room, \$55.00

Flat Rate for Tonsillectomies:

Ward bed, 1 day, \$7.50.

Double room, 1 day, \$9.50.

Private room, 1 day, \$12.50.

The above rates cover room, meals, floor nursing and operating room, laboratory work is not included. A special rate of \$3.00 will be made for coagulation time and urinalysis, if ordered.

The above rates are to be paid cash in advance or they do not apply.

No person will be allowed to remain overnight with a patient unless the patient is in a private room.

Room rates:

Six bed ward, \$3.00 per day.

Semi-private room, \$4.50 per day.

Private room, \$5.50 per day up.

Routine laboratory, \$6.50 per day.

DE PAUL SANITARIUM

Rates at De Paul Sanitarium range from two dollars to ten dollars per day.

FRENCH HOSPITAL

Schedule of flat rates for surgical and obstetrical patients:

4 to 8 bed ward rate, 7 days, \$30.00. Each additional day at \$2.50 for bed and routine nursing.

Semi-private rooms, 7 days, \$40.00. Each additional day at \$3.50 for bed and routine nursing.

What these rates include:

(a) Seven days in hospital.

(b) Regular meals and special diet.

(c) General nursing service.

(d) Attendance of resident medical staff.

(e) All ordinary medicines and surgical supplies.

(f) Laboratory fee.

(g) Operating room fee.

What is not included:

Charges for ambulance, X-ray, anesthetic, doctor's fee, special prescriptions, serums, private telephones, etc.

Gas anesthetic for minor cases, \$2.50 to \$5.00.

Gas anesthetic for major cases, \$5.00 to \$15.00.

Private rooms, \$5.00, \$6.00, and \$7.50 per day.

Two-bed rooms, \$3.50 and \$4.00 per day.

Ward beds, \$2.50 per day.

Laboratory fee, \$6.50 for private and semi-private rooms and \$5.00 for ward patients.

Operating room, \$10.00.

Anesthesia: Gas, \$10.00 to \$15.00 for major cases. Spinal, \$5.00. Local, \$2.50.

HOTEL DIEU

Schedule of flat rates for surgical and obstetrical patients:

4 to 6 bed ward rate, 7 days, \$35.00. Each additional day at \$3.00 for bed and routine nursing.

Semi-private rooms, 7 days, \$40.00. Each additional day at \$4.00 for bed and routine nursing.

What these rates include:

- (a) Seven days in hospital.
- (b) Regular meals and special diet.
- (c) General nursing service.
- (d) Attendance of resident medical staff.
- (e) All ordinary medicines and surgical supplies.

(f) Laboratory fee.

(g) Operating room fee.

What is not included:

Charges for ambulance, X-ray, anesthetic, doctor's fee, special prescriptions, serums, private telephone, etc.

Anesthetic for minor cases, \$2.50 to \$7.50.

Anesthetic for major cases, \$7.50 to \$15.00.

Wards, 4 to 6 bed, \$3.00 per day.

Wards, 3 beds, \$3.50 per day.

Semi-private rooms, \$4.00 per day.

Private rooms, \$5.00 to \$10.00 per day.

MERCY HOSPITAL—SONIAT MEMORIAL

Schedule of flat rates for cash in advance only.

For major surgical cases:

5-6 bed ward rate, 10 days only, \$40.00. Each additional day at \$3.00 per day for bed and routine nursing.

3 bed ward rates, 10 days only, \$55.00. Each additional day at \$3.50 per day for bed and routine nursing.

2 bed ward rates, 10 days only, \$55.00. Each additional day at \$4.00 per day for bed and routine nursing.

\$5.00 private room rate for 10 days only, \$65.00. Each additional day at \$5.00 per day for bed and routine nursing.

What these 10-day rates include:

- (a) Ten days stay in hospital.
- (b) Regular meals and special diet.
- (c) General nursing service.
- (d) Attendance of resident medical staff.
- (e) All ordinary medicines and surgical supplies.

(f) Laboratory fee.

(g) Operating room fee.

What is not included:

Charges for ambulance, X-ray, anesthetic, doctor's fee, special prescriptions, serums, private telephone, etc.

These rates are for 10 days only. Thereafter all charges will be made at regular rate. Flat rates do not apply to cases less than 10 days in hospital, but no bill will be rendered for more than the flat rate for services as specified in flat rate schedule, for those staying less than 10 days.

Obstretical Cases

6 bed ward rate, 7 days only, \$32.50. Additional days at \$2.50 per day for bed and routine nursing for mother and baby.

3 bed ward rate, 7 days only, \$40.00. Additional days at \$3.50 per day for bed and routine nursing for mother and baby.

2 bed ward rates, 7 days only, \$45.00. Additional days at \$4.00 per day for bed and routine nursing for mother and baby.

\$5.00 private room rate, 7 days only, \$55.00. Additional days at \$5.00 per day for bed and routine nursing for mother and baby.

NEW ORLEANS HOSPITAL & DISPENSARY FOR WOMEN AND CHILDREN

No private rooms, only wards.

Bed and board, \$2.00 per day.

Laboratory fee, \$3.00.

Operating room, \$5.00.

Anesthetic, \$5.00.

TOURO INFIRMARY

Flat rates for major surgical cases

Semi-	Priv't.	Operat.	Flat			
Ward	10 days	Lab'try	Room	Total	Rate	
	\$3.00	\$30.00	\$4.50	\$10.00	\$44.50	\$40.00
	\$3.50	35.00	4.50	10.00	49.50	45.00
D'ble						
Rooms						
	\$4.00	40.00	6.50	12.50	59.00	55.00
	4.50	45.00	6.50	12.50	64.00	60.00
Priv'te						
Rooms						
	\$5.00	50.00	6.50	15.00	71.50	65.00
	5.50	55.00	6.50	15.00	76.50	70.00

These rates are based on a 10-day stay in hospital. Extra days will be charged for at regular ward or room rates. Flat rates do not apply to cases in hospital less than 10 days but total bill in such cases for care specified shall not exceed the flat rate. Flat rates do not include such extras as ambulance, X-ray, etc., should such be required. They are inclusive of all ordinary services, however, e.g.: care of patient, laboratory fee, operating room charge, regular menu and special diets, attendance of resident medical staff, general nursing service, and all ordinary medicines, drugs and surgical dressings.

Rates above are for hospital care only. They apply to cases of major surgery only, i.e., operative cases for which the above operating room charges are applicable. Professional fees must be arranged

by patient with attending physician. Higher priced accommodations are not covered by flat rates

Flat rates for hospita! maternity care:

A.		Deliv.		Deduc		Flat	
4-Bed	Ward	M'h'r	Inf'n't	Lab. Room	Total	tion	Rate
\$3.50	24.50	7.00	4.50	5.00	41.00	6.00	35.00
B.							
D'ble Rooms							
\$4.50	31.50	7.00	6.50	10.00	55.00	10.00	45.00
C.							
P'vt. Rooms							
\$5.50	38.50	7.00	6.50	10.00	62.00	7.00	55.00

These rates are based on a 7-day stay in hospital. Extra days will be charged for at regular ward or room rates for mother and infant. Note that flat rate deductions, if applied against ward or room charge alone, bring the per diem charge for accommodation to:

A. \$2.64 B. \$3.06 C. \$4.50

Flat rates for above types of accommodation do not apply to cases in hospital less than 7 days but total bill in such cases for care specified shall not exceed the flat rate. Flat rates do not include such extras as ambulance, X-ray, etc., should such be required. They are inclusive of all ordinary services however: care of mother, care of infant, laboratory fee, delivery room fee, regular menu diets, attendance of resident medical staff, general nursing service, and all ordinary medical and surgical dressings. Rates above are for hospital care only. Professional fees must be arranged by patient with attending physician. Higher priced accommodations are not covered by flat rates.

Flat rates for tonsillectomy hospital care:

Semi-private ward, (\$3.00), \$6.00.

Semi-private ward, \$(3.50), \$6.50.

Double room, (\$4.00), \$9.00.

Double room, (\$4.50), \$9.50.

Private room, (\$5.00), \$12.50.

Private room, (\$5.50), \$13.00.

Private room, (\$6.00), \$13.50.

Higher priced rooms:

Room rate plus \$10.00 operating room fee.

The above schedule is based on a 24-hour stay in hospital. Extra days will be charged for at regular rates. Rates include use of operating room, general nursing service and routine urinalysis and coagulation tests.

Rates above are for hospital care only. Professional fees must be arranged by patient with attending physician.

ILLINOIS CENTRAL HOSPITAL

Ward rate, \$2.50 a day.

Small private ward, \$4.00 per day.

Private rooms, \$5.00 and \$6.00.

THIRD DISTRICT MEDICAL SOCIETY

The next meeting of the Third District Medical Society will be held in Lafayette, in the month of September. Dr. C. A. Weiss will be present at this meeting, and in his honor the meeting will be called "The State President's Meeting".

L. B. Long, M. D., Secretary.

MADISON, EAST CARROLL AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its regular monthly meeting on Thursday, July 6, at Sondheim, Louisiana, with nineteen members present. We were very glad to have as our guests, Doctors T. P. Sparks, W. D. Anderson and Edley Jones of Vicksburg, Mississippi.

After enjoying a very delicious dinner a very interesting scientific program was rendered. Dr. William H. Hamley presented a paper on "Diagnosis and Treatment of Malaria". Dr. G. Douglas Williams presented a paper on "Pellagra: A Review of the Recent Literature". Both papers were freely discussed by the members and guests.

The next meeting of the Society will be held in Epps, Louisiana, on Tuesday, August 1.

G. Douglas Williams, M. D., Secretary.

NEWS ITEMS

Dr. H. W. E. Walther, head of the Department of Urology, Southern Baptist Hospital, addressed the Pike County Medical Society, at McComb, Miss., on July 6th, 1933, his subject being "Transurethral Prostatic Resection."

At the recent meeting of the American Medical Association in Milwaukee, Dr. H. W. E. Walther was re-elected delegate from the Section on Urology to the House of Delegates for the years 1934 and 1935.

Medical Director L. L. Lumsden has been directed to proceed from New Orleans, La., to Baton Rouge, Shreveport, and such other places in Louisiana as may be necessary, and return, in connection with investigation of tuberculosis.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending June 17, there were 121 deaths in the City of New Orleans, giving the remarkably low rate of 13.1. The deaths were distributed white 75, and colored 48, giving a death rate for the first group 11.4, and for the latter 17.2. There were only 12 deaths in this week of children under one year, giving an infant mortality rate of 67. For the next week which ended June 24, the deaths had increased to 162, largely augmented by a rate of 25.4

in the colored race, whereas the white population had a death rate of only 14.3. The rate for the two groups was 17.5. Nineteen infants died in this week, giving an infant mortality rate of 107. For the week ending July 1, there were 150 deaths in the City, divided 90 white and 60 colored. The death rate for the group as a whole was 16.2, for the white race 13.7, and for the colored 22.4. The infant mortality rate had fallen to 78 as a result of only 14 infants deaths in the City. It is interesting to note that the death rate for 1933 is exactly the same as that of the first twenty-six weeks of 1932, the rates for both being 15.7. For the week that was concluded July 8, the number of deaths had fallen considerably. There were only 128 deaths, divided 75 white and 53 colored. The death rate for the week was 13.9, for the white race 11.4, and for the colored 19.8. The infant mortality rate had fallen to 45 .

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has issued morbidity weekly reports, which briefly abstracted contain the following information. For the week ending June 24, there were reported the following in double figures: Eighty-one cases of syphilis, 48 of pneumonia, 41 of gonor-

rhea, 37 of pulmonary tuberculosis, 33 of cancer, 31 of measles, 29 of malaria, 28 of typhoid fever, 20 of whooping cough, 15 of hookworm, 14 of influenza, 13 of pellagra, and 10 of scarlet fever. The typhoid fever cases were evenly distributed throughout the state. In no parish were more than 2 cases reported. For the week ending July 1, there were 31 reported cases of pneumonia and tuberculosis. There were also reported 30 cases of cancer, 20 of syphilis, 30 of typhoid fever, 20 of gonorrhoea, 13 of malaria, 11 of measles, 10 of diphtheria and pellagra. There were 30 cases of typhoid fever. Five were reported from Franklin Parish, 4 from Jackson and Richland. For the week ending July 8, there were reported 30 cases of syphilis, 27 of typhoid fever, 19 of malaria, 14 of pellagra, 13 of cancer, 12 of pneumonia and whooping cough. There were 4 cases of typhoid fever reported from Sabine Parish. For the week ending July 15, there were reported to the State Board of Health, 83 cases of syphilis, 44 cases of malaria, 34 of pneumonia, 29 of typhoid fever, 22 of hookworm and of pellagra, 21 of pulmonary tuberculosis, 20 of cancer and 16 of measles, and 15 of gonorrhoea. No parish in the State reported more than 3 cases of typhoid fever. One case of typhus fever reported from Calcasieu Parish, and Rapides reported 1 case of tularaemia.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

MEMBERSHIP

The Transactions of the Mississippi State Medical Association, as recently issued by Dr. T. M. Dye, Secretary, shows the following membership this year:

Central Medical Society	106
Claiborne County Medical Society	6
Clarke-Wayne Medical Society	3
Clarksdale and Six Counties Medical Society	44
Delta Medical Society	83
DeSoto County Medical Society	8
East Mississippi Medical Society	76
Harrison-Stone-Hancock Counties Medical Society	34
Homochitto Valley Medical Society	32
Issaquena-Sharkey-Warren Counties Medical Society	40
Jackson County Medical Society	11
Kemper County Medical Society	7
Leake County Medical Society	1
North Mississippi Medical Society	44
Northeast Mississippi Thirteen Counties Medical Society	107
Pike County Medical Society	28
South Mississippi Medical Society	70
Tate County Medical Society	9

Tri-County Medical Society	23
Winona District Medical Society	36
Honorary Members	9
Total Membership	777

COUNTY SOCIETIES SHOULD ACT

Two important matters were referred to the component societies by the House of Delegates of the Mississippi State Medical Association at the annual meeting in May. Details have been furnished by Secretary T. M. Dye, and action should be taken by all societies. The first of these is a resolution adopted by the House of Delegates and having to do with the sales tax levied on the gross income of physicians. It is as follows:

WHEREAS, the sales tax levied on the gross income of physicians of Mississippi by the State Legislature at its last regular session works an injustice on and imposes a discriminating burden upon the physicians of the State who are already paying privilege tax, income tax, and the regular sales tax imposed on all articles purchased just as other citizens, and

WHEREAS, it should be borne in mind that the physicians take care of the indigent sick, the cost of which would devolve upon the State if the med-

ical profession did not take care of such charity work, and

WHEREAS, the physicians of the State feel that the general sales tax is fair and equitable, but they know that a double imposition of such tax is not fair and is not in accord with the spirit of justice; and physicians feel that the Legislature would not have imposed such a tax a year ago but for the fact that the Legislature was being fought, with its back against the wall, by a certain well-organized group or groups of taxpayers in the State, and apparently the Legislature feared the effect of exempting the professional group on sales tax on gross income, in addition to regular income tax. Now since practically all of the men composing the special group or groups which were organized against the passage of the sales tax are now in favor of it, it is felt that the Legislature could well afford to correct the injustice of levying two sales taxes—one on income from services rendered and another on expenditures of physicians;

Therefore, be it resolved by the House of Delegates of the Mississippi State Medical Association in annual session assembled in Jackson, Mississippi, on the eleventh day of May, 1933, that since the clause of the present sales tax law as enacted by the Legislature on the income of physicians works an unwarranted burden and is unfair and discriminatory in that physicians are paying double sales tax, and that their services are given freely to the indigent, the Mississippi Legislature is hereby respectfully petitioned to exempt the medical profession from the operation of that part of the sales tax which levies a tax on the gross income of physicians. The medical profession has nothing to sell except its services, regardless of whether the purchaser is able to pay for such services.

Be it further resolved that in view of the fact that cities and towns in the State impose a privilege tax on physicians, that the state and county privilege tax be reduced fifty per cent. If this action is taken by the Legislature, the medical profession of the State will cheerfully pay the privilege tax and the general sales tax imposed on other classes of citizens of the State.

Also, be it further resolved that the secretary of this Association send a copy of these resolutions to the secretary of each local medical society requesting that he bring the matter before the first meeting of the local medical society for ratification there, and that the president of each local society appoint a committee of three physicians considered to be best adapted or suited, who are willing, to take the matter up promptly and vigorously with the members of the Mississippi Legislature of the county and if possible get their support pledged.

And, be it further resolved that this resolution supersede the resolution passed by this House on

May 9, 1933, which was the first session of the House of Delegates.

The second matter, of much importance and affecting intimately a large number of the members of the Association, has to do with proposed changes in Chapter XI. of the By-Laws, by adding Sections 2, 3 and 4. These changes to be acted upon at the 1934 meeting of the House of Delegates, deal with contract practice and are as follows:

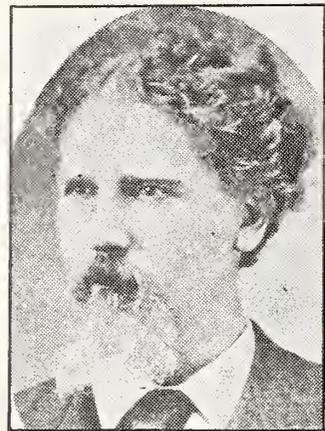
"Section 2. No member, or combination or group of members, of this Association shall either directly or indirectly, enter into any contract or agreement to render professional services under the system known as Contract Practice, except in situations wherein the needed medical and surgical services otherwise cannot be obtained. This shall not be construed as barring emergency surgery and medical treatment for railroad employees, the employees of lumber camps and mills, or of government employees.

"Section 3. Any member entering into any contract with any individual, corporation or organization to provide medical or surgical service for a group or individuals, to cover a period of time, for a stipulated remuneration, shall be in violation of this regulation and subject to expulsion from his component Society for unethical conduct.

"Section 4. It shall be the duty of the Council to compile, and keep revised as conditions show the necessity for revision, a list of exceptions as provided for in Section 2, such list to be the guide for all component Societies."

BETTER THINK IT OVER CAREFULLY!

LEST WE FORGET THEIR GOOD WORKS



P. F. WHITEHEAD, M. D., Vicksburg, Mississippi
President, Mississippi State Medical Association,
1874-1875.

Peter F. Whitehead was born in Winchester, Ky., June 9, 1838 and died at Vicksburg, Miss., September 5, 1878, being one of the victims of the yellow fever epidemic. He graduated from the Jefferson Medical College, Philadelphia, in 1860 and served

as resident surgeon of the Blockley Hospital the succeeding year. After leaving Philadelphia he settled at Independence, Mo., where he remained until the outbreak of the Civil War, when he enlisted as a private in a Missouri regiment. Shortly afterwards he was commissioned surgeon in the Missouri State Guard and assigned to duty at General Price's headquarters. When the State Guard was mustered out in 1862 he re-enlisted, at Corinth, Miss., as a private in the Confederate service, but a few days later was commissioned surgeon of the Third Louisiana Regiment and was on duty at Vicksburg during the memorable siege. Later he served as chief surgeon of General Loring's division, with which command he surrendered at Greensboro, N. C., in April, 1865.

Returning to Vicksburg, where he married Miss Irene Cowan just before the surrender, Dr. Whitehead began the practice of his profession and here he lived the remaining years of his life. His untimely end was a signal for general mourning and the estimation in which he was held is well expressed in the following testimonial from the *COURIER-JOURNAL*:

"Dr. Whitehead is dead. He was a Kentuckian and Kentucky may well be proud of her son—She had none left that was nobler than he. He was the very type of a perfect man—strong as a lion, gentle as a woman, handsome as a god.—Nature had placed the stamp of nobility on his brow, and he who ran might read it. When the fever broke out he might well have gone as others did. His practice was confined to a class of people who have the means to go north every summer, and who had gone this time, but he stood by his people in the hour of need, and died in the cause of humanity."

He was one of the group that issued the call for the meeting in 1869, was chosen one of the delegates to the A. M. A. by that meeting and served as vice-president of the State Association, 1873-4, and as corresponding secretary, 1872-73. He was a member of the first State Board of Health.

TRANSACTIONS, 1879.

NOTE.—The above is an abstract from the History of the Association, and is published for the purpose of inviting additions and corrections. If anyone knows any such, please communicate with the editor.

TRIBUTES

"I thank you for your telegram and letter telling me of Howard's death. Underwood had just told me over the telephone, and I don't know when I have been so shocked.

"Certainly you will miss him in Vicksburg and in the Issaquena-Sharkey-Warren Society, and we will all miss him in the State Association. It won't be a normal Association meeting without Howard. His like we shall not see again."—T. M. Dye.

"I was distressed to death to hear of Dr. Howard's death. In my opinion, the medical profession of Mississippi has suffered a distinct loss. Dr. Howard was an honor to our profession. The loss to Vicksburg will be great."—J. M. Acker, Jr.

"Was grieved over passing of my old friend, E. F. Howard—a true friend and had contributed much to organized medicine in Mississippi. We will miss him."—W. H. Frizell.

ADVISORY COMMITTEE

In response to a request of the Women's Auxiliary to the Mississippi State Medical Association, President J. W. D. Dicks, Natchez, President of the Mississippi State Medical Association, has appointed a committee to act in an advisory capacity. The committee is made up of Drs. E. C. Parker, Gulfport; G. S. Bryan, Amory; and Leon S. Lippincott, Vicksburg.

CENTRAL MEDICAL SOCIETY

The Central Medical Society met at the Robert E. Lee Hotel, July 5. The regular meeting date was July 4; that being a holiday the meeting was automatically carried over to July 5.

Dr. Noblin presented two interesting cases of tuberculosis,—one of which was a cook in a large family up to five weeks prior to being found with high temperature and other signs and symptoms of tuberculosis. Following phrensectomy by Dr. Barksdale both are now looking 100 per cent healthy. Discussed by Drs. Strain, Barksdale, and Simmons of Hazelhurst.

Dr. Armstrong talked for five minutes on gall bladder. In substance he said that frequent acute fulminating gall bladder must be operated. Discussion by Drs. Wall, Culley, Barksdale. Dr. Barksdale said that any acute inflammatory process in the abdomen should be operated upon in the first 24 hours. Dr. Barksdale spoke of a case of intrahepatic gall bladder containing a stone and presented roentgenograms showing the stone in the substance of the liver. The final diagnosis was made by autopsy, I believe. Dr. J. C. Culley of Oxford, the reciprocity essayist from the North Mississippi Medical Society, read an excellent paper on "Symptomatic Agranulocytic Angina Following Neoparsphenamine Therapy." He reported a case with recovery under treatment by sodium thiosulphate and nucleic acid. His paper was freely discussed by Drs. Kemmerer, Strain, Garrison, Jr., and Culley. Dr. O. H. Swayze, of Yazoo City, read a paper on "Arachnoidism". His paper was discussed by Drs. J. B. Howell, Wall, Barksdale, Noblin, Hays and Swayze, closing. Dr. Underwood spoke on "Some Suggestions for Our Mutual Benefit." Following reading of Dr. Underwood's paper, Dr. Wall moved that committee be appointed to contact senators and representatives on Dr. Underwood's sales tax resolution. Seconded and carried. Dr. Wall moved that

the Robert E. Lee Hotel be made permanent place of meeting of the Central Medical Society—seconded and carried. Drs. Henderson, Welsh, and Norman Kelley were elected to membership. The meeting adjourned at 10:45 P. M. There were 48 members and guests present.

Robin Harris, Secretary.

Jackson,
July 11, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society, through our president, Dr. Dudley Stennis of Newton, has accepted an invitation from the Neshoba County physicians for our next meeting, Thursday, August 17 at 2:30 P. M., to be held on the fairgrounds of Neshoba County. Judging from the program and the entertainment that we received from the hands of the Neshoba County doctors and their wives at a similar meeting on the fairgrounds last year, we will have an instructive scientific meeting and a great time. Physicians of Kemper, Clark and Leake counties are cordially invited and expected to be present. On request these three counties are to be united with the East Mississippi Medical Society, by action of the State Medical Association at its last meeting. They are to be formally united at this meeting.

The program incompletely arranged at the time of this writing is as follows:

Orthopedic Surgery.—Dr. Frank Hagaman, Jackson.

Doctor's Business.—Dr. A. C. Bryan, Meridian.

Another paper or clinic to be conducted by one or more of the Neshoba county doctors.

T. L. Bennett, Secretary.

Meridian,
July 9, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

RESOLUTIONS—DR. CLYDE R. STINGILY

With profound sorrow, we of the East Mississippi Medical Society record the death of one of our most earnest and zealous members, Dr. Clyde R. Stingily of Meridian, Miss.

In recognition of the long and untiring services of Dr. Clyde R. Stingily in the field of pathology, bacteriology and roentgen ray work, we of the East Mississippi Medical Society wish to express our sense of personal loss in our Society. From the earliest beginnings of pathological, bacteriological and roentgen ray work in the State of Mississippi, Dr. Stingily was one of the first, and has been identified with constructive research, educational and practical guidance for us all.

Dr. Clyde R. Stingily died June 24, 1933, at the

age of 54 years. Dr. Stingily was born at Pelahatchie, Miss., the son of Mr. and Mrs. J. M. Stingily. He was a graduate of Pelahatchie High School, Roanoke College, Roanoke, Va., and received his medical degree from Vanderbilt University in 1901. He then located in Pelahatchie, Miss., where he did general practice for several years. Afterward, Dr. Stingily took special post-graduate work in pathology and bacteriology at Chicago Post Graduate College, Johns Hopkins, and New York State Laboratories. Later, he was in charge of the Mississippi State Hygienic Laboratories from 1910 to 1922 after which from 1922 to 1928, he was in charge of the pathological and bacteriological laboratories of the Jackson Infirmary. Dr. Stingily with his family moved to Meridian in 1928 where he opened what is known as the Stingily Laboratories, of which he was chief medical director until the time of his death. He was a member of the East Mississippi Medical Society, Mississippi State Medical Association, Fellow of the American Medical Association, and Southern Medical Association. He was also a member of the Medical and Surgical Clinic of Meridian, Miss.

Dr. Stingily is survived by his wife, Mrs. Bessie Stingily, one son, Dr. Karl O. Stingily, and two daughters, Misses Helen and Bessie Clyde Stingily. He was affiliated with the Baptist Church.

We know that it was an honor to have been associated with a man of Dr. Stingily's caliber, and in the loss of Dr. Stingily we feel that every member of the East Mississippi Medical Society, as well as the state-at-large, have lost a helpmate not only socially, but professionally.

RESOLVED THAT a copy of these resolutions be spread upon the minutes of this Society and that copies be sent to his family, to the Secretary of the Mississippi Medical Association, to the Mississippi Editor of the New Orleans Medical and Surgical Journal, and to the press.

Respectfully submitted.

T. D. Boudreaux,
F. G. Riley,
H. L. Arnold.

Meridian,
July 9, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

July Meeting was held at the King's Daughters' Hospital, Gulfport, Wednesday, July 5, 1933, at 7:30 P. M.

Paper—H. K. Rouse. Subject—Diarrhea in Children.

E. A. Trudeau, Secretary.

Biloxi,
June 30, 1933.

HOMOCHITTO VALLEY MEDICAL SOCIETY

The regular meeting of the Homochitto Valley Medical Society at Centreville, July 13, was attended by some eighty or more doctors of Mississippi and Louisiana. Drs. R. J. and S. E. Field were the hosts and the meeting was held at the Field Memorial Hospital.

After a sumptuous banquet provided by the staff of the hospital, and the regular business of the Society, the following scientific program was presented:

1. Cancer of the Cervix Uteri.—Dr. Leon S. Lippincott, Vicksburg.

Discussed by Dr. J. A. K. Birchett, Jr., Vicksburg.

2. Immediate Operation in Acute Infection of the Fallopian Tubes.—Dr. J. W. Barksdale, Jackson.

Discussed by Dr. J. S. Ullman, Natchez.

3. Complications of Appendicitis.—Dr. Alton Ochsner, New Orleans.

Discussed by Drs. J. W. Barksdale, and E. E. Enoist, Natchez. Dr. Ochsner closed.

Dr. C. E. Mullen, Bude, president, presided. Dr. W. K. Stowers, Natchez, is secretary.

ISSAKUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Coral Room, Hotel Vicksburg, on Tuesday, July 11, at 7 P. M., with 21 members and three guests present. After supper the meeting was called to order by the president, Dr. P. S. Herring, and the minutes of the last meeting were read.

The scientific program was presented under the chairmanship of Dr. J. A. K. Birchett, Jr., as follows:

1. Diagnosis and Treatment of the Diseased Cervix (Lantern slides).—Dr. Phil C. Schreier, Memphis, Tenn.

2. Endocervicitis.—Dr. S. W. Johnston, Vicksburg.

The papers of Drs. Schreier and Johnston were discussed by Drs. G. W. Gaines, H. H. Haralson, L. S. Lippincott, A. Street, and G. M. Street. Dr. Schrei and Johnston closed.

3. Conservative Treatment of Compound Fractures of the Long Bones (Lantern slides).—Dr. J. A. K. Birchett, Jr.

A resolution having to do with the sales tax levied on the gross income of physicians of Mississippi, adopted by the Mississippi State Medical Association at its recent meeting and referred to the component societies, was presented and ratified. The resolution was referred to the Committee on Public Health and Legislation to take up the matter promptly and vigorously with the members of the Mississippi Legislature in the counties represented.

A proposed change in Chapter XI. of the By-Laws of the Mississippi State Medical Association, having to do with contract practice and referred to the component societies at the recent meeting of the State Medical Association, was presented and discussed. Action was deferred until the next meeting.

The next meeting of the society will be held on Tuesday, August 8, at 7 P. M. The committee in charge of program consists of Drs. L. J. Clark, Vicksburg; W. C. Pool, Cary; C. J. Edwards, Vicksburg, and D. P. Street, Vicksburg.

NORTHEAST MISSISSIPPI THIRTEEN COUNTY
MEDICAL SOCIETY

We have added to our profession in Aberdeen two new doctors. Aberdeen at the present time has eleven doctors. That, of course, includes one negro doctor. The newcomers are Dr. J. P. Ward from Winona, a graduate of Jefferson, and Dr. H. Williams from Tennessee, a graduate of the Medical Department of the University of Tennessee. Dr. Ward will do general practice while Dr. Williams will confine his work to surgery. The profession of Aberdeen welcomes these new men.

J. M. Acker, Jr.,

Secretary

Aberdeen,
July 3, 1933.

CARROLL COUNTY

Dr. M. E. Arrington, who has recently been appointed health officer for Carroll County, reports two cases of typhoid fever in the Vaiden territory. Our swimming pool, which is located under the hill from one of the cases, has been closed for the summer.

July 4 was a great day for Dr. C. H. Ingram of Pickens. The people of Poplar Creek honored him with a "home coming day" and fish fry. Hundreds of his friends attended.

Dr. M. E. Arrington was last week appointed railroad surgeon, Illinois Central System, for the Vaiden territory.

M. E. Arrington,

County Editor

Vaiden,
July 8, 1933.

DESOTO COUNTY

Dr. C. W. Emerson is now a proud father, the young lady and her mother are doing well. Mrs. Emerson is the daughter of Dr. L. W. Dotson of West Point.

Dr. and Mrs. J. A. Rhodes have returned from a visit to their daughter, Mrs. Ruth Hughes of Cherry Valley, Ark.

Dr. D. C. Funderburke is on the Mississippi

Coast and Dr. A. L. Emerson is in Hot Springs—both on a vacation.

Dr. A. V. Richmond is a frequent visitor to Memphis, Tenn.

Drs. Cord, Hammond, Stuart, Weissinger and Wright are busy with their practice.

Sally Starre, the daughter of Dr. and Mrs. L. L. Minor, will leave to-night for New York. On Tuesday night she will sail on the S. S. Bremen for a two months' tour of Europe. Her uncle, Judge H. Dent Minor, will accompany her.

So sorry to hear of Dr. E. F. Howard's death. He was a manly man. He will be missed in our association.

L. L. Minor,
County Editor

Route 4,
Memphis, Tenn.
July 9, 1933.

HINDS COUNTY

We of Hinds County, as all the rest, deeply regret the passing of our good friend and fellow workmen, Dr. Howard. We especially miss him at the meeting of the Central Medical Society for he always had a word of good cheer for us, when he was able to attend. We are going to miss him more and more and our deepest sympathy is with his loved ones.

Dr. and Mrs. Noel Womack spent June 12 and 13 at the Edge Water Beach Hotel, Chicago, where Dr. Womack was attending the American Academy of Pediatrics.

The Staff of the Jackson Infirmary held its last meeting of the summer the evening of June 6. A good clinic was presented and the usual good meal was enjoyed.

Dr. Guy C. Verner, Jackson, motored to Michigan June 20 where he joined Mrs. Verner for a visit to Chicago where they enjoyed the World Fair. Dr. and Mrs. Verner returned to Jackson July 1.

The Staff of the Baptist Hospital held its regular monthly meeting the evening of June 20. A most interesting program was enjoyed, as well as the good chicken dinner.

Dr. Julius Crisler of Jackson, is spending several weeks with his brother, Dr. Gus Crisler, in Memphis.

Dr. J. C. Walker recently spent a few days on the Gulf Coast.

Wm. F. Hand,
County Editor

Jackson,
July 7, 1933.

KEMPER COUNTY

Dr. C. E. Baldree, Jr., has moved from Electric Mills to Belleville, Illinois.

Dr. J. L. Hasie of Electric Mills has just re-

turned from a visit in the Delta and reports that cotton may be suffering a drough but that he was able to maintain his fluid balance with very little effort.

A. M. McCarthy,
County Editor

Electric Mills,
July 4, 1933.

LEFLORE COUNTY

Dr. Fred Sandifer has returned from the University of Chicago. His friends will be glad to know that he was one of six out of a class of 125 to be invited to join the A. O. A. National Medical Scholastic Society. He was also awarded the Henry M. Layman Memorial Prize for his excellent work in the Department of Medicine.

Dr. Hugh Gamble of Greenville was a visitor in Greenwood on July 4.

Dr. J. P. Kennedy spent the 4th of July at Hot Springs, Ark.

Drs. George Baskerville and J. P. Kennedy spent July 8 in Jackson.

Dr. Ira B. Bright, Jr. has completed his internship at Touro, New Orleans, and has located in Greenwood for the general practice of medicine.

All of the physicians of Leflore County have been asked to meet with the Board of Control of the Greenwood-Leflore Hospital at its regular monthly meeting, Monday night, July 10 at 8 P. M., to discuss matters of importance to the hospital. Mr. C. C. Whittington is chairman of the Board of Control, and Dr. G. Y. Gillespie, Jr. is chief of staff.

W. B. Dickins,
County Editor

Greenwood,
July 8, 1933.

MONROE COUNTY

Your monthly post card has been received. It tells me that it is time for me to step up to the firing peg. But my shell, as is usual, will prove to be a dud. Nevertheless, since your readers are long suffering and full of patience, here I come here I am.

I will not speak of the weather for Mark Twain said the last word on that subject many years ago. But if I thought it could be made an interesting subject, I think I might write a full length letter and not change the subject.

My heart is too sad because of recent deaths in our circle to even attempt to write a newsy or entertaining letter. When I think of the friends who, perhaps, have formerly read my letters, I bow my head in sorrow because Howard and Stingily and others, too, are gone from us. Their places can never be filled—how then can we carry on? But 'twas ever thus and so it will ever be. Under the glass cover of my desk, I have long kept the pic-

ture of "an empty chair." As I see this picture, almost every hour I am reminded of some dear friend whom I shall see no more. But so long as life shall last, Howard and Stingily and all my friends who have gone on, shall live in my memory. While speaking of Dr. Howard's death, I am reminded that the work of compiling a history of our Association and its members had been by common consent, assigned to him. I do not think any man alive is so well fitted for this work as was he. And in this connection, I will send you an excerpt from a letter I have just written to our splendid president, Dr. J. W. D. Dicks. This letter to Dr. Dicks was in answer to one from him in which he offered the appointment to me to serve as historian pro-tem in Dr. Howard's lieu. The excerpt is as follows: "Now, doctor, as to my undertaking the work that Dr. Howard has so splendidly begun, I must say, that I feel inadequate to the task. The Association as a body and its various members as individuals have been so gracious to me that I feel that I would be an ingrate and a coward to shirk any duty that they might see fit to impose. But we had but one Howard. Now that he is gone, we shall not, soon, see his like again. But there are others in our membership better fitted for the duties and responsibilities that will devolve upon the man who undertakes to write the history of our Association than am I. I think the suggestion of Dr. Dudley Jones in the current issue of the Journal is a good one. Let the work rest until we have accustomed ourselves to our great loss. At the next annual session of the Association, if no one, better fitted than I, can be found to undertake the task, and the Association should ask it of me, I will not be a slacker. But I want you to know that I appreciate your faith in me and it pains me to ask you to excuse me for declining to assume the mantle of so great a man as Dr. Howard (at least for the present)."

Well, the Greenwood Springs meeting of our society is now a memory, and to some of us a memory filled with great pleasure. The attendance was unusually small, due we think to the fact that people who did not know the location and history of this fine old resort, did not realize how easy of access it might be and how much it would please the Monroe county doctors for them to attend. As it was we had a fine meeting. The program was good; the author of every paper was there on time to read his paper when it was reached. We had two visiting essayists. One was a young doctor who was born in Amory and reared here. I refer to Dr. I. P. Burdine, Jr., now of Jackson. He was our "exchange essayist" loaned us by the Central Society. Dr. J. B. McElroy of Memphis was our "guest essayist." Both read splendid papers and both were well received. A splendid paper was read by a young man who has recently come into

our bounds, Dr. Wolford, recently from Birmingham but now domiciled at Columbus. We welcome him into our ranks as an active member. He is up and coming.

Two new doctors who have recently moved to Aberdeen were with us. While we consider them homefolks, still we welcome them into the fold. I refer to Drs. Ward and Williams. Please page Jamie Acker and tell him I warn him to look well to his laurels. But no one can crowd Jamie out of his place in our hearts and esteem. As there was but one Howard, there IS but one Jamie Acker. The day was fine, though rather warm. The water that flows from under a hill eternal can not be excelled. The luncheon furnished by Dr. and Mrs. Blair (proprietors of the Greenwood Springs Hotel), was all that could have been asked for. So with so many of our friends present (including Dr. Dicks and his son and Dr. Parker and his wife and son) we, as hosts, had a great day. We think that those who were not there were the losers, together with us, by reason of their absence. Be sure to meet with us at Calhoun City in September.

G. S. Bryan,

County Editor.

Amory,

July 3, 1933.

NESHOBA COUNTY

The friends of Dr. and Mrs. C. H. Harrison are gratified at the nice convalescence being made by Mrs. Harrison who underwent an operation recently at a local hospital for appendicitis.

Dr. R. G. Hand was recently called home from Vicksburg to the bedside of his wife who was stricken with an attack of appendicitis. She was operated upon at a local hospital. She is now up and about and apparently in splendid condition.

Dr. Blount, chief surgeon for the G. M. and N., R. R., was in town yesterday. We were very glad to have him visit our town and hope he comes again soon.

Dr. W. J. Stribling has just returned from a fox hunt and reports a good hunt.

Dr. W. L. Watkins has recently been appointed county health officer to succeed Dr. W. J. Stribling.

Two new doctors have recently located in our town, Dr. J. R. Plummer and Dr. Bryant Wilson. Dr. Plummer was formerly connected with the Adams-Newell Lumber Company at Deemer as contract physician. Dr. Wilson is just starting his medical career having finished an internship in a Memphis hospital.

Dr. J. S. Hickman and family, formerly of this place, Philadelphia, but now located at Jackson, were in town shaking hands with old friends.

The next regular meeting of our local society,

the East Mississippi Medical Society, will be at the historic Neshoba Fair Grounds. We look forward to a profitable and enjoyable meeting.

W. R. Hand,
County Editor.

Philadelphia, Miss.,
July 9, 1933.

PANOLA COUNTY

Your editor and little daughter, Bess Wood, drove to Rosedale some days ago to see his son, Mr. Jack Wood, and wife. We spent an extra pleasant day.

While in Rosedale I thought frequently of a physician who made Rosedale known to the physicians all over the state by its being his home. He was a former president of the State Medical Association, Dr. H. L. Sutherland. I also thought of another man who helped to make Rosedale known to every Mississippian, also to many in other states, Hon. Charles Scott.

Panola county was represented at the North Mississippi Seven County Medical Meeting at Holly Springs by Drs. A. P. Alexander, Como, and H. R. Elliott and G. H. Wood, Batesville.

Dr. Stovall from the University of Georgia, class of 1930, with the U. S. Reserves, looks after the C. C. Camp near Batesville. He makes a trip each day from the camp at Tyro.

On July 4, the Southern Air Service, Inc., of Memphis, Tenn., demonstrated an aerial ambulance at the air port near Batesville. Mr. J. A. Wright, vice-president of the company, had charge of the machine.

I received a telegram today from Dr. G. H. Wood, Jr., of Big Springs, Texas, stating, "Father, mother and son resting well."

G. H. Wood,
County Editor.

Batesville,
July 8, 1933.

PONTOTOC COUNTY

The June meeting of the Northeast Mississippi Thirteen Counties Medical Society held at Greenwood Springs was largely attended.

Dr. W. N. Blount, Chief Surgeon of the G. M. and N. Railroad, made us a short visit yesterday.

Very little sickness in Pontotoc county now. Have had only two cases of typhoid fever reported in the county this year. We are kept busy on Saturdays giving typhoid inoculations.

R. P. Donaldson,
County Editor.

Pontotoc,
July 8, 1933.

STONE COUNTY

Dr. E. W. Green, a young graduate of the Medical Department of Tulane University, who located at Wiggins about one year ago, is spending his honeymoon in Chicago where he and his bride are attending the Century of Progress Fair.

Dr. Green was married to Miss Grace Cowley on July 2, at her home in Amory. Miss Cowley had been a popular teacher in the Wiggins High School for the past two years.

Dr. and Mrs. S. E. Dunlap, returned on June 30 from a two weeks' vacation near Nashville, Tenn., the former home of both Dr. and Mrs. Dunlap. Dr. and Mrs. Dunlap will leave August 8 for a ten days' trip to Chicago, and while there will attend the meeting of the American Railway Surgeons Association and see the Century of Progress Fair.

Dr. W. M. Shepherd has been in very poor health for the past several months due to a stroke of paralysis.

S. E. Dunlap,
County Editor.

Wiggins, Miss.,
July 8, 1933.

SIMPSON COUNTY

Miss Zelma Kennedy, daughter of Dr. A. E. Kennedy, Magee, is now on a tour of portions of Europe.

Mr. Heber Kennedy, son of Dr. A. E. Kennedy, Magee, was married to Miss Jones, Collins, in June.

Dr. H. A. J. Watkins, Magee, pioneer physician of Smith and Simpson Counties, age 81, was stricken with paralysis about two weeks ago. I am glad to report that his condition at this time is favorable.

Miss Katherine Watkins, R. N., is at home with her father, Dr. H. A. J. Watkins, Magee.

Dr. and Mrs. Henry Boswell, Sanatorium with their family, left last week to spend their vacation on the Gulf Coast.

Dr. and Mrs. C. E. Walker, Sanatorium, recently visited in Oklahoma.

The sons of Dr. and Mrs. C. E. Walker, Sanatorium, visited their grandfather in Memphis, Tenn., making the return trip as far as Jackson by air.

Dr. Straine and Dr. Weimers, Sanatorium, and Dr. E. L. Walker, Magee, attended the meeting of the Central Medical Society held in Jackson this week. The pros and cons on operations in acute fulminous types of gall bladder diseases were very interesting.

I regret to report that it has been necessary to suspend the operations of the Simpson County Maternity Center for an indefinite period.

Dr. and Mrs. E. L. Walker, their son, Bin, Magee, and Henry Boswell, Jr., son of Dr. Boswell, Sana-

torium, spent several days in Chicago seeing things at the World's Fair. Dr. Walker was so pleased with his trip that he is planning to return in August and attend the meeting of the Illinois Central Surgeons.

E. L. Walker,
County Editor.

Magee,
July 8, 1933.

WASHINGTON COUNTY

Dr. and Mrs. S. L. Lane of Hollandale motored to Memphis, Tenn., for a short visit this past month.

Dr. R. N. Crockett of Winterville is touring the West. He expects to be gone several months.

Dr. and Mrs. T. B. Lewis of Greenville are on an extended tour of the West. They will visit many points of interest. They expect to be home by the first of August.

Dr. and Mrs. W. P. Shackelford of Hollandale have recently returned from a trip to Memphis, Tenn.

Dr. and Mrs. D. C. Montgomery of Greenville have just returned from Hot Springs, Ark., where they had a most pleasant visit with Mr. and Mrs. Devere Dierkes.

Dr. and Mrs. J. C. Pegues of Greenville are spending their vacation in Atlanta, Ga.

Dr. P. G. Gamble of Greenville attended the meeting of the A. M. A. at Milwaukee, June 12 to 16. He reports a most successful meeting. On his way home Dr. Gamble stopped in Chicago for several days for the World's Fair.

Dr. J. B. Hirsch and family of Greenville attended the World's Fair in Chicago last month.

Dr. J. W. Lucas of Moorhead is a patient at the King's Daughters' Hospital, Greenville. His many friends hope for his early recovery.

John G. Archer,
County Editor.

Greenville,
July 7, 1933.

WILKERSON COUNTY

The regular staff meeting of the Field Memorial Hospital will be held in conjunction with the meeting of the Homochitto Valley Medical Society at the hospital on July 13, at 6:30 P. M. Drs. Ochsner, Barksdale and Lippincott will be on the Program.

Mrs. R. J. Field is spending several weeks on the Mississippi Coast this summer.

Mr. and Mrs. A. A. Marx and family of Houston, Texas, visited Mrs. Marx's sister, Mrs. S. E. Field during July.

Drs. Chas. E. Catchings, J. W. Brandon and Paul Jackson made several visits to the hospital in Centerville this month.

S. E. Field,
County Editor.

Centerville,
July 7, 1933.

WINSTON COUNTY

The Winston County Medical Fraternity met in regular session and elected officers for the next year as follows: Drs. W. W. Parks, President; E. L. Richardson, Vice-President; and M. L. Montgomery, Secretary. We shall continue to meet the second Tuesday of each month at 3 P. M. Dr. W. B. Hickman is to read a paper at our next meeting. He is to select his subject.

Dr. W. W. Parks made a trip to Horse Shoe Lake on a fishing trip; his catch was too great to relate at this time.

Dr. E. L. Richardson was re-elected county health officer for this county.

The doctors of the city enjoyed a dinner at the Woodward Hotel, Friday night.

There is a great effort on the part of the doctors of the county to procure money from the Government Home Loan Fund to build and equip a hospital. We have a lot that is ideal already purchased for the hospital.

Fishing and an occasional fox hunt is all the sport now among many of our doctors.

M. L. Montgomery,
Louisville,
July 8, 1933.
County Editor.

Dr. William Krauss, for forty years professor of pathology, bacteriology and epidemiology of the Medical Department of the University of Tennessee, Memphis, Tennessee, has associated himself with Dr. Karl O. Stingily (son of the late Dr. C. R. Stingily) as chief pathologist, bacteriologist and radiologist of the Stingily Laboratories, Meridian, Mississippi.

UNIVERSITY OF MISSISSIPPI SCHOOL OF MEDICINE

Oxford, Miss.,
June 26, 1933.

Dear Doctor:

The vote, in response to the poll of the Governor, has resulted in a majority of the Senate in favor of the rehabilitation of the University Medical School. We need about twelve (12) votes in the House to carry the measure through. This is a very vital matter to the Medical Profession in the State, and to the State University. The closure of one of the most important schools of the University would be a calamity.

I am writing to ask you to see your Representative, or get in touch with him at once, and urge him to send in his vote for the measure to the Governor. Only a short time remains, and if the vote is not favorable, the School will have to close.

With best wishes for your continued success and good health, I am

Sincerely your friend,
(Signed) P. W. Rowland.

STATE BOARD OF HEALTH

At the meeting of the State Board of Health on June 23 and 24, the following took the written examinations and were granted license to practice medicine in Mississippi: Dr. Robert E. Blount, Bassfield; Dr. Julia D. Brown (Col.) Washington, D. C.; Dr. Ralph B. Davis, McComb; Dr. Hansel E. Edmondson, Edwards, Dr. Floyd L. McCullum, Lauderdale; Dr. Bernard Patrick, Booneville; Dr. Cole D. Pittman, Sweatman; Dr. Henry S. Provine, Clinton; Dr. Ray H. Biggs, Jackson; Dr. Edwin M. Butler, McComb; Dr. James G. Dees, Philadelphia; Dr. Thomas F. Frist, Meridian; Dr. Earl L. Laird, Union; Dr. Luther L. McDougal, Jr., Booneville; Dr. William N. Payne, Lauderdale; Dr. Ray L. Rhymes, Jr., Macon; Dr. Eric P. Robbins, Sanatorium; Dr. David H. Thornhill, Picayune; Dr. Richard B. Warriner, Jr., Corinth; Dr. John E. Windham, Hickory; Dr. Benson B. Martin, Jr., Vicksburg, Dr. Alston Callahan, Vicksburg.

Dr. Eugene V. Bramlett, Oxford, and Dr. Donald S. Hall, Vicksburg, took the examinations and successfully passed them, but their licenses will not be issued until they have completed internship as the medical colleges they attended require internship before diplomas are granted.

Dr. Harry E. Handley and Miss Carolina R. Randolph of the Commonwealth Fund spent two weeks of June with Mississippi State Board of Health.

Dr. Wm. F. Lamb, Kentucky State Board of Health; Dr. Charles H. Eller, Albuquerque, New Mexico; and Dr. M. T. Foster, Spartanburg, South Carolina, spent a week in Mississippi observing the program in the central organization and in the Pike and Holmes Counties Health Departments.

The following physicians were granted license to practice medicine in Mississippi at the last meeting of the State Board of Health. These physicians were admitted on the basis of reciprocity with other states: Dr. William D. Anderson, Vicksburg; Dr. William H. Brandon, Clarksdale; Dr. A. Dabney Hurt, Corinth; Dr. John V. James, Newton; Dr. Norman Kelly, Jackson; Dr. Wesley W. Lake, Pass Christian; Dr. Oscar E. Ringold, Winona; Dr. Thomas F. Wolford, Columbus; Dr. Charles E. Holmes (col). Greenville.

Of the physicians who were appointed in 1912, to serve as local registrars of births and deaths, 78 are still serving.

The death rates and the morbidity rates in the counties having full-time health departments are declining faster than the rates in the counties not having full-time service. There are several part-time health officers who are devoting a great deal of time to preventive medicine and it is said here to their credit that their work has been effective in reducing the case and death rates of preventable diseases in their counties.

James G. Chastain, newly elected superintendent of the Jackson schools, formerly of Leland, wrote the State Board of Health on May 13, 1933 the following letter:

"Dr. Perry (the county health officer) has recently concluded his work in our preschool clinic, and we had the best and largest clinic we have ever had. As a result of the preschool clinic, we find that our attendance in the first year of a child's school experience has been greatly increased. We have had fewer retentions and repeat students than ever before. If a county could be brought to realize that a health officer practically saves his salary on this item alone, no county would be willing to do without a full-time health unit. The work of our doctors and nurses in Washington county has been outstanding, and I, personally, am keenly appreciative of your interest in us and of the excellent service rendered our schools by the State Board of Health."

The school children of Jackson are fortunate to have at the head of the schools a man so interested in their health.

Dr. J. T. Googe of Meridian has returned from Harvard University where he has just completed a year's study in the School of Hygiene and Public Health.

Dr. George E. Riley of the State Board of Health, was awarded his certificate of public health at John Hopkins early in June and spent three weeks in Florida observing the malaria control program carried on there before returning to Mississippi on July 1.

Dr. A. L. Gray, former director of the Copeiah County Health Department, is now in charge of the Epidemiological Unit for the Mississippi State Board of Health. Dr. Gray recently earned his master of public health degree at Harvard University and has spent much time in working with and observing the work of several leading epidemiologists of the country.

F. J. Underwood,
Executive Officer.

Jackson,
July 10, 1933.

HONOR ROLL

COUNTY EDITORS—M. E. Arrington; L. L. Minor; W. F. Hand; A. M. McCarthy; W. B. Dickens; G. S. Bryan; W. R. Hand; G. H. Wood; R. P. Donaldson; S. E. Dunlap; E. L. Walker; J. G. Archer; S. E. Field; M. L. Montgomery.—14.

COUNTY SOCIETIES—Central, Robin Harris; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock, E. A. Trudeau; Homochitto Valley; Issa-

quena-Sharkey-Warren; Northeast Mississippi Thirteen Counties, J. M. Acker, Jr.—6.

HOSPITALS—King's Daughters' Hospital, Greenville; John A. Beals; Vicksburg Sanitarium.—2.

OTHERS—T. M. Dye; W. H. Frizell; J. W. D. Dicks; K. O. Stingily; P. W. Rowland; F. J. Under-

wood; J. A. K. Birchett, Jr.; L. J. Clark; R. A. Street, Jr.—9.

TOTAL—31.

YOUR EDITORS THANK YOU!

We hope our other editors and correspondents are enjoying pleasant vacations!

BOOK REVIEWS

Practical Hematological Diagnosis: By O. H. Perry Pepper, M. D. and David L. Farley, M. D., Philadelphia, W. B. Saunders Co., 1933. pp. 562. Price \$6.00.

This is a tersely written volume which should be a valuable aid to those interested in clinical hematology. The authors have divided the subject matter into three parts:

Part I contains a practical description of the components of the blood and standard methods for their study.

Part II is a clear description of the diseases of the hemopoietic system. The cardinal findings that characterize each disorder are given briefly and clearly.

Part III is devoted to a compendious description of the hematological changes that occur in diseases that are not primarily of the hemopoietic system. These diseases are listed in alphabetical order. This section should be gratefully received by the busy clinician who needs a convenient reference to refresh his memory in the minimal length of time.

D. O. WRIGHT, M. D.

Operative Surgery, vol. 7: By Warren Stone Bickham, M. D. & Phar. M. (Tulane) M. D. (Columbia), F. A. C. S. & Calvin Mason Smyth, Jr., B. S., M. D., F. A. C. S. Philadelphia, W. B. Saunders, 1933. pp. 849.

To write a book, used as one of the reference and bring it up to date is not an easy task. The author of this volume, Dr. Calvin Mason Smyth, Jr., has most thoroughly and capably selected the operative procedures that have come into practice since the publication of the preceding volumes.

This additional volume maintains the high standard enjoyed by the other six. The headings of each chapter follow the same plan as the previous volumes in that they give a detailed outline, with page references of all that is contained.

It includes the pathological conditions encountered in operations, the preparation of the operating room, of the hands of the operator and assistants and the preparation of the patient.

A frank discussion of surgical anesthesia is given, with definite conclusions; the injection methods and operations on the sympathetic and central nervous systems are thoroughly covered.

The chapter on surgical measures applied through high frequency currents, the galvano-cautery, etc., the subject of amputation, including different types of cineplastic amputation and cinematic prosthesis, is worthy of particular mention. The operations on bones, including fractures and joints (arthroplastics) are brought up to date.

Mr. William B. McNett's illustrations are excellent and in themselves are so complete that in many instances word pictures are unnecessary.

An attempt to discuss each chapter separately would make this review too lengthy. The very best estimate of the book is perhaps in its own advertisement, which, abstracted, says,—“It is not an ordinary work on surgery, but covers the entire field, including the specialties; but it does not stop there. It gives the preoperative and post-operative procedures, care and management, and comments on the technic of each operation.”

EMILE BLOCH, M. D.

Food in Health and Disease: By Katherine Mitchell Thoma, B. A. Philadelphia, F. A. Davis Co., 1933. pp. 370. Price \$2.75.

The central contention of Miss Thoma's excellent contribution is that the properly planned, well balanced diet is the most important phase of dietetics. Around this idea she constructs a text superior to any thus far presented. The A, B, C's of nutrition, the essential components of normal diet in health are first explained. The exposition is masterly simple without sacrifice of scientific essentials. Next she deals with the various diets in disease and the corrective diets. To each chapter is appended a list of questions for review. The third and fourth parts of the book consist of outlines for laboratory exercises.

MAURICE SULLIVAN, M. D.

The Fundamentals of Good Medical Care: By Roger I. Lee, M. D., Lewis Webster Jones, Ph. D. assisted by Barbara Jones. Chicago. The University of Chicago Press, 1933. pp. 302. Price \$2.50.

This book comprises an enormous amount of valuable data and is one of the publications of the Committee on the Costs of Medical Care. It is highly important to have some kind of outline of the fundamentals of good medical care and an es-

timate of the services required to supply the medical needs of the country. This study is an attempt to give definite meaning to the term "adequate, scientific medical care". It is obvious, however, that scientific medicine is ever changing and new procedures constantly developing so that such a study must require frequent revisions. The general picture of medical needs shown in this book should serve as a basis for later studies. The present study proceeds by two main steps in its outline of adequate medical care: (1) "A statement of the functions which would represent a reasonable utilization of modern medical knowledge and an outline of the fundamental procedures involved in good current practice. (2) The establishment of normal expectancy rates of the diseases and conditions for which medical care is required, and, upon the basis of these rates, the calculation of quantitative estimates of the services and the personnel and facilities required for the application of good current medical practice to all the people". It will be observed that the scope of this book is so wide that it is not possible to condense it in a short review. Suffice it to say that the authors have presented it in a broad, fair-minded way, conscious of its limitations and, in no sense as the last word on the subject. As this is such a live and important topic every physician will be well repaid by adding this study to his library.

RANDOLPH LYONS, M. D.

Collected Papers of the Mayo Clinic and the Mayo Foundation: Vol. 24, 1932. Edited by Maud H. Mellish-Wilson and Richard Hewitt, B. A. M. A., M. D. Philadelphia. W. B. Saunders Company, 1933. pp. 1205.

The first volume of collected papers of W. J. Mayo and C. H. Mayo and their associates was published in 1909. Thereafter yearly papers published by the distinguished group have been collected into one volume. Recently publications from the Mayo Clinic have been so numerous, some of which are not of interest to the general profession, that republication of all in the Collected Papers has not been justified. The editors have wisely selected only their best and most interesting papers. The present volume is the republication of 157 of the 484 papers published from the Mayo Clinic last year. Almost all of them are of some practical interest to the general profession. However, they are segregated into different sections, making it less difficult for the specialist to review the subjects in his field. Many of the papers are excellent, and some would deserve special mention were it not for the fact that such an attempt would probably result in an incomplete list.

In reviewing a volume such as this, one is struck with the sameness of style in most medical publications. Perhaps the essence of a medical subject is better portrayed with one unvarying

method. Certainly one would not make the criticism of these papers that something is not told definitely and clearly. The subjects and presentation are not mistakable. However, like most medical literature, probably wisely, there is absence of literary embellishment. Occasionally, however, one finds a medical author not deviating from the accepted form whose style is as striking as the subject he is presenting.

HOWARD R. MAHORNER, M. D.

Dietetics for the Clinician: By Milton Arlanden Bridges, B. S., M. D., F. A. C. P. Philadelphia, Lea & Febiger, 1933. pp. 666.

This is a splendid volume. It is marked by practicability and modern concepts of dietetic tables, showing distributions of foodstuffs, their calories, vitamins, mineral and food elements. The menus and recipes are good. The mechanics, physiology and pathologic physiology of digestion are concisely and completely considered. Part III is devoted to pediatrics. Preceding the type of diet in each disease is a summary recital of modern concepts of treatments. A full bibliography and a good index complete the work. It is a most handy volume for the general practitioner and hospital interne.

I. L. ROBBINS, M. D.

Incomes of Physicians: By Maurice Levin, Ph. D. Chicago Univ. of Chicago Press 1932. pp. 135.

This volume is a thorough, well written, economic and statistical analysis of information gathered by the Committee on the Costs of Medical Care between 1929 and 1931.

The following ideas will give the prospective reader an understanding of its contents:

In 1929, physicians collected about 81½ per cent of the amount charged to patients as compared with over 97 per cent for dentists.

In 1929, there were approximately 142,000 physicians engaged in active practice, of which 121,000 were engaged in private practice and 21,000 held full time salaried positions. The average income of private practitioners estimated by the author is \$5,467.00, while that of salaried physicians is \$4,524.00. Twelve per cent were over \$10,000.00, and 2 per cent over \$20,000.00, 50 per cent about \$3,800.00, and 25 per cent below \$2,300.00.

The difference between the gross and net incomes approximated 40 per cent. In other words, the cost of conducting a medical practice is approximately 40 per cent.

The average physician begins practice at the age of about twenty eight years. Seven to eight years are usually required for a physician to become established in private practice. The peak of income from private practice is about the seventeenth to eighteenth year, after which income de-

clines. At the twentyfifth year, incomes are approximately the same as at the eighth.

Complete specialists are variously estimated between 24 per cent and 40 per cent of all physicians.

The average volume of free work furnished by physicians throughout the country is approximately 7 per cent of the total medical service rendered.

In the evaluation of this work, which is presented in a most thorough manner, one must not forget that the information and the conclusions based thereon do not include 1933 conditions, which economically may or may not differ sufficiently to affect practical correctness.

The author and Committee on the Costs of Medical Care are to be congratulated on the publication of this excellent volume which presents the subject from a new point of view.

CHAS. A. BAHN, M. D.

Surgical Anatomy: By C. Latimer Callander, A. B., M. D., F. A. C. S. Philadelphia, W. B. Saunders Company, 1933. Illus. pp. 1115. Price \$12.50.

Although perforce there are not many fundamentally new facts or relationships concerning surgical anatomy, the author has justified the publication of this volume by the introduction of several innovations in presentation.

Surgical anatomy is pertinently presented in relationship to embryology, physiology, clinical pathology, and diagnosis, as well as to clinical surgery, so that both the value and the interest of the work are enhanced.

Several relationships which previously have not been stressed are herein presented and elaborated upon because of new interest attached to them, which has grown out of recent development or expansion of certain fields of surgery.

In preparing some of the sections of manuscript the author has collaborated with contemporary workers who are experts in special fields such as neurosurgery, ophthalmology, otorhinolaryngology, thoracic surgery, urology, and gynecology.

There are numerous appropriate new illustrations in addition to many well selected reproduced ones.

This volume affords a well organized, adequate, and readable medium for a general review of clinical anatomy; it is well arranged and indexed for quick reference.

For the undergraduate medical student, this tome capably fulfills the recognized need for a book which correlates anatomy with other branches of medicine, including clinical practice.

AMBROSE H. STORCK, M. D.

Towards Mental Health, The Schizophrenic Problem: By Charles Macfie Campbell, Cambridge, Harvard University Press, 1933. pp. 110.

In this little book is reproduced the Adolph Gehrman lecture in hygiene at the University of Illinois College of Medicine in 1932. For this year Dr. Charles Macfie Campbell, Professor of Psychiatry, of Harvard University was invited to discuss mental hygiene. The general science of hygiene has been taught for years, it has to do with preservation of life, and has accomplished a great deal in lessening the ravages of tuberculosis, smallpox, rickets, poisoning from food or drink, parasitic and microbic agents. Mental Hygiene is not directed to particular aspects, but is hygiene of the whole individual, in which efforts are made to prevent abnormal behavior and distorted beliefs.

There are four lectures or chapters: 1st. The General Field and the Special Territory; 2nd. The Harmonizing of Conflicting Trends, the Achievement of Independence, the Attaining of a Conviction of Personal Value; 3rd. Heredity and Environment; 4th. Summary.

All of Dr. Campbell's writings are of a very pleasant style and are easily comprehended. In these lectures he gives a concise picture of many problems in Mental Hygiene and illustrates them with brief case histories.

I recommend this little volume as containing the present day conception of mental disorders and believe that every one interested in medical problems would be intrigued and benefitted by spending an hour or two reading this lecture.

C. S. HOLBROOK, M. D.

Operative Surgery: By Alexander Miles, M. D., LL. D., F. R. C. S. Ed., and D. P. D. Wilkie, M. D., F. R. C. S. Ed. and Eng. Oxford Medical Publications. London, Oxford University Press, 1933, pp. 590. Illustrated. Price \$5.25.

It might almost be said that any surgical textbook which comes out of the University of Edinburgh carries with it an automatic guarantee of excellence, for that particular School of Surgery, with its unique Intramural and Extramural Faculty and its intimate association with the Royal Infirmary, has been for more than 200 years one of the most famous centers of clinical teaching in the whole world. The first holder of the Chair of Surgery, Alexander Monro, was more anatomist than surgeon, and the tradition of the school has always been the interrelationship of anatomy and surgery. Lizars, Fergusson, the Bells, Syme, Lister, Stiles, all entered the department of surgery through the gateway of anatomy, and it is perhaps for that reason that their lines have gone out literally unto the ends of the earth. It is small wonder, therefore, that the last Regius Professor of Clinical Surgery, Sir Harold J. Stiles, in his Fellowship Address before the American College of Surgeons in 1921, should have advised all would-be surgeons, as he looked back upon the eleven

years in which he himself had demonstrated and taught pure anatomy and surgical anatomy, to teach practical anatomy for at least a year before they attempted to practise surgery, since the dissecting room must ever be the surgeon-probationer's basic laboratory.

Miles and Wilkie have written this **Operative Surgery** with the aid of a notable company of collaborators, headed by John Fraser, the present Regius Professor, and including the outstanding surgeons at the University, the Royal Infirmary, and the Municipal Hospitals of Edinburgh. Since the avowed purpose of the book, as the authors state in the preface, is to serve as a manual of the practice of surgery according to the Edinburgh method, it must be criticized only on that basis, and it must be remembered, too, that the presentation of the subject of operative surgery within the compass of less than 600 pages means, of necessity, a limited presentation. But even with those allowances there is much to admire and relatively little to condemn in this text, which is a really remarkable compendium of practical surgical information and sound surgical methods.

The most striking characteristic of the book is, as would be expected in view of its place of origin, the constant and intimate correlation of anatomy and surgery. The operations on each special region of the body are preceded by an admirable anatomic survey of that region, which condenses, within very brief limits, the salient facts which the surgeon must have at his call, stripped of confusing details and reduced to basic essentials. Only in one place has the zeal for anatomy led the authors astray, in the section on vascular surgery, and even here the aim is praiseworthy though the results are not. There are included in it, they state frankly, many operations which are seldom, if ever—we would say are never—performed in practice, but the descriptions of which are retained as exercises in the anatomy of the parts concerned. We agree with them that the anatomic relationship of the blood vessels is a matter of vital importance in any procedure, for the avoidance of the vascular supply is a fundamental surgical consideration, but at that it would be better, in our opinion, to eliminate these operations, less than half a dozen of which are of the smallest practical use, and to devote the space to exercises in pure anatomy. With this exception, however, the correlation of anatomy and surgery is beyond criticism, and the operative procedures are described with great clarity and in ample detail. The chapters on plastic surgery and on surgery of the brain, breast and abdomen are particularly well done.

While the section on their operative treatment is perhaps rather longer than is strictly necessary, the clinical classification of fractures may be taken as an example of the sane conservatism which

the text exhibits throughout. To the surgeon quick with the knife is to be commended the grouping of such injuries into the very large group in which operative treatment should never be advised, the very small and very carefully selected group in which only surgical measures can achieve results, and the debatable group, again very small, in which the question of surgical versus non-surgical treatment must be settled by the wisdom and experience of the individual surgeon. Equally to be commended is the reasoned warning of the dangers of the open method of treatment. These points, like many others, are not new, but that does not mean that there is not a constant need to stress them and reiterate them. In this connection, we might say that it is regrettable to find the name of Dr. E. D. Martin omitted in the mention of the Parham-Martin band; the local profession knows how largely his mechanical genius contributed to the efficacy of that device.

Since the surgical technique and the indications for surgical treatment represent the point of view of one special school, there is naturally much in the book with which American surgeons do not find themselves in full agreement. We question, for instance, the wisdom of preoperative purgation as a routine in abdominal surgery—can the intestinal tract really be at rest, as the authors demand, if a purgative be given twenty-four hours before operation?—and we question equally the wisdom of calomel or castor oil on the third day postoperative; neither procedure is the general practice in American surgery today. Even granting the fundamental safety and soundness of the citrate method of blood transfusion, it seems curious that more detailed mention is not made of some one of the modern methods of direct transfusion, such as the Jubé syringe method. It is questionable whether the numerous operations, many of them quite ancient, which are included in the section on amputations are actually in use even in the Edinburgh School, though in that same section the discussion of artificial limbs is unusual and commendable: the importance of such devices to the future economic and social happiness of the patient cannot be over-estimated, and yet too often no consideration is given to their practicability when amputation becomes necessary.

The introduction of preoperative and postoperative treatment and of indications is again rather to be regretted. Such subjects really do not belong in a textbook of operative surgery, certainly not in a textbook of this size, but if they are introduced, they should be considered for each operation, which is not always the case. Moreover, because of the limitations of space, they can necessarily be handled only fleetingly, when they are introduced, and in the casual mention of important matters there is always an element of danger. The

inclination of the average reader is to measure importance by length; that his inclination is unreasonable and incorrect has nothing to do with the case; the point is that the inclination exists. Thus the preoperative treatment of toxic goiter, although it includes practically all the basic points and is indeed remarkably sound, considering the limited experience most English and Scottish surgeons have in this field, is treated in a paragraph, while the operative technique extends over many pages; the casual, the careless, or the frankly ignorant reader might well assume that the most expert surgery will not avail him if the patient is not properly prepared for his efforts. Precisely the same criticism might be made of the paragraph or two devoted to the subject of post-operative obstruction, a complication of such tragic potentialities that it might better have been omitted entirely than treated so cursorily.

The illustrations are many and clear, although they do not compare in excellence with similar work by American medical artists, particularly those who have been trained in the school of Max Broedel or Tom Jones.

These criticisms, however, are of passing moment. Over-shadowing the minor defects are the soundness of surgical judgment and the richness of surgical wisdom that permeate the whole book. In few other publications of this sort has so much of value been put into so small a compass, and the authors and their collaborators are to be congratulated on their achievement.

FREDERICK FITZHERBERT BOYCE, M. D.

JAMES DAVIDSON RIVES, M. D.

Lymphatics, Lymph and Tissue Fluid: By Cecil K. Drinker, B. S., M. D. and Madeleine E. Field, A. B., PhD. Baltimore, Williams and Wilkins Company, 1933. pp. 254, figs. 14.

Drinker and Field summarize what is known of the physiology of the mammalian lymphatic system. The data they present, much of it the result of their own experimentation and observation, are drawn from anatomy, physiology, pathology and immunology. The steady normal function of the lymphatics consists in removing certain fractions of the tissue fluid which do not re-enter the blood vessels and thus assisting in keeping the aquatic environment of the body cells at a relatively constant level of composition. The lymphatic capillaries are essentially absorptive, the blood capillaries productive and absorptive. The latter vessels produce the tissue fluid and reabsorb water and salts, there being no evidence that the great body of blood capillaries absorb the plasma proteins once these substances become extra-vascular. The lymphatics deal constantly with extravascular proteins and under normal conditions absorption of the blood proteins represents their main task.

In the presence of infection there may be added the removal of cellular detritus, particles of dirt, etc. The authors believe it probable, though unproven, that the wall of the lymph capillary is normally decidedly more permeable than that of the blood capillary. The capillary lymphatics behave like endothelial-lined tissue spaces. Protein containing fluid leaving the blood stream moves into lymphatics almost as easily as through the tissues. The lymph capillaries guide a certain amount of the fluid which enters them into larger valved vessels, out of which escape is difficult and through which the lymph flows to reach the blood stream.

Blood capillaries differ markedly in permeability to the blood colloids, but all are somewhat permeable unless reinforced by a secondary membrane. This permeability is the source of protein in lymph. The lymphatics are efficient in removing proteins but do little to minimize abnormal filtration of water. The blood capillaries are the essential mechanism for determining the water content of the tissues.

The authors have suggested that lymph and tissue fluid possess an approximate degree of identity. They believe that the filtrate from the blood capillaries to the tissue spaces contains, water, salts and sugar in the concentrations found in blood, together with serum albumin, serum globulin and fibrinogen in low concentration, lower probably than that of tissue fluid or lymph; that water and salts are reabsorbed by the blood vessels and the protein enters the lymphatics together with water and salts in the concentration existing in the tissue fluid at the moment of lymphatic entrance. This is, of course, not a universally accepted point of view, but the authors marshal much evidence in favor of their contention. They believe that the lymphatic capillaries act like endothelial lined tissue spaces. Capillary lymph and tissue fluid exist in a common reservoir and to this the blood capillaries make additions of fluid and by reabsorption withdraw it. This belief results from an analysis of their experience and cannot be supported by direct evidence, since tissue fluid has not as yet been obtained under normal conditions.

The last and longest chapter is devoted to "practical considerations" such as the lymphatics and lymph in circulatory edema and hypertension, the lymph flow with lowered plasma proteins, the lymph flow as a result of intravenous injections, lymph flow in anaphylactic shock, the relation of the lymphatics to edema and the consequences of lymphatic obstruction, the promotion of lymph flow, etc.

There is an ample bibliography and author index of 37 pages as well as a subject index.

Anyone desirous of finding out what we now know of the physiology and functional pathology

of the lymphatic system will be repaid for having read this monograph, there being no one more competent than the authors, as a result of their own work, to review the facts and problems as they exist today.

HENRY LAURENS, Ph. D.

Urology in Women: By E. Catherine Lewis, M. S. (Lond.), F. R. C. S. (Eng.) Baltimore, Wm. Wood & Co., 1933. pp. 73. Price \$1.75.

The author has presented a number of the uncommon conditions that occur in the female lower urinary tract as she very aptly states in the preface.

Little or no mention is made of these conditions in the general text books on urology. The work is well presented and beautifully illustrated with several fine cuts and very impressive photographs and microphotographs.

It is time well spent in reviewing this short but instructive text.

MONROE WOLF, M. D.

Holt's Diseases of Infancy and Childhood: A Text-book for the Use of Students and Practitioners, by the late L. Emmett Holt, M. D., and John Howland, M. D.; revised by L. Emmett Holt, Jr., M. D., and Rustin McIntosh, M. D. New York and London, D. Appleton and Co. 1933. pp. 1240.

The tenth edition of this book on pediatrics will be welcomed by students, practitioners, and teachers. Since the first edition of this book in 1897 it has been very extensively used throughout this country.

There have been so many advances made in the scientific knowledge of certain diseases that this book differs from the former editions in many respects. Certain chapters have been revised and others have been entirely rewritten. As the authors state in their preface, the sections on nutrition, and nutritional disorders, deficiency diseases, diseases of the blood and diseases of allergy have been completely rewritten; the same is true of much of the material on diseases of the nose and throat, the genito-urinary system and the nervous system. The list of rewritten articles includes those on premature infants, diabetes mellitus and, among the infectious diseases, tuberculosis, rheumatic fever and the common cold. New articles have been added on chemical relations in childhood, immunology in childhood, general conditions of allergy, serum disease, burns, lead poisoning, dwarfism, diseases of the parathyroids, xanthomatosis, lipoid cell pneumonia, rabies, smallpox, postinfectious encephalitis, erysipelas, typhus fever, tick-bite fever, tularemia, undulant fever and some of the less frequent diseases of the skin and of the nervous system.

The book is practical and gives in concise form

the latest knowledge of the diseases of infancy and childhood and also gives a bibliography at the end of each chapter, thus enabling the student to get further information if he so desires.

RENA CRAWFORD, M. D.

The History of Urology: Prepared under the auspices of the American Urological Association. Baltimore, Williams & Williams Co. 1933. 2 v.

The American Urological Association has undertaken a praiseworthy task in outlining the development of Urology since the foundation of the Association by Dr. Ramon Guiteras in 1902. The progress of the specialty in different sections of the country is outlined with a short biography of each under which these men labored and the remarkable of its more energetic contributors. The difficulties successes which they achieved are clearly portrayed.

The diagnosis and treatment of practically all conditions coming under the heading of Urology are outlined from their incipiency, whether in ancient or modern days, up until the present time.

The various contributors to the volumes collectively are composed of the most outstanding men doing Urological work today. They have spent an enormous amount of time and energy in fulfilling their task and practically every chapter is accompanied by an excellent bibliography.

The work is well worth the time spent in reading it, and a number of incidents from the lives of Urological pioneers make it entertaining as well as instructive.

CHAS. D. EHLERT, M. D.

PUBLICATIONS RECEIVED

J. B. Lippincot Company, Philadelphia: Fractures, by Paul B. Magnuson, M. D.

W. B. Saunders Company, Philadelphia: Obstetrics and Gynecology, by Arthur Hale Curtis, M. D. Volume II.

McGraw-Hill Book Company, Inc., New York: Health and Environment, by Edgar Sydenstricker.

The Hospital for Joint Diseases, New York: History and Source Book of Orthopaedic Surgery, by Edgar M. Bick, M. A., M. D.

American Medical Association, Chicago: Medical Relations under Workmen's Compensation. Report prepared by the Bureau of Medical Economics of the American Medical Association.

The National Committee for Mental Hygiene, Inc., New York: Psychiatry in Medical Education, by Ralph A. Noble, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

AUGUST, 1933

No. 2

TREATMENT OF SYPHILIS IN CHILDREN*‡

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NEW ORLEANS

When any phase of syphilis is dealt with from the standpoint of the Pediatricist, the immediate thought that springs to the front is the problem of hereditary syphilis. For although acquired syphilis is sometimes met in children, it represents the rarity while hereditary syphilis constitutes the majority of this disease in the young. In accepting the privilege of participating in this symposium on treatment of syphilis, I realize the impossibility of fully and adequately covering the subject in the necessarily limited time. Yet, I realize too, the possibility of contributing to the effort being made to achieve a much needed simplification of the never-ending list of methods of procedures.

Since the advent of salvarsan in 1910, a multitude of drug preparations and a multiplicity of methods have, from time to time, been advocated for the treatment of syphilis in general. Each of these has had its ardent advocates who have extolled the merits of drug and method of administration. Gradually it has become evident that simplification in the treatment of syphilis is not only desirable, but indeed, a necessary achievement for the benefit of both patient and physician. To be sure such simplification must provide results equal to modern standards of therapy. The responsibility of

controlling this disease lies perhaps more directly upon the shoulders of the pediatricist than upon any other specialty; for while the urologist does come in more direct contact with syphilitic patients, and the obstetrician is called upon to contribute in the general attack against this disease, it is the pediatricist who has the earliest opportunity to so manage the individual case as to remove it as a scourge to the patient and also as a source of dissemination to others.

There can be no doubt that the easiest, surest and best manner of managing hereditary syphilis is, when possible, by the prophylactic treatment of the parent. It has been abundantly established that adequate anti-syphilitic treatment of the mother during pregnancy will result in the birth of a non-syphilitic offspring; and, there seems to be agreement, too, on the proposition that when the mother received treatment during pregnancy, even though this be inadequate to achieve a cure, the resulting syphilitic offspring is more readily amenable to successful treatment. Looking beyond the cure of the individual case, and visualizing the attack against the disease in general, it is recognized that the mother's treatment must be continued until complete cure is effected, and also that the father must submit to treatment until completely cured; otherwise subsequent pregnancies will result in the birth of potentially syphilitic offsprings.

In the treatment of the newborn exhibiting hereditary syphilis there are four drugs more or less in general use: mercury, arsenic, bismuth and the iodides. Of these mercury has been in general use for a much longer period than any of the others, and in many quarters is still regarded as the sheet anchor. For although

*Read before the Orleans Parish Medical Society, May 22, 1933.

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‡This paper and the three following articles constituted a symposium on syphilis.

experiments with the various preparations of arsenic and bismuth offer encouragement to those not satisfied with the efficacy of mercury, further evidence of their superiority must be shown; otherwise mercury must continue to occupy the position of highest desirability. It is, of course, understood that in selecting a drug as the most reliable agent in combatting a disease, one must consider its therapeutic efficacy; its freedom from damaging effects upon the organism; and finally its ease and practicability of administration.

Of the many preparations of arsenic that have been advocated for the treatment of syphilis, we may briefly give an itemized inventory. *Arsphenamin* proper, "606", has been tested in the field of pediatrics, and has been found wanting. This statement is based upon the known long list of serious disadvantages it possesses, and notwithstanding its superior therapeutic efficacy over all arsenobenzenes. *Arsphenamine* is the most toxic of the group, as demonstrated by the high mortality incident to its use, and, because of its pain-producing action when injected into tissue it must be given intravenously and in large dilutions; this makes it entirely impracticable for introduction into the small circulation of the infant. Therefore, *arsphenamine* is not recommended for the treatment of hereditary syphilis.

Neoarsphenamine has been, and is at the present time recommended for the treatment of infantile syphilis. It is not as toxic as *arsphenamine*, and it can be given with safety in small solutions when used in moderate doses. Though not to the extent of *arsphenamine*, *neoarsphenamine* is possessed of a high therapeutic efficiency. However, when used in doses which will insure safety, many relapses occur, while the use of doses calculated to represent therapeutic equivalents of *arsphenamine*, in our own experience as well as that of others, carries with it the possibility of complications almost as numerous and serious as with *arsphenamine*. Moreover its use is apt to produce injury to the blood and blood-forming organs in a greater percentage of cases than *arsphenamine*. It is unstable in solution and slight errors in technic markedly increase its toxicity. Its therapeutic effect is variable, as shown by its

lesser effects upon the blood Wassermann. The ideal procedure in using *neoarsphenamine* is its administration into the jugular vein. This is by no means a simple procedure, nor is it entirely free from serious accidents or reactions. In fact, the procedure is safe only in the hands of those who have developed skill in the technic, and should not be attempted by those who have not such skill. For these reasons *neoarsphenamine*, too, is not recommended for routine use in the treatment of infantile syphilis.

We next pass to a consideration of *sulpharsphenamin*. After a period of experimentation this preparation was heralded as the drug which would finally fulfill all requirements. Its therapeutic efficiency is at least equal to that of *neoarsphenamine*; it has been shown to possess a high penetration of the nervous system and its action on blood Wassermann and neurosyphilis, when administered by the intra-muscular route, is better than *neoarsphenamine*. Its use is not associated with the Herxheimer effects because of its slow absorption, and its animal toxicity is relatively low. *Sulpharsphenamin* is stable under market conditions and also very stable in solutions; its administration produces few immediate reactions and the technic of administration is simpler, being given either subcutaneously or intra-muscularly.

To be sure, *sulpharsphenamin*, like all arsenobenzenes, possesses certain characteristics which make its routine use somewhat unsafe in many cases; its tendency to serious injury of the vascular system and the high incidence to dermatitis, coupled with the fact that its effects are less lasting than other arsenobenzenes, necessitating the administration of a larger number and more frequent injections, constitute serious objections to its routine use.

Careful comparison of advantages and disadvantages of the arsenobenzenes, however, clearly places *sulpharsphenamin* in a position of decided choice in this group.

Next, one has to give consideration to *Stovarsol* (acetylaminohydroxyphenylarsonic acid), a preparation containing 27.1 to 27.4 per cent of arsenic. Its most manifest advantage, I think, is the ease and simplicity of its administration, it being given by mouth.

Its therapeutic efficiency undoubtedly has been established to a satisfactory degree, and A. F. Abt and A. S. Traisman believe that "the peroral administration of stovarsol is the method of choice in the treatment of infantile syphilis." However, even they sound a word of warning that its use calls for "close and strict supervision of cases so treated, if serious untoward effects are to be avoided." My own notes contain records of two newborn syphilitics in whom the administration of stovarsol apparently precipitated the onset of renal lesions which eventually led to deaths. This, with other experiences and information gathered from other workers, causes me to entirely subscribe to the idea already set forth by others, that with our present knowledge this preparation of arsenic may be said to be yet in its probational stage. Its routine use can not be recommended until its real position can be determined by further clinical experience at the hands of those who have ample clinical material and sufficient interest to determine its merits on a large scale.

Bismarsen injected intramuscularly is recommended as an alternate drug for the treatment of infantile syphilis. This drug like other preparations of this type also possesses many disadvantages, and besides, so far, appears to offer nothing that bismuth alone or alternating with an arsenobenzene offers.

As early as 1889 Balzer studied the effect of bismuth in dogs, and found that severe stomatitis and enteritis resulted. In 1921 this drug was first used in the treatment of syphilis, and in 1922 Sazerac and Levaditi proved the value of bismuth in the treatment of syphilis. They concluded from their experimental results that "bismuth exercised an incontestable therapeutic action upon experimental syphilis." These favorable results were confirmed by Fournier and Guenot. In the treatment of infantile syphilis bismuth has been used with benefits parallel to those in the acquired form. Although inferior to the arsphenamines as a spirocheticide, it causes almost as rapid disappearance of syphilitic manifestations, and since it is practically non-toxic, it is considered by many to be superior to mercury. Wright uses bismuth "as the main adjunct to the arsphenamines, confining the use of the latter to one or

two courses of eight injections, and then depending upon bismuth to complete the arrest of the disease." Many syphilologists consider bismuth to possess a higher antisyphilitic action than mercury. Its use is preferable because of its very low toxicity. In cases of arsenical poisoning, bismuth may be used for injections without untoward symptoms, whereas, mercury quite often produces serious reactions when used this way.

The use of bismuth as a routine in the management of infantile syphilis, however, is not recommended in a general way, because frequently cases occur in which a condition of so-called "bismuth fast" develops. It then becomes necessary to supplement it with another drug, and in such cases the drug of choice is mercury.

Passing now to mercury, it can be definitely stated that this drug in the field of infantile syphilis probably has no superior. It can be administered with ease and safety, while its anti-syphilitic action has been repeatedly proven. Even when administered in doses which are too large for the individual case, the appearance of diarrhea leads to cessation of active administration of the drug, and within a few days treatment may be resumed, using a smaller dose with safety. There are no drastic or real serious toxic effects, and the curative action of mercury is equally marked, whether the drug is used by inunction, oral administration or by injection.

From our own experience and information at present at hand it is recommended that main reliance in the treatment of hereditary syphilis be placed in the use of mercury, and that arsenic therapy should rank second in importance.

- (1) Because of the lesser danger of serious reactions, and
- (2) Because of the uniform rapid improvement which follows its use in a large majority of cases.

If arsenic preparations are used, they should be used for initial courses only and then followed up with mercury for completion of the treatment. Our own experience indicates the conviction that the arsenobenzene of choice is *sulpharsphenamine*.

The routine recommended at present is to obtain control of the disease by an initial, in-

tensive course of treatment with mercury inunctions, using unguentum hydrargyrum or blue ointment (grs. X) daily for a period of two weeks; this preparation is far superior to calomel ointment. We do not employ intramuscular administration of mercury because it has proven unnecessarily painful and otherwise objectionable. The intensive, initial treatment may consist of a series of subcutaneous or intra-muscular injections of sulpharsphenamine, six injections being given at intervals of four to six days. The dose administered, though influenced by the age and weight of the patient, averages as follows:

1st injection	0.05 gm.	in .5cc	of sterile water
2nd.	“ 0.1 gm.	“ 1cc	“ “ “
3rd.	“ 0.1 gm.	“ 1cc	“ “ “
4th.	“ 0.1 gm.	“ 1cc	“ “ “
5th.	“ 0.1 gm.	“ 1cc	“ “ “
6th.	“ 0.1 gm.	“ 1cc	“ “ “

Based on age the average initial does is as follows:

Birth to 1 month	0.03 gm.	in 0.3cc	sterile water
1 month to 2 months	0.05 gm.	in 0.5cc	“ “
2 months to 6 “	0.07 “	in 0.7cc	“ “
6 “ to 12 “	0.1 “	“ 1cc	“ “
1 year to 2 years	0.15 gm.	“ 1.5cc	“ “

These doses conform in a general way to calculations based of the dosage of 0.01 gm. per kilogram of body weight.

After the intensive course of mercury or sulpharsphenamine, mercury is administered by mouth in the form of hydrargyrum cum creta in doses of gr. 1/2 to gr. 2 three times daily, depending upon the age and weight of the infant, or in the form of hydrargyrum iodidum flavum in doses of gr. 1/20 to gr. 1/10, again depending on the age and weight of the infant. We prefer, and use almost exclusively, the hydrargyrum cum creta. This oral administration of mercury following the initial intensive course is employed continuously for one year in infants, and two years in older children after the Wassermann has become negative. In some cases it is necessary to continue treatment three years or even longer.

All cases of hereditary syphilis require most thorough physical, serological and roentgenologic examination in order to determine the localization of organic lesions. After a case is

clinically and serologically well, Wassermann tests should be made every six months throughout infancy and early childhood, and again at puberty. In this way only can one be certain that permanent cure has been achieved.

In conclusion I wish to emphasize several points that are of vast clinical importance in the management of hereditary syphilis.

1. Only a few newborns exhibit clinical evidence of hereditary syphilis during the first two weeks of life. The majority are seen from this time to the fourth month.
2. A positive Wassermann of the cord blood justifies the institution of early treatment, even in the absence of clinical evidence.
3. A negative Wassermann of the cord blood in a child whose mother is definitely syphilitic, though she may have received treatment during pregnancy, does not signify that the newborn has escaped infection.
4. At no time, during the course of a treatment, should a negative Wassermann in early infancy be considered sufficient evidence to interfere with completion of the course as outlined.
5. Complete cure and elimination of possible late syphilis of the central nervous system are made more probable in direct relation as to how early treatment is begun.

THERAPY IN PRIMARY SYPHILIS
WITH SPECIAL REFERENCE TO BISMUTH
ARSPHENAMINE SULPHONATE
(BISMARSAN)*

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NEW ORLEANS

The kaleidoscopic pace at which the medical profession has been bombarded by pharmaceutical houses with drugs of most intricate chemical formulae for the treatment of patients afflicted with syphilis since the introduction of the arsenical compounds by Ehrlich in 1910, leaves most of us in a maze.

*Read before the Orleans Parish Medical Society, May 22, 1933.

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Having had the good fortune, or misfortune, depending upon the viewpoint, of beginning my medical practice in the midst of this therapeutic transition, flanked on the one hand by a time-honored mercury and iodine regime, and, on the other, by the new and long-awaited arsenical and bismuth compounds, and being privileged to supervise the treatment of syphilis in the out-patient clinics of two of our largest hospitals over a period of years, it is hoped that my observations and conclusions may serve of value in this symposium on the treatment of syphilis.

My remarks are to be confined to the therapy of primary lues. It is in this stage of syphilis that our greatest responsibility lies, for if the therapeutic efforts employed are not adequate, serious sequelae can be anticipated. Sufficiently early treatment therefore is imperative. The stigma attached to the disease could be better ameliorated if this fact were better appreciated by those infected.

Dark field examinations of scrapings from each and every extra-genital as well as genital sore should be available to all and where such lesions reveal doubtful findings the adjacent lymphatic glands, where palpable, should be aspirated and the serum submitted to microscopic study for *spirochaeta pallida*. Unless physicians adopt such routine certain borderline lesions might escape true recognition. It should be obvious that where the ulcer has first been treated by the patient with the usual chemical caustics obtained at a drug store, the true character of the infection becomes increasingly difficult. In making a diagnosis of syphilis many physicians avail themselves of a blood Wassermann test in preference to studies of scrapings. Knowing as we do that it requires from two to six weeks after exposure for the complete fixation reaction to become positive and that valuable time is lost in the interim, the superiority of dark field studies, in skilled hands, seems self-evident.

Complete physical examinations, particularly of the skin in its entirety, the mucous membranes, the lymph glands, etc., should not need emphasis. The recognition of heart disease, tuberculosis, or nephritis, as they bear directly on the therapy planned, is most important.

Admitting the diagnosis established, it behooves the physician frankly to explain to the patient his predicament. The degree of intelligence as well as the psychic slant of the patient must be considered in the first interview. If unmarried the patient must be warned about exposing others to his infection; if married, the wife or the husband, as the case may be, must also undergo examination. With tact this can be managed in a way that will seldom result in marital rupture. It cannot be emphasized too forcefully that no time limit can be set for a cure in syphilis. The charlatan who guarantees a cure in from three to six months has created much havoc in the minds of those easily led astray. In time so limited as is allotted this presentation no adequate discussion of this important phase of case-management can be entered into here.

Many plans have been suggested for sterilizing the initial lesion of syphilis. Its accessibility at times furnished a problem. A chancre under a tight prepuce, where either phimosis or paraphimosis supervenes, demands surgical measures to the constricting tissues. A dorsal slit or the severing of a constricting band behind the glans may prevent necrosis. The sore proper is treated with nitric acid by some; frequently the actual cautery is used, while still others use a simple dusting powder and let it go at that. In our experience nothing works quite as well as the Rosenwald solution and ointment; the former being applied on a pledget of cotton for twenty-four hours only and the latter is then continued locally until resolution occurs, which is usually a week.

Personal equation still enters into the selection of the arsenical and bismuth compounds used in treating this disease. Likewise the avenues through which antileptic medication is to be introduced into the patient brings us to debatable ground. Opinion, however, is united in the matter of thorough and unremitting treatment, extending over a period of years if necessary, with recognized agents until one feels reasonably certain of cure.

Many highly esteemed and authoritative syphilographers both here and abroad, advocate the concurrent use of a heavy metal with arsenic. Not only is continuous therapy super-

ior to interrupted treatment but it appears that the concurrent use of drugs is paramount to the alternating plan. Obviously, we treat the patient rather than the disease; still we can hardly compromise with so devastating a host as syphilis. Treat the disease vigorously while ever keeping check on the patient's resistance by periodic urinalyses, 'phthalein readings, blood pressure determinations, etc.

Our clinical experience has convinced us that intramuscular administration of the principal antiluetic drugs is superior to intravenous injections. Furthermore, we feel that it is most important to avail ourselves of all three of the drugs commonly used in syphilis therapy, namely, bismuth, arsenic and mercury.

The plan we follow at present is as follows: Twenty intramuscular injections of bismuth arsphenamine sulphionate at from five to seven day intervals. The initial dose is 0.1 gm., which tests the susceptibility of the patient. Sometimes we consider it best to give this smaller dose for two or three injections. Then we increase the dose to 0.2 gm., and continue the same. After the twenty bismarsan injections no rest period is given. Immediately we follow with twenty intramuscular administrations of either mercury potassium iodide, gr. $\frac{1}{2}$; mercury benzoate, gr. $\frac{1}{3}$; or, mercury succinimide gr. $\frac{1}{6}$. Some patients are found to tolerate one mercurial better than another and so we finally select, of the three soluble preparations mentioned, the one best fitted to the individual. Mercury intramuscularly is given every third, fifth or seventh day, depending upon tolerance.

Immediately following the mercury series, a second interval of twenty bismuth arsphenamine sulphionate injections are given. In all, three arsenic-bismuth and three mercury series, extending over a period of approximately fifteen months, are administered without a rest. Such a plan of therapy in primary syphilis we consider rational; anything less than this is not adequate. A rest period of six weeks follows the fifteen months of treatment and then a blood Wassermann. If negative, the Wassermann is repeated every four months for at least two years. Whenever the Wassermann is reported positive the fifteen months of treat-

ment is repeated.

Anticipating that many will find objection to so much intramuscular therapy, contending that treatment so given is painful (to the point of incapacity at times), that absorption by this route is variable in degree and that occasionally abscesses follow gluteal injections, we wish to state that with a proper selection of areas into which the three-inch needle can be introduced, the insistence that the patient be in a prone posture to receive the treatment and the selection of drugs promptly soluble, make the management of primary syphilis both safe and simple.

THE TREATMENT OF VISCERAL SYPHILIS:

THE USE OF BISMUTH*

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Syphilis has been described as the disease most protean in its manifestations. We sometimes overlook the fact that this is true because the organism is so general in its distribution in the body and sooner or later involves or may involve any one or many structures. This characteristic of the disease naturally suggests to us the necessity for a thorough general examination before beginning the treatment of any victim of this infection, especially in all cases of long standing. Even though every finding be normal, the records of such an investigation will enable us better to evaluate any later indications of pathological changes.

One of America's greatest clinicians remarked that he owed his success in medicine to the fact that he always suspected syphilis. The status of the disease since his day has not changed in this particular. No case history should be considered complete until such possibilities have been thoroughly covered. This applies particularly to such oft neglected manifestations as frequent abortions, still-births or children dying soon after delivery and the history of a family tendency to sudden deaths, paralyses and related conditions occurring in middle life. Such findings

*Read before the Orleans Parish Medical Society, May 22, 1933.

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as involvement of the aorta or of the aortic valves or the presence of an aneurysm call for the exclusion of syphilis or the treatment of the disease. Attention is being directed lately to the frequency with which some previously obscure conditions such as persistent, unresolved pneumonia are responding to antiluetic treatment.

We hope to see the day when every patient admitted to any hospital will be given the advantage of a routine blood Wassermann test and when, at the same time, we will better appreciate the fact that a negative Wassermann does not eliminate the possibility of an old but still active syphilitic infection, particularly in cases of visceral involvement.

The length of time after the primary infection before such structures as the heart and liver may be invaded is still unsettled. The usual belief is that it occurs within the first few weeks of the disease process. The studies of Herrmann and Jamison rather indicate that in many cases it may occur at a much later time than was previously supposed.

Among the important structures, the circulatory apparatus is the one most frequently affected. Conner mentions aortitis as being found in from 50 per cent to 85 per cent of all autopsies of patients dying from this disease. Warthin found in all of his autopsies that the heart was involved.

Next in point of frequency comes the liver. Symmers reported such change in this organ in one-third of his autopsies of luetic patients. The frequency with which the stomach, intestines, pancreas, kidneys and other structures may be the sites of active invasion is less certain, but such developments are all too frequent.

The recognition of visceral complication is of importance from every standpoint, a major consideration being the value of such information in directing the selection of the therapeutic agents. The degree of involvement of such structures as the heart and liver is of particular value in determining whether the treatment will be intensive or more moderate and also the duration of the course. Not only should the treatment in these cases be less energetic but it should be continued for a longer period of years. Extensive visceral involvement may re-

sult in serious reactions of the Herxheimer type. There is no other one factor more directly affecting the prognosis than the extent and degree of visceral damage.

Schamberg and Wright have earnestly called attention to the fact that in the treatment of syphilis the specialists in genito-urinary diseases are apt to treat the infection and neglect the damaged structures, while the internist is apt to treat the damaged structures and neglect the infection and that in the first instance particularly we may witness the "medical paradox"—the infection clears up but the patient gets worse.

When the cardiovascular system is invaded, the outcome depends largely upon an early diagnosis and the prompt institution of effective treatment. The damaged organ requires all of the measures of general care that would be exercised in damage from any other cause. This includes particularly rest, both mental and physical, body comfort, careful diet and the elimination of alcohol and tobacco or restriction of their use.

When there is evidence of failing compensation, the usual therapeutic agents may be required. Herrmann and Jamison have particularly emphasized the value of small doses of digitalis in preference to full digitalization. They have also employed theophylline ethylenediamine with the same favorable results that Musser and others have obtained in other types of coronary impairment.

Intensive specific treatment may lead to the sudden disintegration of more or less extensive heart lesions or to a too rapid replacement of normal structure by non-elastic, fibrous tissue. The treatment may interfere with coronary circulation through edema at the coronary orifice or later because of the contraction of scar tissue. Practically all syphilologists recognize the value of small doses of neoarsphenamine, usually beginning with about 0.1 Gm. or less and gradually increasing, the maximum being 0.4 or 0.5 Gm. It is uniformly recommended that even this medication be delayed until after a preliminary treatment of a month or two with more slowly acting agents. In the presence of myocardial disease, definite coronary changes or aneurysm these precautions are particularly important and

iodides are especially of value. It is in such cases that bismuth has established its particular usefulness, some even going so far as to claim that it may meet all of the requirements for specific medication.

The frequency of liver involvement is almost equal to that of the heart, but such invasion is very often unrecognized (Schamberg and Wright). Here again energetic treatment may lead to disastrous results and the arsphenamines are particularly contra-indicated or, if used at all, should be employed with even greater caution than was mentioned in discussing the heart. In early luetic hepatitis, the iodides are probably without value, although later in the disease they may have a distinct field of usefulness. Bismuth is increasing in favor as the main reliance.

The question as to the most favorable diet is still unsettled. A high carbohydrate intake is the one of most frequent choice though Craven has done some excellent work that tends at least to open up this controversy again.

The lungs are rarely the site of active lesions and such are probably less frequently recognized. The condition may simulate tuberculosis or carcinoma. Pulmonary involvement does not influence the usual course of treatment.

The kidneys may be invaded directly by the specific organisms, but the kidney damage most frequently encountered is probably the result of treatment. Mercury should be avoided and neoarsphenamine should be employed with caution in the presence of renal impairment. The status of bismuth here is somewhat unsettled, some relying upon it almost entirely, others claiming that it is rather unsafe. The avoidance of renal irritants, a low protein diet and all of the other measures of general care should not be neglected.

When the gastro-intestinal tract is the site of active lesions, full energetic treatment is not contra-indicated except in the presence of ulceration in the esophagus, pylorus or rectum. Pancreatic invasion also does not contra-indicate active treatment.

Bismuth in the treatment of syphilis was introduced by the French about twelve years ago. Due to indiscretions in its employment, resulting from a limited knowledge of its toxic

possibilities, many unfavorable developments resulted and its general employment was somewhat delayed. Many still hesitate as there is not yet a perfect evaluation of its possibilities of harm or uniformity of opinion as to its full value. Schamberg and Wright feel that it is the greatest advance in the therapy of this disease since the development by Ehrlich of the arsphenamines and that it is superior to mercury in its effect and far less toxic.

Its specific action is not thoroughly understood, but probably results through some obscure chemical changes taking place after the drug is assimilated. It is excreted principally by the kidneys. Bismuth is not well absorbed from the intestinal tract or by inunction, so cannot be employed in either of these ways. The intravenous route is fraught with many dangers and at present it is being administered almost exclusively by intramuscular injection.

The last U. S. Pharmacopeia was published too long ago to include any preparations for such employment. New and Non-Official Remedies contains thirteen preparations for the specific treatment of lues. Four of these are water soluble, four are oil soluble, four are insoluble suspensions, and one is a solution in a special solvent. The water soluble salts are the most rapidly assimilated, obtain the quickest therapeutic response, are eliminated with the greatest rapidity and are most apt to cause toxic symptoms. To maintain therapeutic effect they must be given at more frequent intervals. Next in these qualities comes the oil soluble salts and lastly the insoluble suspensions. The solution that is dissolved in ethylene glycol may be classed with the water soluble products. Greenbaum with his usual thoroughness has demonstrated that there is a wide range of therapeutic value in even the different members of these particular groups, and he feels that merely administering an available bismuth salt does not necessarily mean efficient bismuth medication. The possibility of administering a "sterilizing dose", as Ehrlich dreamed to be possible with arsphenamine, is not hoped for in the case of bismuth, as it has been proven that this would require a larger amount than could be tolerated by the human host.

The toxicology of the bismuth preparations should be thoroughly understood by those employing them in intensive treatment. Fatal or even severe reactions are comparatively rare, but mild and moderate toxic manifestations are quite common. Large amounts of bismuth subnitrate used for other purposes sometimes have resulted in poisoning, but it has been felt that most of these were due to the formation of the nitrite from the nitrate radical. The principal toxic symptoms of bismuth as used for syphilis may be briefly stated as follows:

Systemic: Headache, malaise and body pains especially in the muscles and bones. Agranulocytosis has been reported.

Cutaneous: These closely simulate those of the arsphenamines and may be pruritus, erythema especially of a scarlatiniform type, urticaria, dermatitis or even hemorrhagic lesions.

Gastro intestinal: There may be a blue line on the gums, gingivitis, stomatitis, nausea, vomiting and diarrhea.

Kidneys: There may be a slight reduction in output, rarely an albuminuria.

In the management of bismuth poisoning, the principal and usually the only measure necessary is to discontinue the drug. Otherwise the treatment is symptomatic. Sodium thio-sulphate may be used as in arsenic poisoning. It is interesting to note that most of the severe reactions have been reported by European clinicians where the drug is employed in much larger doses than is customary in this country.

There is usually some local discomfort at the site of injection, but this is seldom of marked importance except where there has been faulty technic. A slight fever is not uncommon. Tragic results have probably developed most often from the accidental injection of the drug into a blood vessel. Mild Herxheimer reactions have been reported.

Some of the unpleasant symptoms may be prevented by preliminary dental care and by the subsequent attention to oral hygiene that should always be a part of the treatment of lues. In general it is claimed that bismuth is not hepatotoxic, is less damaging to the kidneys than mercury and that there are no general contra-indications to its use such as may be urged

against the other specifics.

The most satisfactory site of injection is the upper outer quadrant of the gluteal region. The ordinary Luer type of syringe is used and a needle of about 22 gauge and 1½ to 2 inches in length. As there is usually some local discomfort that may persist for several days, it is well not only to alternate the two gluteal regions in making these injections, but not to use the same particular area more often than is necessary. The injections should be made well down into the muscle, avoiding both the subcutaneous fat and the periosteum. If the injection is made too near to a nerve trunk, persistent discomfort may result. I have twice produced a moderate sciatica that lasted two or three weeks, both times with an oil suspension. I tried a series of cases with an oil suspension on one side and an aqueous solution on the other, having the patients report from time to time as to which side gave them the least discomfort. The results were in favor the aqueous solution.

The usual precautions such as the use of sterile instruments and painting the site of injection with iodine should be employed. As the most unfavorable possibility is that of getting the drug into a vessel, precautions should be scrupulously observed to prevent this. After the needle has been introduced and before injection is begun, traction should be made upon the plunger to see if blood comes back into the syringe thus indicating puncture of a vessel. Another precaution of some value is to have about 0.2 cc. of air in the syringe so that this will be injected last and will clear the needle of bismuth; then when the needle is withdrawn, a trail of the drug will not be left. Gently massaging the area after injection will facilitate the distribution and therefore the absorption of the material.

The frequency of the injections will depend upon the intensiveness of the treatment that is being employed, the size of the patient, the dose and the particular preparation that is being used. The average dose should be enough to give about 1 grain (0.06 Gm.) of actual bismuth. From one to three injections a week are given, depending upon the factors previously stated. The average course of bismuth therapy is from one to two months. Where this drug is being

used in alternation with the arsphenamines or with mercury, as is so ably advocated, by Moore in the plan of continuous treatment, the usual period of each bismuth course is about six weeks.

CONCLUSIONS

1. A most careful general examination is essential before beginning the treatment of syphilis, as the findings may affect the entire plan of therapy.

2. Visceral involvement is always a possibility in early syphilis and a probability in late syphilis.

3. Treatment should include not only attention to the infection but also to the damaged structures.

4. Indications are that bismuth is less toxic than mercury and more effective.

5. Merely using an available preparation of bismuth does not necessarily mean effective bismuth therapy.

TREATMENT OF NEUROSYPHILIS*

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In a recent article, Dr. H. H. Hopkins reports that a statistical study indicates an increase in the number of cases of neurosyphilis. He offers various reasons as a possible explanation for this condition, particularly, methods of treatment employed in handling the primary syphilitic infections. Whether or not this reasoning be true, is not a question for consideration at this time, as this discussion is to be confined to treatment of the neuroluetetic, but it is quite evident that his figures on the increased incidence of this type of difficulty cannot be disputed.

The average general practitioner encounters neurosyphilis in some one of its forms frequently. Apparently, his first tendency is to ignore its seriousness, give a few doses of some anti-luetetic agent, assure the patient that he will soon be better, or well, and when the most troublesome symptoms have cleared, to indicate to this patient that the awaited day has arrived and so pass on to the next treatment of some other case. Of course, the opposite of this is equally

so, in that the average sufferer of neurosyphilis fails to accept the statement of his physician that his treatment should be continued from three to five years, and, instead, discontinues his treatment as soon as pain or the most prominent symptom has been relieved.

The possibility of neurosyphilis as a terminal condition must always be given grave consideration. Its prognosis must be considered from two angles: That of physical or mental incapacity, and life and death. Remembering that scar tissue cannot be eradicated from the nervous system, a guarded prognosis should be given in all cases.

Physicians should bear in mind that, although intensive therapy is essential in the treatment of neurosyphilis, conservatism is equally important and that as much harm can be done by therapy as by the disease itself. I cannot condone the giving of intensive anti-luetetic therapy, however, without good and sufficient indications of the presence of a luetetic process or residual, merely for the sake of doing something for the patient, as was recently the procedure followed in a case of brain tumor.

May I suggest that you avoid fads, particularly those now in vogue for producing elevation of temperature, and confine your activities to the arsenicals, mercurials and bismuth preparations, leaving the other methods of treatment to someone better able to handle such procedures. I cannot too strongly remind you to remember always that you are treating an individual and not a positive Wassermann.

The therapeutic agents available for handling syphilitic infections of the central nervous system are generally the same as those used in treating syphilitic manifestations in its other forms and elsewhere in the body. It is my contention, however, that a variation in the method of administering these agents and the use of tryparsamide as the arsenical of choice is productive of better results, in treating neurosyphilis. The variation referred to consists in the administration of either a bismuth or mercurial preparation during the same period intravenous arsenic is being given. It will be claimed that such combinations frequently produce severe systemic reactions and I must admit that I can corroborate such a statement.

*Read before the Orleans Parish Medical Society, May 22, 1933.

However, by developing a mild degree of saturation with either bismuth or mercury before the combined therapy is instituted, such occurrences can be avoided. This procedure was followed by my late colleague, Dr. Henry Daspit, and it was his contention that since adhering to such a technic his percentage of bad reactions associated with the intravenous administration of arsenicals had been practically nil.

Tryparsamide is given intravenously every fifth or seventh day, in courses of ten doses, a gram (15 grs.) to fifty pounds body weight, the average dose being three grams (45 grs.). No permanent improvement should be anticipated before the end of the third course, or thirtieth dose. Stokes has called to our attention the fact that only after a prolonged administration of this drug should permanent beneficial results be anticipated.

When the Department of Neuropsychiatry of Tulane University received the first supply of tryparsamide for clinical trial, it was our procedure to administer mercury salicylate with each dose of tryparsamide. We have, in the past few years, however, been using a bismuth preparation, thio-bismol, with the tryparsamide with the same beneficial results and I feel that either of these drugs can be used in conjunction with the intravenous administration of tryparsamide to produce the same good results. However, in all initial courses of treatment, I strictly adhered to the procedure of developing the mild degree of saturation with either the mercury or bismuth before combining them with the administration of tryparsamide.

The individual disease syndrome and individual patient, naturally, calls for a variation in the plan of therapy. In a young individual with a rapidly developing meningo-vascular syndrome, we believe that the iodides, mercurials, and arsphenamines should be tried first, to be followed later with mercury or bismuth and tryparsamide, if clinical evidence of improvement is not evident after six or eight weeks' treatment.

In old, weakened individuals, a similar procedure is suggested, with the exception that occasionally a two gram dose of tryparsamide is used instead of the average three gram dose and the interval between treatments is ten days

to two weeks.

Before deciding upon any plan of treatment, it is necessary and important that all available information be gathered, including both physical and neurological examinations and spinal fluid survey. These factors combine to determine variations in the mode of treatment. The doses and intervals between administrations decided upon are varied by the age, weight, and physical condition of the patient. It has been my plan to determine carefully each patient's cardiorenal status and the condition of his optic mechanism. Throughout the period of active treatment, urinalyses are done each week and the eye grounds are checked at least every second week. Should the patient complain of any disturbance of vision or blurring, the treatment is immediately stopped and a definite recheck of the visual fields, in addition to examination of the fundi, is made, and with the resumption of therapy, the dosage is reduced, the interval between doses is lengthened, the dilution is increased, or all three such modifications are embodied in the treatment.

The spinal fluid findings are particularly of importance in outlining a plan of treatment. It has been generally held that high cell counts indicate a more favorable response to treatment, but this cannot be depended upon to be universally true. As improvement progresses, the number of cells decrease and the gold curve shows a tendency to flatten out on the right. Subsequent fluid surveys having such changes and contrasted with the patient's clinical condition makes the further continuation of therapy a certainty and not merely guess work.

I do not recommend doses of tryparsamide smaller than two grams, even where eye complications are feared, but suggest under such conditions that the interval between doses be increased from weekly to ten days or two weeks and the dilution from ten cc. to fifteen or twenty cc. of distilled water.

In frank paretic, tabetic, or tabo-paretic syndromes, the usual procedure, after all essential information has been collected, particularly spinal fluid survey, is to administer three or four doses of thio-bismol or mercury salicylate intra-gluteally and then to combine these injections with tryparsamide, administered intra-

venously at weekly intervals for ten weeks, assuring ourselves that during the first course of treatment the patient has received twelve to fourteen doses of bismuth or mercury and ten doses of tryparsamide. At the end of such a course, the patient is given a rest period for six to eight weeks, depending upon his clinical condition, and a second course of therapy similar to the first, except insofar as the preliminary doses of bismuth or mercury are concerned, is instituted. At the end of this second course, a rest period of twelve to fourteen weeks is given and a third course similar to the second is carried out. At the end of this third course, a spinal fluid recheck is made, contrasted with the original spinal fluid survey, and upon this comparison and an estimation of the patient's clinical condition, the next step of therapy depends.

No fixed program can be recommended from this point, each case presenting its own requirements. Where an advanced disease syndrome has been encountered, I would recommend a continuation of the same intensive courses outlined above, with longer rest periods between courses of active treatment.

In frank meningo-vascular pictures, the combined tryparsamide mercury or bismuth therapy is of distinct value but usually given after the iodides and mercury have been used with arsphenamine.

It can be accepted that tryparsamide therapy is of definite advantage to all cases of neurosyphilis. Cases invariably improve physically under this form of therapy, as evidenced by the gain in weight. The possibility of optic and auditory nerve damage, so widely advertised with the advent of this form of treatment, can be greatly discounted and Lillie of the Mayo Clinic states that more optic nerve damage results from syphilis than from any form of arsenical therapy. Ayer and his colleagues at Boston believe that the administration of tryparsamide alone has been beneficial to large numbers of their cases, but the fact that this drug does not seem to have a particularly direct action on the spirochete makes me feel that the administration of mercury and bismuth in conjunction with the tryparsamide assures us of better results.

The method of treating neuroluetetic syndromes outlined above should appeal to the average practitioner, particularly in that such forms of treatment are far less dangerous to the patient than either intra-spinal treatment or malaria inoculation and it must be admitted that, even in the hands of the most experienced, unfortunate results sometimes develop with both of these methods. It has been proven that as a rule those cases not responding to tryparsamide with bismuth or mercury rarely respond to malaria. I have at present in the clinic three cases presumably cured with malarial inoculations that are now being treated with tryparsamide.

The method of treatment I have suggested is simple, can be carried out by the patient's personal physician without undue disturbance of the patient's usual method of living, and it is economical.

In conclusion, may I remind you that you encounter cases of cerebro-spinal syphilis in your practice frequently, urge that you recognize them early, give them intensive courses of mercury or bismuth with tryparsamide, as I have outlined above, continue this intensive form of therapy for at least three courses before anticipating permanent improvement, keep them under treatment and observation for three or five years; and leave diathermy, malaria, rat-bite fever, intra-spinal, and other hazardous forms of treatment, for specially selected cases and then in the hands of someone who is equipped for these special forms of therapy.

BACTERIOPHAGY IN THE TREATMENT OF INFECTIONS OF THE SUPERFICIAL AND DEEP TISSUES,

With a Report of 200 Cases
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It is perhaps not entirely correct, though it is still not very far from the truth, to say that to most lay persons, as well as to a very

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fair number of physicians, the term bacteriophage brings just one thing to mind, the attempt of a blatant young doctor named Arrowsmith to conduct a scientific experiment during an epidemic in a certain tropical island, an attempt which ended, as did most of his other efforts, in fiasco. Bacteriophagy has been the subject of laboratory and clinical experiments for more than fifteen years, and while comparisons of individual worth are usually invidious and seldom very sensible, it can fairly be said that it represents one of the important medical discoveries of the twentieth century. Yet there is still among physicians a surprising degree of ignorance about it, the literature is still surprisingly barren of papers on the subject, except in its theoretic aspects, and the profession is still surprisingly unaware of what it is and what it can do.

That is certainly true of this community, which, from the standpoint of educational and hospital facilities, can justly be regarded as a medical center of some importance. Seven months ago, when we began our work with it, bacteriophage was regarded by the profession—by those of the profession who took the trouble to regard it as anything at all—as little more than a field for laboratory experiment. Indeed, one of the most interesting features of this investigation has been the almost childlike astonishment with which our results have been received, an astonishment, however, which has been quickly supplanted by cordial cooperation, as expressed by the reference of many patients to us.

We write these things with no sense of complacence, for we ourselves were then equally lacking in our comprehension of the possibilities of bacteriophage. This study began, as such studies frequently do, because in an idle moment of speculation it occurred to one of us (Boyce) that if the principle which made the Orr treatment of osteomyelitis successful was really bacteriophagy, then the same results might be secured, probably more speedily and undoubtedly more agreeably for all concerned, by the direct application of bacteriophage to the involved areas. We knew only casually of

Albee's work along these lines, and we decided to try out the method for ourselves. Experience, someone has well said, is what you get when you are looking for something else, and that is precisely what happened to us: we undertook to treat osteomyelitis with bacteriophage, and our results were only fair; we extended the treatment to infections of the superficial and deep tissues, and our results were amazingly good.

Our work has been purely clinical. We have not concerned ourselves with the theoretic and scientific aspects of bacteriophage, which have been studied in endless detail by far better qualified workers than we are, for we see no point to meaningless repetition of experiments. For that matter, we share d'Herelle's opinion, that such work is of value only when it is interpreted with reservations and applied with safeguards. We acknowledge the very great worth of laboratory investigation, but there is, it seems to us, a limit to its usefulness, and that limit is often over-reached, not only by the so-called pure scientists, but also by the ultra-scientific clinicians, who do not comprehend the essential distinctions between what happens *in vitro* and what happens *in vivo*, who do not realize that between mice and men, between laboratory animals and human beings, there are certain fundamental differences which at least partially invalidate even the most honest of investigations by the most clinically-minded of laboratory men.

The facts of bacteriophagy are still under dispute in many quarters—indeed, the directors of the Institut Pasteur have just confirmed their own suspicions that it is a myth—and it is variously contended either that it acts by purely chemical means or that it brings about a species of foreign protein reaction. The majority of those who have worked with it, however, are willing to accept d'Herelle's conclusions, that the bacteriophage "corpuscle" is a living, ultra-microscopic virus, which is capable of being a parasite on bacteria and which dissolves and destroys them through the agency of a ferment which it secretes. In other words,

the principle upon which it operates, the destruction of organisms by other organisms, is excellently expressed in Dean Swift's well known lines (we quote the verse with less hesitation because we once heard it used in the course of a sermon by one of the most scholarly members of the Episcopal hierarchy)

Big fleas have little fleas
Upon their backs to bite 'em,
And little fleas have lesser fleas,
And so *ad infinitum*.

That is perhaps not a very dignified exposition of the subject, but it is an entirely accurate one. To express it more scientifically, albeit still crudely, the process involves the attraction of the bacteriophage to the bacterium by chemotaxis, its digestion of the membrane, its destruction of the bacterium by lysis, and its own prompt regeneration. This process can continue indefinitely, the potency of the bacteriophage increasing as successive regeneration occurs.

Space does not permit a full discussion of the subject, but it should be said that both experimentally and clinically certain other facts have been proved and can be accepted: that the action of bacteriophage is entirely selective, in that it does not affect living tissues and that it is harmless except to bacteria; that the bacterial cell is its sole culture medium, no matter what its potency may be; that it can act in infinitesimal quantities; that while its original specific action is upon specific strains of specific bacteria, it possesses the property of adaptability, and it sometimes can, with reservations, affect different strains of the same species, or even entirely different species. It is known also that it can withstand temperatures 5 to 15 degrees higher than can bacteria, and that it is most effective in an alkaline medium, its action being more or less inhibited by serum, pus, blood and bile, as well as by antiseptics.

In addition to its direct action in the destruction of bacteria, d'Herelle has been able to prove experimentally that bacteriophage has an indirect action, its ability to increase phagocytosis, his explanation being

that the lysins secreted by the bacteriophage corpuscles during bacteriophagy are really opsonins. It is also quite possible that bacteriophage lyzed cultures can be regarded as supervaccines; because of the proteolysis of the bacteria lyzed such cultures are antigenic, and it is believed that the antibodies which such suspensions produce are produced more rapidly and have more effective powers of protection than the antibodies of ordinary bacterial vaccines. In the opinion of many observers this is its most potent effect.

If these theoretical considerations can be accepted, it is clear that we have in bacteriophage an agent whose therapeutic possibilities are obvious. Furthermore, its therapeutic application would seem justified for the reason that it is a true imitation of natural processes, at least if we grant d'Herelle's theory, that recovery is synonymous with the appearance of the principle of bacteriophage within the body, which is a complete reversal of the former belief that an individual recovers from his disease because he develops an immunity to it. If, as we say, the new theory be accepted, it would seem entirely logical to endeavor to enhance by artificial means the natural principle which is responsible for recovery, and that is the basis of the use of bacteriophage as a therapeutic agent. The single apparent disadvantage of the method is that its unwise and indiscriminate administration may bring about a condition of bacterial resistance to the bacteriophage and so terminate in an increased susceptibility of the host to infection, but this disadvantage can readily be eliminated by a judicious selection of cases.

d'Herelle's original work was done in such highly fatal diseases as bacillary dysentery, Asiatic cholera, primary pneumonic plague, and infantile diarrhea, and his results, which were literally miraculous, are a testimony to the efficacy of the method. Our own work has been confined to superficial and deep infections of various kinds. Larkum, in 1929, and Rice, in 1930, both made extensive reports of their results in these conditions, and the latter ran a series of control cases treated by nutrient broth, the results in no wise

paralleling the results he obtained by the use of bacteriophage. We mention this control series specifically, because it seems to us to settle the point recently raised by O. F. Lamson of Seattle, that nutrient broth does everything that bacteriophage is claimed to do. Perhaps, in the hands of other workers, it does, but no method that we ourselves have employed or that we have seen employed has given such results as we have obtained with bacteriophage from the point of view of promptness of relief and swiftness and permanence of cure.

We have previously reported 111 cases of carbuncles, furunculosis, abscesses, hand infections, osteomyelitis and miscellaneous infections treated by this method, and to this series we are now adding 89 other cases, bringing the total number so treated up to 200.

Theoretically, when a patient is seen with a certain condition the scientific method would be to determine the species and strain of bacteria present and to work out in the laboratory the bacteriophage which would act specifically upon the organism involved. On the other hand, it can be taken for granted in practice that in all but a few chronic cases or in a few acute cases of exceptional etiology, certain types of infection are caused by certain species of bacteria, and now that adequate commercial preparations are available, the cumbersome and time-consuming methods formerly necessary are neither essential nor practical. We have used in this study stock preparations in the form of lysate and jel kindly furnished to us by Eli Lilly and Company and have found them entirely satisfactory. Since the use of polyvalent suspensions is obviously more practical than the use of univalent preparations when an elaborate routine of laboratory tests is not carried out, Staphylo-lysate and Staphylo-jel are made up in the proportion of 75 per cent bacteriophage for staphylococci and 25 per cent for streptococci, while the Strepto-lysate and Strepto-jel are made up in the reverse proportions. The Colo-lysate and Colo-jel are effective against staphylo-

cocci, streptococci, *B. coli* and pneumococci.

Certain general principles must be borne in mind for the clinical use of bacteriophage. It must come into direct contact with the infected tissues, and external application, direct injection and circuminjection are employed according to the type of lesion to be dealt with. In direct injections we are careful not to increase tension within a closed cavity, and we therefore always aspirate such pus as may be present before introducing the bacteriophage. The closed treatment of pus we have found to be perfectly safe; indeed, we agree with Rice, that when it is possible, it is superior to the open method because of the absence of secondary infections.

Dosage we have not found to be a matter of great importance. If the results are not prompt, we increase it, hoping that an increased amount of bacteriophage may compensate for a possible lack of potency, but when the results are satisfactory we continue with the original dose. We have given as many as 7 successive injections, in doses ranging from 1/2 to 5 c. c., and have found, as did d'Herelle, that large doses were without harmful effects. The application of the jelly to open wounds is far more satisfactory than the older method of using moist dressings or of injecting fluid material into open cavities in which it could not be expected to remain, but it is our impression that the lysate is rather more effective. In the single case in which we used the intravenous route, we bore in mind d'Herelle's warning, that bacteriophage must be used in adequate dilution (1 to 2 per cent in quantities of 500 c. c. of normal saline solution) and should be administered very slowly, in order to avoid the risk of anaphylactic shock, and we had no reaction.

We have not always given daily treatments, but we have always insisted upon daily visits during the first few days. While we grant that the idea is purely speculative, it is our theory that the marked liquefaction which is the first result of the application is likely to carry off with it potent bacteriophage, for which more bacteriophage must

be substituted. d'Herelle, on the other hand, believes that bacteriophagy produces by-products which lessen the effectiveness of the bacteriophage which has been introduced.

Following the injection there is usually a burning pain, probably to be attributed to the bacteriophage itself, though perhaps partly, at least, to be attributed to the technique of injection and the inflamed state of the parts. The pain is always transient, and seldom lasts more than a few minutes. In no case was there any constitutional reaction of moment, and in most of the cases there was none at all. In no instance did the pain of the original lesion last more than 48 hours after the first treatment and in the majority of cases it had disappeared within 24 hours, while a few of the patients reported complete relief within 2 to 5 hours of the injection. The promptness of relief, particularly in such conditions as carbuncles, ischio-rectal and perirectal abscesses and hand infections, in which the pain is frequently excruciating, is one of the results of this treatment that cannot be set down in statistical tables. Furthermore, the relief was too unanimous and too permanent to be explained on the basis of suggestion or psychologic effect.

The physical phenomena are rather generally the same. Within the first 24 hours induration is lessened and there is a marked liquefaction of necrotic tissue, so that the aspiration of pus in more or less large quantities is frequently possible when the patient is seen for the second time. The progress toward cure is then rapid and characteristic. Soreness and induration disappear, sloughs separate, leaving clean, granulating surfaces, and the patient is usually clinically well within a week. The rapidity of cure is particularly notable in such conditions as ischio-rectal and perirectal abscesses and carbuncles, in which treatment by other methods usually means a prolonged convalescence, while in carbuncles the minimum loss of skin and the minimum scar formation and deformity are almost incredible.

We do not exaggerate when we say that deep-seated lesions treated by this method

usually localize and point within a very much shorter time than by any other method of treatment or by natural processes, and convalescence is usually very much smoother and speedier than under any other form of therapy with which we are familiar. Our results are additionally remarkable in that, with few exceptions, all of these patients came from the wards and clinics of Charity Hospital and many of them were negroes, so that we had against us malnutrition, lack of cleanliness, and disregard of the simplest laws of hygiene, as well as the limited cooperation always evinced by persons of limited intelligence. Furthermore, the majority of these patients had previously been treated by other methods, with poor results, and the results which were secured by bacteriophage can be taken at their face value, for it succeeded where other forms of therapy had failed.

CASE REPORTS

Carbuncles—27 cases; no failures; all but 2 patients discharged before the tenth day.

Furunculosis—13 cases; no failures; all patients discharged within a week.

Abscesses—54 cases; no failures; all patients discharged within a week.

Wound infections—46 cases; 2 failures; in none of the other cases were more than two applications of the bacteriophage necessary.

Hand infections—30 cases; 1 failure; all other patients discharged within a week.

Osteomyelities—10 cases; all the patients were benefited by a decrease of drainage and an elimination of the foul odor, while the pain and discomfort were more or less markedly relieved, but in only 2 cases was bone regeneration at all striking.

Miscellaneous cases—20, including: infected varicose ulcers—3 cases; axillary adenitis—3 cases; inguinal adenitis—3 cases; infected sebaceous cysts—4 cases; and 1 case each of: cellulitis of the forearm; infected lymph nodes after mammectomy for advanced carcinoma of the breast, with metastasis and ulceration; infected pilonidal cyst; parotitis; phlegmon of the chin; sinus tract following appendectomy 2 years before; and cavernous sinus thrombosis. In the latter case death occurred.

A very important consideration in the treatment of these patients is that all of them, except those already hospitalized when we were consulted, were ambulatory, and even those in the hospital were usually discharged to the clinic within a few days after treatment was begun. Under other forms of

treatment many of them would have been confined to their homes or kept in the hospital for more or less long periods of time, and the economic advantages of this new method to both patient and institution are apparent. It should also be noted that some of the conditions treated, especially carbuncles, certain types of furunculosis, perirectal abscesses, etc., are particularly resistant to treatment, and that all of them responded very promptly to the application of bacteriophage.

The abscess group includes 15 cases of ischio-rectal and perirectal abscess, and the same number of breast abscesses, and in no case has there been a recurrence. In the 2 infected wounds in which the treatment failed, some comment is necessary. The first was a postoperative infection of no very great severity, for which we probably did not employ the proper bacteriophage; no other reason for failure was apparent. The second was a secondary infection following amputation of the upper arm for a gas bacillus infection, and we knew, at the time we applied the Staphylo-lysate, that we were using the wrong bacteriophage; our excuse, though we grant that it does not justify our course, is that we did not have the proper preparation available, and we were prepared for the failure which followed. The hand infections in which we succeeded include 21 cases of staphylococcal infection of the thenar or palmar spaces, or both, and 8 cases of bone felon. The patient in whom we failed had an extremely serious infection which had been neglected and badly treated for 3 weeks before her admission; the extent of the infection when she was first seen made it impossible to bring the phage into proper contact with all the affected areas without extensive surgical incision, and amputation was finally necessary. Better results could undoubtedly be achieved in acute cases of osteomyelitis than we achieved in the chronic cases we handled, but we have not yet had an opportunity to test this point.

Certain illustrative cases are herewith appended:

Case 1. White female, aged 65 years, seen in consultation on the fiftieth day of her illness, at which time her blood sugar was 350 mg. The carbuncle, which involved the entire right half of the neck, was at least 4 by 6 inches in size, and the surgical measures considered inevitable by the attending surgeon were postponed for 48 hours to permit a test of bacteriophage. By the end of that time the necessity for operation had disappeared, for the response to circuminjection and direct injection of Staphylo-lysate was astonishing. The patient was discharged from the hospital on the fourteenth day, with a crater less than 1 inch by $\frac{3}{4}$ inch in size; the enormous induration of the neck had practically disappeared, although natural-

ly the discoloration still persisted. One of the remarkable features of this case was the prompt reduction of the blood sugar to 200 mg. and the prompt improvement in the constitutional condition as soon as treatment by bacteriophage was begun, in spite of the fact that through an unfortunate misunderstanding no anti-diabetic measures were undertaken.

Case 2. Colored female, aged 60 years, exhibiting a left ischio-rectal abscess, the induration of which covered an area 3 by 5 inches. The pain, which was extreme, disappeared within 24 hours after an injection of 1 c. c. of Colo-lysate. On the second day 5 c. c. of liquid pus was aspirated and the same amount of Colo-lysate was injected. On the third day the needle puncture was enlarged with a single stab of the knife, without anesthesia, and 75 c. c. of pus was removed, the large indurated area having been converted, within the space of 72 hours, into a definitely localized abscess. Recovery was complete within a week.

Case 3. A colored female, aged 60 years, eviscerated herself on the tenth day after an exploration for inoperable carcinoma of the sigmoid. She was resutured at once, and within a week she developed a wound infection with very severe local and constitutional manifestations. The condition, for all practical purposes, was a huge subcutaneous abscess. The upper and lower sutures were removed, the pus was evacuated by gentle pressure, and Colo-jel was injected lavishly. Without further treatment and within 3 days both local and constitutional evidences of infection had entirely disappeared, and the patient went on to recovery with a scar that was at least superficially strong.

Case 4. A white female, aged 65 years, was subjected to a rapid circular amputation for a violent infection above the knee of undetermined origin. Amputation was done as high as possible, but even then was done through infected areas. The stump was left wide open for drainage. After operation the infection continued unabated, and the patient's life was despaired of; she did not respond to any measures, including two transfusions. On the sixth day Colo-Jel was applied to the stump; for the next 24 hours the discharge was so profuse that her bed could not be kept dry, but within 48 hours it had practically ceased, and within 72 hours the stump was so clean that closure could be considered.

Case 5. Colored female, aged 28 years, with an infected pilonidal cyst. The infection involved an area of the gluteal region about 5 inches in diameter, in the center of which was a draining sinus, and the odor was intolerably foul. Two applications of Colo-jel brought about prompt liquefaction of the necrotic tissue, followed, 48 hours after treatment was begun, by the discharge

of a slough at least 2 inches in diameter, which included the entire cyst wall. Healing was prompt and the patient was discharged on the seventh day.

On these 200 cases, then, cure was complete and usually very prompt in all but 10 cases of osteomyelitis, 1 case of parotitis, 1 hand infection, 2 infected wounds, and 1 case of cavernous sinus thrombosis, and only in the last 4 cases was failure absolute; all the others showed some degree of improvement. The case of cavernous sinus thrombosis must be mentioned in some detail:

The patient, a colored female 6 years old, was admitted to the hospital in convulsions, with a temperature of 105° F. She exhibited at the time a bilateral edema of the periorbital soft tissues, and a bilateral bulging of the eyes. The story was that 72 hours before she had picked a furuncle on the ridge of the nose. Strepto-lysate and Staphylo-lysate were used intravenously (2 c. c. per 100 c. c. of normal saline solution), in combination with the routine measures of sedatives, continuous compresses, cold sponges, forced fluids, etc., and she exhibited a temporary and rather striking improvement. There was positively no reaction of any sort from the use of the bacteriophage. Death occurred on the fourth day after admission, however, and autopsy showed a bilateral suppurative thrombosis of the cavernous sinuses. Even though this case ended in failure, it was felt by the members of the staff who had seen the patient that the bacteriophage had not been wholly ineffective in arresting the fatal course of the disease, and perhaps would have succeeded in saving the child had she been seen a few hours sooner.

We have been hesitant in reporting our work with bacteriophage because we admit that our results do sound incredibly good, and we have no desire to seem to be swept away on a tide of enthusiasm that has no foundation in fact. We believe, however, that the specimen cases we have quoted, which could be duplicated many times over from our files, bear out our contention that there is something in this method that cannot be explained away by charges of commercial exploitation or pseudo-scientific investigation. As we have already emphasized, the percentage of cures we obtained, important as that phase of the question is, is not to be compared to the promptness and completeness of the relief we achieved. The immediate cessation of pain and discomfort, the elimination of surgical measures and prolonged drainage, are considerations which statistical tables do not take into account.

Furthermore, regardless of the cost of bacteriophage, it is trifling in comparison with the cost of older methods of treatment, and that is no small matter in these days of economic stress for individuals and institutions; any method is surely worthy of trial which lessens the financial strain on patients and hospitals, particularly when, if it should fail, no harm at all is done. The after-course, which is the surest test of the value of any method, has conclusively proved to us in this series of cases the value of bacteriophage in infections of the superficial and deep tissues, and we echo Howard Kelly in his shrewd observation that what patients want is to be cured, whether or not the cure has a basis of logic behind it.

SUMMARY

1. If the investigations of d'Herelle and his followers are to be accepted, bacteriophage is a therapeutic agent with bactericidal properties beyond those of any other agent known, and with a power of selection that makes it harmless to normal tissues.

2. The clinical application of bacteriophagy is discussed.

3. 200 cases are reported of infections of the superficial and deep tissues treated by this method.

4. It is concluded that this method, when it is properly applied, is far superior to other methods now in use in the treatment of these infections. In particular, the patient is spared much pain and disability, and the hospital is relieved of a decided financial burden.

Note. We desire to express our appreciation to Eli Lilly and Company for their generous cooperation with us in this work and for the freedom with which we have been permitted to conduct the investigation.

We are grateful also to Dr. Urban Maes, Director of the Department of Surgery in the Louisiana State University Medical Center, for the privilege of treating these patients on his service in the wards and clinics of Charity Hospital, and to the other members of the Charity Hospital Staff who referred patients to us in consultation.

BIBLIOGRAPHY

- Albee, F. H. Principles of bacteriophage applied to osteomyelitis. *Internat. J. Med. & Surg.* 42:1-11, 1929.
- Idem. Will bacteriophage prove the ideal wound treatment? *Am. J. Surg.* 15:228-236, 1932.
- Boyce, F. F., Lampert, R., and McFetridge, E. M. Treatment of infections of superficial and deep tissues by bacteriophage, with report of 111 cases. Accepted for publication (May, 1933) *Arch. Surg.*
- Charnock, D. A. Phenomenon of bacteriophagy. *Am. J. Surg.* 19:292-295, 1933.
- Cipolarro, A. C. Bacteriophage. Its application in dermatologic practice. *New York State J. Med.* 31:349-351, 1931.
- d'Herelle, F. Address on bacteriophagy and recovery from infectious diseases. *Canad. M. A. J.* 24:619-628, 1931.
- Idem. Bacteriophage and its clinical applications (translated by G. H. Smith), Springfield, 1930, Charles Thomas.
- Lamson, O. F.: Commercial aspects of bacteriophage therapy. *J. A. M. A.* 100:2038, 1933.
- Larkum, N. W. Bacteriophage from public health standpoint. *Am. J. Pub. Health*, 19:31-36, 1929.
- Idem. Bacteriophage treatment of staphylococcus infections. *J. Infect. Dis.* 45:34-41, 1929.
- Rice, T. B. Use of bacteriophage filtrates in treatment of suppurative conditions (report of 300 cases). *Am. J. M. Sc.* 179:345-360, 1930.

CONVALESCENT SERUM IN THE
PREVENTION AND ATTENUATION
OF MEASLES*

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Measles is one of the most prevalent of the diseases of infancy and early childhood and one of the two most fatal of the communicable diseases. In a review of the mortality and morbidity reports for the State of Mississippi, it is interesting to note that the peak of the measles epidemics has occurred every five years. The last high peak prior to this year was in 1928, when 35,276 cases occurred with 233 deaths, 166 of which occurred in patients four years of age and under. The high mortality associated with measles in infancy and early childhood, urges the use of some procedure that will either prevent or modify this disease.

Although attempts to immunize children against measles by the injection of human blood are reported¹ as having been done nearly two hundred years ago by Home of Scotland, it is only recently that much work

has been done along this line. Within the last ten years there have been a number of excellent papers on the use of whole adult blood, whole convalescent blood, serum and plasma, for a bibliography of which I will refer you to that of Zingher². In comparing the relative values of convalescent and immune (adult) serum, Morales and Mandry³ report the protection of 85 per cent of 120 measles contacts injected with convalescent serum, while only 57.8 per cent of 393 measles contacts injected with adult immune serum were protected. The recent work of Tunnicliff⁴ and her associates gives hope of a biological serum which can be universally used in the near future, but until that time the use of convalescent serum is our best weapon. The serum as prepared by Tunnicliff and her associates is goat serum, and, like all animal sera, occasional reactions have been reported⁵ and some complications. Convalescent serum has been found to be the most potent and effective agent in preventing measles, and in producing an attenuated disease, but it is useless as a cure once the disease is established.

From experimental data it has been shown that the titer of immune bodies in the serum is highest about the tenth day after defervescence and from then on slowly decreases, therefore, we obtained serum from convalescent cases from the seventh to twenty-first day after defervescence. Only healthy donors who were free of any other disease were used. Late in the epidemic, serum from a patient who had an attenuated disease was used and found to be equally as effective in preventing measles. The method of preparation was to draw the blood under aseptic conditions into 20 cc. test tubes, incubate at 37° C for four hours, allow the clot to retract for eighteen to twenty-four hours, centrifuge, and remove the serum. Wassermann, Kline, and sterility test were done upon each serum and if found negative the serum was put up in 10 and 20 cc. vials after .5 per cent phenol had been added for a preservative. These procedures are simple and can be carried out in almost any laboratory. When prepared in this way convalescent

*Read before the Section on Hygiene and Public Health at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 11, 1933.

serum maintains its potency for 6 to 12 months.

The concensus of opinion of the investigators seems to be that 4 to 10 cc. of convalescent serum, varied according to age and weight, injected intra-muscularly into children who have been exposed up to four days, will in 85 to 95 per cent of the cases confer a passive immunity lasting six weeks to six months; when injected into children exposed four to eight days, it produces an attenuated disease in which practically no complications occur; and when injected after the ninth day of exposure, does not modify the course of the disease. The use of adult or parents serum, if the adult had measles in childhood, is advisable where fresh convalescents serum cannot be obtained, but it does not seem to be as potent. The use of whole blood is not widely advocated, due to the large amount required and the possibility of anaphylaxis when the bloods have not been typed or matched.

During the present epidemic of measles we have given convalescent serum to 253 children in institutions and private practice, with no reactions and no complications. Our experience in the use of convalescent serum in 253 cases comes from the private and institutional practice of my father, Dr. H. F. Garrison, Sr., and myself. Our institutional practice has afforded us a most excellent opportunity to study more accurately the advantages of convalescent serum in the prevention and attenuation of measles. We have obtained accurate records in 231 of these cases and have studied them both from the standpoint of prevention and attenuation. Two hundred and thirty-one of these cases are tabulated below.

In Table I, are shown 48 cases injected with convalescent serum on or before the fourth days of exposure. Ten cases were injected before any exposure and not one developed measles. Sixteen cases were injected on the second and third days after exposure, 14 of them were protected from measles, 2 developed very mild cases of measles, with an average duration of temperature 2 days, the highest point being 101°. Twenty-two cases were

Table I. Cases injected with convalescent serum on or before the fourth day of exposure.

No. of cases injected	Day after exposure given	No. of cases not developing measles	No. of cases developing measles	Average No. days duration	Temperature	Average height
10	Before	10	0	0		0
16	2nd & 3rd	14	2	2		101
22	4th day	20	2	1.5		101.4
	Before exposure through					
Total 48	fourth day	44	4	1.7		101.2

injected on the fourth day, 20 of which did not develop measles, 2 did develop measles with an average duration of temperature 1.5 days, the highest point being 101.4°. In the total of 48 cases injected on or before the fourth days of exposure, 44 were protected from measles and 4 developed attenuated cases.

Table II. Cases injected with convalescent serum on the fifth through the eighth day of exposure.

No. of cases injected	Day after exposure given	No. of cases not developing measles	No. of cases developing measles	Average No. days duration	Temperature	Average height
44	5th day	37	7	2		101.6
10	6th day	4	6	2		102.8
3	7th day	0	3	2		101
2	8th day	0	2	3		103.2
Total 59	5th through 8th day inclusive	41	18	2.2		102.1

In Table II, there are recorded 59 cases injected on the fifth through the eighth day of exposure. Of the 44 cases injected on the fifth day, 37 did not develop measles, 7 did develop measles with an average duration of temperature of two days, the highest point being 101.6°. Of the 10 cases injected on the sixth day, 4 did not develop measles, 6 did develop measles with an average duration of temperature of two days, the highest point

being 102.8°. Of the 3 cases injected on the seventh day of exposure all developed measles, the average duration of temperature being two days and its height 101°. Of the two cases injected on the eighth day of exposure, both developed measles, the average duration of temperature being three days and its highest point 103.2°. Of the total number of 59 cases injected from the fifth through the eighth days of exposure, 39 did not develop measles, 20 cases did develop measles with temperature above normal, an average of 2.2 days, the average highest point being 102.1°. These cases were all of mild to moderate severity, there were no complications, and many of the children were kept in bed with great difficulty. The rash varied from just a few spots on the trunk and neck to a heavy rash, but no case had a haemorrhagic rash. Kopliks spots were present in only seven cases.

Table III. Cases injected with convalescent serum on the ninth through the twelfth day of exposure.

No. of cases injected	Day after exposure given	No. of cases not developing measles	No. of cases developing measles	Average No. days duration	Temperature Average height
	9th to 12th day inclusive	0	17	4.2	103.1

In Table III, there are shown 17 cases injected upon the ninth to twelfth day of exposure, and all of them developed measles with an average duration of the temperature being 4.2 days and its average highest point 103.1°. No complications occurred in these cases, but on the whole, they were as ill as the cases not receiving any serum.

Table IV. Cases of measles not receiving serum.

No. of cases	Temperature		No. cases severely ill	No. cases having complications
	Average No. days duration	Average height		
36	5.3	103.1	17	11

In Table IV, there are shown 36 cases of

measles not receiving any serum, in which the average highest point of the temperature was 103.1°, and the duration of temperature 5.3 days. Seventeen of these cases were severely ill and 11 of them had some complications, 3 of which were broncho-pneumonia. In comparing the cases recorded in tables III and IV, it is seen that in so far as the acute illness of measles *per se* is concerned, those cases receiving serum after the eighth day of exposure were not benefitted but they did not develop any complications, and the average duration of temperature was one day less. However, it is the consensus of opinion that the injection of serum after the eighth day of exposure does little or no good in modifying this disease and these findings support that opinion.

CONCLUSIONS

The injection of 4cc. of convalescent serum into a child 3 years of age and under, with a proportionate increase in the amount up to 10 cc. for children 14 years of age, who have been exposed to measles less than 5 days will usually confer a passive immunity lasting 3 weeks or more. If it does not prevent the infection it modifies the disease so that it is very mild and no complications occur. This type of passive immunity is desirable in institutions where the crowded conditions would make complications more prevalent. It is also desirable in very young children and children having any other illness, due to the high mortality of measles under these circumstances. Of 48 cases injected before the 5th day of exposure, 44 were protected from measles and the other 4 had very mild cases.

The attenuated form of measles is most desirable in private practice. It is best obtained by injecting the convalescent serum on the fifth to ninth day after exposure. In the attenuated form of measles there is usually no period of invasion, the rash and temperature occurring simultaneously. Kopliks spots are present in only a small number of the cases. The rash is less pronounced, sometimes amounting to only a few scattered areas over the trunk. The duration of fever is shortened and remains lower. The patient

often does not feel ill and complications are almost unheard of. During the present epidemic of measles, we have given convalescent serum to 253 children in institutions and private practice, with no reactions and no complications. Of 59 cases injected between the 5th to 9th day of exposure, 18 had an attenuated form of measles, and 41 did not develop measles. Of this 41 cases not developing measles, 37 were injected on the fifth day of exposure.

The use of convalescent serum in the prevention and attenuation of measles is valuable and practical, the main drawback to its widespread use being the lack of a constant supply. From the public health standpoint, I would advocate that local health boards and hospitals interested in children make a special effort to collect this serum and keep it available to the physician at a reasonable price. When it is not available, immune adult serum may be used but it is not as potent or effective.

I wish to express my appreciation to Drs. J. H. Stone, M. L. Batson, and Mr. C. A. Palmerlee for their kind assistance and cooperation given me in this work.

BIBLIOGRAPHY

1. Kellogg, W. H.: The present status of convalescent serum therapy, *J. A. M. A.* 93:1927, 1931.
2. Zingher, Abraham: *J. A. M. A.* 82:1180-1187, 1924
3. Morales, E. Garrido, and Mandry, O. Costa: Relative prophylactic value of convalescent and immune adult serum. *Am. Jour. Dis. Child.*, 39:1214-1220, 1930.
4. Tunncliffe, Ruth, and Hoyne, A. L.: Further studies on a diplococcus in measles; prevention of measles by immune goat serum. *J. Infect. Dis.*, 38:48, 1926.
5. Barnberg, L. H., Levis, J. M., and Messer, W. H.: Measles prophylaxis, *J. A. M. A.* 95:4-8, 1930.

DISCUSSION

Dr. John K. Bullock (Jackson): We are all familiar with the fact that newly born infants have a high degree of resistance to certain of the communicable diseases namely, diphtheria, scarlet fever, poliomyelitis and measles, with no immunity to certain other of the communicable diseases such as chickenpox, smallpox, and whooping cough. This immunity on the part of the newly born infant is of a passive type which no doubt is derived from the mother through the transmission of antibodies. Both active and passive immunization against measles has been attempted in several different ways. The active immunization against measles by the use of toxin-antitoxin has not been satisfactory. The method of Herman, namely, the

transfer of nasal secretions from a child with active measles to a well child has also failed to prove satisfactory. But the use of blood and serum from recent convalescent cases and even from individuals that have had the disease at some earlier period in life, is proving to be most satisfactory as we have just been able to see from this excellent paper by Dr. Garrison. The passive immunization against measles has also been attempted by different methods namely, the use of placental extracts, the use of anti-measles diplococcus serum and with the use of whole blood or serum injected within the first five days of the incubation period. Of these methods, the use of blood and serum, of course, has proven to be of great value. The dosage and time of administration of serum for passive immunization is very well standardized but for active immunization, we need more data on the quantity of serum and time at which it should be given. We know that each child varies in its susceptibility to measles and we also know that the sera from different individuals varies in anti-body concentration. These two variable factors explain the difficulty of standardization in active immunization.

Less than ten per cent of children reach adult life without having measles and certain of these develop it in later life, at an age when the combative powers are less than they were when younger. Since measles is more severe in adults than in children of school age, it is advisable for each individual to have an attenuated form of the disease when a child. Since the disease is also more severe in very young children, it is important that every child under three years of age should have protection against the disease.

Dr. W. H. Scudder (Mayersville): May I ask if one can have measles more than once?

Dr. M. L. Batson (Jackson): I cannot refrain from saying a few words in behalf of this splendid paper. I think it is timely, and I think Dr. Garrison has covered the subject thoroughly. I believe this is one of the best papers we have had during this session, and I very much appreciate the manner in which he has presented it.

It was my privilege to observe a number of cases of measles which were treated by Dr. Garrison in the School for the Blind. All those treated with a serum were not sick enough to go to bed. As a matter of precaution we kept them in bed for a day or two, and only one out of the number treated had a temperature above 101°. Some of the children that were effected will never know that they had measles, as it was so light.

I desire to say that this is an excellent treatment. There were no reactions following the injection, it did not cause any soreness of the muscles, and it lessened the seriousness of measles

to where there is no further dread of the disease. They do not have sore throat, coryza and running of the nose and eyes that one has with an ordinary case of measles.

To me, this is a very splendid treatment, and I want to endorse everything the doctor has to say about it.

Dr. Joe Green (Laurel): Please tell us how long this immunization lasts.

Dr. F. M. Smith (Vicksburg): I am interested in a general way in this subject. Yet it seems to me that the paper deals entirely with the treatment of measles. It does not offer much from a public health standpoint or preventive medicine proper. Therefore, I do not see much promise to us, (public health workers.) It seems that the serum when used as a prophylactic produces a passive immunity and not an active immunity—that it is taking the protective agents—anti-bodies—from the body of the convalescent that has created them, and puts them into the supposedly susceptible child to tide that child over the present attack, to make it milder or to prevent it from having it for a time, but the protection doesn't last for a great while. One or two other thoughts come to my mind. I do not want to be a "doubting Thomas" but I am interested, and I am thinking along the lines that Dr. Evans led us in his talk the other night about that zero point that we are reaching in all communicable diseases. Possible factors influencing this decline in severity and incidence are the virulence of the organism, the type of measles or communicable disease that we are having. Another thought comes to my mind—in 253 cases reported, mostly institutional cases, I assume that you definitely determined as far as possible how many of these had had an attack of measles, red or French type, previously, and that you excluded these, else the value of your prophylactic record could be justly questioned. Permit me to call your attention to another fact apparent to me. We are having a milder type of French or red measles in the present epidemic than we have previously had. In Vicksburg I think I can safely say we had approximately 400 reported cases and as far as I can determine we did not have more than 10 or 12 that had any complications and by far the majority of the cases had no medical attendant. I would go to home after home as a health officer where they would report three, four, or five children that had measles, and they were all up and out and had developed no complication and had not even been under the care of a doctor. The health officer can let measles patients go back into school without danger to others much earlier than it is safe for the patient. The period of communicability is from four days before to five days after the appearance of the rash.

In conclusion I am just wondering if we have thought all the way through—do we observe in those that did take the convalescent blood serum a much milder degree of infection than in those that did not take it who may have lived in an adjacent community or town?

Dr. N. C. Womack (Jackson): I think Dr. Garrison has brought us a paper that will not be surpassed by any paper read before this Association. What happens in the prevention or attenuation of measles happens and is happening and is being practiced now as far as infantile paralysis is concerned. The theory is not a theory but is a fact. Whooping cough is a disease limited to one attack. I confidently believe that if we can get the date of exposure definitely settled and wait a certain period of time and give blood from a person who has had whooping cough recently or in sufficient quantities that we will be able to do the same for whooping cough that we are doing for measles. In 1930, 8000 children in the United States died as the result of complications of measles—that answers the doctor's question. About 300 died as the direct result of measles. The morbidity is great, and the suffering is great and the universality of the disease is such that if as many as ten children get sick it is quite an economic problem, so I want to congratulate Dr. Garrison on the presentation of this paper. He spoke of one of the difficulties being the lack of serum. I believe the time will come when it will be available. Now I want to make this suggestion to you—in those cases where it is not available, or you so desire, if you will wait until the fourth or fifth day and use mother's blood or father's blood, sodium citrate with a syringe using twice the quantity you would use and don't put it in the muscles, put it in the fatty tissue, insert a little novacaine and you will accomplish quite the same result. If your home is in a rural community where one has measles and there are five or six more, explain to the mother what it means—why she has had measles and didn't have it again, that her blood possesses immunity and that you can take her blood and give it to the baby, you can rest assured that you will have when the disease erupts, one or two days of a mild eruption, or low grade fever and the baby is soon out. If the mother hadn't had measles for 30 years, and the child is eight or ten years old, give him a little more. You ought not to put it in a vein but as long as you put it in the tissues you won't have any trouble. It doesn't have to be typed—it is easy, it is rational, and it will get the results. As I say Dr. Garrison has presented us with what I believe to be a paper as valuable as any we will have presented this year.

Dr. A. E. Keller (Nashville): I would like to

congratulate Doctor Garrison on the excellent work that he has done in regard to the use of convalescent measles serum. Doctor Garrison took two groups of children exposed to measles in an institution. He gave convalescent serum to one group and used the other group of children as controls. He was able to show that the children who did not receive convalescent serum had a much more severe illness than the group which received convalescent serum but developed attenuated measles.

The indications which Doctor Garrison enumerated for the use of convalescent serum are accurate. Emphasis should be placed on the use of convalescent measles serum first in children in institutions because it is a well known fact that the mortality rate, resulting especially from complications following measles, in children in institutions is much higher than in children not in institutions. Therefore, the use of this agent in institutions is a definite indication.

One should also emphasize the use of convalescent measles serum in children who are in poor physical condition, who have tuberculosis, and who are under the age of five. Often times children who have measles and a latent focus of tuberculosis are likely to have the tuberculous focus awakened and the patient die of tuberculosis following measles. If it is possible to prevent infection with measles until after a child has passed the age of five years it will be possible to prevent a great many more deaths which would occur as a result of measles because we know that most of the complications of this disease occur before the age of five years.

The therapeutic use of convalescent serum has not been shown to have any effect on the disease after the fever has started. Therefore, convalescent measles serum is only efficacious when given soon after exposure and under these conditions one can expect to prevent the attack or at least to attenuate the disease. The question might be raised as to whether or not it is dangerous to use convalescent measles serum. I would like to emphasize the fact that there is no need to fear antiphylaxis following the injection of human serum because in this case one is injecting an homologous protein.

Whole blood from adults who have had measles may be used when convalescent serum is not available. In using adult whole blood much larger doses should be given intramuscularly and this procedure will occasionally bridge the gap in those instances when convalescent serum is not available.

Dr. H. F. Garrison, Sr. (Jackson): The use of convalescent serum has many advantages over that of whole blood as all the doctors have agreed. I

also agree with them with reference to the use of whole blood where it is not feasible or material available to get the use of a laboratory to have the blood separated and get the serum, then you may use your whole blood, but if it is possible to get your serum separated it is certainly much better to use serum always. It is a very simple matter to separate the blood and to use just the serum. You have only to use a comparatively small amount of serum and in that way you have a good deal more advantage. Of course, you have the advantage of it being more likely to prevent or attenuate the disease.

Dr. Keller mentioned a matter, and I regret very much that I was not here to hear his paper on the control of tuberculosis. I read a similar paper several years ago before this Association on the control of tuberculosis in children, and I think right there is one of the biggest advantages in the use of convalescent serum. Take the case that my friend Joe Green mentioned this morning—the children who are going around and you know they are contact cases. By the way that is the most serious phase of this question—is contact; those are the ones your serum will do the most good in. Take a child who has tuberculosis—its grandmother, as Dr. Womack suggested, or some of the relatives have tuberculosis and they are continually in their presence—those are the kinds of cases you want to prevent measles in, because if you give a child like that a good case of measles you are likely to flare up a tubercular condition that may be hard to check.

We have shown in this series of cases that one of the biggest advantages is in the attenuation. In that way you lessen the complications and the severity of the disease. Dr. Smith mentioned the cases over at Vicksburg. I think Dr. Womack and the other men here will bear me out that his experience in Vicksburg is not that of ours. This present epidemic we have had here is about as bad as I have seen in many years, and the complications were many and severe. We had more measles in Jackson, with a temperature ranging from 104 to 106 than we ever did before—just bad cases, and we had many complications—ears, eyes, throat conditions, mastoids and pneumonia, I tell you it is an advantage—a great big advantage. If you have the use of a laboratory where you can get your blood separated, always do it, but, of course, if you cannot, in an emergency, whole blood will be permissible, but we warn you on the indiscriminate use of whole blood. Don't take that lightly. If you can separate it, then that is probably permissible.

I have enjoyed the discussion of this series of cases here because it shows that men are interested in it, and we are going to get co-operation.

Another point with reference to the giving of the serum. You need not be afraid to give serum in all cases. We don't have the slightest reaction from it. There was not the slightest reaction in any in this whole series—they did not even have a red spot where it was injected, and any good laboratory can separate and give you the serum in just a little while. It takes only 24 hours to get it, or you may even draw the blood and have it separated immediately, but it is best to allow more time if possible.

I thank you all for the discussion and interest in this piece of work. The use of convalescent measles serum has certainly been a very pleasing revelation to us. We feel that it can be used in cases where it may mean the saving of life, and may in the future be useful in a public health way.

Dr. R. N. Whitfield (Florence): I was considerably interested in Dr. Garrison's experiments and would like to mention the results obtained in my "institution". I have my official position with the state, and I am also at the head of a "private institution for children". I came back home from a trip out of the state on about the last day in January, and I had a girl piled up in bed. My wife said "Well, Emily has got the measles." She is about 9 or 10 years old. I had a boy there that hadn't had the measles, and he was piled up the next day too. They caught it at school. Well then I had three babies that I knew I was going to have some sort of a time with. You know a fellow can get jumpy late in life, and I knew what was coming. I was going to have three babies down with temperatures running around 104° and 106° possibly a few convulsions, maybe a case of pneumonia, and possibly a little death, so I was worried. I happened to mention the matter to Dr. Garrison, Sr., and he called my attention to this preventive measure that has just been used and in fact I had a bulletin from some state sometime back about it, so they gave me a little bit of encouragement and we talked it over and I began to look around then for somebody that had had the measles that I could induce to give me a little blood. I found out one lady over here in Jackson had had measles, and I called her up—her husband was without an occupation, and she was a little doubtful about furnishing me blood. I told her I would give her \$3.00 if she would help me out. She talked with her husband—I thought her husband would be willing, so she finally called me and said her husband didn't seem to be so agreeable to this matter; anyhow she asked me "did you mean \$3.00 for all the blood, or \$3.00 an ounce"; so finally I found an elegant little lady working for the Hinds County Unit here who had had the measles, so I called her and asked her about it.

She said "Yes, I will be glad to do it" She went out to the hospital and gave sufficient blood; they separated it and in three or four hours Dr. Garrison, Jr., and I were on the way out to my "institution", and those three little babies were injected; they didn't even cry, and I had a friend out there who was scared to death—he was always bringing his child to the hospital over here, so I suggested we vaccinate that child, and I made even a better friend out of that man. Well, anyhow in a few days—about the usual time—maybe 14 days after the first exposure to this girl, these children developed just enough temperature to know they were sick, and they had just a little eruption, but they never did go to bed, and as to that boy and girl, their temperatures ran up around 103° and 104°, just the worst attack you ever saw, broken out from head to foot. I was certainly proud of the fact that I did not have to worry about these little fellows.

Dr. H. F. Magee (Jackson): I just want to report a few cases from the Methodist Orphanage. We had 70 little girls between the ages of 5 and 11 years, six of whom went down with measles, with typical symptoms, severe coryza, cough, temperature 103 to 105, and a rash. Of the 64 remaining, 41 had never had measles. Doctor Garrison was kind enough to give us enough Baptist blood from recent convalescent children of the Baptist Institution to give 6 to 8 cc of serum to each of the 41 children. From the 41 children who had never had measles but were exposed, only 4 had symptoms—only slight rash, or slight sore throat, temperature about 100, all coming simultaneously lasting 24 or 36 hours. No complications and in fact only one of the four went to bed. The other three were isolated in the hospital room but were not sick. The original six cases ran high fever, severe cough, coryza and distinct rash, and were very sick for four or five days. The four cases receiving convalescent serum had only slight cough, coryza, temperature about 100, all coming simultaneously and lasting about 36 hours and were not really very sick. I think there was decided benefit derived from the Baptist convalescent serum.

Dr. H. C. Ricks (Jackson): One very important item to consider when the use of adult blood instead of convalescent serum is to be used in the prevention or attenuation of measles is: Has the adult from who you propose to obtain blood had measles? In a report from New York State where adult blood was used in an orphanage in an attempt to prevent or attenuate measles, the incidence of measles was reported just as high among the group receiving blood as among the group not receiving blood. The experience of others indicates that this donor had not had measles.

We do not consider that the rash of measles has anything to do with the transmission of the disease. I believe most authorities agree that the infectious agent is spread by the secretions of the nose and throat and probably most often before the rash appears. This is probably the only way the infectious agent responsible for the disease is spread.

Dr. Garrison, Jr., (Closing): First in answer to Dr. Scudder—I say yes you can have measles more than once in the same individual. I have seen it occur.

In speaking of the active and passive immunity I would like to answer Dr. Green and Dr. Smith together. When I showed you these tables I grouped these cases as being cases that were injected on the fourth day or earlier, and those that were injected from the fifth to eight days. In those cases injected before the fifth day a majority developed a passive immunity and the serum acts as any passive immunity serum, similar to the serum you give in scarlet fever. When you give this serum between the fourth and eighth day your patient develops an attenuated form of measles and they have just as much resistance as any other case has had, they have a continuous immunity which is an active immunity. In the passive immunity I stated that it lasts anywhere from six weeks to six months. After that it is probable that your patient will be just as liable to get measles next year. The value of your passive immunity is in your weak and debilitated case—also in your very young children.

Now in regard to the use of blood. I am reminded of a little occurrence that happened when I had my first personal experience in trying to do a little public health work. I was asked to go out and talk before a group of midwives, and I went out in great gusto and enthusiasm. I was ushered into a little negro church where there were some 15 or 20 negro mid-wives, all dressed in their white dresses. As I went in, a big, fat, black, gray-haired negro mammy arose and introduced me with a prayer that went something like this: "Oh, Lord, you done sent this little young fellow down here to talk to us. Lord, if he tell us right, Lord lift him up on high, but if he tell us wrong, Lord, you push him down." Well, that is the way I feel about giving whole blood—I am afraid if you go home and think it is such a simple thing, that you can get a case that has recently had measles and take a little of the blood and inject it into your exposed cases, you are going to get into trouble. There is an element of danger of anaphylaxis and one bad result will more than off-set many good results.

Dr. Clark, whom I am very sorry had to go home, had a series of 17 cases in his own private practice.

He used convalescent serum prepared in the following manner: He drew off blood for a Wasserman and about 50 cc. which he placed in a sterile tube. He allowed this blood to sit in a warm place in his office until the clot had formed and retracted leaving the serum, then placed it in his ice box and used the serum when needed if the Wasserman test was negative. If you have a large Keidel tube, you could collect the blood in it and keep it in your office until needed, and the serum would remain sterile. It takes about 50 cc. of blood to yield you about 30 cc. of serum. Ordinarily blood serum loses its potency after storage of about six months. Some investigators have reported the stabilization of blood serum after it is dried, and if we can do that and store the dried serum, then there would be a means of having a constant supply. At the present time, we are doing a little work trying to put up a little dried serum.

MIDWIFERY CUSTOMS IN INDIA WHICH FAVOR TETANUS AND PRESSURE GANGRENE OF MOTHER AND DECOMPOSITION OF THE UNBORN. CASE REPORTS*

H. W. KNIGHT, M. D.

NEW ORLEANS

To work successfully among women in India during pregnancy and parturition, one is compelled to consider their devotion to their customs, traditions, and religious rites. These are considered more essential to them than life itself. Often both the lives of mother and child are sacrificed as a result of conforming to certain rules regarding childbirth and puerperium. This necessitates first winning their confidence and respect; then they will accept advice and service. There is a great gulf between their customs and ours. Their own they follow in blind faith, so gentleness, tact and patience are required to establish necessary confidence and acceptance of us. This is easily appreciated when we reflect on what would be our reaction if asked to change customs followed for many generations, such as, for instance, eating at a table. Ill-feeling engendered in one busti (house) quickly spreads to many others and further re-

* Read before the Orleans Parish Medical Society, May 8, 1933.

lations are debarred by closed doors and forbidding looks.

The easiest way of cultivating friendship is generally through the children, but one must be careful to avoid admiring or praising a child excessively, as this will be expected to invite the visitation of the evil spirits in the child, which of course would be sure to do harm or even cause death. Many months of contact and friendly service must intervene before ties of confidence are established. Often this confidence is gained by service rendered in time of suffering or an accident.

It is essential, when visiting the home, to ignore conditions which are unpleasant or even repulsive. At least one must not permit his feelings to be observed by them. Homes are not always as clean as we might expect and necessitate our wearing washable clothing for our task.

Superstitions form the greatest problems to be surmounted, as they often place us in a very undesirable status. For instance, there are numerous superstitions about strangers seeing the new born baby or seeing the mother before the ceremonial cleansing rite and bath. These are usually performed on the third, fifth or seventh day. If one should be insistent and the child should become ill or die (which very frequently occurs from tetanus about this time) it will be attributed to our visit. The most of the busties in that area at least will be seen with closed doors on the succeeding visits.

A fire is usually found burning at the inner threshold of the lying-in chamber. This fire is started when the placenta is burnt and it is kept up for days. The smoke fills the room which has every window and door closed, thus the atmosphere in which mother and child lives can easier be imagined than described. The fire is supposed to keep evil spirits from entering the room and causing trouble to both mother and child. Often those who enter the room are invited to step over the fire and shake the clothing so as to remove any lurking spirits of ill-omen. In some parts of India, the placenta is buried under the mother's bed, even though this may be simply a mat. There seems to be a strong prejudice against any person seeing the placenta or allowing it to be removed from the room. Sometimes the fire is kept under the

mother's bed in cold weather and she often narrowly escapes getting on fire herself.

Among the articles deemed essential is a broom or date palm branch, and an iron implement is placed just outside the outer threshold. Hanging across the lintel is a string of garlic or onions, potatoes, chillies, leaves and many old articles. Occasionally an old shoe hangs in the middle of the string, while in other instances there is a bunch of fish nets. The sign of a birth in a Hindu household is a cactus on either side of the outer door and this is very strictly observed.

Hindu women are usually confined on the floor or on an old mat, while the Mohammedan women are usually confined on a charpoy (bed). While Hindu women are attended by out-caste women of the dhais group, Mohammedan women are attended by friends and relatives as well as dhais. The Hindu woman is put away on the first sign of a show, in a room usually the darkest and she is fortunate if she has a friend or relative who will remain with her and thus become unclean. Usually a piece of sacking of no special cleanliness is thrown on the floor and on this the baby is born. A piece of sacking or another mat is given for the bed during the puerperum. Occasionally one may be able to persuade the friends to give a charpoy but this is seldom. "After the bath" is the usual reply and so the woman lies on the ground during the time she needs the most care and comfort. Workers can usually persuade the people to supply some clean straw or grass to place under the mat to prevent exposure of both mother and child to the dampness and afford a little comfort.

As soon as the show begins, the mother is considered unclean. Her vessels and lota (water bottle) as well as lamp and other necessities are also unclean so they are placed on the outer threshold and she takes them into the room to be kept till after the "ceremonial bath". In many cases, the original principle underlying the strict seclusion during labor and puerperium is almost entirely lost in the unyielding custom of no outside help even though needed. When labor pains are slow, the female relatives and friends become impatient and taunt the dhai with doing nothing. In order to keep up appearances, the

dhai calls for oil (which is always supplied willingly) and she begins to lubricate the vagina and genitals in order to facilitate the passage of the child's head. This constant handling increases the danger of infection as little care is given to cleansing the hands. In many cases it is not the dhai's fault, because if there is much delay, one dhai after another is called and each resorts to all the extreme measures she knows. I have seen four and five present at a time. The position of the child is not determined and delay materially interferes with the woman's chance of recovery, as they try to remove the child forcibly. They usually understand that a transverse position requires the child to be turned and this they proceed to do without washing their hands or taking any precautions. Their procedure puts the woman in intense agony. There were cases which adds excessive misery to that regularly limbs have been pulled off the body of the child. I have seen women who were worked over and tortured by unskilled hands till exhaustion and cessation of all labor pains resulted while the head was lodged in the pelvis obstructing the circulation. The child of course was dead and gangrene of the vagina and vulva was present. Fifty per cent of the cases where gangrene of the genitalia was present, died, although the child was easily delivered by forceps without laceration of the perineum.

One procedure in childbirth is to require the woman to walk around a rope hanging from the roof. This is required for hours by some dhais. She is required to assume every conceivable attitude or is placed in attitudes and held there which adds excessive misery to that regularly endured in slow delivery.

Mohammedans have a dried flower "Miriam Kiphul" (Rose of Sharon) which is placed in water to expand, and this is believed to assist in labor if drunk in the first stage. The Hindus have the woman drink some water brought from the temple in a lotus leaf. These are harmless customs and may encourage by suggestion. There are, however, procedures which are extremely unpleasant and those which are dangerous. It is quite common for a midwife to hang a plait of hair (usually reeking in rancid and illy smelling oil) under the nose to cause pain in the second stages of labor. This is not so bad

as stuffing the mouth full of oily hair to cause retching and vomiting in order to expell the placenta. What really is dangerous, however, is the forcible manual removal of the placenta. Immediately after this, the patient is made to stand against the wall and the abdomen is massaged with the hands or the head of the dhai to force the bad blood away. Added to this are three days total starvation except for the "gurum masalas". This mess of gurum masalas must be concocted by a "Bunia" (a certain outcaste) and is composed of the following:—Aijawain (Bishop's weed), Hing (*Folia Asafoetida*), Gour (crude sugar), dried green Adarkh (ginger), Haldi (tumeric), Rei tale (mustard oil), etc.

Every caste has some variation and Syed Si-1ai Ul Hassan, a judge, gives the following concerning the Brahmanic ceremonial followed in the natal and post-natal period: "A woman in child-birth is ceremonially impure for ten days. When labor begins she is taken into a room rendered artificially warm. The midwife, who is a woman of any caste, cuts the umbilical cord, removes the puerperal impurities, bathes the mother and child and lays them on a cot. Both the cord and the impurities are enclosed in an earthen pot and buried. The mother is given a mixture of saffron and ghi. During the first two days the child is maintained on cow's milk, castor oil and honey being given to it at intervals. On the third day after birth the mother is presented with coconuts and red powder and for the first time gives her breast to the child. When the child is six days old the father worships Sasto or Satwai, who is supposed to assist at child-birth and to be the guardian of young children. The goddess is represented by two dolls of wheat flour and a sickle with its blade painted with strips of chunam (lime). Offerings of flowers, betel-leaves and nuts, sweet-meats and roast gram, are made to the goddess, and a vigil is kept during the night in her honour. On the 11th day the mother bathes and is free from child impurity. The child is named on the 12th day, when friends and relatives are entertained at a feast." The same author describes the custom of the Erakalas as follows:—"The moment labour begins, the woman communicates the fact to her husband, who immediately retires to a dark room and lies on a bed, covering himself

with his wife's clothes. When the child is born it is placed by the side of the father, who has his teeth daubed with dentifrice and his eyelashes smeared with lamp-black, while all the prescribed medicines are given to him and he is not allowed to leave his bed for three days, during which period he is regarded as being impure. No attention, on the other hand, is shown to the mother, who lies neglected on the ground. She is given no medicine and no food except bread." Thus it is apparent that, while the customs of each caste are different in and after childbirth, there is a mixture of superstition and religious rites in each which materially interferes with the woman receiving proper care.

The baby is sometimes oiled and then supposedly washed with powdered brick in place of soap. The skin is so roughly scrubbed and wiped that it is a wonder that it is not bruised. As soon as everything is over, the dhai warms her hands over the fire and sankos (foments) the child. The soot and smoke settle on the cord and in twenty-four hours it has become unbelievably hard, dry and black. It usually falls off on the third day. In the Punjab, after the cord has fallen off, it is suspended by a long string passed around the child's neck as a charm. The baby is not put to the mother's breast till the third day. In the meantime, it is given, every little while, a few drops of goat's or cow's milk undiluted. This is given by dipping a piece of cloth in the liquid and letting the baby suck. In one case the baby was being given a mixture of castor oil and honey in place of cow's milk. The cloth is left in an open dish of milk which is thus exposed to dust and flies. In some parts of eastern India, the child is given a dose of castor oil when it is born and one grain of calomel next morning.

When tetanus occurs, the dhai is never blamed but the evil spirit is believed to have effected an entrance and shut the child's mouth. Someone having a gun is implored to come and fire it off in the house to scare the evil spirit and thus drive it from the house. Although this always fails, faith in its efficacy is undiminished.

The infant mortality is appalling from many causes other than from premature birth due to specific diseases. The most frequent causes are tetanus from infected cord; also a large num-

ber from pneumonia and intestinal troubles, principally due to exposure from insufficient clothing. The very fact that the new born infant lies naked on the floor or on an old piece of rag, absolutely uncovered, till the completion of the third stage of labor, is sufficient to reduce the resistance to disease by chilling. But the custom is to keep no clothing on the child until the ceremonial bath is over; even then the only clothing is a small jacket and a warm covering for the head. The head is well covered with a gay looking cap with a cloth tightly wrapped over the cap and tied behind the neck. From the waist down, the body is absolutely nude. When carrying the child astride the hip, the jacket is pushed upward exposing the back even during the rains. This exposure is followed by many deaths. The reason for half clothing the infant is due to the lack of its training in regular habits while a little earth covers all traces of neglect. The chilling of the bowels during teething is followed by a few days of illness and death in many instances. The marvel is not that so many die, but that many survive under this Spartan treatment and upbringing. It is truly, a case of "Survival of the fittest".

It is considered a very dangerous proceeding to prepare the baby's clothes beforehand, as thus the evil spirit would be attracted either before or after birth to cause deformity, sickness or death to the infant. For the same reason, a nickname is given visitors instead of the child's real name. Only the priest uses the real name at the "Naming ceremony" as thus the evil spirit cannot find and molest the child.

NOTES OF CASES

(1) There is evidence that the danger to the mother does not cease at the time delivery is completed. Meddlesome interference was noted in a case to which I was called during the puerperium. The woman was a Mohammedan living in Bidar, Deccan, and had been delivered by a dhai. When I was called, she was lying on a dirt floor in a hopeless condition from tetanus. I examined the vagina and found old colored rags, one containing an ancient and a modern copper coin and another containing several kinds of small grain which were used as food. This doubtless was the cause of the tetanus in-

fection, as there was nothing to indicate that these were not filthy before insertion.

(2) My surprise was unsurpassed while at Pakaur, Bengal, when I was told that a woman thirty miles up the railroad had been seventy-two hours in labor. The station-master arranged that she be brought by the downcoming midnight train. Examination revealed the head resting on the pelvic floor, R. O. A., cessation of pains and head extended. There were two very dark spots about an inch by three on the labias. These spots could be easily recognized as gangrenous and due to long continued pressure of the undelivered head. Instruments were made ready and just sufficient chloroform was administered to relax the patient when instruments were applied. Supporting the perineum, the head was delivered without difficulty. No trouble was experienced in delivering the body of the dead child and the detached putrid placenta came at once. Relief was thus rapidly given and examination of the perineum showed that no laceration had occurred but the vaginal mucosa was sloughing gangrenous tissue and long shreds were removed by flushing with normal saline solution. If this woman had had a little assistance in guiding the head, there would have been no complication, for the child weighed only eight pounds.

The after-treatment was constant irrigation with normal saline solution at 100° F., for a number of days till the sloughing tissue was removed. The spots on the labias sloughed and were treated with protective and antiseptic dressings of iodoform. Tonic treatment and anti-tetanic serum were given. This case recovered but the entire vagina was destroyed.

(3) While at Bidar, Deccan, I was called to a Hindu woman three days in labor, who lived seven miles away from the station. I placed a portable operating, a sterilizer containing necessary instruments, irrigator, douche-pan, trays, pitcher, surgeon's robe, gloves, towels, sheets, cotton and gauze, and a medicine chest into a motor car and we drove across the plateau to a village of mud houses with straw thatched roofing. In one of these houses was the patient, who stood when I entered the dark room. There was a three foot porch on the street. On this the operating table was placed and large clothes were

hung for screening around the porch, as men, women and children had gathered in the street and elsewhere to see.

On examining the woman, the head was found resting on the perineum, R. O. A., absence of pain and head extended while, as in the previous case, there were two gangrenous spots on the labias. My assistant had built a fire in the street and had the water supply boiled and sterilization completed. In a short time, with forceps, the child was delivered with no difficulty or injury to the mother. The entire vaginal mucosa was badly decomposed and irrigation was used to remove the long shreds as much as possible. It was deemed necessary to move the woman to hospital, as she had one sinking spell and would require attention which would be impossible at the home. A litter was built and she was carried by relays of men as carefully as possible, but she died just as she reached the hospital. This would doubtless have occurred if she had remained in the village.

(4) A woman was brought twenty-five miles to hospital in a bullock-cart, which had no springs. The case was one of head presentation of two days duration, L. O. A., cessation of all pains and head extended. The long oval gangrenous spots involving the labias were like the others described. The head and body of the child were delivered by instruments without injury to the perineum. This woman was of a sect of Hindus known as Lingyats (Worshippers of the procreative force) and therefore was unclean during childbirth. Hot normal saline solution was used for four days and medication as indicated to sustain the functions of the body. Also anti-tetanic serum was given and frequent small doses of magnesium sulphate. She lived for four days and suddenly collapsed as a result of the severe toxemia to all probability. Her own people could not bury her without breaking caste rules and so the Christians, who were of the outcaste people, buried her in the mode of her people, that is, in a sitting posture with the arms across the chest and facing West. It seems that many postures and ceremonies are practiced in India.

(5) I was called some ten miles to a village down the slope of the plateau and across the black cotton soil plain. The houses were made

of stone and formed a court by being built on four sides of an open square. In one of these rooms was a Lingyat woman who was unable to deliver a child whose head was resting on the perineal floor, L. O. A., cessation of pains and head extended. The case had been in that condition for two days. Instrumental delivery soon relieved the woman with no injury to the perineum. The friends of the patient were intelligent and dependable and so treatment was possible at home. The condition of the patient was the same as that of the other patients having the gangrenous spots on the labias and the sloughing of the vaginal mucosa. The treatment was the same and the woman recovered after a protracted illness.

It is interesting that the gangrenous areas were always elongated oval spots on the labia majora that the vaginal mucosa was always in an advanced state of decomposition, and that the placenta in each case was entirely separated and greatly decomposed. The rectum protruded and showed signs of venous and arterial obstruction. All the children were in process of decomposition and therefore had been dead for some time. Of the four cases seen in this state, two died. The definite lines of demarcation, mode of sloughing and character showed this to be due to pressure and what is termed dry gangrene. In all my experience in America, India and Africa, I have never seen or heard of cases of this character beyond these four, and I have found no mention of dry gangrene occurring in labor cases in medical literature.

(6) One night at Bidar an Indian Civil Surgeon requested that a case be brought to the hospital for my assistance. At midnight we examined the woman and found the child in breach presentation. One leg had been pulled off and the other was up along the body while the buttock was engaged in the pelvis. In attempting to bring down the leg, it separated from the body and was delivered with the aid of placenta forceps. The body was removed by the use of Hodge's forceps, but not without great difficulty because putrifactive changes were present in the child and the head became separated from the trunk. It required several applications of the forceps before the head could be deliv-

ered. This woman, however, made an uneventful recovery. It was deemed necessary to give antitetanic serum to avoid possible danger from uncleanly manipulations. The case illustrates what conditions may develop in many attended by dhais.

(7) A woman was brought to hospital with the child in shoulder presentation. The dhais had brought down the arm, produced traction therewith and had pulled it off at the shoulder. By a little manipulation, the head was in presentation when the application of forceps enabled the child to be delivered and the woman made an uneventful recovery.

Thus an entangling web of superstitions, customs, and religious rites catches the teeming millions of India and render them powerless. Men are often enlightened but are powerless because the home is woman's realm where she and her neighbors reign supreme, being supersaturated with superstitions.

(8) The last abnormal case which will be reported is an uncommon condition with which to meet. A Hindu woman had failed to be delivered in full, as the child was decomposed. The bones of the skull were removed separately by gloved fingers, protecting the soft parts of the mother. The clavicles were brought out, as they were free. The arms must have been pulled off. Heavy vulsellum forceps were then attached, a blade at a time and locked together with gauze, and the body was delivered. The decomposition of the placenta and soft parts of the child rendered the work most difficult. A constant irrigation for several days with normal saline solution restored the normal tone of the tissue. Antitetanic serum was administered as in the other doubtful cases. Recovery followed and the case was discharged after twenty days in hospital.

DATA DERIVED FROM GOVERNMENT REPORTS AND CENSUS

It is difficult to realize the vast need of women in the East during pregnancy, parturition and the puerperium. It is also difficult to portray the slowness with which the people gain confidence in Western methods. The census returns and vital statistics afford a limited study of the actual fatality from childbirth to both mother and child and the deaths during childhood. Re-

ducing the figures available to smaller proportions we can obtain a better idea, especially when we take Bengal Province with 46 1-2 million population, as such a smaller area, in place of all of India.

In Bengal Province, India:—

Every 10 minutes—24 babies are born.

Every 10 minutes—5 babies die from birth causes.

Every 10 minutes—1 mother dies from childbirth.

Thus about 60,000 mothers in Bengal Province die every year from childbirth while in all India it is estimated that about 322,000 mothers die from childbirth. All India approximates 31 deaths of babies from birth causes every ten minutes.

AGE DISTRIBUTION

It is estimated that the distribution of female deaths from prenatal, natal and post-natal conditions, based on a study of 3700 cases of childbirth, may be considered as follows:—

Under 15 years	8% to 10%
Between 15 & 20 years	50% to 60%
Between 20 & 30 years	30% to 33%
Above 40 years	3% to 4%

The main causes of maternal deaths due to pregnancy complications were estimated as follows:—

Accidents of labor occasion 5.4 maternal deaths per M births,

Puerperal fever occasions 6.5 maternal deaths per M births.

Tetanus occasion 0.8 maternal deaths per M births.

The remaining being due to eclampsia, anaemia and a post-natal condition known as "Sutika". Eclampsia deaths are numerous and also a large number die from sutika which is a term applied to a puerperal diarrhoea occurring in Bengal.

From these findings, it is apparent that a gigantic task confronts the profession in India, where there is only one hospital where forty are needed and even in Bengal, which is far ahead of other parts of India in medical education, there is only one doctor for 11,744 population. This scarcity of doctors has forced the Government of India to arrange for the training of indigeneous dhais, or midwives, which has

proved a very difficult method since these women feel that nothing can be told them since they are born to their calling. Public opinion is gradually being changed by means of propaganda and public health exhibitions.

DISCUSSION

Dr. H. E. Bernadas: This is not a discussion but a congratulation of Dr. Knight for having brought this matter before us. Most of us who have read of the obstetric customs of India, among others Katherine Mayo's "Mother India", have looked upon the description there as exaggerated, but the doctor's paper brings it right home to us, and the land of Ghandhi still has some progress to make.

Dr. Knight: I do not think there is any discussion. I brought home those two copper coins and the bones of the skeleton removed from the vagina, and if some want to see those, I will be glad to show them.

The queer thing to me in this whole subject was the rapid decomposition of the child within the mother. We had one case where in 48 hours, the placenta was detached, the child died and decomposition took place so rapidly it was almost impossible to get hold of anything. All tissue was loose from the bones and they were easily cleaned. It is remarkable that these things transpired in the face of the effort of Government to remove the difficulty of gaining assistance.

MANDIBULAR THIRD MOLAR INFECTIONS AND COMPLICATIONS*

SIDNEY L. TIBLIER, D. D. S.

NEW ORLEANS

Third molar infections can be classed under three main headings. (1) The apical infection occurring as a sequel to a dead pulp, i. e. the infection of the bony structure at the apex of the tooth comes about from infection introduced through the root canal or canals after the death of the pulp. (2) Infection of the bony and as well as of the soft tissues surrounding this tooth, resulting from periodontal lesions, commonly known as pyorrhea. This type of pathology affords large areas for absorption of toxins and the entrance of bacteria into the surrounding tissues under conditions of lowered local and general resistance. (3) Infections beginning in the ruptured capsules of partly erupted, nonerupted and impacted teeth. Whatever the causes for the noneruption or impaction the fact remains that these ruptured capsules

*Read before the Orleans Parish Medical Society, February 13, 1933.

form crypts, which allow infectious organisms to lodge and actually enter the tissues on account of a lowered resistance due to congestion in this area.

The third molar, involved very frequently in either of the ways just described or a combination of these, is a singular factor in the severe infections of the adjacent tissues, bone and soft tissue;

1. Because of its proximity to the pharyngeal tissues infection spreads very easily in a distal direction to the tonsillar region.

2. Because of the thinness of the lingual plate near this tooth, in the average case, perforation and drainage of alveolar abscesses and pariteal abscesses occur lingually and under the attachments to the mylohyoid ridge.

I would like at this time to give credit to Dr. Walter Hava for a recent and very interesting dissertation on this particular point some time ago before the District Dental Society.

3. Because the third molar by reason of its location in the arch is not easily cleansed nor is it, as a rule, functioning properly in mastication and as a result decay and periodontal disease make rapid headway.

4. Because all too frequently on account of lack of jaw development the third molar cannot assume a fully erupted position in the arch, a gum flap exists over this tooth which acts as a trap for food debris producing congestion and eventually infection. This is a favorite site for specific acute or chronic infection, Vincent's.

5. Because collateral edema incident to infection of the third molar region means difficulty in swallowing and respiratory embarrassment. Complications of third molar infections may be listed as follows:

1. Peritonsillar abscess.
2. Suppurative cellulitis of the floor of mouth and connective tissue planes of the neck.
3. Involvement of salivary glands.
4. Edema of epiglottis.
5. Osteomyelitis.
6. Trismus and false ankylosis.
7. Tumor formation.
8. Ludwig's angina.
9. Reflex disturbances.
10. General toxemia and septicemia.
11. Involvement of other organs distant from

the original site of trouble.

12. Dentigerous cysts in which the third molar is the tooth contained.

Time does not permit lengthy discussion of each of these complications. Each is a subject unto itself but it is my purpose in this short paper to point out certain salient points about the handling of these third molar infections and their more common complications.

The diagnosis and treatment of the average third molar infection in its early stages, be it alveolar abscess, periodontal lesion or infected flap or capsule is relatively easy. There is no excuse for failure to diagnose early third molar troubles if all the diagnostic means at our command are used.

Roentgenograms, transillumination, and clinical examination combined will give the true picture. The treatment of third molar infections in the cold or chronic state is of interest only to the dental surgeon, who using care will bring about uneventful recovery after extraction, or the excision of a gum flap.

The conservative treatment of the acute infections in the hands of the competent dental surgeon will also generally bring about good results. I would emphasize conservative treatment for in acute cases it means the postponement of any trauma until such a time as acute symptoms have subsided.

There are three principal reasons for the all too common severe complications of these infections.

1. The too hasty surgical intervention in these infections in the acute stage, resulting in spreading the infection rather than eliminating it.

2. The unfortunate picture of severe flare ups. Even though surgery is performed under cold conditions, still on account of poor local and systematic resistance or the high virulence of organisms present, post-operative complications manifest themselves.

3. Pure neglect. Failure to heed the advice of dentist or physician to eliminate these veritable smouldering volcanoes, when the necessary minor surgery in time would bring about uneventful recovery.

Let us consider briefly the treatment of the complicated case. This case is treated either by

the dental surgeon who is qualified to do so by hospital training and experience or by the general surgeon to whom the patient presents or to whom the patient is referred by the dentist not familiar with the handling of such cases. The case should be hospitalized immediately, and is prepared just as any other acute surgical case is prepared. As a rule the necessity of incision and drainage is evident.

The infection and pus formation have left the original site and the problem is locating it as soon as possible. The edema and cellulitis of the adjacent tissues in neck are serious considerations from a standpoint of dysphagia and respiratory interference. Couple these annoying symptoms with trismus so frequently present, and the case presents a real problem.

Depending upon the type and virulence of the organisms concerned in the infection, the patient shows signs of toxemia and acidosis which must be combatted. Hot magnesium sulphate packs in water or glycerin are indicated for softening or pointing if the swelling is so pronounced as to indicate the necessity of extraoral drainage. Otherwise ice cap to face and neck and the use of hot water continually in the mouth might allow for intraoral incision and drainage.

As a rule with third molar infections, however, the pus is located below the mylohyoid attachments, and adequate drainage is better obtained by extraoral incision. Another difficulty in the way of intraoral incision for deep seated infection is the danger of reinfection from the mouth flora if tubes or rubber dam are placed in the incision for continuous drainage.

In the abstract the idea is to establish drainage as quickly and as efficiently as possible, as the accompanying cellulitis and edema of the adjacent tissues must be counteracted. Since the infection has left the original site, the extraction of the tooth is rarely indicated for little drainage is affected thereby and the trauma produced, especially in the removal of impactions, merely add to the trouble. The tooth can be taken out at a later date under local after all acute symptoms have subsided.

One of the most difficult problems in the handling of these cases is anesthesia. Local is out of the question if real anesthesia is sought.

All such cases are poor risks as far as general anesthesia is concerned. The possibility of spontaneous rupture inside the mouth or throat with consequent inhalation of septic material into the lungs makes the situation still more serious.

The use of nasal tubes with nitrous oxide or ethylene with throat packs is indicated, therefore in some cases, but even then the respiratory embarrassment caused by the cellulitis and edema plus the effect of toxin absorption on the respiratory function has to be reckoned with. Many cases of staphylococcus and colon bacillus infection with intense swelling, pointing quickly, with pus palpable just under the skin can be opened without anesthesia.

Early and radical counter incisions with fenestrated rubber tube drainage is indicated in the hard swellings involving the submaxillary and submental regions on both sides, although little or no pus is usually encountered in these cases. These are usually streptococcus infections and having all the symptoms of a Ludwig's angina. Serums and vaccines can be used to advantage. We have had some success with the use of streptococcus immunogen and the polyvalent.

Just a few remarks regarding osteomyelitis as a complication of third molar infection. A conservative treatment, including the establishment of drainage intraorally or extraorally, as it is deemed necessary and then watchful waiting is indicated. Roentgenray findings in the early stages are of little use but as necrosis and sequestrum formation occur, the roentgen ray becomes an invaluable aid in locating the sequestra and simplifying their removal. In the meantime a diet rich in calcium, vitamin C and D and plenty of sunshine and rest are of paramount importance in bringing about increased resistance so necessary in stemming the progress of this infection.

These serious third molar complications, although not everyday affairs, occur far too frequently and especially is this true during our economic crisis when people are postponing the proper and early care of their troubles. Add to this the weakening of the defensive barriers occasioned by worry, faulty diet, etc., then it is no wonder that we are confronted with the sad spectacle of conditions which could have easily been prevented. We need a little more co-opera-

tion between the physician and dentist in establishing more early diagnosis of third molar involvements and insistence on their elimination.

There is no excuse for diagnostic failure with the present methods of examination. Relatively few cases of severe post-operative complications result from operations of third molar infection in the cold state. These isolated cases only occur in patients of low resistance and where the organisms involved is of a high virulence.

DISCUSSION

Dr. J. T. Nix: I would like to consider a few of the points of the essayist and simply emphasize what Dr. Tiblier has so well brought out.

I think first of all these cases are distinctly individualistic. We can not lay down any set of rules to follow for all cases. In the few we have had which required consultation of a surgeon-dentist, each was just a little different from every other one. When they are viewed from this angle, when proper and timely care is given, bad results are usually preventable. In nearly every instance where a case came to our notice acutely ill, presenting a serious complication, had that patient been handled differently from the beginning by the surgeon, the dentist or the medical man in charge, the complication in all probability would not have resulted.

I think nearly all authorities agree that in the presence of an extensive fulminating infection surgery should be limited to the least possible amount adequate for drainage.

Another point that should be stressed is that these cases represent real bone surgery. Although this phase of work has been included by the dentist, the oral surgeon, it is truly bone surgery and therefore should be handled in the same manner as we have handled bone surgery in the past. Remember the maxim of the immortal John B. Murphy: "Keep your fingers out of the wound". This is especially true in dealing with conditions of the mouth.

The indefinite term, Ludwig's angina, to my mind, in many instances represents cases improperly handled from the beginning, when definite cellulitis and perhaps lymphadenitis has developed secondarily following an infected tooth. The nature of the organisms may vary. As a rule, however, you will find the staphylococcus, streptococcus and colon bacillus. It, of course, presents definite clinical symptoms and physical signs, but these same signs and symptom are to be found in any locality where this particular variety of infection is present with these specific organisms playing the major role.

I think dental surgeons should also call into consultation the general surgeon, particularly when the infection has gone beyond the mandible and in-

vaded the soft parts, where there is suppurative cellulitis with breaking down and pus formation. Most of these cases should be opened externally and preferably under local anesthesia. I can recall one case very well where an extensive suppurating cellulitis was opened through the mouth and the infection increased very rapidly, the patient dying in forty-eight hours. The patient might have died had the incision been made through the skin, but, to my mind, the danger of an extension of the infection would have been greatly decreased.

I can also recall off-hand two or three cases with retropharyngeal abscesses who died on the operating table when the abscess was opened under general anesthesia. Therefore it can not be stressed too much, when you believe there is an extensive infection with tissue breaking down and a localized accumulation of pus, the patient should be in an operating room where you have the facilities for aspirating pus completely and promptly once the cavity is opened, and the operation should be performed under local anesthesia.

I think vaccine, of course, should be used and in most instances, for the sake of expediency, stock vaccine. Starting off with a large dose usually gives the best results. In a case Dr. Tiblier saw with me about one year ago, I recommended a small initial dose of stock vaccine, increasing the dose as directed on the package. Fortunately the patient recovered because of the combined treatment. But if this same case presented itself today, I would start with a large initial dose of stock vaccine as outlined recently by Dr. Shirley Lyons in the treatment of carbuncles.

I want to thank Dr. Tiblier for the real privilege that I feel in being asked to discuss his excellent and illuminating paper.

Dr. S. L. Tiblier, (closing): There is only one point that I want to emphasize after I express my thanks to Dr. Nix for his discussion of my paper, and that is, his opinion that these cases are practically all preventable. I think this is an important point and all dental surgeons agree in this opinion.

These conditions of mandibular third molars are easily diagnosed, and if we could convince patients of the idea that full mouth roentgen-ray examination and clinical oral examinations should be done more frequently, these severe reactions could be avoided, for infections of the type described would be diagnosed in the dormant chronic state and eliminated before acute symptoms develop.

If examinations are complete, there is no excuse for failure to diagnose such conditions.

As a dental surgeon I would ask your co-operation in advising complete examination when there is a suspicion of the presence of oral chronic infections, especially of lower third molar regions.

Mild subacute flare ups of these chronic infections often occur and should be taken as warning that more serious involvements might follow.

Diagnosis and elimination of these infections is a simple procedure in most cases. Rarely do severe complications arise in the cases operated upon in

the cold state. All cases present the possibility of severe extensive infections if left untreated and hence, call for their removal as early as diagnosed.

I want to thank you again for this opportunity to appear before you and to thank Dr. Nix again for his kind appreciation of the views of the dental surgeon on this subject.

THE PHYSICIAN AND THE NATIONAL RECOVERY ADMINISTRATION

It has been definitely settled that physicians, in the discharge of their professional duties, are not within the terms of the National Industrial Recovery Act. A physician may work as many hours as he finds expedient and for as small compensation as he is willing to accept, and he will violate no law and no federal policy.

THE JOURNAL last week said: "However, if a physician employs more than two persons as attendants in his office, of the class of clerical employees, accountants, laborers and similar types of help, they do come under the National Recovery Act with a minimum wage and certain maximum hours of work." Because of many rulings reported from various parts of the country that were inconsistent with this statement, a ruling was requested from General Thomas S. Hammond, executive director the President's reemployment program. The policy stated in THE JOURNAL, said General Hammond, concerning physicians as employers of certain types of help, is sound and has his approval. Rulings from other sources may be disregarded.

Many physicians have manifested concern because a proposed code of fair practice for the retail drug trade, prepared and published by the National Association of Retail Druggists, contained provisions from which it might be inferred that physicians would be required to purchase medicinal preparations, drugs, pharmaceuticals and chemicals, applicable to the outside or inside of the human body, from retail druggists and to pay retail prices, and that physicians would not be permitted to distribute drugs and medicines to their patients and to receive pay for them. The draft of the proposed code seemed to be designed, too, to prevent hospitals from maintaining drug rooms for the compounding and dispensing of drugs necessary in the operation of the hospital, unless such drug rooms were under the supervision of registered pharmacists or licensed physicians at all times when in operation. In a later draft of this proposed retail drug trade code, these objectionable provisions have been eliminated.

While the draft of a proposed code published by the National Association of Drug Clerks contains the same objectionable provision looking toward the closing of the drug rooms in all hospitals and dispensaries throughout the country, when such drug rooms are not, when in operation, under the constant supervision of registered pharmacists or licensed physicians, it seems hardly likely that this proposal will carry much weight in view of the fact that the National Association of Retail Druggists has eliminated an analogous provision from its draft of a proposed code. The code proposed by the National Association of Drug Clerks, however, is worthy of commendation because there is incorporated in it a specific provision that "in view of the fact that the professional training of a pharmacist does not qualify him to intelligently diagnose and treat diseases, proprietors or employees shall decline to give medical advice and refer the general public seeking such advice to a regular practicing physician." This code properly proposes, too, that "proprietors and employees shall at all times uphold the professional reputation of physicians, in return expecting the same consideration from the medical profession."

In considering the present activities of the government under the National Industrial Recovery Act, it must be borne in mind that they will admittedly lead to increased prices, even if that is not their avowed purpose. In trades and industries, it may be economically sound to increase prices. It can hardly be regarded as economically sound, however, to increase the cost of medical and hospital services to those who are sick and injured and to women during confinement, and thus to add to their burdens. Undoubtedly this aspect of the matter will be taken into consideration by the National Recovery Administration in its endeavors to apply the act to the medical profession and to related activities. The American Medical Association, however, will keep in touch with the situation, to see that the public health is not jeopardized by any decision affecting adversely the interests of those in need of medical services.—*Jour. A. M.*, 101: 606, 1933.

NEW ORLEANS Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

CHANGING TRENDS OF PRACTICE

The practice of medicine as now conducted presents very many different problems from those of twenty-five to fifty years ago. As an example of present day difficulties consider that an enormous section of the population is receiving free treatment for every kind of illness. In the past most of these people were taken care of by individuals economically able to look out for their employees, their servants

and those who worked for them. A large number of the contemporaneous populace pay for minor sicknesses but can not, or will not, pay for severe or long continued illnesses. Figures vary, but probably about forty-five per cent of the population of this country have incomes under \$1,500.00 a year, a sum insufficient to pay for even the most incomplete and most inadequate medical care. Pottenger* states that seventy-nine per cent of the population of San Francisco have incomes under \$2,000.00, so that they are unable, when ill, freely to consult the doctor. This leaves approximately only twenty-one per cent who might be considered able to pay for complete medical care. These startling statistics show the way in which the changing trend of medical practice has turned.

Infant mortality has been reduced nearly sixty per cent in twenty years. Life expansion has jumped eighteen years in the past four decades. Nowadays a very considerable part of the practice of the physician consists in the taking care of old people who are economically dependent and who have to call on others for their very sustenance. The increased bacteriologic and epidemiologic knowledge and advances in sanitary arts have reduced the field of short lived infections, which made up the bulk of the doctor's practice some years ago, the type of disease which the sick man could readily finance. There has been a very large increase in the functional disorders, expressions of disease which are not cured in a day, a week, or a month, but often require long periods of careful attention by the physician before these people recover.

These changing types of practice indicate definitely why in this present era the doctors are having difficulty in making a living. Some change will have to eventuate in the practice of medicine in order to permit the doctor to live in a manner which will compensate him for the years of study that he has given to the learning of his profession, and the thousands of dollars that have been spent in obtaining this medical education. He should be able in his active days to put money enough aside to give him surcease from worry in his old age. The way things are going at the present time this

is possible for only an exceptional few. How best to make it possible for the entire profession or at least the deserving members of our great profession to obtain proper and sufficient emoluments is a problem which confronts the leaders of our profession.

*Pottenger, F. M.: President's Address. *Ann. Int. Med.*, 6:1517, 1933.

TREATMENT OF NEUROSYPHILIS

The recent interest that has been shown in the treatment of certain types of neurosyphilis by the induction of malaria and artificial fever, has more or less focused general attention on this subject. It seems appropriate, therefore, that Hopkins* should report at this time on a series of 1200 patients who were treated in the syphilis division of the Medical Clinic of Johns Hopkins Hospital. This report is peculiarly timely because no similar report has appeared since 1927 at which date necessarily certain of the more modern methods of treatment were not available. The cases were divided into those patients with early neurosyphilis, those with diffuse late neurosyphilis, those with paresis, a group of patients who had tabes, still another with optic atrophy and lastly, those who had vascular neurosyphilis. Of these 1200 patients, only 480 were under treatment and observation two or more years, the average period being approximately ten years. Two hundred of the patients died while under observation. The patients were treated according to six types of therapy: poor treatment—that is, treatment for less than one year; routine treatment—arsphenamine alternating with mercury and bismuth, together with large doses of potassium iodide in courses; intensified routine treatment—larger doses and longer courses of the arsphenamine; routine treatment to which was added intradural injections by the Swift-Ellis method; routine treatment with tryparsamide at weekly intervals, and routine treatment plus malaria. It was found that in early neurosyphilis the best results were obtained with an intensified form of the routine treatment with arsphenamine. In late neurosyphilis routine treatment was inferior to the use of the arsphenamized serum, tryparsamide

or malaria. Malaria was by far the best treatment for paresis or the tabetic form of dementia paralytica. In tabes the best results were obtained with malaria, although tryparsamide was almost equally efficacious. In optic atrophy apparently the subdural injections of arsphenamine were valuable. There were too few patients with vascular neurosyphilis to make a proper statistical study.

An analysis of this excellent presentation would show that it is possible for the general practitioner to carry out satisfactorily, the treatment of the patients with neurosyphilis. Intensified treatment with arsphenamine in large doses and in courses of ten or fifteen injections together with large doses of potassium iodide, should produce results. Tryparsamide may be given by any practitioner of medicine. The only difficulty with the malaria treatment lies in the inability of most men to obtain the plasmodia, with an added responsibility of watching the patient with malaria most closely; it would seem that these patients had better receive treatment in an institution rather than in a private home. The paper would substantiate what has been generally appreciated that the neurosyphilitic patient can be materially helped by active, energetic treatment directed towards eradication of the syphilitic process.

*Hopkins, H. H.: Treatment of Neurosyphilis—Review of Results in Six Hundred and Eighty Patients. *Arch. Int. Med.*, 52:66, 1933.

THE PATHOGENESIS OF ALCOHOLIC POLYNEURITIS

An interesting communication has appeared from the Thorndike Memorial Laboratory in which Minot, Strauss and Cobb* discuss the possible relationship of alcoholic neuritis to the multiple neuritis of beriberi. The concept that multiple neuritis is capable of being produced by dietary deficiency has been virtually neglected in the literature but because of the similarity of the symptoms and pathology of the neuritis of beriberi and alcoholic neuritis, this neglect of a hypothesis which might explain the causation of alcoholic neuritis is rather remarkable. There can be no question but that an individual with alcoholic neuritis is fre-

quently one who eats an abnormal diet, inadequate in protein, minerals and vitamins and composed largely of carbohydrate. This is substantiated by Minot and his workers in their detailed dietary histories of 43 patients in no one of whom had the diet been satisfactory for a period of many months. The gastric analysis of the alcoholic showed the usual finding, low, or no acid, which is common to other types of avitaminoses such as pellagra, pernicious anemia, hyperchromic anemia, and beriberi. Another factor which may explain the inadequacy or insufficiency of utilization of vitamin B is that in the alcoholic there is a marked increase in the total daily metabolism as a result of ingestion of large quantities of alcohol. It is just at this time that the diet is wont to be particularly deficient. Contrasting beriberi it is known the man with sub-clinical beriberi may develop the neuritic symptoms following the raising of the total metabolism by exercise.

It seems logical to assume that dietary defi-

ciency, more particularly the lack of vitamin B₁, does have an important part in the production of alcoholic polyneuritis because it occurs frequently in patients who have grossly inadequate diets; the objective lesions and the subjective symptoms resemble closely dry beriberi; the essential pathology is likewise similar; infection may precipitate the neuritis in both conditions; achlorhydria occurs in many well known deficiency diseases; neuritis may occur in deficiency diseases other than beriberi; the most satisfactory improvement occurs when a diet rich in complete proteins, minerals and vitamins is given to the patient with polyneuritis. The deficiency may be due to inadequate intake of vitamin B₁, to the condition of the gastro-intestinal tract, and the presence of other factors, according to Minot, that inhibit the value of the nutritional elements.

*Minot, G. R., Strauss, M. E., and Cobb S., Alcoholic Polyneuritis: Dietary Deficiency as a Factor in Its Production. *New Eng. J. Med.*, 208: 1244, 1933.

HOSPITAL STAFF TRANSACTIONS

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on August 10 at 6:30 P. M. After the business of the staff and discussion of reports from the records department and analysis of the work of the hospital, the following special case reports were presented:

1. CARCINOMA OF GALL BLADDER.—Dr. J. A. K. Birchett, Jr. Discussed by Dr. R. A. Street, Jr.
2. ENCEPHALITIS FOLLOWING SCARLET FEVER.—Dr. G. C. Jarratt.
3. SPINAL CORD TUMOR.—Dr. R. A. Street, Jr. Discussed by Dr. L. S. Lippincott.

SPECIAL REPORTS:

CARCINOMA OF THE CERVIX UTERI (Lantern Slides).—Dr. L. S. Lippincott.

SELECTED RADIOGRAPHIC STUDIES WERE DEMONSTRATED AND DISCUSSED AS FOLLOWS: Gunshot fracture of femur; exostosis of radius; pulmonary tuberculosis; pulmonary actinomycosis; thorax for discussion; mixillary sinusitis; sphenoidal sinusitis; cholelithiasis; gastric ulcer; ureteral calculus.

THREE MINUTE REPORTS OF THE LITERATURE OF THE MONTH WERE PRESENTED AS FOLLOWS:

Dr. G. M. Street.—Thyrotoxicosis During Pregnancy.

Dr. L. S. Lippincott—Forced Spinal Drainage.

Dr. J. A. Birchett, Jr.—Renal Tuberculosis.

Dr. L. J. Clark—Pernicious Anemia Associated With Carcinoma of Stomach.

Dr. R. A. Street, Jr.—Cancer of the Lip.

The next meeting of the staff will be held on Monday, September 11, at 6:30 P. M.

Leon S. Lippincott,

Secretary.

ABSTRACT.—CARCINOMA OF GALL BLADDER.—Dr. J. A. K. Birchett, Jr.

PATIENT, No. 1.—White female, aged 60 years. PRESENT COMPLAINT.—Pain in abdomen. HISTORY OF PRESENT COMPLAINT.—Last April while working in flower bed was leaning over pulling up weeds when she felt an acute pain in her right abdomen and back. This pain passed off after a few days and there was no more disturbance except a little soreness until three weeks ago when the pain became very acute necessitating hypodermic relief of pain. It is now necessary to take something for pain almost nightly as she complains of inability to rest or sleep and of colicky type of pain over abdomen.

For last two weeks there has been fever and some nausea and elimination has been sluggish although the stools are of good color and there is no

evidence of jaundice. There has been no definite digestive disturbance; able to eat all foods without discomfort. There has been some loss of weight. PAST HISTORY.—Never been seriously ill but once before in life; that was during "flu" epidemic in 1918; recovery without complications. Had attacks of cramp colic in fall of 1930; these lasted only for two or three days and did not recur; could have been gall stone colic.

Has had five children, two of which were twins. No operations. Respiratory history negative, circulatory history negative, digestive history unusually normal, no gas or dyspepsia, not subject to any food disturbance, not constipated, never jaundiced, no abdominal pain. Menstrual History.—Regular, 28 days, duration five days, menopause 15 years ago. PHYSICAL EXAMINATION.—Short fat female of past 50 years, complaining of more or less constant pain in abdomen.

Head: Eyes slight tendency to strabismus, wears glasses. Blood pressure, systolic 140, diastolic 80; lungs normal. Abdomen: Tendency to ptosis, large, pendulous; lower abdomen doughy in consistency; apparently a mass in region of descending colon (roentgenogram of colon after barium enema did not bear this out). Pain over gall bladder region and especially under costal margin directly over normal position of fundus of gall bladder. No pain in back or over kidney region. Pelvis—Essentially negative. LABORATORY FINDINGS.—Gastric analysis normal. Blood: Hemoglobin 92 per cent; erythrocytes 4,620,000, leukocytes 6,800; differential leukocyte count—small lymphocytes 27 per cent; large lymphocytes 2 per cent; monocytes 3 per cent; polymorphonuclear neutrophils, mature forms 36 per cent; band forms 30 per cent; myelocytes, basophilic 1 per cent; eosinophils 1 per cent; no malaria found. Wassermann negative; Kline and Young test, positive (1 plus); Kahn test, positive (2-plus); Eagle flocculation test, doubtful. Urine (catheter specimen): Slightly cloudy, acid, trace of albumin, no sugar; rare hyaline casts; rare pus cells; some leukocytes.

DIAGNOSIS: A diagnosis of cholecystitis, acute and chronic, and possible cholelithiasis was made from physical findings and the roentgenograms which showed a non-filling gall bladder after the dye method of Graham, administered intravenously, and colon and stomach negative. An exploratory operation was devised.

PROCEDURE.—Under gas ether anaesthesia a high upper right rectus incision was made to give adequate exposure to the gall bladder and stomach. Upon opening abdomen we found the liver edge very blunt and evidence of marked hepatitis; there were several masses over liver surface and in substance that suggested possibility of malignancy.

The liver at its under surface was densely adherent to the duodenum and transverse colon which in turn were firmly adherent to gall bladder. These structures were dissected away with caution and a small thick hard mass was identified as the gall bladder. The fundus was picked up and incised, the blade of the scapel coming in contact with a hard mass with feeling of a stone. This proved to be a large single gall stone, the size of a walnut, firmly embedded in the gall bladder and adherent to it. The gall bladder in turn was firmly adherent to the liver and buried almost in its substance. Possibly the swelling of the hepatitis had caused an involvement of the gall bladder. Stone was removed by breaking it up and taking it out piecemeal. The cystic duct was not patent. The common duct and head of pancreas appeared to be negative. There were no masses nor hard areas which gave us impression of stone or growth. The common duct was not exposed because of no jaundice and we did not care to prolong surgery. A tube was placed in fundus of gall bladder after a large piece of thick tissue of fundus had been removed for biopsy. The procedure was fairly well tolerated. A postoperative diagnosis of primary carcinoma of gall bladder was made.

The postoperative progress was uneventful except for rise of temperature to 103°F. the day after operation; this dropped to normal the next morning and remained so. The cholecystotomy tube, only drained serum, no bile. We expected no bile drainage because of the occlusion of the duct. The tube was placed as a safeguard in case bile should flow from the shrunken gall bladder.

Patient discharged on the 16th post operative day in good condition. Has been necessary to see her at home on several occasions and give hypodermics for severe lancinating pain in abdomen. There is still no jaundice or sign of common duct obstruction and she is having two normal stools a day.

Prognosis is necessarily poor because of the presence of malignancy which Dr. Lippincott reported as Grade III adeno-carcinoma of the gall bladder.

PATIENT, No. 2.—White female, aged 64 years, married; first seen May 31, 1926. CHIEF COMPLAINT.—Pain in left side of abdomen, and pain in back. PHYSICAL EXAMINATION. Temperature 98.8°F.; pulse 92, regular; respiration 17, regular. Blood pressure 120/80. Tenderness over liver, gall bladder and appendix. PAST HISTORY.—"Flu" in February, 1926, followed in two weeks by great soreness in abdomen, distention with gas, backache, occasional nausea and vomiting. This continued up to four weeks ago and then vomiting was continuous. For the past two weeks this condition has been better. Has had indigestion all her life, spitting up food, associated with abdomi-

nal pain and colic always on left side. For past three months has suffered much with backache.

Operated upon July 9, 1926.

PREOPERATIVE DIAGNOSIS.—Cholelithiasis, probably malignancy of gall bladder and involvement of liver and glands.

OPERATION.—Upper right rectus incision. Gall bladder covered with adhesions and stony hard. Very hard nodules throughout the liver in region of gall bladder, some as large as a pigeon egg. The wall of the gall bladder near fundus was about 1/2 inch thick, pliable, and solid. Gall bladder contained about one dozen fairly large black stones which were removed. Section of the wall of the gall bladder taken, drain placed inside of gall bladder and one alongside outside of gall bladder. Wound closed. The appendix was not inspected; wall of stomach carefully inspected and found normal. Immediate postoperative condition—Good.

POST OPERATIVE DIAGNOSIS.—Cholelithiasis, probably malignancy of gall bladder.

DISCHARGED—August 8, 1926. Condition unimproved. Patient expired a short while after leaving hospital.

SURGICAL PATHOLOGY.—Section of Gall Bladder Wall—5/x1/2x1/16 to 3/16 inch, irregular shape, smooth one side, irregular other side. Yellow, moderately firm. Few shreds, irregular yellow gray, largest 1/2x1/4x1/8 inch "from gall bladder."

Microscopic—Adeno-carcinoma (Grade II) evidently from glands of mucosa, gall bladder lining hyperplastic some areas; much ulceration, acute inflammatory and caseous necrosis. Considerable chronic inflammatory; much fibrosis.

Six calculi—1/3 to 1/2 inch in diameter, dark chocolate color, smooth, 3 to 6 sided, pyramidal and irregular cuboidal. Hard; light yellow green inside.

DIAGNOSIS: Adeno-carcinoma of gall bladder (Grade II), cholecystitis, acute and chronic, cholelithiasis.

PATIENT, No. 3.—White female, aged 70 years, married, seen March 22, 1926. **CHIEF COMPLAINT.**—Epigastric distress. Attacks last two or three minutes. Intervals one to two weeks. Belching, dyspepsia, not influenced by one food, but by all foods. Bowels constipated, has lost weight definitely in last six months. No edema, no dyspnea. Has had several attacks, last one with acute pain in gall bladder region. No hypodermics. Blood pressure 130. Liver edges hard and one inch below costal margin; slight tenderness. No other masses or tenderness in abdomen. Admitted to hospital March 22, 1926, with diagnosis of cholecystitis, chronic. Discharged March 24, 1926, condition improved.

Readmitted to hospital April 19, 1926. Operation June 19, 1926.

Preoperative Diagnosis: Cholelithiasis, ruptured gall bladder.

OPERATION.—Upper right rectus incision. Liver showed marked induration and white discoloration of right lobe; portion of stomach visible showed nothing abnormal. Gall bladder occupied central portion of mass and inspection was impossible. Attempt to free portion of gall bladder for examination opened a pocket containing gas, turbid fluid and numerous small and large stones, one of these very deeply seated and wedged into what was probably the remains of the gall bladder. After removing all evident stones, tube was placed in the cavity and wound closed to exit of drain.

Postoperative Diagnosis: Cholelithiasis, ruptured gall bladder.

Patient expired July 22, 1926.

Pathological Diagnosis: Carcinoma of gall bladder and associated cholelithiasis.

SURGICAL PATHOLOGY.—1.—Material from gall bladder: (a) 35 calculi, green-brown and gray, from 3/16 inch, pyramidal, to 3/4x5/8 inch, irregular rounded. Mostly smooth, faceted; hard, but friable.

(b) Numerous shreds soft, irregular, red and gray tissue, largest 1x1/2x1/4 inch.

Microscopic: Cylindrical cell carcinoma of gall bladder (Grade IV). Some areas suggest squamous cell carcinoma with pearls. Considerable chronic and acute inflammatory; fibrosis.

2. Section from liver—1/8x1/16x1/16 inch, white-pink, dense.

Microscopic: Similar to tissue from gall bladder; much fibrosis, some granular necrosis. Considerable acute inflammatory; some chronic inflammatory. No liver cells found.

DIAGNOSIS: Cylindrical cell carcinoma of gall bladder (Grade IV), cylindrical cell carcinoma of liver (Grade IV), cholelithiasis.

ABSTRACT.—**ENCEPHALITIS FOLLOWING SCARLET FEVER.**—Dr. G. C. Jarratt.

PATIENT.—White male, aged 7 years; admitted to hospital June 23, 1933. **CHIEF COMPLAINT.**—Cough; sore throat; fever; rash. **PRESENT ILLNESS.**—Mother stated that four days before admission child complained of sore throat and had fever of 103°F. Rash faded in 36 hours. On morning of admission family physician became suspicious of diphtheria because of severe angina and membrane on tonsils. Fever has continued since onset. Slight cough since onset. No known exposure to diphtheria or scarlet fever. **PAST HISTORY.**—Pertussis two years ago; measles two years ago; mumps one year ago. Toxin-antitoxin mixture given two years ago without Schick test. Not vaccinated against small-pox. Typhoid vaccine four

years ago. Frequent attacks of upper respiratory infection and removal of tonsils and adenoids advised six months ago. FAMILY HISTORY.—Not remarkable. PHYSICAL EXAMINATION.—Well developed and nourished; acutely ill; can hardly swallow because of pain in throat. Nasal membrane red. "Strawberry tongue"; tonsils large and covered with white glistening membrane; no membrane; no membrane on pharynx or soft palate but soft palate showed much inflammatory and edema. Several large tender lymph nodes under mandible on both sides. Phimosis. "Mealy" feel to skin on palpation. Physical examination otherwise not remarkable. DIAGNOSIS: Scarlet Fever.

COURSE.—Apparently not diphtheria but usual scarlet fever throat. As had had toxin-antitoxin mixture and scarlet fever streptococcus antitoxin, it was decided to wait for report on throat culture. Throat culture showed no diphtheria bacilli.

June 24: Temperature, 102°F. Throat shows less swelling and no spread of membrane. Throat culture shows streptococci. Urine shows trace of albumin and finely granular casts. Blood: Hemoglobin 67 per cent; erythrocytes 3,730,000; leukocytes 11,000; differential leukocyte count, lymphocytes 32 per cent; polymorph, neutrophils 65 per cent, polymorph eosinophils 3 per cent.

June 25: Temperature 103°F. Throat improving with irrigations of salt solution. Second throat culture negative for diphtheria bacilli.

June 26: Temperature 105.4°F. Slight stiffness of neck; positive ankle clonus; Kernig and Babinski signs positive; knee jerks, hyperactive; no nystagmus; no muscular weakness. Spinal puncture made; fluid under increased pressure and slightly turbid. Cell count 1,249; differential cell count, lymphocytes 20 per cent; polymorphonuclears 80 per cent. Wassermann test negative. Lange's Colloidal Gold test negative. Globulin increased (2 plus); protein increased (2 plus). No tubercle bacilli or other organisms found. Blood: Leukocytes 18,700; differential leukocyte count, lymphocytes 34 per cent; polymorph. neutrophils 59 per cent; polymorph eosinophils 1 per cent; polymorph. basophils 6 per cent.

June 27: Temperature 105°F. Neck stiffness much less; knee jerks hyperactive; ankle clonus present. Looks much improved, eating, rational, and wants to talk. Spinal fluid culture planted June 26 shows no growth. Spinal puncture made and 18 cc. of fluid withdrawn; under pressure; clear; less pressure than on June 26. Cell count 274; lymphocytes 50 per cent; polymorphonuclears 50 per cent; sugar, 55 milligrams per 100 cc.; globulin increased (2 plus); protein increased (2 plus); no organisms found.

June 28: Temperature 103°F. Much brighter and eating and wants to be entertained. Much less stiffness of neck; ankle clonus absent; knee jerks

only slightly increased. Slight desquamation of abdomen, legs, arms, and around finger and toe tips. Spinal fluid cultures planted on June 26 and 27 show no growth. Spinal puncture shows clear fluid; pressure normal; cell count 234; lymphocytes 58 per cent; polymorphnuclears 42 per cent; protein increased (2 plus); globulin increased (2 plus); sugar 58 mg. per 100 cc.; Lange's Colloidal Gold test negative; no organisms found.

July 2: Temperature 100.4°F. No stiffness of neck; knee jerks slightly hyper-active; complains of pain in site of lumbar puncture when sitting up. All spinal fluid cultures negative. Spinal puncture made and 2 cc. of clear fluid under no pressure withdrawn; cell count 131; lymphocytes 79 per cent; polymorphonuclears 21 per cent; globulin increased (1 plus); protein increased (1 plus); no organisms found.

July 5: Temperature 101°F. No complaint. No abnormal or neurological findings except hyper-active knee jerks. Spinal fluid cultures negative. Spinal puncture made and 2 cc. of clear fluid without pressure withdrawn; cell count 66; lymphocytes 82 per cent; polymorphonuclears 18 per cent; globulin increased (1 plus); protein increased (1 plus); no organisms found. Mantoux test (1-1000) negative. Schick test negative.

July 14. Temperature 100°F. Doing well; no complaint except mild headache at times. No abnormal neurological findings except ankle clonus at times and slightly increased knee jerks. Toes and fingers peeling. Spinal puncture; pressure normal. Cell count 5; lymphocytes 72 per cent; polymorphonuclears 28 per cent; globulin not increased; protein not increased; no organisms.

Daily urine examinations showed nothing remarkable. Patient discharged on July 23 after being up in wheel chair for one week. No sequelae.

FINAL DIAGNOSIS: Scarlet fever with post scarlet fever encephalitis.

ABSTRACT.—SPINAL CORD TUMOR.—Dr. R. A. Street, Jr.

PATIENT.—White male, aged 22 years; admitted to hospital June 22, 1933. CHIEF COMPLAINT.—Paralysis of the arms and legs, dura-COMPLAINT.—Illness began with loss of sensation and muscular paralysis of left arm, followed in order by same conditions in left leg, right arm, and right leg. No diplopia, nystagmus, or vertigo. Pain and stiffness of neck; unable to move head in any direction without much pain. No vomiting or abdominal pain. No urinary incontinence but marked urgency and frequency without burning. Appetite fair; much nausea after eating. No cough or chest pain. Marked insomnia. Loss of fifteen pounds in weight. For past few days difficulty in speech and mouth distorted when attempt is made to talk. Moderate fever for three weeks; no chills

or rigors and no night sweats. For past two days difficulty in breathing. No palpitation. Frequent occipital headaches. PAST HISTORY.—Acutes gonorrhoea one year ago. Wassermann test said to be negative at that time. Ten months ago, following a severe sore throat with fever and general malaise several swollen, painless glands were noted in the anterior cervical group on the right side for one week. During past winter frequent attacks of tonsillitis for which treatment was given and tonsillectomy advised. Five weeks ago tonsils were removed. Second day following operation, rather severe secondary hemorrhage, necessitating blood transfusion. Gradual improvement and in fairly good general physical condition up to onset of present illness. FAMILY HISTORY.—Not remarkable. PHYSICAL EXAMINATION.—Temperature 99.2° F.; pulse 100; respiration 22; blood pressure 110/70. Well developed; appears undernourished and chronically ill. Several almond sized glands along anterior border of right sternocleidomastoid muscle; not tender; apparently attached to underlying tissues. Marked stiffness of neck; no Kernig. Generalized enlargement of lymph nodes, axillary, inguinal, and epitrochlear; no tenderness. Thorax: Symmetrical; no movement of left side on inspiration. Diminished voice and breath sounds over entire left side of thorax; diminished fremitus over same area; no rales; percussion note normal over entire lung area. No enlargement of heart; rate rapid; sounds regular and rhythmic; loud blowing systolic murmur at apex. Abdomen: Soft and flat; no masses; no herniae. Genitalia not remarkable. Rectal examination showed no masses or tenderness; prostate normal. Extremities: Limp and flaccid; some muscular atrophy. Reflexes: Deep reflexes of lower extremities very active. Ankleclonus present on both sides; positive Babinski on both sides. Gordon-Oppenheim reflex not positive. Loss of deep reflexes in upper extremities. Abdominal reflexes absent. Cremasteric reflexes absent on both sides. Speech: Difficulty in enunciation of words and mouth is twisted in a peculiar fashion when talking. Sensory: Complete loss of pain and temperature sense and loss of tactile discrimination over entire body and both extremities except head and neck. Deep sensibility is rather hard to estimate due to lack of co-operation of patient. Motor: Flaccidity of muscles of upper extremity. Muscles of lower extremity give feeling of spastic type of paralysis, although legs can be moved at ease. No motor change in muscles of face, eye-lids, or soft palate. Vaso-Motor: Skin has a greasy appearance. No tests were made for gait or position sense due to condition of patient. Spine: No curvatures or tenderness; no costo-vertebral tenderness.

CLINICAL LABORATORY.—Blood: Hemoglobin 77, erythrocytes 3,850,000; leukocytes 4,600; differ-

ential leukocyte count: small lymphocytes 29; large lymphocytes 2; monocytes 5; neutrophils, mature 21; neutrophils, immature 43. Some moderately ripe, few ripe and rare ring form tertian malarial parasites. Reticulocytes 0.5. Urine: Few pus and rare finely granular casts; rare pus cells. Serology: test; positive (three plus); Kahn test positive Blood Wassermann, negative; Kline and Young (three plus); Eagle flocculation test positive. Cerebro-Spinal Fluid: Globulin increased (three plus); protein increased (four plus); Fehling's solution, delayed reaction (one plus); Lange's colloidal gold curve typical of paresis. Wassermann test anticomplementary; Eagle flocculation test negative.

COURSE.—Patient complained of pains in arms and lower limbs on admission. Given conservative treatment and sedatives for rest. The next day involuntary urination was noted and unable to expel an enema. Spinal tap did not show increased pressure; fluid was clear; only a small amount obtained. Quinine given for malaria. General condition fair. The next three days were rather uneventful with little improvement. On the night of the sixth day, patient began to have more marked difficulty in breathing and complained of rattling in throat; condition much worse; rate of respiration greatly increased. Expired suddenly early on the morning of the seventh day.

Autopsy showed glioma (spongioblastoma multiforme) of upper cervical cord, apparently involving whole of diameter of cord; membranes invaded; meningitis, chronic; encephalitis, chronic.

ABSTRACT.—CARCINOMA OF THE CERVIX UTERI.—Dr. Leon S. Lippincott.

Of 470 cervix specimens examined microscopically, 93 showed carcinoma (19.79).

Of 57 patients with carcinoma of the cervix, 51 were married; two were single; four (colored), marital status not known.

Of 45 patients with carcinoma of the cervix, 3 were pregnant.

There was one stump cancer, occurring 10 years after hysterectomy for fibroids.

Complaints when first seen (45 cases): Pain—cervix and perineum (1); back (12); abdomen (14); legs (7); hips (4); arm (1); pelvis (3); head (33). Discharge—leukorrhoea (7); mucoid followed by blood (2); leukorrhoea followed by blood (3); flooding (9); bleeding (13); blood after coitus (1); profuse menstruation (2); irregular menstruation (1); painful menstruation (1). Loss of weight (11); fever (2); weakness (6); fatigue (1); vomiting (2); diarrhoea (1); gaseous distention (1).

Of 91 cases of carcinoma of the cervix, there were cylindrical carcinoma (1); (1.1); adenocarcinoma 2 (2.2); squamous cell carcinoma 88 (96.7). The cylindrical cell carcinoma was Grade IV; one

adenoma was Grade III; seventeen squamous cell carcinomas were Grade I. (19.32); thirteen were Grade II. (14.77); nineteen were Grade III. (21.59); thirty-nine were Grade IV. (44.32).

Of 83 squamous cell carcinomas, there were nine age 20-29 (10.84); thirty-one 30-39 (37.35); twenty-three, age 40-49 (27.71); fourteen, age 50-59 (16.87); six, age 60-69 (7.23). The youngest patients were twenty-four years of age (1 white and 1 colored); oldest sixty-eight years (white). The average age of 52 white patients was 43 years; of 31 colored patients 31 years.

AGE	COLOR	MALIGNANCY
Age 20-29	White (7)	Colored (2)
Grade I.	4	0
Grade II.	1	1
Grade III.	1	1
Grade IV.	1	0
Age 30-39	White (17)	Colored (14)
Grade I.	5	1
Grade II.	3	1
Grade III.	1	5
Grade IV.	8	7
Age 40-49	White (14)	Colored (9)
Grade I.	2	1
Grade II.	3	0
Grade III.	2	1
Grade IV.	7	7
Age 50-59	White (10)	Colored (4)
Grade I.	4	0
Grade II.	2	1
Grade III.	3	0
Grade IV.	1	3

Age 60-69	White (5)	Colored (1)
Grade I.	0	0
Grade II.	1	0
Grade III.	2	0
Grade IV.	2	1

AVERAGE AGE AND MALIGNANCY			
Grade	No.	Av. Age	Inclusive Ages
I.	17	40	24-56
II.	13	43	28-58
III.	16	42	24-64
IV.	36	43	28-68

Definite knowledge of thirty-five patients with carcinoma of the cervix is available as follows:

Living (27). TIME	GRADE			
	IV.	III.	II.	I.
One Year	2	1	1	2
Two Years	2	1	1	
Three Years	1		4	
Four Years	1	1		1
Five Years		2		
Six Years	1		1	
Seven Years			1	
Nine Years			1	1
	7	5	9	6 (27)
Treated and Dead (8) TIME	GRADE			
	IV.	III.	II.	I.
One Year	3			
Two Years	3			
Three Years		1		
Six Years			1	
	6	1	1	(8)

LOUISIANA STATE MEDICAL SOCIETY NEWS

MEDICAL RESERVE CORPS

The medico-military course of inactive duty training for Medical Department Reserve officers, which has been held at the Mayo Clinic during the past four years, will again be held this year from October 1 to 14, both dates, inclusive. This inactive duty training will follow the plan so well worked out under the auspices of Colonel George A. Skinner and the military features will be under his personal supervision.

This type of military medical training is now well established and has proved its worth during the past four years. The course offers valuable and interesting training for the Medical Department officers of all the components of our national defense. The staff and faculty of the Mayo Clinic have again placed their unexcelled facilities at the service of their government in the interest of preparedness, and have extended an invitation to all the services to participate.

This short course is equally applicable to general practitioners and specialists. The morning hours are devoted to purely professional subjects selected by the student officers. The afternoon hours pertain solely to medico-military subjects and the evening hours are covered in a lyceum course of general interest.

Application for this course of inactive duty training should be made to the Corps Area Surgeon, Seventh Corps Area, Omaha, Nebraska. Applications should state the character of the work the candidate desire to follow in the morning hours. All student officers are expected to attend and participate in the afternoon and evening sessions. Each applicant should fully understand that the invitation to accept this course of study without charge is extended by the Mayo Clinic, that the project is without expense to the Government; and that one hundred hours' credit will be given those who take and complete the course. While it is

desirable to attend the entire course, those whose time will not permit this may join or leave at any time and will receive credit for the hours spent in training. Uniforms are optional.

ST. LANDRY PARISH

At a called meeting of the St. Landry Parish Medical Society, called for the purpose of noticing the demise of Dr. E. Denegre Martin, the following resolution offered by Dr. F. J. Mayer was unanimously adopted.

Whereas, Dr. E. Denegre Martin, a native of St. Landry Parish, has crossed the Great Divide at the ripe age of three score years and ten; the St. Landry Parish Medical Society deplores the loss of a native son, whose high standing in the surgical ranks of the South, reflects honor on his native Parish.

Resolved: that this tribute to his memory be spread upon the minutes, and a copy sent to his bereaved widow, with the condolences of this body, each member feeling the personal loss of a dear and honored friend.

MADISON, EAST CARROLL AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its regular monthly meeting in Epps, Louisiana, on Tuesday, August 1, 1933, at 7:30 p. m. The following members and guests were present: Doctors W. H. Hamley, J. P. Davis, G. Douglas Williams, B. C. Abernathy, of East Carroll Parish; Doctors W. McG. Dollerhide, B. L. Bailey, J. L. Kelly, Dan Kelly, T. N. Pulley, C. M. Petty of West Carroll Parish; Doctors G. W. Gaines and B. T. Ferguson of Madison Parish; Doctor S. W. Douglas of Eudora, Arkansas; and Doctor John Snelling of Monroe, Louisiana.

The guest Essayists of the evening were Dr. John Enelling of Monroe, Louisiana, and Dr. S. W. Douglas of Eudora, Arkansas. Dr. Snelling presented a paper on "Lowering Mortality and Morbidity Rate in Acute Appendicitis".

Dr. Douglas presented a paper on "The Relation of the Physician to Society".

Dr. Dan Kelly presented a paper on "Hookworm Diseases".

These papers were freely discussed by the members of the Society and the guests.

The next meeting will be held in Oak Grove, on Tuesday, September 5, 1933, at 7:30 p. m.

G. Douglas Williams, M. D.
Secretary.

UNITED STATES PUBLIC HEALTH SERVICE
Assistant Surgeon M. K. King, Relieved from

duty at New Orleans, La., and assigned to duty at the Marine Hospital, Savannah, Ga. July 7, 1933.

Surgeon T. J. Liddell. Relieved from duty at New Orleans, La. on or about August 15, and assigned to duty at the Marine Hospital, Chicago, Ill. August 3, 1933.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending July 15, 1933, there were 130 deaths in the City of New Orleans, with a death rate of 14.1. There were 73 white deaths and 48 colored deaths. There were only 19 deaths in this week of children under one year. For the week ending July 22 the total deaths had increased to 146. During this week the infant mortality rate in the colored was 92 and 62 in the white. For the week ending July 19, the total deaths were 126, being almost evenly divided between the two races, being 65 white and 61 colored. There were 7 deaths in children under one year. For the week ending August 5 the total deaths were 156 with a death rate of 16.9. Of these there were 81 white and 75 colored. The total infant mortality under one year was 12, 6 white and 6 colored, the mortality rate being 53 and 92 respectively.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information.

For the week ending July 22 there were 36 cases of cancer, 13 of diphtheria, 14 of gonorrhoea, 38 of malaria, 52 of pneumonia, 52 of pulmonary tuberculosis, 116 of syphilis, 11 of septicemia, 38 of typhoid fever, 21 of whooping cough. There was one case of epidemic cerebrospinal meningitis reported in the Parish of Orleans. Five cases of typhoid fever reported by the City Board of Health, New Orleans, were imported. There was one case of leprosy from the Parish of Orleans. Reported cases of pellegra were 9 as compared with 15 in the corresponding week in 1932 and 22 for the previous week of 1933. In the thirtieth week of the year ending July 29, the most noticeable feature of the report was the increase in the number of cases of malaria reported, there being 92 cases reported as compared with 38 reported the previous week and 24 reported the corresponding week of last year. There were 28 cases of typhoid fever reported. A case of anthrax was reported from Cameron Parish. There were only 5 cases of gonorrhoea reported during this week. For the week ending August 5 the malaria cases reported

were 96. A note appended to this report, however, stated that the unusual number of malaria cases reported during the last two weeks is the result of special survey in several parishes in the State. A case of typhus fever was reported in Orleans Parish during this week. There were 45 cases of pneumonia, 53 of typhoid fever, 2 of poliomyelitis, one in the Parish of Orleans and one in the Parish of Winn. During the week ending August 12 a case of tularemia was reported, 55 cases of typhoid, 74 cases of malaria, and 6 cases of small pox all in LaSalle Parish.

WOMAN'S AUXILIARY NEWS

OFFICERS OF THE WOMAN'S AUXILIARY OF THE LOUISIANA STATE MEDICAL SOCIETY

President—Mrs. John H. Musser, New Orleans.

President-Elect—Mrs. T. Henry Watkins, Lake Charles.

Recording Secretary—Mrs. Francis E. Lejeune, New Orleans.

Corresponding Secretary—Mrs. S. Chaille Jamison, New Orleans.

Treasurer—Mrs. Isidore Cohn, New Orleans.

Vice-Presidents—Mrs. George Kreeger, Lake Charles; Mrs. William J. Norfleet, Shreveport; Mrs. John B. Benton, Minden.

Parliamentarium—Mrs. Charles E. Rew, Shreveport.

Chairmen of Standing Committees

Organization—Mrs. George Kreeger, Lake Charles.

Program—Mrs. Jacob M. Bobenheimer, Shreveport.

Finance—Mrs. Alfred D. Tisdale, Monroe.

Legislation—Mrs. John L. Scales, Shreveport.

Public Relations—Mrs. Frederick G. Ellis, Shreveport.

Hygiene—Mrs. L. Walter Gorton, Shreveport.

Revisions—Mrs. Roy B. Leavell, Bastrop.

Press and Publicity—Mrs. Wiley R. Buffington, New Orleans.

Printing—Mrs. Brooke C. Garrett, Shreveport.

Archives—Mrs. Michael Shelly Picard, Shreveport.

Historian—Mrs. Herman B. Gessner, New Orleans.

Exhibits—Mrs. W. P. Bordelon, Lake Charles.

Councilors

1st—Mrs. H. E. Bernadas, New Orleans.

2nd—Mrs. A. I. Levin, New Orleans.

3rd—Mrs. P. A. Boykins, Jeanerette.

4th—Mrs. M. J. Rivenbark, Haynesville.

5th—Mrs. C. P. Gray, Monroe.

6th—Mrs. E. M. Levert, St. Francisville.

7th—Mrs. Olin Moss, Lake Charles.

8th—Mrs. D. C. McBride, Alexandria.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

FROM OUR PRESIDENT TO EACH MEMBER OF MISSISSIPPI MEDICAL ASSOCIATION

I wish again to call the attention of the members of the Mississippi State Medical Association to the importance of increasing the membership of our county or component societies. These societies are the very foundation of organized medicine. Unless we build up a strong active membership in them we cannot hope to have an efficient State Medical Association. Our State Association can only be as strong as the foundation upon which it rests. The importance of a strong, militant organization was never so necessary as it is today. Whether we like it or not the day of individualism has passed. We physicians must realize that it is only by teamwork that we may be able to promote the best interests of the profession and preserve unchanged the high ideals that have guided the conduct of our profession in the years past.

A steady drive for increased membership should be begun without delay and continued until every eligible physician is enrolled in organized medicine. A survey of the state reveals the fact that

we have fourteen hundred physicians registered to practice medicine in the State of Mississippi. The report of the secretary of the State Association showed that on February 1, 1933, we had seven hundred seventy-seven active members. On this same date there were six hundred twenty-three physicians practicing in the state, who were not members of any medical society. Our percentage of membership was, therefore, only slightly above 55 per cent. We must materially increase this percentage. The duty devolves on each officer and member to see that every eligible physician in Mississippi is brought into organized medicine by February 1, 1934.

The State Association is your organization. It will be just what you make it. Without your aid your state officers can accomplish very little.

Each individual member should feel that it is his duty to work unceasingly to build it as strong as possible. There should be no slackers in our ranks. I ask the active cooperation of each individual member in our endeavor to build up the membership of the component societies to the highest possible point during this year.

In order to systematize our organization work, I have divided the state into three divisions;—namely, the first or North Mississippi Division, comprising the first, second, and third councilors' districts; the second or Central Mississippi Division, composed of the fourth, fifth, and sixth councilors' districts; and the third or South Mississippi Division made up of the seventh, eighth, and ninth councilors' districts.

The organization work in the North Mississippi Division will be under the supervision of Vice-President E. R. Nobles of Rosedale. In the Central Mississippi Division the work will be under the direction of Vice-President J. A. K. Birchett, Jr. of Vicksburg. In the South Mississippi Division, Vice-President C. C. Hightower of Hattiesburg will be in charge.

Section II, Chapter VII of our By-Laws provides as follows: "The president-elect shall be in charge of the work of organization under the direction of the president and shall direct and advise with the vice-presidents and councilors in this phase of their work." Complying with this section of our By-Laws, Dr. E. C. Parker, President-Elect, is in charge of organization work throughout the state. I have asked the vice-presidents to report to him concerning organization work in their respective divisions. The councilors are requested to report to the vice-presidents in charge of the division in which their respective districts may be placed.

A list of non-members as shown by the secretary's report of February 1, 1933, arranged by divisions, councilor's districts, component societies, and counties has been sent to the president-elect, the vice-presidents, and the councilors.

I wish to again emphasize the importance of strengthening in every possible way our county or component societies. I hope that this drive for new members will be started at once and continued throughout the year in order that we may show a healthy increase in membership by February 1, 1934.

Fraternally,
J. W. D. Dicks,
President.

Natchez,
August 5, 1933.

LET'S SUPPORT OUR JOURNAL

Did you read the editorial, "To Our Readers," in the August number of our Journal? It is deserving of serious consideration by every member of the Mississippi State Medical Association. The New Orleans Medical and Surgical Journal is the official organ of our association and its size and make-up reflect our thought and standing. There

is no question that an association is judged by its official organ.

Just the same as you and I, our Journal has felt the financial difficulties of the last few years—its income which goes to make the Journal has been seriously impaired. This is partly due to the fact that our membership is less than in some former times. Our president, Dr. J. W. D. Dicks, through a carefully thought out set-up, is seeking to remedy this shortage through the president-elect, the vice-presidents and councilors of the State Association and through the vice-presidents of the component societies. His efforts are distinctly worthy of your support and demand your active co-operation. Every member of this Association can do much to bring into membership those reputable physicians not now enrolled. Whenever you meet a man who is not a member and you know he is eligible, talk to him, show him the advantages and present need of organization and medical legal protection; tell him that only through membership in his county society can he be a member of the State Medical Association, the American Medical Association, or the Southern Medical Association. And not the least of the advantages of membership is the fact that his dues brings to him every month the New Orleans Medical and Surgical Journal and the direct thought of his own people whose problems and activities are the same as his own.

Just as serious from the financial standpoint of our Journal is the loss of advertising suffered in the last few years. And here again every member of the Association can be of real help. You are constantly purchasing medical supplies, drugs, instruments, biologicals, medical books, and a vast number of other things necessary to your practice. The people from whom you purchase profit through your patronage. Those people may rightly be expected to reciprocate to some degree by supporting your official organ through advertising where advertising would bring them still further sales. If all of the members of the Mississippi State Medical Association and the Louisiana State Medical Society would ask every detail man who calls and every business house of whom they buy if they advertise in the Journal and, if not, why not; if then they would buy only of those people who do advertise, it would not be long before our Journal would be out of financial difficulties. In thus insisting, you are not asking anything unreasonable. The advertising pages of the Journal are your safe-guard; every advertisement must pass the critical investigation of the American Medical Association; you know that an article or product advertised in the Journal is ethical, reliable and dependable. While everything that is reliable and dependable is not advertised in the Journal, the

advertising pages are a guide which you can use with reason. You can well show your confidence in and support of organized medicine by stating frankly to salesmen that you use our official Journal as a guide to your buying. Greatest success always comes from working together. If you help me and I help you, we can accomplish much more than if you do all the helping and I do nothing.

Following the publication of the editorial in the last number of the Journal, a physician of Mississippi wrote the following letter to a supply house with which it has done business:

"August 2, 1933.

"Dear Sirs:

"For a long time we have been buying biologicals and other supplies from you. Our relations have been very pleasant and from my point of view, I would like to have them continue.

"I find myself in an embarrassing position. The Mississippi State Medical Association shares with the Louisiana State Medical Society and the Orleans Parish Medical Society the New Orleans Medical and Surgical Journal. It is our official journal and in it are published the papers read before the State Association as well as monthly news and hospital items of this state.

"There is a strong feeling that members of the Association should purchase supplies from those business organizations which see fit to advertise in our journal. It has been noticeable for a considerable period that has been missing among the companies selling similar products. As a member of the Association, I feel that there should be cooperation, and it will be rather difficult for me to explain why I do not live up to my convictions. I shall have to take a definite stand in the matter.

"I shall appreciate it very much if you will let me have your thought in regard to advertising in the Journal."

"Sincerely yours,"

LET'S GET BEHIND OUR JOURNAL. LET'S INSIST ON THE APPLICATION OF THE GOLDEN RULE.

COUNTY SOCIETY MEMBERSHIP

In another column is a message from our President, Dr. J. W. D. Dicks, in which he calls serious attention of the members of the Mississippi State Medical Association to the problems confronting and energetic action, and the necessity of securing the help of those ethical physicians not now enrolled in the Association in order to present a united front. As the leader in Mississippi, Dr. Dicks points out that every member has a duty.

It is to be hoped and expected that Dr. Dicks will receive active and helpful support.

One may well wonder if the loss in membership of the Association is not greater than the circumstances make really necessary. There are many factors to be considered. It is possible that the financial conditions of the past few years may have been sometimes used as an excuse to drop membership. Nowadays in order to sell successfully, real value must be given for money paid. There are those who believe as did Dr. Howard, that the big society with only two to four meetings a year does not accomplish the purpose for which county societies were intended. Frequent meetings within easy reach of all members, where doctors may get together and discuss local matters and exchange ideas bearing on local conditions is important. It is also possible that membership in the large societies depends more on loyalty to organized medicine than on value received and in many cases there may be a limit to which loyalty will carry especially if money is rather short.

It is not difficult to understand that a doctor practising in the country away from others, who has to travel one hundred miles or more to attend a meeting with program made up of papers on complicated surgical procedures of which he knows little and for which he has less use, might feel that it was not worth the cost in money, time and effort.

Programs means a great deal. Every program should have at least one or more papers and discussions of general interest to the country practitioner. Those same country practitioners should be urged and, if necessary at first, required to present papers themselves. When a man is doing something for his society, he is an interested member.

It is possible to enroll eighty-five per cent of the desirable doctors of Mississippi in organized medicine. But, many must be shown that they cannot stay outside.

DELTA MEDICAL SOCIETY

The second meeting of the Delta Medical Society for this year will be held Wednesday, October 11, at Belzoni.

F. M. Acree,
Secretary.

EAST MISSISSIPPI MEDICAL NEWS

The regular meeting of the East Mississippi Medical Society which was to be held on the fair grounds of Neshoba county on August 17, has been postponed and will be held at the above named place on Thursday, August 24, beginning at 2:30 P. M.

At this meeting Kemper, Clark and Leake coun-

ties are to be officially united with the East Mississippi Medical Society and other business of importance will be taken up.

The following program has been prepared:

Resection of the Presacral Nerve for the Relief of Pelvic Pain.—Dr. Frank Hagaman, Jackson.

Discussion opened by Dr. C. H. Harrison.

Doctors' Business.—Dr. A. C. Bryan, Meridian.

General discussion.

This is the first meeting of this nature we have for this year and is given through invitation by Neshoba county physicians.

T. L. Bennett,
Secretary.

Meridian,

August 10, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

August Meeting—King's Daughters' Hospital, Gulfport, Wednesday, August 2, at 7:30 P. M.

E. A. Trudeau,
Secretary.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg on August 8, with 23 members and three guests present. After a supper served at 7 p. m. and the reading and adoption of the minutes, the following papers and discussions were presented:

1. Paralysis of the External Muscles of the Eye—Dr. C. J. Edwards.

Discussed by Drs. H. H. Johnston, and E. H. Jones. Dr. Edwards closed.

2. Hyperparathyroidism—Dr. L. J. Clark.

Discussed by Drs. Allen Grimes, L. S. Lippincott and W. D. Anderson. Dr. Clark closed.

Dr. L. J. Clark, Vicksburg was chairman of the program committee.

The Society voted to oppose the proposed changes in the By-Laws of the Mississippi State Medical Association to make a member who engages in contract practice subject to expulsion from his component society.

At the request of the chairman of the local committee of the President's Emergency Reemployment Campaign, Dr. L. S. Lippincott was elected as representative of the Society on the committee.

Dr. H. H. Austin, Bovina, a former member of this society, was reinstated.

The next meeting of the Society will be held at the Hotel Vicksburg, Tuesday, September 12, at 7 p. m. Dr. F. Michael Smith, Program Chairman, has announced the following papers and discussions for the September meeting:

1. Congenital Syphilis—Dr. G. C. Jarratt.
Discussion to be opened by Dr. W. P. Robert.
2. Allergic Nasal Conditions with Case Reports—Dr. Edley H. Jones.
Discussion to be opened by Dr. H. H. Johnston.
3. Essentials In Smallpox Prevention—Dr. F. Michael Smith.
Discussion to be opened by Dr. T. P. Sparks, Jr.

TRI COUNTY MEDICAL SOCIETY

The regular meeting of the Tri-County Medical Society was held at Tylertown, June 13.

A little spice and variety to the program was enjoyed by the addition of unusually interesting and instructive papers given by our honor guests, Mr. Thomas P. Brady, Brookhaven, subject, "The Law of Negligence and Malpractice As Applied To Physicians;" and Dr. Robert H. Brumfield, McComb, subject, "Treatment of Abdominal Pain".

Dr. W. H. Frizell, Brookhaven, Councilor for this district very ably discussed "Our Legal Defense," and clearly defined what we might and might not expect from this department.

Dr. O. N. Arrington, Brookhaven, gave us an interesting paper, subject, "Significance of Abdominal Pain."

An arrangement for the exchange of essayists between the Tri-County and Central Medical Societies was discussed, voted and adopted.

Dinner was served at the hotel at 12:30 p. m.

H. R. Fairfax,
Secretary.

Brookhaven,
June 21, 1933.

CLAIBORNE COUNTY

The friends of Dr. E. D. Barron, of Patterson, will be glad to learn of his improved condition.

Dr. G. W. Acker is enjoying a vacation visiting the Century of Progress Exposition in Chicago. From there, he goes to his summer home in Michigan.

We regret to learn of the illness of Dr. E. P. James, of Hermanville, necessitating hospitalization.

Dr. and Mrs. W. N. Jenkins, of Port Gibson spent a week at the World's Fair in Chicago. Dr. Jenkins also attended the convention of Illinois Central Railroad Surgeons.

W. N. Jenkins,
County Editor.

Port Gibson,
August 4, 1933.

DESOTO COUNTY

There is a dearth of news among the fraternity this month.

The oldest physician in the county in age but

not in appearance is Dr. W. A. Powell of Hernando. The doctor lives in a fine old two-and-a-half story antebellum home just out of Nesbitt on the Jefferson Davis Highway.

He delights to entertain his grandchildren and friends and as the shadows gather around him he can look back on a well spent life and forward to a happy home beyond.

L. L. Minor,
County Editor.

Memphis,
Route 4,
August 10, 1933.

HINDS COUNTY

Dr. J. F. Armstrong and Dr. L. W. Long are away on a two weeks' camp with the National Guard now training at Alexandria, La. Dr. J. E. McDill is also attending the same camp.

There where no meetings of the staffs of the various hospitals in Jackson. The staff meetings are not held during the months of July and August.

Dr. G. W. F. Rembert has been in Memphis visiting Dr. Julius Crisler who has been confined to the hospital there following a recent operation. We are all delighted that Dr. Crisler is recovering nicely.

On July 26, Dr. N. C. Womack read a paper on "Some Pediatric Problems" at Lexington before the Winona District Medical Society. He reports a mighty good time.

We regret very much to have to report the death of Dr. J. Preston Kennedy of Greenwood, who died here in Jackson on August 5, at the Baptist Hospital.

W. F. Hand,
County Editor.

Jackson,
August 9, 1933.

ISSAQUENA COUNTY

The scribe from Issaquena County has not reported as often as he would like, but not altogether his fault.

On account of the very limited number of physicians in Issaquena we cannot offer much worthwhile news of our medical men and their families. There are only three of us, and this scribe is one of the three. He is modest beyond his years, and has a delicacy in writing about himself, but in this case he cannot help it. He knows it would never do for him to send in an item about one or two of our doctors without mentioning the third.

One of the trio enjoyed a trip to Memphis on August 6, and was struck by the fact that the planters of the three upper delta counties are not plowing up their cotton by Government orders,

while the field of the lower counties are white with open cotton bolls already plowed under by the same order. Another proof of the futility of trying to get farmers to cooperate.

Two of us, members of our County Board of Supervisors, visited Jackson recently to confer with the State Welfare Board in regard to the continuation of R. F. C. relief in our country. We will dispense with it after August.

A third member was fortunate in attending the August meeting of the Issaquena-Sharkey-Warren Counties Medical Society in Vicksburg on the 8th inst. A recent innovation of this society is the banquet which immediately precedes each meeting. This feature has proved to be a drawing card, and is materially increasing the attendance. Formerly a dutch lunch followed each meeting, but the banquet at the same price, is proving more popular.

Dr. T. W. Huey, Grace, was elected part time health officer of Issaquena County at the August meeting of the Board of Supervisors. Pardon the mentioning of names, but it was necessary in this instance.

W. H. Scudder,
County Editor.

Mayesville,
August 10, 1933.

LEFLORE COUNTY

Dr. Fred W. Adams of Brooklyn, N. Y., recently visited his brother, Dr. J. C. Adams, of this place.

Dr. A. H. Little of Oxford was the guest of Drs. Gillespie and Otken on July 15.

Dr. G. Y. Gillespie of Duck Hill, spent July 19 in Greenwood with his son, Dr. G. Y. Gillespie, Jr.

Dr. F. B. Mitman of Huntington, Indiana, stopped over in Greenwood to visit some friends after a trip to Cuba.

Those attending the funeral of Dr. J. P. Kennedy at Jackson were: Drs. J. C. Adams, George Baskerville, I. B. Bright, W. B. Dickins, G. Y. Gillespie, Jr., L. B. Otken, F. M. Sandifer, W. G. Tabb, of Greenwood, Dr. Edgar Giles, Avlon and Dr. A. M. Gill, Swiftown

W. B. Dickins,
County Editor.

Greenwood,
August 8, 1933.

DR. JOHN PRESTON KENNEDY

It was a shock to the entire community to learn of the death of Dr. J. Preston Kennedy at the Baptist Hospital at Jackson, early Sunday morning, August 6, 1933, after an illness of nine days. Funeral services were held from the home of his brother Dr. Barney Kennedy, Woodland Hills, Jackson, and interment was made in Lakewood Memorial Park in Jackson.

Dr. Kennedy was one of the most skilled and prominent young surgeons in Mississippi, and one of Greenwood's outstanding citizens. He numbered his friends by the scope of his acquaintanceship, and hundreds of people will mourn his death at the apex of a brilliant career as a personal bereavement.

He first located at Vancleve, Jackson County, remaining there for three years before moving to Greenwood where he quickly rose to recognition as an outstanding physician and surgeon.

The Physicians and Surgeons Building at Washington and Henderson Streets, one of the most modern and best equipped clinics in the state, was built and owned by Dr. Kennedy and will stand as a memorial to him in the community in which he resided and served so faithfully as a surgeon and radiologist.

Dr. John Preston Kennedy, the son of Dr. and Mrs. J. H. Kennedy of Pinola, was forty-one years of age. He was a member of the Baptist Church, a World War Veteran, a Mason, a member of the Kiwanis Club, member of the Delta Medical Society, State Medical Association, American Medical Association, and a member of the Radiological Society of North America.

The doctors of Leflore County extend their deep sympathy to the bereaved family. The medical profession has lost a member who honored it with the high standards he maintained, and sick and suffering humanity have been deprived of the services of one who ministered kindly and effectively to their ills.

MARSHALL COUNTY

Dr. C. R. Senter and family spent two weeks the first part of August on the Gulf Coast, stopping at Biloxi and Gulfport.

Dr. D. R. Moore and his family are spending their vacation in Chicago, visiting the "Century of Progress Fair" and other interesting places in the City of Chicago and surrounding cities.

Dr. Moore and Dr. Senter both live in Byhalia.

D. R. Moore,
County Editor.

Byhalia,
August 10, 1933.

MONROE COUNTY

The coming of "The Journal" reminds me that it is time to do my part. That expression leads me to say that the scream of the "Blue Eagle" that is heard today in every city, town, village and hamlet within the borders of our nation, is calling upon us all to "do our part." Many years ago I received a letter from one who was loved by many in Mississippi but one who was feared and

hated by many others. I shall never forget that letter nor shall I forget the note of pain and self abnegation that rang in every word and sentence. The writer said: "our poor country is at war. I did all I could to avert it. Would to God I might have been able to do more. But we are at war—there are but two courses open before us, and one of them is impossible. We must either win this war or back out of it. That course is unthinkable. We must win if it takes every dollar of treasure and every drop of blood that flows in the veins of our splendid young manhood. Please tell my friends these are my convictions and sentiments". We won the war although it cost us ALL our treasure. Now we are at war again. This is a most holy war; for it is a war against the insatiable greed of the money lords and the power of political usurpation of the rights of freemen born; the right to labor and to receive a living wage in order that food, shelter and clothing may be provided for those whom they love. In my opinion a decisive moment has come. Every American has been LEGALLY drafted. There must be no evaders of the draft; for it will take every dollar we have to win the war. As said Lord Nelson, so say I—Every American patriot is expected to do his part now. HIRE, PAY, SPEND—What if our business should fail? Let us think of the many millions who are unemployed. Unless work and wages are provided for them before winter comes nothing short of bloodshed, arson, revolution with the downfall of our civilization can be hoped for. Please pardon this interjection, but remember and ponder well what I have said.

I have frequently said that my society—the society does not belong to me, I belong to the society—is the largest and best society in the state. But Tom Dye made me shiver when he gave out the statement that one other society had just one member less than ours. But even though it might come to pass that some society might show as many members as can we, still I shall claim that ours is the best. Anyone who might be inclined to dispute or doubt this statement, can, by attending our next meeting, which will be held in Calhoun City, September 19, see that I have not tried to deceive you. Look out for the program and be sure to meet me there.

Things are very quiet in Monroe. We have less than our quota of sickness. Crops are somewhat more promising than for some years and we are hoping for better prices. When the money for cotton that has been plowed under begins to come in, perhaps we may see around the corner.

None of our county doctors have been sick—neither have any of them been to the fair so far. Dr. B. C. Tubb, of Smithville, together with his wife, son and daughter, have recently visited the

Eldorado section of southwest Texas. They reported an enjoyable trip.

Dr. M. Q. Ewing's wife and little son have made a pleasant visit to friends and relatives in Washington, D. C. I think this about covers the case as our news paper friends would say.

I hope you, everyone of you, will extend the glad hand to my good friend Dr. Wm. Krauss, who has joined the Stingily Laboratories at Meridian.

Again I say, meet me at Calhoun City.

G. S. Bryan,
County Editor.

Amory,
August 2, 1933.

MONTGOMERY COUNTY

Since our last writing everything seems to be moving along smoothly. There is not much sickness and collections are very poor.

Dr. J. F. Howell of Kilmichael died July 23 of angina pectoris.

The Winona District Medical Society met in Lexington July 27, with a fairly good crowd present. The following program was held.

Some Pediatric Problems—Dr. N. C. Womack, Jackson.

Autogenous Vaccine in Pyelitis—Dr. R. E. Wilson, Greenville.

Congenital Duodenal Adhesions—Dr. Nathan Kendall, Jackson.

Congenital Pyloric Stenosis—Dr. W. H. Curry, Europa.

Dr. E. W. Holmes of Winona, is leaving today for Chicago to the World's Fair, and will then go to Mayo's for a few weeks.

Dr. O. E. Ringold of Winona, has located in Cleveland.

J. O. Ringold,
County Editor.

Winona,
August 9, 1933.

PANOLA COUNTY

Dr. W. C. Lester of Batesville made a business trip to Memphis, Tenn., recently.

Dr. Priddy of Memphis made a visit some days ago to his former home, Charleston, and in returning to Memphis stopped in Batesville for a short visit.

Mr. Murphy Wood, son of Dr. G. H. Wood of Batesville has returned from New Orleans where he has been attending Soule's Business College.

Dr. C. F. Floyd of Phoenix City, Alabama, is now physician in charge of Tyro and Camp Conner in place of Dr. Stovall, who was sent to Camp McClellan, Alabama.

Governor Conner made a very pleasing address at the C. C. Camp Friday afternoon which was

thoroughly enjoyed by quite a number of Panola County citizens, as well as the camp boys and officials.

G. H. Woods,
County Editor.

Batesville,
August 8, 1933.

PONTOTOC COUNTY

Dr. E. G. Abernethy of Algoma carried his daughter to Memphis this morning for a mastoid operation.

Dr. E. B. Burns of Eceru and Dr. A. H. McGregor of Randolph were pleasant callers a few days ago. We are having very little sickness in Pontotoc county for the time of year.

The staff meeting of the Houston Hospital was largely attended last Thursday night.

Some of our doctors are spending their idle time fishing and report that the fish are biting fine.

R. P. Donaldson,
County Editor.

Pontotoc,
August 8, 1933.

SCOTT COUNTY

Dr. Anderson asked me to send in the following news items for Scott County.

Dr. W. E. Anderson, son of Dr. and Mrs. W. C. Anderson of Forest, arrived in Forest from Seattle with his bride the latter part of July to take over the practice of his father, who has been confined to his bed for the past five months and is still seriously ill. Dr. and Mrs. Anderson made the trip from Seattle to Forest by auto.

Dr. Anderson was born and raised in Forest and received his medical training at the University of Mississippi and at the University of Illinois. Since his graduation from Illinois, he has been in the Public Health Service and has served in the Marine Hospital at New Orleans and in the new Marine Hospital at Seattle, Washington, at which place he was stationed at the time he removed to Forest.

Dr. and Mrs. R. B. Austin and sons of Forest, left last Sunday for the World's Fair to be gone a week or ten days.

Dr. W. E. Anderson has been appointed county health officer to serve the unexpired term of his father, Dr. W. C. Anderson, who resigned on account of ill health.

Mrs. W. C. Anderson,
Forest,
August 9, 1933.

SHARKEY COUNTY

Dr. and Mrs. H. S. Goodman, Cary, are spending their vacation in Virginia with relatives.

Dr. Rex Goodman, Mobile, spent his vacation in Cary with his mother, Mrs. B. Goodman. Dr. Goodman is in the U. S. Public Health service and will now be located at Savannah, Georgia.

Dr. and Mrs. E. B. Stribling, Rolling Fork visited their parents at Philadelphia, recently.

W. C. Pool,
County Editor.

Cary,
August 12, 1933.

SIMPSON COUNTY

Dr. R. E. Giles, Mendenhall, county health officer, is conducting his annual campaign against typhoid fever with his needle and serum. If the people respond as they should our county will be practically immune from this dreaded disease.

Mr. and Mrs. A. W. Walker, Magee, have just returned from Chicago where they spent a week seeing all they could at the Century of Progress.

Mr. and Mrs. W. W. Diamond, Jr., Magee, have returned from their vacation.

Dr. W. W. Diamond, Magee, has been on the sick-list recently but is now able to be up and about his practice

Malaria is very prevalent in this section of the county and is being fought by our doctors. They say that there is more than in at least fifteen years. We are using atabrine quite successfully. How do you like it?

E. L. Walker,
County Editor.

Magee,
August 12, 1933.

SMITH COUNTY

Dr. G. E. Eddy, Heidelberg, is taking a two weeks' course in Saluda.

Dr. W. C. Lamb, Montrose, is still confined to his bed.

J. B. Thigpen,
County Editor.

Eay Springs,
August 6, 1933.

TALLAHATCHIE COUNTY

Dr. John A. Harris, Webb, is new part-time county health officer of Tallahatchie County. He has been giving typhoid vaccine in the area east of Tutweiler where the only typhoid has been in the county for the past nine months.

Dr. J. G. Backstrom, Tutwiler, spent night and day in our capitol city, Jackson, first of week.

Dr. Arthur Smith has bought out Swann Drug Store. He and his venerable father have offices upstairs over the store as in the past ten years.

Dr. J. D. Biles, Sumner, is devoting a great deal of his time to his farming interests at Webb and

Swan Lake this season. He is proving himself quite as successful a farmer as practitioner.

It will indeed be a pleasure for our clients to all become members of N. R. A. and increase pay at least 20 per cent to their doctors. The doctors will not grumble about "shorter hours and increased wages". Don't believe any class of men have been more sorely pressed and stood depression any more gracefully than the doctors of Tallahatchie County,—the State for that matter.

Dr. T. F. Clay's two eldest daughters left for World's Fair the 5th for 10 days' stay.

Dr. Felix J. Underwood made a short talk at Tutwiler enroute to Jackson on the "Know Mississippi Better" train today. They are returning from Chicago and other northern and western points. He said the fair is certainly hard on ones "Dogs."

T. F. Clay,
County Editor.

Tutwiler,
August 10, 1933.

WASHINGTON COUNTY

We are sorry to learn that Dr. R. L. Roby of Bourbon has had a spell of malaria recently. We trust that he is able to be about again.

Dr. B. C. Witte, of Shelby, Texas, visited his brother, Dr. K. L. Witte, of Leland, a few days during July. The doctors in Greenville and Leland enjoyed meeting Dr. Witte and were sorry not to have seen more of him.

Dr. F. M. Acree of Greenville has returned from his vacation, and is sporting a beautiful new car.

Dr. and Mrs. T. B. Lewis of Greenville have returned from a wonderful trip out west.

Dr. R. N. Crockett of Winterville is back home again from a western tour.

Dr. John W. Shackleford has returned to Greenville and assumed his duties as director of the Washington County Health Department, succeeding Dr. A. R. Perry. Dr. Shackleford returns here after ten months at Harvard University where on June 1 he received his degree as master of public health. He was awarded a fellowship by the Rockefeller Foundation.

Dr. Perry, who has been acting as county health officer, is now at Hot Springs, Arkansas, where he has been looking after the health of the boys and girls at Camp Ki-Y. He will return here next week and go to Sanatorium, later going to Harvard University to take a degree as master of public health.

John G. Archer,
County Editor.

Greenville,
August 8, 1933.

WEBSTER COUNTY

The doctors of Webster county have been real busy for the last month.

The writer attended the meeting of the Winona District Medical Society at Lexington, July 27. A splendid program was given on diseases of children.

Dr. W. W. Gore, Embry, age 79, died at his home July 13 of apoplexy. He was the father of Webster County, representative and an uncle of the blind Senator Gore of Oklahoma.

W. H. Curry,
County Editor.

Eupora,
August 9, 1933.

WINSTON COUNTY

The Winston County Medical Fraternity will meet in regular session this afternoon at 3 o'clock. We are hoping we will have a full attendance. Dr. W. B. Hickman is to read a paper on some subject he sees fit to select.

The stockholders of the Winston County Hospital lot had a meeting and planned to dispose of the lot to the county conditioned on them obtaining money from the federal funds and building and equipping a hospital. It has not as yet materialized whether or not they can get such funds.

Dr. S. W. Pearson was in Meridian this week, taking a patient for hospital treatment.

The writer and family were happy to have Mr. and Mrs. E. N. Ballard of Starkville, their daughter and son-in-law, with them Sunday and Sunday night.

Our doctors are somewhat optimistic at this time. We are looking for a collection of more money and less hogs and corn this fall.

M. L. Montgomery,
County Editor.

Louisville,
August 8, 1933.

LEST WE FORGET THEIR GOOD WORKS



M. S. CRAFT, M. D., Jackson Mississippi
President, Mississippi State Medical Association
1875-6

Mijaman Sidney Craft was born in Jackson, Miss., August 6, 1827 and died at that place April 8, 1888 of locomotor ataxia, after an illness of more than a year.

He graduated from the University of Louisville in 1851 and had two courses of lectures, subsequently, at Jefferson Medical College, beginning the practice of his profession in Jackson in 1853. He was appointed surgeon in the Provisional Army of the Confederate States May 18, 1861 and assigned to duty with the Twelfth Mississippi, serving with the Army of Northern Virginia until February 1865, when on account of ill health he was relieved and assigned to hospital duty at Meridian, Miss. After the war he resumed practice in Jackson. He was secretary of the original meeting of the Association in 1856, was elected corresponding secretary at the second meeting, in 1869, and served as vice-president 1873-4. For many years he made collections of reports of surgical cases in Mississippi, which collection constituted an important feature of the meetings of the Association and of the Transactions in which they were printed. He served as a member of the committee of seven experts selected by the lower house of Congress in 1878 to inquire into the origin, introduction and prevention of epidemic diseases in the United States.

Dr. Craft was married in 1871 to Miss Julia Barr and was the father of four children, of whom the eldest died in infancy.

TRANSACTIONS, 1888.

NOTE.—The above is an abstract from the History of the Association, and is published for the purpose of inviting additions and corrections. If anyone knows any such, please communicate with the editor.

NEWTON INFIRMARY

Dr. and Mrs. Omar Simmons left Monday for Chicago where Dr. Simmons will take some special work in surgery, visit some of the leading hospitals and attend the Illinois Central R. R. Surgeons' meeting. They will also visit the Century of Progress Exposition and expect to return the first of next week. Dr. Simmons has the management of Newton Infirmary and Mrs. Simmons is superintendent of nurses.

Dr. M. L. Flynt, who still retains a connection with the Newton Infirmary, left last Saturday for the Mayo Clinic, Rochester, Minn., going by way of Chicago and will also see the fair before returning to his home in Meridian.

Dr. W. E. Box who for the past year has been forced to give up his practice on account of a throat paralysis has now resumed his practice and almost completely recovered.

Dr. T. E. James, who recently completed his medical course in the University of Tennessee, has

located in Newton and has offices in McBeath's Drug Store.

Mrs. S. Kemp,
Secretary.

Newton,
August 9, 1933.

Acknowledgment is made of the receipt of a reprint, "The Treatment of Infections and Caruncles of the Face and Lips," by H. A. Gamble, M. D., Greenville.

MISSISSIPPI STATE BOARD OF HEALTH

Dr. Sanches-Vigil, Inspector General of Sanitation in Nicaragua, Central America, arrived at the offices of the State Board of Health on August 8. He will spend three and one-half months here taking part in and studying the laboratory and county health work of the Mississippi State Board of Health. Following his work here, he will go to Johns Hopkins School of Hygiene and Public Health, Baltimore, where he will work on his masters degree in public health. Dr. Sanches-Vigil is accompanied by his wife.

Mrs. Catherine R. Mayfield is now associated with Dr. T. W. Kemmerer in the State Hygienic Laboratory. Mrs. Mayfield has an A. B. degree from Maryville (Tennessee) College, and a masters degree in bacteriology and hygiene from the University of Chicago. She has worked in the City Laboratory of Savannah, Georgia; the Chicago Health Department; the Birmingham City Laboratory, and for the past six years was assistant director of the Alabama State Board of Health Laboratory.

On July 31, a meeting of the full-time health officers was held at the Robert E. Lee Hotel, Jackson. The main purpose of the conference was to explain the new reports which will be used from July 1, beginning of the biennial period. The new report forms will simplify reporting.

During the month of December, 1932, 23.8 per cent of the 2,069 deaths in Mississippi occurred without medical attention. This means that 493 people in that one month died in our State without any medical attention whatsoever. The number does not include those who died suddenly and there was not time to call a doctor.

During the first four months of 1933, the figures for deaths without medical attention are as follows:

January—20.6 per cent or 360 of the 1748 people dying.

February—18.6 per cent or 279 of the 1498 people dying.

March—20 per cent or 366 of the 1780 people dying.

April—16.9 per cent or 261 of the 1547 people dying.

These figures represent deaths of people all ages—a large percentage of them were young and middle aged.

During the past twenty-four months, the State Hygienic Laboratory manufactured and distributed free of charge to physicians and health officers of this State 1,177,755 cc. of typhoid vaccine.

Ming-Ting Young of the National Health Administration, Nanking, China, spent the last week of July and first week of August with the Mississippi State Board of Health observing the sanitary engineering activities. Mr. Young was especially interested in the drainage work being done by Nelson H. Rector in some of the delta counties where malaria control is a major public health problem.

The report of the Committee on the Costs of Medical Care states that the expenditures of the medical dollar is as follows:

Physicians in private practice.....	29.8c
Hospitals	23.4c
Medicines	18.2c
Cultists	3.4c
Nurses	5.5c
Public Health	3.3c
Dentists	12.2c
All Others	4.2c

According to this, thirty times as much is spent for curative measures as for disease prevention and health protection. Most communities in our state spend more each year to bury tuberculosis victims than would be necessary to spend in order to control the Great White Plague.

In the search for the missing copies of the Mississippi State Board of Health reports, a letter was written to Dr. H. A. Gant who now lives in Columbia, Tennessee. Dr. Gant was President of the State Board of Health for several years following his election in 1900. His reply will be of interest to many members of the medical profession because of his early labors in and contributions to medicine in the South.

Columbia, Tenn.

July 26, 1933

Dr. Felix J. Underwood,
Jackson, Mississippi.

Dear Doctor Underwood:

Replying to your favor of 26 inst. I regret to have to say that I have no copies of the reports of the State Board of Health of Miss. for the years mentioned. The board was organized in 1877 and for many years had no funds and I do not remember seeing any publications of the board, but about the last years named 1894-1896 there should be some of the published reports somewhere. If the libraries of Dr. Wirt Johnston and Dr. J. F. Hunter, the first secretaries of the board could be traced it is possible copies might be found. The department of archives and history or the office of the secretary of state should have preserved copies. I wish I

could supply the copies needed to complete the file. I would gladly furnish one or all of them for I have an abiding interest in the medical history of Miss., and especially in the splendid scientific sanitary work of recent years in which you have done so much outstanding and progressive sanitation placing Miss., in the first ranks of the states in preventive medicine.

Your mention of the year you took the examination for license when I was President of the board and also your speaking of my having had experience in yellow fever epidemics calls to mind many incidents and happy associations of my professional life in Mississippi. Of all the years, 1897-1898-1899, when I worked most strenuously were the fullest and most satisfactory because I am satisfied that our board did some real scientific work and prevented the spread of the disease and checked the epidemic preventing the infection not only of many places in Miss. but also of Memphis in 1898.

At the request of Drs. Ramsey and Sawyer of the Rockefeller foundation and Dr. E. L. Bishop, commissioner of health of Tenn., I have written my experiences, recollections and reminiscences of my work from 1878 the year I had yellow fever up to 1899. I showed the manuscript to Dr. W. A. Evans in May and he seemed to think it worth publication and I have been thinking of submitting it to you but am doubtful whether it is of sufficient consequence to tax you with a reading of the 150 double spaced typewritten pages.

Please excuse my poor typing. I am in my 82nd year and "still going strong"—but not very strong. I cannot write with a pen and am very shaky but otherwise have good health.

With kindest regards and best wishes,

H. A. Gant.

A special program of dairy improvements work in south Mississippi was started in April, 1933, in conjunction with one Mississippi and two Louisiana milk plants which secure a part or all of their milk from Mississippi dairies. Improved sanitation at these dairies was necessary in order to enable the milk shipped into Louisiana to meet certain requirements of the Louisiana State Board of Health. Because the Mississippi State Board of Health had no funds to take on this additional work, the active cooperation of the owners of the plants was secured and they agreed to pay the cost of an inspector who would be responsible to the Mississippi State Board of Health and who would spend his full time working with the patrons of these plants. This work has been in progress four months and much interest has been manifested by the producers in improving their dairies. As a result of this effort a definite agreement was reached with the Louisiana State Board of Health that this improvement work would be on the basis of the requirements of the Standard Milk Ordinance of the U. S.

Public Health Service. Satisfactory compliance with these requirements on the part of the south Mississippi milk producers will insure the retention of this market for Mississippi milk.

Beginning in the Fall of 1932, efforts were made to use funds obtained from the Reconstruction Finance Corporation to provide labor for the construction of sanitary toilets. This work on private as well as public property was made possible early in January, 1933, when the State Board of Public Welfare ruled that such work even though done on private property "would be largely for the protection of others as much as for the owner of the property." With the issue clearly put before boards of supervisors and mayors, efforts were renewed to stimulate interest in privy construction using free labor. Assistance was first given to full-time county health departments, then to part-time counties in organizing construction work. During the past six months over 700 concrete toilets have been constructed in a number of the part-time counties.

F. J. Underwood,
Executive Officer.

Jackson,
August 5, 1933.

WOMEN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson.
President-Elect—Mrs. Henry Boswell, Sanatorium.
State Convention—Natchez—May, 1933.
Chairman Press and Publicity, Mrs. Leon S. Lipincott, Vicksburg.

We have not had any direct news of the results of the National Conveion in Milwaukee, other than the names of the officials for the coming year. We will look forward to what our new national press and publicity chairman from Wauwatosa, Wisconsin, Mrs. Robert E. Fitzgerald, has to say to us, and hope to give her our best support. We will miss our letters from Mrs. Overholser, and hope that she will some time let us hear from her, and give us some more good advice.

Our auxiliary guest of last May, Mrs. A. B. McGlothlan, is to be the national chairman of the program. We know there will be a splendid program.

We hear from only two press and publicity chairmen, this month, and hope before time for another issue of the Journal that every one will be back on the job, feeling more like getting into line, and sending in the news.

WOMAN'S AUXILIARY TO THE HARRISON- STONE-HANCOCK MEDICAL SOCIETY

Dr. and Mrs. Cummings McCall and two children left early in June. The family stayed in Chicago and did the fair while the doctor did the A. M. A. Dr. and Mrs. C. A. McWilliams and two daugh-

ters spent ten delightful days during the middle of June there and Miss Mary Elizabeth Gay, daughter of Drs. Fred and Emma Gay, was also a June visitor.

Drs. Dan Williams and Cy Ship attended a meeting of health officers in Jackson, July 10.

Dr. J. A. McDevitt has opened an office in Pass Christian and divides his time between there and Gulfport.

Dr. and Mrs. Henry Boswell occupied the home of Dr. and Mrs. Dan Williams during the Williams' absence, which included a motor trip thru the Carolinas, Virginias and on to Michigan to the relatives of Mrs. Williams and home via the World's Fair.

Dr. and Ira L. Parson's are now domiciled on the grounds of the beautiful Soldiers' Home recently opened. Dr. Parsons is medical officer in charge.

Dr. Harry Foster of Jackson will have charge of surgery.

Dr. Elmer Gay of Long Beach is looking after the health of the reforestation camp in Stone and Hancock counties.

Mrs. Dan Williams was elected president of the Long Beach Garden Club at its meeting in July.

Mrs. Dan J. Williams,
Press and Publicity Chairman.

Gulfport,
August 1, 1933.

WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

Dr. and Mrs. Harvey Garrison enjoyed a recent family reunion at Seminary. According to custom, quite a large number of the Garrison family assembled for this occasion, which occurs annually.

All Jackson mourns the passing of one of its most beloved physicians, Dr. B. L. Culley. A fittingly beautiful poem, dedicated to his memory appeared in recent publications.

Mrs. A. S. Applewhite, in her home at Hubbard's Wells, recently entertained her son, Dr. Norman Applewhite, of New Orleans. Other recent guests of

this home were, Mr. and Mrs. Houston Bass of Lumberton, and Houston Bass, Jr., with whom Mr. Henry Applewhite made a delightful trip to Chicago.

Dr. and Mrs. F. E. Rehfeldt's son, Fred, was among the Jackson people to attend the World's Fair in July.

Dr. and Mrs. N. C. Womack have had as their guests, Mrs. J. K. Vardaman and her son Kimble, of St. Louis.

Dr. Joseph Flynt Armstrong and Dr. Lawrence W. Long, attended the encampment at Camp Beau regard. During their absence, Mrs. Long and small son were guests of relatives in Louisiana.

Mrs. B. F. Johnson,
Press and Publicity Chairman.

Jackson,
August 8, 1933.

HONOR ROLL

The following have contributed to the Mississippi Section of the Journal this month:

COUNTY EDITORS—W. N. Jenkins; L. L. Minor; W. F. Hand; W. H. Scudder; W. B. Dickins; D. R. Moore; G. S. Bryan; J. O. Ringold; G. H. Wood; R. P. Donaldson; Mrs. W. C. Anderson; W. C. Pool; E. L. Walker; J. B. Thigpen; T. F. Clay; John G. Archer; W. H. Curry; M. L. Montgomery.—18.

COUNTY SOCIETIES—Delta Medical Society, F. M. Acree; East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Assaquena-Sharkey-Warren Counties Medical Society, L. S. Lippincott; tri-County Medical Society, H. R. Fairfax.—5.

HOSPITALS—Vicksburg Sanitarium; Newton Infirmary, Mrs. S. Kemp.—2.

WOMAN'S AUXILIARY—Mrs. Leon S. Lippincott; Mrs. Dan J. Williams; Mrs. B. F. Johnson.—3.

OTHERS—J. W. D. Dicks; H. A. Gamble; F. J. Underwood; J. A. K. Birchett, Jr.; G. C. Jarratt; R. A. Street, Jr.—6.

TOTAL—34.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

Child Psychology: By Buford J. Johnson. Springfield, Charles C. Thomas Co., 1932. pp. 439.

The reader will find in this volume one of the most scientific and detailed works of its kind. It is quite different from the average psychology of today, which appeals to the lay mind. Many points known to the pediatrician, such as the fact that the child raises his head in the nursery, are here brought out. The chapters on infant responses attention and perception are of particular interest.

SUZANNE SCHAEFER, M. D.

The Gold-Headed Cane: By William MacMichael, M. D. Edited by Herbert Spencer Robinson. New York, Froben Press, Inc., 1932. Illus. pp. 223. Price, \$3.50.

This sixth edition of "The Gold-Headed Cane," by William MacMichael, edited by Herbert Spencer Robinson, is worthy of being in every physician's library. It is probably the most complete edition of "The Gold-Headed Cane" and is especially valuable because of the explanatory notes by the editor, all of which are given in the greatest detail. The fas-

cinating story of the cane is thus made even more interesting and certainly more instructive. In addition to the explanatory notes concerning the life of the cane, the editor has a complete chapter on MacMichel's life, his works, and his editors.

ALTON OCHSNER, M. D.

Urine and Urinalysis: By Louis Gershenfeld, Ph. M., B. S., P. D. Philadelphia, Lea and Febiger, 1933. pp. 272.

This excellent little volume briefly reviews the physiology of kidney function and the physical, chemical, and biological test that are of value in urinalysis.

In Part I of this volume the author describes methods of collecting and preserving specimens of urine. The physical characteristics, chemical compositions and abnormal constituents of urine are discussed and their clinical significance stressed.

Part II is devoted to qualitative tests, quantitative determinations and microscopical examinations of urine. The clinical interpretations of results so obtained are stated.

In Part III special examinations and tests as the P. S. P. test, concentration test, and pregnancy tests are described. This volume is to be recommended to the technician, student and practitioner.

CONRAD G. COLLINS, M. D.

Orthopedics in Childhood: By Wm. L. Sneed, New York, J. B. Lippincott Co., Philadelphia, 1931. pp. 318.

This small volume is one of the Everyday Practice Series edited by Dr. Harlow Brooks. Its aim is to give a short description of the commoner types of orthopedic conditions and a simple type of treatment for these conditions. The subject matter is treated by regions, beginning with affections of the foot, and taking each joint ad seriatum. The methods described are for the most part those carried out at the Hospital for Ruptured and Cripples.

This work should fill a longfelt need for the general practitioner who does not care to delve in the lengthy descriptions as put out in the standard texts on orthopedics. The material is well presented and numerous case histories are included.

GEORGE C. BATTALORA, M. D.

The Law Against Abortion: By William J. Robinson, M. D. New York, Eugenics Publishing Co., Inc., 1933. pp. 123. Price, \$2.00.

This work constitutes an argument in favor of repealing laws against the induction of abortion. As is well known, the induction of abortion for definite medical indications is an ethical and legal procedure; but the induction of abortion on other grounds is at present classed as an illegal operation, and is condemned as unethical and criminal by the medical profession. Dr. Robinson advo-

cates the abandonment of this attitude so that it will be both legal and ethical for physicians to induce abortions in cases of undesired pregnancies, more particularly in illegitimate pregnancies. As is well known, the number of such abortions performed in this country annually by the patients themselves, by midwives, and by some members of the medical profession mounts up into the hundreds of thousands. Of course no accurate figures are available. The author of this book would have conditions changed so that these abortions could be performed openly and under the best possible conditions without legal or ethical objections being raised. He cites a number of cases and in particular devotes an entire chapter of twenty-one pages to discussion of the case of "Birdie and Her Baby."

He also inveighs against the reporting of criminal abortions by the physicians who are called upon to handle the cases later. He furthermore makes a statement that "if every physician who even once in his career—under the stress of tragic circumstances in order to save the life and reputation of a young woman and the happiness of her parents—performs an abortion is a murderer, then seventy-five per cent, nay, probably 90 per cent of the medical profession are murderers." He gives no authority for this remarkable statement, and the reviewer is convinced that it is extremely inaccurate and unjustified. Such an accusation against the medical profession should not be allowed to pass unnoticed. The author puts himself in the class of the impeccable ten per cent by stating that he has not committed a single abortion personally.

The reviewer does not feel that the position taken by the author is tenable. In what manner will legalization of abortion be of any assistance to the ones most urgently demanding the operation, namely, those who are illegitimately pregnant? Will these patients go openly to a hospital and have the abortion induced? Could anyone imagine that under such circumstances the secrecy which they feel is so essential would be obtained? And what about the medical profession? Would legalization of abortion make the members of the profession feel differently regarding the matter, when they are importuned to interfere with an undesired pregnancy where there are no medical indications for so doing? It is the reviewer's experience that most physicians entertain a high regard for the sanctity of human life, and that they would be just as unwilling to perform an abortion in the absence of distinct medical indications even though there were no law on the subject. The reviewer feels that for these and many other reasons, the author's stand is not well taken, and that little good and very much harm would be the outcome were his views shared by the legislators of the land.

E. L. KING, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

OCTOBER, 1933

No. 4

THE EFFECT OF FEEDING AMINO ACIDS IN CASES OF MUSCULAR DYSTROPHY

HOWARD H. BEARD, Ph. D.

and

CARLO J. TRIPOLI, M. D.†

NEW ORLEANS

In view of the recent reports of important clinical results following the treatment of muscular dystrophy and myasthenia gravis by the administration of glycine, it would seem that this amino acid must play an important part in muscle metabolism in general, and in creatine metabolism in particular. Before 1929 biochemists believed that creatine and creatinine were products of endogenous metabolism. However, experimental and clinical work since that time have shown definitely that creatine can be formed by the ingestion of large quantities of amino acids. This may indicate either that the formation of creatine is stimulated by the amino acids ingested in the diet or that creatine is formed by these acids.

From the work of Levene and Kristeller¹, Brand, Harris, Sandberg and Ringer², Beard³, Beard and Barnes⁴, Beard⁵, Milhorat, Techner and Thomas⁶, Boothby⁷, Terroine, Giaja and Bayle⁸, Bollman⁹, and others, it has been definitely shown that creatine may be formed from the proteins and amino acids of the diet, and that creatinine excretion in the urine is not dependent upon the muscle mass or body weight of the individual.

*Read before the Orleans Parish Medical Society, May 8, 1933.

†From the Departments of Biochemistry and Medicine of Louisiana State University Medical Center and the Charity Hospital of Louisiana, New Orleans.

It is generally believed that creatine, as phospho-creatine, serves to provide energy for muscular contraction. It would appear, therefore, that at the present time both the origin and function of creatine in muscle metabolism are definitely established. The latest review of creatine and creatinine metabolism has been published by Myers¹⁰.

That the above facts are also of distinct clinical importance was first shown by Milhorat, Techner, and Thomas⁶. These investigators confirmed the finding of Brand and associates that glycine feeding would cause an increase in the creatine content of the urine of patients suffering from various forms of muscular dystrophy. A distinct improvement in the physical condition of most of their patients was noted following the oral administration of glycine. This improvement was manifested by "crawling sensations" in the muscles, relief of muscular fatigue, ability to climb stairs, and ride bicycles, feats that were impossible before treatment was instituted. A study of the creatine excretion in these patients revealed interesting results. For instance in one case creatine excretion was increased 100 per cent; in another, 1,000 per cent.

These results have stimulated a number of clinicians to use glycine in the treatment of patients suffering from various muscular dystrophies. The beneficial effect of ephedrin, first noted by Edgeworth¹¹ (herself a victim of the disease) has been utilized by some observers in combination with glycine or gelatin.

Boothby⁷ and his coworkers at the Mayo Clinic have observed a more definite im-

provement in cases of myasthenia gravis than in other muscular dystrophies. Boothby stated in his report that he had information of the successful use of glycine in 10 cases (which included his own). Taylor¹² reported the successful treatment of one case of myasthenia gravis with gelatin and ephedrin. Milhorat¹³ has recently reported success with glycine therapy in an additional fourteen cases of progressive muscular dystrophy and allied conditions. The ingestion of glycine increased the creatine output, and phosphate and glycine increased it still more. The increased creatinuria then gradually subsided. A rapid, and then slower, improvement in the functional capacity of the muscles occurred, provided they had not become completely atrophied. During the progress of our present work we have received information from another clinician of the successful use of glycine in five cases, making, to our knowledge, a total of about thirty cases of myopathies being treated with amino acids at the present time.

We wish to report in this paper our observations in one case of each of the following conditions: Progressive spinal muscular atrophy; progressive muscular dystrophy; "psychopathic inferiority complex", with loss of muscle tissue from disuse; and amyotrophic lateral sclerosis, all treated with amino acids.* Our reason for selecting glutamic acid in place of glycine were as follows: (a) According to Needham¹⁴, glutamic acid constitutes 16 per cent of muscle protein; (b) We have observed in earlier work that glutamic acid was a slightly better creatine former in young rats than glycine; (c) Pure glycine can be purchased for \$12.00 a pound, while pure glutamic acid costs \$5.50 a pound; (d) Glutamic acid is non-toxic, while glycine may be slightly toxic.^{15 16}

The patients gave excellent cooperation, three of them collecting their own urine specimens. A control period of from four

to seven days was instituted in each case before the oral administration of the amino acids was begun. The total nitrogen, total creatinine, preformed creatinine, and creatine, were determined daily in the twenty-four hour specimen of urine in the case of each patient. At the beginning of the second period (shown by the arrows on the chart) 10 gm. of glycine dissolved in milk were given to one patient suffering from progressive spinal muscular atrophy, and 10 gm. of glutamic acid were given likewise to three other patients. The effect of the amino acid on the excretion of creatine and creatinine is shown in Chart I. The clinical data follow:

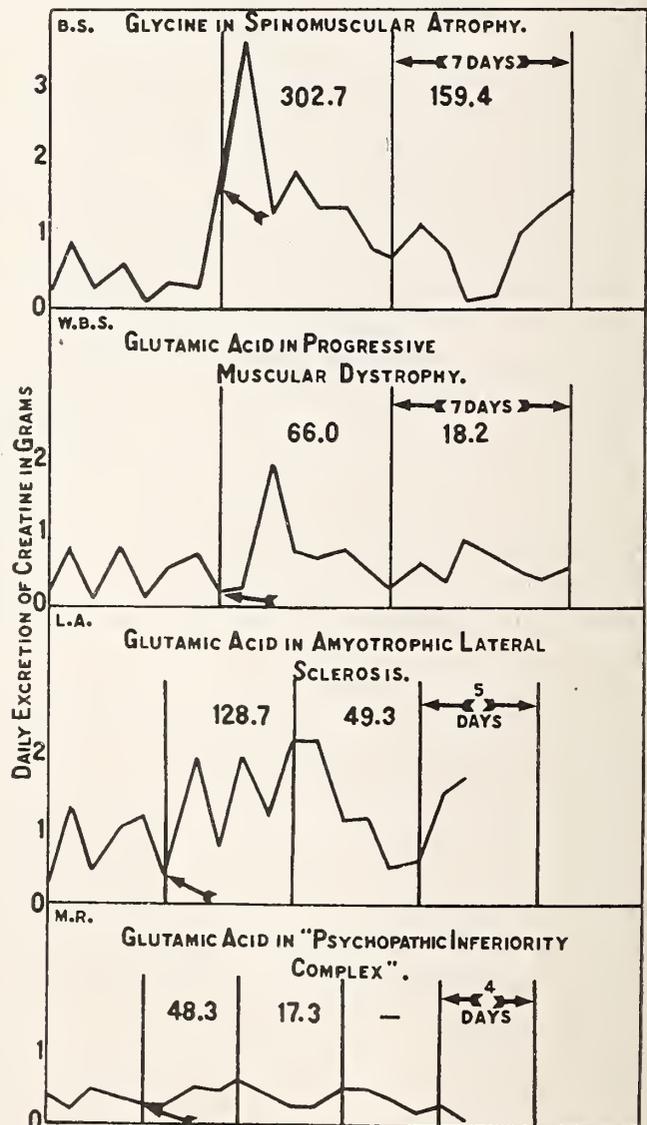


Chart I. Creatine excretion before (first period) and during amino acid therapy (second etc.). Arrow indicates point at which amino acid therapy was instituted. Figures represent percentage increase of creatine excretion above normal for each case.

*The amino acids used in this work were prepared by Dr. William M. McCord of the Department of Biochemistry, of the Medical Center of Louisiana State University.

Case I. (No. 41829) The patient is a white man, twenty-six years of age, suffering from progressive spinal muscular atrophy of nine months' duration. Muscular tremors, with weakness and easy fatigue of the muscles of the shoulder girdle and upper extremity, were present. Marked asymmetrical weakness was present on the left side, with wasting of interossei and lumbricalis muscles of both hands. Complete blood, spinal fluid and roentgenological examinations gave negative findings. Ten gm. of glycine were given daily in milk beginning December 1, 1932. After six weeks of this treatment, there was a definite increase in the patient's weight, partial return of muscular strength and a notable diminution of the tremulous twitchings in the left shoulder, but not in the right. Further improvement in this case has not been noted to date.

Case II. (No. 39352) This patient is a white man, thirty-six years of age suffering from a progressive muscular dystrophy of twenty-one years' duration. Atrophy began in the muscles of the shoulder girdle, gradually progressing until the time of observation. The pelvic girdle was involved to such an extent that a "wobbling gait" resulted. Complete blood, spinal fluid and roentgenological examinations gave negative findings. All previous therapeutic regimens resulted in no definite effect upon the progress of the disease. Ten gm. glutamic acid were given daily in milk beginning December 1, 1932. After one month of treatment, definite muscular improvement, both subjective and objective, was noted. There was an increase in weight, the "wobbling gait" disappeared, and the patient was able to walk four miles daily without fatigue. This patient has shown continued improvement in those muscles in which atrophic changes were taking place, but not in those in which resultant fibrotic changes of long standing had occurred, a finding which has also been observed by Milhorat. Examination of this patient on May 7, 1933 showed still more improvement, especially in the muscles of the back and legs which appeared to be essentially normal in function.

Case III. (No. 43018) This patient is a white woman, thirty-one years of age, suffering from a psychopathic inferiority complex of five years' duration following an unrequited love affair. Physical examination revealed marked muscular atrophy of both lower extremities from disuse resulting from a protracted stay in bed. The patient had been unable to walk for some time. Ten gm. of glutamic acid were given in milk beginning December 13, 1932. General improvement, such as increase in body weight and strength and ability to walk in a few weeks was noted which, however, may have been due to the hygiene of physiotherapeutic regimens which were simultaneously instituted.

Case IV. (No. 3050) This patient is a white man, twenty-six years of age, suffering from amyotrophic lateral sclerosis. The first symptoms appeared in December, 1931. The chief complaint was weakness and wasting in the arms. The symptoms were progressive until December 1932, at which time weakness of the left shoulder and chest muscles, arm, forearm and hand was distinctly noticeable, concomitant with atrophy of the interossei and lumbricalis muscles. This resulted in a very weak grip in the left hand. The patient was unable to flex the index finger, or to facilitate "grouping" of fingers of the left hand.

Twitchings were marked in the left upper extremity and slight in the right upper extremity. The left leg showed marked weakness with dysfunction of the anterior tibial group of muscles to the extent that the patient's normal gait was frequently interrupted by stumbling. Slight atrophy of the muscles was also present. Complete blood, spinal fluid and roentgenological examinations gave negative findings in every detail. After 10 gm. of glutamic acid in milk had been given daily for four weeks, the patient's left leg became stronger and he no longer stumbled when walking. The muscle tone of the left arm improved to the extent that flexion and extension of the left forefinger returned. Grouping of the fingers of the left hand was also improved. The twitchings have now almost disappeared in the left, but not in the right arm, the muscles of which were the last to become affected. The patient has gained 11 pounds in weight during the four weeks' period of treatment. A recent examination however, fails to show any more clinical improvement.

DISCUSSION

At the present time there are three theories to account for the presence of creatine in the body: (a) That it is endogenous; (b) That the formation of creatine is stimulated, and (c) That it is of exogenous origin. From the findings in recent experimental work⁴ and from the results obtained from amino acid therapy in various muscular dystrophies, it would seem that the exogenous origin of creatine from amino acids is definitely proven. The clinical importance of this finding will be discussed later.

Brentano¹⁷ has shown that creatinuria is always associated with a reduction of muscle glycogen, while a disappearance of creatinuria is associated with an increase in muscle glycogen. Moren¹⁸ stated that research has shown that a disturbance in sugar metabol-

ism occurs in cases of muscular dystrophy possibly due to a lowering of muscle glycogen. Eaton, and also Farnell (quoted by Moren¹⁸) noted beneficial effects from the feeding of sugar to patients suffering from muscular dystrophies.

The clinical results obtained in these and other studies mentioned above throw interesting light on some of the problems of muscle metabolism. From the physiological point of view, glycine or glutamic acid can form creatine, which, as phosphocreatine, increases the strength and muscular efficiency of the body. Both these amino acids increase specific dynamic action,* which, however, as we have shown in earlier work⁴ is not the cause of the increased creatine formation. Each of these amino acids can also assist in the formation of muscle proteins and glycogen which results in the construction of new muscle tissue.

In our patients the same "crawling sensations" were noticed after amino acid ingestion as were observed by Thomas and his co-workers. This might indicate that creatine formation was taking place in the muscles. It is well known that the muscular dystrophy patient is practically "diabetic" as regards creatine. But when the tissues are made to "work" to form creatine from amino acids, this valuable substance is retained and used again and again in muscle metabolism. This is shown by the gradual decrease in creatine excretion. Our studies, as well as those of others, show that the muscular dystrophy patient can form large amounts of creatine provided a sufficient quantity of amino acids is ingested. The chief disadvantage at the beginning of treatment seems to be an inability on the part of the patient to retain this valuable substance. The most important clinical result of amino acid therapy, therefore, would seem to be the formation and retention of creatine in the muscles. This

is shown by the clinical improvement in the patients.

At the present time we are studying the effect of glutamic acid ingestion upon the histological and functional changes taking place in the muscles and nerves in the hind leg of the dog after severing the sciatic and femoral nerves at their origin. It is entirely possible that muscular dysfunction may be the primary cause of nervous lesions or vice versa, as is the case in spinal muscular atrophy. This study with our experimental animals should show whether the amino acid acts upon the nerve to effect muscle regeneration or on the muscle fiber *per se*. No doubt both conditions may occur.

Milhorat¹³ made a histological examination of the excised portions of muscle from three patients suffering from muscular atrophy who had received glycine over a period of three months. Completely atrophied or entirely normal fibers, with no intermediate stages, were found. We have confirmed this finding in one of our patients. It has been stated that glycine is absent in cases of myopathies and when fed to the patient, acts upon the metabolism of resting muscle fibers.

Our results are in agreement (with one exception) with preliminary reports of the successful treatment of about 30 cases of myopathies treated with glycine. At the present time we are studying as many cases of muscular dystrophy and atrophy as possible in order to make a more thorough biochemical and clinical study of the problem.

SUMMARY

Glycine, or glutamic acid, in 10 gm. daily doses, has been administered to four patients suffering from muscular dystrophies and atrophies. Improvement in metabolism was noted in those cases in which the nerve tissues were not involved.

The average increases in creatine excretion ranged from 48 to 303 per cent; and in creatinine excretion, 11 to 46 per cent. These findings indicate a new formation of muscle creatine resulting from the ingestion of amino acids.

*This would be denied by the late Professor Graham Lusk. However, from the work of Rapport and Beard (*J. Biol. Chem.*, 73:285-299, 1927) and others, it has been shown that glutamic acid does increase the heat production.

After two or three weeks of amino acid therapy the increased creatinuria disappeared in all cases, indicating a retention of muscle creatine in the body.

Definite subjective and objective clinical improvement was noted in the dystrophy cases, which followed and could be predicted, from the changes in creatine and creatinine metabolism noted above.

We wish to offer our sincere thanks to Drs. L. L. Cazenavette, M. S. Frieman, U. Giles, L. S. Hill and H. R. Unsworth for the use of their patients in this study.

DISCUSSION

Dr. Unsworth: The subject which Doctor Tripoli has presented is a very remarkable example of what can be done if one perseveres and works along rational therapeutic lines.

It has been my pleasure to have followed two of these cases, and there is no doubt, from a clinical standpoint that the high amino acid diet has definitely improved these patients symptomatically. They were formerly beridden in my ward, and at this time are up and about and capable of climbing stairs. Their general muscular power has been undoubtedly increased. Apparently it is essential to differentiate a case of dystrophy from atrophy, as this treatment does not appear to help the atrophies whatsoever.

Cases of myasthenia gravis show a greater amount of improvement upon this diet than do these cases of dystrophies.

An atrophy implies pathology of the central nervous system, whereas a dystrophy implies muscular pathology. Unfortunately the etiology in both of these diseases is obscure.

Doctors Beard and Tripoli deserve a great deal of praise for this work. They should have the help of everyone to carry this research further. Time will play a tremendous part in the final analysis as to the permanent value from this treatment.

I wish to congratulate both doctors and to thank them for the privilege of discussing their paper.

Dr. Holbrook: There is no more pitiful group of children than those who are affected by the muscular dystrophies. I believe most of them can be recognized in childhood, and, of course, if they can be recognized early, then the chances of doing something for them before the muscles are completely atrophied and replaced by fibrous tissue are very much better. This new treatment is tremendously interesting and hopeful.

I have had no group of cases that have been more painful to me than these poor children who have

been brought to my clinic. Usually the diagnosis is all that they have been able to get. We are sorry to see them go because nothing could be offered them. They would go from clinic to clinic in the hope that somebody would do—something to relieve their crippling malady.

It is possible that we have a treatment that may relieve the disorder. Even though it has not been worked out very definitely, Dr. Tripoli and Dr. Beard are doing very splendid work. I hope they will take some of the cases we can send them.

The whole classification as made up now is very vague and overlapping, and the different nomenclature used, and the different types of cases are described in a way that has been confusing. Now that this new piece of work has been done, we will probably get something more definite as to the mechanism that is behind these disorders.

I do not believe that anything can be accomplished in cases due to neurologic lesions; the muscular dystrophies produced otherwise will be more promising.

I hope that the work will be continued and I shall be very glad if Dr. Tripoli and Dr. Beard will be interested in the cases that we can send them.

Dr. Cazenavette: About the middle of the last century Duchenne of Boulogne presented a classical description of progressive muscular atrophy and placed the pathological process in the muscular tissue itself. This latter fact was subsequently supported by other observers. In spite of this knowledge however the therapeutic efforts for the relief of this malady have always been directed along neurological lines. It is only within very recent years that any attempt has been made to correct the wasting of muscular tissue by the administration of substances, such as glycine, glutin and glutamic acid for the purpose of enabling muscular tissue to hold and utilize creatine, a substance necessary for the proper functioning of muscular tissue.

Very recently Drs. Howard H. Beard and C. J. Tripoli of this city have used glycine and glutamic acid in several cases of progressive muscular atrophy (dystrophy type) and have recorded improvement in these cases. I have witnessed this improvement.

The beneficial results so far obtained mark the beginning of a new era in the therapy of a malady which heretofore has been regarded as incurable.

During my thirty-five years of clinical experience at the Charity Hospital I have seen a great number of patients afflicted with this disease. The majority of these came from the central parishes of the State. They afforded wonderful clinical material for teaching purposes but unfortunately the only thing that could then be done for these patients was to diagnose the malady, express an unfavorable prognosis and advise them to return home.

Thanks to the efforts of Drs. Beard and Tripoli the prognosis in these cases of muscular dystrophy does not seem so grave as there is now a ray of hope that something has been found to help these unfortunates. When we consider the state of utter helplessness to which these patients finally reach a state which is due to the inroads and ravages on their muscular tissue and power, we can then appreciate the real value of this new therapy.

To illustrate this state of helplessness I wish to present on the screen a few lantern slides showing the ravages of this malady on four children afflicted with this disease. Father and mother are well and none of their relatives as far as they know have had any familial disease. Their is no consanguinity of parents. Yet there are seven children ranging in ages from 18 years to 4 years. Four of these have progressive muscular atrophy. The afflicted ones comprise one boy and three girls; the boy heading the list is 16 years, and the girls are 13, 6, and 4 years. The non afflicted, two boys and one girl, are 18, 15, and 10 years. (Slides).

Dr. Beard has kindly furnished me with a lot of glutamic acid which has been given to these afflicted children. At the time of my presenting these slides there had been no noticeable change in any of them but at present, June 27, 1933 I am informed by the mother that the smallest girl, 4 years of age is showing more willingness to go about and has walked unaided the distance of one city block. I thank you for your attention.

Dr. Walter J. Otis: Whatever the causes dealing with interference with muscle innervation, of necessity courts investigation, whether it be cerebro-spinal, autonomic or sympathetic.

A pertinent fact lost sight of by physicians when examining children is the history of growing pains which, for the most part, in a number of cases is a forerunner of muscular dystrophy.

The treatment as brought forward, with presentation of the patients, has especial value to a particular group of the dyskinesias which results have been most gratifying as displayed by the activities and muscle control of the patients themselves. It is very evident that this treatment is to some extent effective. Gathering from this, we infer that the motor end plates in the muscles are intact.

The physicians are to be complemented for their research and results obtained in the diseases described this evening. There has been, no doubt, some marked benefit derived thereby.

I have yet to see cases fully recovered.

Dr. Tripoli (Closing): Dr. Otis' question concerning the electrical reactions and measurements of the muscles of our patients, before, during and after the therapy is really well taken, and I am sorry that time does not permit me to fully discuss this phase of the work. However, I might

say that our objective information concerning the progress of the patients, is derived chiefly by the utilization of these methods and must be done in each case.

I wish to demonstrate two patients, in order to exemplify the classification of muscle diseases which I gave in the substance of the paper.

This young man is the individual I have described as case Number 1 in the substance of the paper. He represents a case of progressive spinal muscular atrophy. The primary lesions are in the central nervous system and he has the typical asymmetrical distribution of muscular pathological lesions. He also has persistent twitchings of the deltoid, biceps, and triceps muscles on stimulation accompanied by marked atrophy by the muscle of the right hand, particularly affecting the interossei and lumbrical groups. Although he has had improvements in his right hand there has been a progression of atrophy in his left hand. Whether or not this atrophy of his left hand will cease, as had occurred in the right hand is, of course, questionable.

This other young man is the individual I have described as case number 2 in the substance of the paper. He represents a case of progressive muscular dystrophy. As you see, he has had a remarkable wasting of the muscles of the back and shoulder girdle. Some of the muscles which were formerly present, are gone completely and only fibrous tissue remains. He demonstrates, very well, our findings; that muscles which are in the process of wasting will return to practically normal; yet those muscles fibers in which the nuclei have become pyknotic go to complete atrophy with fibrous tissue replacement and never have a return of function.

His improvement has been remarkable, indeed. From an individual hardly able to walk, he has been literally transformed into an active individual, perfectly capable of taking his place, again, in the community.

In behalf of my co-worker, Dr. Beard, I wish to extend our most sincere thanks to those of you who have so kindly discussed our work. Our deep gratitude and appreciation is extended to Dr. Vidrine whose interest and aid have facilitated this work in a great measure.

Those of you who wish to use this form of therapy are welcome to it. We will gladly supply the various amino acids, in order that you, yourselves, may use them. All we ask, in return, is a complete record of the case including a few special observations in order that we may use these in our future work.

Dr. Beard has a few most interesting lantern slides which beautifully demonstrates the chemistry of normal and abnormal muscular metabolism. With your permission, I will ask him to present

them, as I do not feel that the presentation is complete without this discussion from him. I thank you.

Dr. Beard: I wish to take only a few minutes to show some slides which I believe may represent the formation of creatine from the ingested amino acids. (Slide \dot{s} .) The amino acid arginine contains the guanidine group which is believed to form the guanidine group of creatine. Arginine can be synthesized by the body and does not have to be fed. When the other amino acids, such as glycine or glutamic acid, are ingested I believe that the methyl group (CH_3) of these acids may join with this guanidine rest to form creatine. Glycine ($\text{CH}_2\text{NH}_2\text{COOH}$) contains one methyl group, one atom of hydrogen being replaced by the amino group, (NH_2). In animal experiments this amino gave an increase of 15 per cent in muscle creatine; valine (CH_3) $_2$ $\text{CH}_2\text{CHNH}_2\text{COOH}$ with two methyl groups, gave a 34 per cent increase. Again, alanine $\text{CH}_3\text{CH}_2\text{NH}_2\text{COOH}$, with one methyl group gave an increase of 12.5 per cent, while leucine (CH_3) $_2$ $\text{CH}_2\text{CHNH}_2\text{COOH}$ with two methyl groups gave a 23 per cent increase, in muscle creatine. In these cases an amino acid containing 2 methyl groups gives twice as much creatine as one containing only 1 methyl group. Glycocyamine is creatine less one methyl group. When it is fed this methyl group is supplied by the body to form creatine. This theory does not, however, account for creatine formation from those amino acids like aspartic and glutamic, which do not contain a methyl group.

REFERENCES

1. Levene, P. A., and Kristeller, L., Factors regulating the creatinine output in man. *Amer. J. Physiol.* 24:45-65, 1909.
2. Brand, E., Harris, M. M., Sandberg, M., and Ringer, A. L., Studies on the origin of creatin. *Proc. Internat. Physiol. Congress*, p. 36, 1929. (Boston).
3. Beard, H. H., Protein and amino acid feeding upon creatine formation in muscle and creatinine elimination in urine. *Proc. Soc. Exper. Biol. and Med.*, 28:454-456, 1931.
4. Beard, H. H., and Barnes, B. O., The influence of feeding proteins, amino acids, and related substances upon creatine-creatinine metabolism. *J. Biol. Chem.*, 94:49-69, 1931.
5. Beard, H., A biometric study of the relation between the excretion of creatinine nitrogen and several body measurements. *Human Biology*, 4:351-362, 1932.
6. Milhorat, A. T., Techner, F., and Thomas, K., Significance of creatine in progressive muscular dystrophy, and treatment of this disease with glycine. *Proc. Soc. Exper. Biol. and Med.*, 29:609-611, 1932.
7. Boothby, W. M., Myasthenia Gravis. Second report of the effect of treatment with glycine. *Proc. Staff. Meet. Mayo Clin.* 7:737, 1932.
8. Herroine, E. F., Giaja, A., and Bayle, L., La formation de la creatine et des corps puriques de l'urine aux dépens des matieres proteiques. *Compt. Rend. Acad. d. Sc.*, 193:956-959, 1931.
9. Bollman, J. L., The influence of protein metabolism on the conversion of creatine to creatinine. *J. Biol. Chem.*, 85:169-177, 1929.

10. Myers, V. C., Creatine and Creatinine, *Yale. J. Biol. and Med.*, 4:467-184, 1932.

11. Edgeworth, H., A report of progress on the use of ephedrine in a case of hyasthenia gravis. *J. A. M. A.*, 94:1136, 1930.

12. Taylor, F. R., A new treatment for hyasthenia gravis. *Sou. Med and Surg.*, 94:790, 1932.

13. Milhorat, A. T., Uber die Behandlung der progressiven Muskeldystrophie und ahnlicher Muskelerkrankungen mit Glykokoll. *Deutsch. Arch. Klin. Med.* 174:487, 1933.

14. Needham, D. M., *The Biochemistry of Muscle*. Methuen and Co. London, p. 96-97, 1932.

15. Sullivan, M. X., Hess, W. C., and Sebrell, W. H., Studies in Biochemistry of sulphur. XII. Preliminary studies on the amino-acid toxicity and amino-acid balance. *Pub. Health Rep.*, 47:75-83, 1932.

16. Lillie, R. D., Histopathologic changes produced in rats by the addition to the diet of various amino acids (glycine, lysine, tryptophane, cystine, tyrosine, and glutamic acid, and glutathione, and of mixtures of some of them.) *Pub. Health Rep.*, 75:83-93, 1932.

17. Bretano, C., Untersuchungen uber die Entsefung der Kreatinurie. II. Mitteilung: Die Beziehungen zwischen Kreatinurie und Muskelglykogen. *Arch. f. exper. Pathol. u. Pharmakol.*, 155:21-45, 1930.

18. Moren, J. J., Treatment of muscular dystrophies. *Kentucky Med. J.*, 23:528-531, 1925.

SOME ROENTGENOLOGICAL STUDIES OF PARTS OF THE LYMPHATIC SYSTEM*

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and

J. N. ANE, M. D.†

NEW ORLEANS

The manner in which the lymphatic system absorb insoluble substances has been known for some time. Herring and MacNaughton¹ have shown that insoluble substances such as carbon and carmine when injected into the subcutaneous tissues of the legs of animals was absorbed by the lymph nodes. They are of the belief that solid particles when injected subcutaneously are taken up in the cytoplasm of cells which pass through the walls of the lymphatics by diapedesis into the lymphatic system.

This is a brief explanation of the mode of absorption by the lymphatics when thorium dioxide subcutaneously injected is used to visualize the lymphatic system. Thorium dioxide, being a colloidal preparation containing particles of thorium, its absorption by the lymphatics should be like that of India ink and carmine, as

*Read before the Orleans Parish Medical Society, June 12, 1933.

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found by Herring and MacNaughton in their experiments.

In a preliminary paper² we reported that it was possible to visualize lymph nodes and vessels by subcutaneous injections of thorium dioxide. In these experiments we were able to visualize popliteal, inguinal, mesenteric, and axillary lymph nodes.

Since the publication of our preliminary report on the visualization of portions of the lymphatic system, we have been able to visualize other portions besides those reported in our previous work, employing in these experiments the intraperitoneal, intradermal, intrapleural, and intrapericardial methods of injection on animals and humans.

INTRAPERITONEAL INJECTIONS—RATS

It was found that when rats were injected intraperitoneally³ fine striations in the abdomen which closely resembled lymph vessels were observed. The diaphragm showed an accumulation of thorium, suggesting absorption, in their lymphatics. The thorax clearly showed the intercostal glands and vessels, and the connection of these vessels with what may be the right and left lymphatic ducts. Thus we demonstrated the drainage system of the lymphatics from the peritoneal cavity, diaphragm, intercostal nodes and vessels and into the lymphatic ducts.

INTRAPERITONEAL INJECTIONS—DOGS

Recently we injected thorium dioxide into the peritoneal cavity of dogs and rabbits, observing the route of absorption by the lymphatic system. It was similar to that seen in the rat, but a different portion of the lymphatic system was visualized because the lymphatic systems of the dog and rabbit differ from that of the rat. In the dog there is an absence of intercostal lymph vessels and glands, prominent in the rat. We were able to clearly visualize the right and left substernal glands, situated on the course of the internal thoracic vessels; also the anterior mediastinal gland. In the posterior mediastinum we found a clump of glands, probably the tracheo-bronchial lymph nodes. Surrounding and also near the trachea were found lymph structures, probably lymph glands which occur on the ventral face of the trachea and esophagus, and also the glands usually present between the tra-

chea and the thoracic inlet and those on the right side of the trachea. The anterior and posterior mediastinal lymph vessels were clearly visualized, beginning in the region of the diaphragm and finally ending in the region of the lymphatic ducts.

INTRAPLEURAL INJECTIONS—DOGS

In the instance of the intrapleural injection with thorium dioxide, dogs were used.⁵ The dogs were injected under the fluoroscope, affording an unusual opportunity to observe the route taken by the thorium, which first quickly filled the different fissures on the side injected. The thorium was seen to leave the needle, and quickly and clearly fill the fissures and then follow the pleural route.

Though all of our animals were injected on the right side, in less than one hour after injection lymphatic vessels were demonstrated on the opposite side.

The first portion of the lymphatic system of the chest to be visualized after the intrapleural injection was the substernal glands, less than one hour after injection. It is believed that substances other than colloidal in character, such as organisms, if injected into the pleura in a similar manner will be absorbed by the lymphatic system in the same way.

INTRAPERICARDIAL INJECTIONS—RABBITS

It was noted that in the intracardiac injection of thorotrast, some of the material was accidentally injected in the pericardium and that roentgenograms made 24 hours after injection showed visualized mediastinal and diaphragmatic lymph glands and vessels.

An attempt was then made to inject the thorotrast into the pericardial cavity only. Films made immediately after injection demonstrated the presence of the opaque material within the pericardial cavity surrounding the shadow of the heart. In this manner we were able to trace the lymphatic route from the pericardial cavity through the lymphatic nodes at the base of the heart and through the anterior mediastinal and tracheo-bronchial nodes and vessels, then through the mediastinal lymphatic channels to the diaphragmatic lymphatic plexus. Subsequent films showed that some of the thorium dioxide remained in the pericardium but the liver and

spleen were not visualized, demonstrating that if some of the thorotrast had entered the chambers of the heart the amount was not sufficient to visualize these organs and therefore could not have resulted in the visualization of the lymphatic glands.

PLACENTAL VISUALIZATION—RATS

In order to study the permeability of the placenta to colloidal substances opaque to the roentgen ray, we employed intravenous injections of thorotrast, in four pregnant albino rats, at or near full term.⁴ Roentgenograms showed visualized spleens, livers and placentas, but the thorium, as far as we could observe, had not penetrated the placentas. Roentgenograms of the fetuses were made after delivery but the presence of thorium could not be detected. Histo-pathologic studies were made of the placentas, also the livers and spleens of the fetuses and while evidence of thorium was found in the placentas, none could be detected in the livers or spleens.

SUBCUTANEOUS INJECTIONS—HUMANS

After being convinced that laboratory animals were in no way harmed by the subcutaneous and intraperitoneal injection of thorium dioxide, we began our experiments on the human in an effort to visualize man's lymphatic nodes and vessels.⁵

Case No. 1, a colored female, aged 41 years, with an extensive carcinoma of the cervix and body of the uterus, was injected subcutaneously over the abdomen and into the tissues of the cervix. A radiographic examination made immediately after the injection showed the thorium dioxide in the subcutaneous tissues of the abdomen and also in the cervix. No ill effect from the injection was experienced by the patient and none observed by us.

The patient, again examined 2 days later, had not experienced any symptoms which might be attributed to the injection of thorium dioxide. A radiograph made at this time clearly showed 2 lymph nodes situated in the pelvis, both circular in shape, one large and the other small. The small node had absorbed the thorium in an irregular manner; one quarter of this gland had failed to absorb any thorium, possibly as a result of metastatic cells blocking that portion, and showed as a dark area in contrast to the remaining portion of the gland which had absorbed thorium and was light.

INTRAPERITONEAL INJECTIONS—HUMAN

Case No. 2, a colored female, aged 50 years, with an extensive carcinoma of the uterus, with metastasis, was injected intraperitoneally with thorium dioxide and radiographed immediately, to ascertain if the thorium dioxide had entered the peritoneal cavity.⁵ The patient felt no ill effect from this injection. Two days later by another roentgen observation we demonstrated some of the abdominal and diaphragmatic lymph vessels, leading to the chest, and also several abdominal lymph nodes. At this examination the patient stated that, several hours after the injection of the thorium dioxide, she experienced slight abdominal cramps, which might have been caused by her illness; however, it had not been necessary to take medication for its relief, and she was now free from pain.

These experiments demonstrated that it is possible to inject thorium dioxide into the subcutaneous tissues and peritoneal cavity of man without producing harmful results; and that by such injections it is possible to visualize human lymph nodes and vessels by means of the roentgen ray.

REFERENCES

1. Herring, P. T. and MacNaughton, F. C.: Lymphatics and lymph glands, *Lancet*, I:1081-108, 1922.
2. Menville, L. J. and Ane, J. N.: Roentgen visualization of lymph nodes in animals. *Jour. A. M. A.*, 98:1796-1798, 1932.
3. Menville, L. J. and Ane, J. N.: Roentgen ray study in absorption of thorium dioxide from the peritoneal cavity of the albino rat. *Proc. Soc. Exper. Biol. and Med.*, 30:28-30, 1932.
4. Menville, L. J. and Ane, J. N.: Roentgen ray study on non-permeability to thorium dioxide of placenta of the albino rat. *Proc. Soc. Exp. Biol. and Med.*, 29:1045-1047, 1932.
5. Menville, L. J. and Ane, J. N.: Roentgen visualization of lymph nodes and vessels in the human and in laboratory animals by injection of thorium dioxide. *Proc. Soc. Exper. Biol. and Med.*, 30:979-981, 1933.

DERMATOPHYTOSIS OF THE EXTREMITIES, ITS TREATMENT BY ROENTGEN RAY THERAPY.

H. C. McCORMICK, M. D.

LAUREL, MISS.

When I was requested to present a paper before this section with the suggestion that the clinical application of radiology might appeal to the profession, it occurred to me I could take for discussion no more practically important subject than that ever prevalent and troublesome affection, so called trench

*Read before the Section on Radiology at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

feet, athletic feet, ring worm, dermatophytosis, or "what's is".

"What's is" might be as good a name as any, but I prefer to call it dermatophytosis. I doubt if any one knows the exact nature or cause of the disease, but it seems to be taking the country like wildfire for the past year or two.

I believe it is generally considered as a parasitic or fungus disease. It is limited to the hands and feet, and presents acute vesicular or vesicule-pustular eczematoid lesions on the fingers and palms or backs of the hands, and on the toes and soles and backs of the feet, or palms and soles (the so-called "tetter").

I have seen very little in the literature relative to its treatment by roentgen rays, and what I have seen has not been altogether favorable. At the time I began its treatment with roentgen rays over two years ago, I had seen no account of this form of treatment, although I now know it is quite generally thus treated, but I do not know how successfully, or by what technic. It is in the hope of learning something that I present this paper.

I began it in a purely empirical and experimental manner. My first case was a very aggravated one involving both hands. I had nothing to guide me as to technic, so I used my best judgement with the surprising result it was absolutely well following the third treatment; the treatments were given a week apart.

The second case came from a neighboring town through the recommendation of the previous patient. His hands were the worst I have seen. They were greatly swollen, and the fingers stood out like the spokes of a wheel. He was incapacitated in consequence and discouraged because he had tried everything and everybody, and he had just read an article in the lay press purporting to come from the Mayo's stating that trench foot was incurable.

Since that time I have had some two or three hundred or more cases involving the hands or feet, some of them very bad. In fact they often presented a mixed infection and were covered with blisters, pustules, sup-

purating sores, excoriations and extensive denudations of the epidermis, with great itching, pain, and discomfort.

Some of them gave a history of having lasted from a few months to several years, and had been resistant to all forms of topical application. Some had been confined to their beds for weeks, some were brought to the office in an ambulance. Most of them had tried everything they ever heard of, or saw advertised, and been under the care of various physicians.

I followed practically the same technic in each case with such variations as circumstances and the exigencies of the case seemed to call for, and I have not failed in a single case, so far as I have been able to trace them, to cure in from usually two to four treatments (generally three) to each involved area, and only two of the cases thus far have had a recurrence, and they have since responded to subsequent treatments.

I have used constant factors of 5 MA, 85 PKV, $\frac{1}{2}$ MM aluminum filter. The variable factors are distance, time, and interval between treatments. My standard time is 2—2 $\frac{1}{2}$ —3 minutes at 10 inch skin target distance, or 4 $\frac{1}{2}$ —5 $\frac{1}{2}$ —6 $\frac{3}{4}$ minutes at 15 inch distance, at intervals of a week to ten days. If it is necessary to give more treatments I wait two or three weeks after the third treatment, and if needed give a second series of three treatments. I rarely find this necessary.

The distance is regulated by the size of the area to be covered. My diaphragm will cover a surface area of 5 $\frac{1}{2}$ inches at 10 inch distance, and 7 $\frac{1}{2}$ inches at a distance of 15 inches, or larger areas if I remove the cone holder from beneath the tube.

Ordinarily I allow only plain water, boric acid or borax solution for bathing, or a sparing use of castile or ivory soap. After bathing, dry carefully without friction and rub in a little Luxuria (a cosmetic cream). Occasionally I use carron oil, white vaseline, unguentine, or calamine lotion. Nothing of an irritant nature should be used on the skin during treatment, and better for some time before or after (if possible not closer than

two or three or more weeks), for fear of getting an excessive roentgen-ray reaction. Have the stockings changed once or twice a day, and the shoes if possible every day or two, disinfecting in the interval.

If the area to be treated is too large to be covered at a 15 inch distance, I treat the several areas separately, marking each as exposed with red skin pencil, being careful to prevent overlapping, and protecting all but the area under exposure with tin foil.

In treating the toes I use spreaders between the toes, and treat both top and bottom if both are affected. The same applies to the fingers, except you do not need spreaders. If I treat both top and bottom at same sitting, I do not use more than 2—2½ minutes to each at a 10 inch distance, or 4½—5 minutes at a 15 inch distance.

In hyperkeratotic forms of the disease, I have sometimes found it useful to use diathermia in conjunction with roentgen-rays, the diathermia every day or two, and the roentgen-rays every week or ten days.

I will not undertake to explain the physics of roentgen-rays, or the whys and wherefores of how they act or cure these cases, nor could I if I would. The first symptom to be relieved is the itching or pain, which is usually greatly ameliorated, if not entirely abated within a few days after the first treatment, probably due to vascular changes induced by roentgen-rays in the neurilemma.

In medical practice we frequently apply our remedial measures empirically (hence the name "practice of medicine"), and with success. The scientific reason may follow later and often does, but frequently does not. Often the reason given is changed in the light of more recent knowledge, but the result remains the same, and that is what we as clinicians are interested in, and that is what our patients are interested in. They come to us for relief from troublesome symptoms and are not concerned or interested in high spun theories.

John Lock says, "The unerring mark of a lover of truth is, not entertaining any proposition, with greater assurance than the proofs it is built on will warrant"; Leonardo

De Vinci, that "wisdom is the daughter of experience".

It would probably be going too far to say this treatment is a specific and it would be wise to remove all known causes and take all preventative precautions if such are discoverable; but I have found it so satisfactory to myself and gratifying to my patients, I have never found it necessary to employ any other than the simple adjuvants mentioned, and often not even these, and the results have been uniformly good.

It is possible the roentgen-rays act by modifying the action of enzymes and ferments on the tissues, fluids, or gasses in the body, a rearrangement and splitting up of the atom—an ionization. By ionization is meant the ability and property roentgen-rays possess of so disturbing the electrical arrangement of a stable atom as to separate some of the electrical charges of the atom and render it less stable and more susceptible to destruction by other agencies.

In all pathological processes there is a constant struggle going on between the normal and pathological cell, and the stronger wins. The battle is carried on by the cell and it is immaterial whether the result is due to the direct destruction of the cell, or so weakening it as to allow of its destruction by the normal cell, which may be influenced by the roentgen-ray to increased activity.

The effect of roentgen-rays on bacteria is a mooted question, but it is generally acknowledged that the beta (cathod or soft) rays are lethal to bacteria in large doses, varying with the kind of bacteria, and that although beta rays have insufficient penetration to reach deep seated bacteria at any depth, yet the gamma (hard) rays with their great penetration have the power of producing beta rays in the tissues by their action on the light elements, hydrogen, carbon, nitrogen, oxygen, and that these secondary or scattering rays from the primary beam have a direct bactericidal action; or it has been suggested the roentgen-rays so modify the soil as to provide a less favorable medium for bacterial growth. Whatever the explanation, it is a fact that bacterial skin

diseases are favorably effected by roentgen-ray therapy.

Ewing in his "Tissue Reaction to Radiation" says—"Ultimate knowledge of the mode of action of radiation still eludes our grasp. Much more extended observation of the histological and biological changes produced in radiated tissues must be accumulated before radiation therapy can be taken out of the field of empiricism". It is known that they profoundly alter cell structure, blood cells, blood vessels and lymphoid structures.

The physical problems are complex and diversified, but it is not necessary however desirable it may be, to understand all of these in order that you may apply roentgen-ray therapy, if one fully understands his apparatus and the limits of his own ability, and keeps well within the limits of safety.

It is best to work with a minimum change of factors, and to familiarize ones self thoroughly with these. In the treatments I have outlined one should never get any visible skin reaction. With my apparatus and the technic outlined above, it takes about twenty minutes to produce a moderate tanning. I do not exceed, usually, a total of 9 to 12 minutes over a period of two or three weeks with above factors at 10 inch distance and never over 15 minutes at that distance, in superficial non-malignant skin diseases.

It is safe to say that roentgen-rays are the most important single agent in the armamentarium of dermatology. This applies especially to the disease under consideration. I am not a dermatologist and so do not pretend to an exact classification of skin diseases, but I glean from a casual reading of dermatological books at my command, dermatologists in the main lean to topical applications as superior to radiation, and report recurrences as common.

It has been my good fortune thus far to see nothing but good results, and only two recurrences, which have now responded to further treatments, in over two or three hundred cases. One of these patients I have given about three courses of treatments during a period of several months. His disease has existed for several years under medical

treatment with exacerbations and remissions, but no intermission. Roentgen-rays have given him more relief than any other form of treatment, and he has now been well for several months.

I would hesitate to apply the treatment in recalcitrant cases that failed to respond to a reasonable number of treatments, for fear of telangectasis, or producing an unnatural dryness of hands or feet from excessive action on the sweat or oil glands of the skin.

It is difficult to apply it to epidermophytosis inguinale, the so called tinea cruris or eczema marginatum, because of the unevenness of the surface and the difficulty of getting an even distribution of homogenous rays, and the difficulty of preventing overlapping. Here the testicles must be protected which may be done by the patient holding them aside with his glove protected hand, reinforced by tin foil if desired.

In dermatophytosis of the nails one has to use a little heavier dosage. Here I have used three or four treatments of five minutes each at 10 inch distance at weekly intervals, confining the rays strictly to involved areas. This will give a moderate tanning. Then wait a month or six weeks, and repeat, if necessary.

In pompholyx, hyperidrosis, impetigo, and other diseases which are clinically somewhat similar in appearance to dermatophytosis, and in corns, warts, callouses, and keratoses, x-rays are often of advantage, although in some of these, one may have to resort to other treatment in conjunction with his roentgen-rays; but this paper does not deal primarily with these, so it is not necessary to dwell on them.

DISCUSSION

Dr. J. Rice Williams, (Houston): I want to express my appreciation of Dr. McCormick's paper. Possibly he will return the kindness when I speak, in case nobody else does.

I have had experience along that line with some success. I had a patient about two years ago, and he came back for additional treatment every six months. This is on his hand. One treatment, that is one time, cures him for the time being.

Dr. M. D. Ratcliff, (McComb): I arise for this one point of caution—that we be careful about

the total amount given to the extremities, that is to the skin. My experience has not been so extensive as Dr. McCormick's. I have one sad experience now, of the hands. Some years ago I gave this patient a few treatments, and from fear of an over-dose would not give more treatments. The patient went elsewhere, and the roentgenologist treated her hand, and now she is in such a condition that I fear an amputation will be necessary.

We may treat these things a number of times, for 12 or 15 minutes, and then I would refuse to go beyond that for a number of years. That is just a caution.

Dr. McCormick, (Closing): I specifically meant that I would only give a reasonable number of treatments, and would not give a patient further treatments in several months time. So far it has been my fortune not to have any recurrence.

THE GYNECOLOGICAL ASPECT OF SYMPTOMATIC EPILEPSY*

LUCIEN A. LeDOUX, M. D.
NEW ORLEANS

Symptomatic epilepsy is a term used to describe epileptiform seizures which may or may not be accounted for by scientific investigations.

We are all familiar with the nervous symptoms manifested by most women, for several days preceding the appearance of the menstrual discharge, and in some cases of menstrual irregularities, have noted an aggravation of these nervous phenomena to the point where some patients become very excitable and others very much depressed.

Of all the menstrual disturbances, amenorrhea seems to evoke the most pronounced nervous and mental symptoms, and as reported here, we shall see that it may assume the grave aspect of periodic epileptic seizures.

In view of the fact that this case received competent and thorough medical study before being referred, we can assume in view of the subsequent developments that the gynecological phase was the principal factor in this case.

CASE REPORT

Mrs. C. F., a white female, aged 33 years, was referred to me by Dr. Randolph Unsworth in November, 1931, because of her irregular menstrua-

tion and this possibly being a factor in the production of her epileptic seizures.

Her past history was negative for serious illnesses or operations. She was the fifth of 9 children, a normal delivery; one brother surviving, the others dying before one year of age.

M. H.: Menstruation began at the age of 11 years of the regular 28 day type, of 4 to 5 days duration, with no pain before, during or after. This normal state continued until an abnormal obstetrical delivery nine years ago.

Marital History: The patient has been married 13 years, and has had two pregnancies; both terminated by operative means, one abortion of two months between these deliveries, the cause undetermined. Six weeks after delivery the patient menstruated but irregularly every 21 days and of a scant one day duration. This has persisted up to the time that she consulted me.

P. I.: Began about two years ago, seven years after her last delivery, with sudden convulsive seizures, severe in type, occurring once or twice a month usually on or about the time of her menstrual period. What she describes as "weak" spells, occurred 8 to 10 times a day, this being almost a daily occurrence. Her periods were irregular and scanty and very dark in color. She complained of hot flushes and dizziness at times.

Phy. Ex.: Patient was a well developed and nourished female who appeared restless and nervous. The head and neck appeared normal excepting for a slight thyroid enlargement. The chest was bi-laterally symmetrical. The lungs showed no rales. The heart was of normal outline and there were no murmurs. Pulse rate 82, B. P. 110/60. The abdomen was flacid and showed striae. The liver, spleen and kidneys were not palpable. There were no tumor masses. Pelvic examination revealed a second degree laceration of the perineum with moderate cystocele. There was a right unilateral laceration of the cervix. The vaginal secretion was alkaline, there was no cervical stenosis and smears from the urethra and cervix were negative for gonococci.

The patient was about 10 pounds overweight. The B. M. R. was not taken at that time.

A tentative diagnosis of functional amenorrhea was made and the supposition advanced that this was due to obstetrical shock; the history giving evidence of severe menstrual disturbance dating from her last delivery, which was a podalic version.

The patient was placed under bromides and put to bed for two weeks; and then about 10 days before her period was due, she was given for six consecutive days, 50 rat. units or I --. of ovarian hormone. This was given to her in the latter part of November and the period that followed lasted 4 to 5 days, was more profuse and lighter in color, a phenomena noted for the first time in five years.

*Read before the Orleans Parish Medical Society. June 12, 1933.

She had two severe epileptic seizures and two light attacks during this time but her "weak" spells became less severe and more infrequent and had ceased altogether following her second series of hormone injections in the month of December.

She menstruated in December, January, and February every 28 days, of 4 to 5 days duration, profusely and bright in color and without pain. During this time her only medication was six injections of ovarian hormone given at the follicular period of the menstrual cycle.

In April she only received three injections and her period was normal, only it appeared at a twenty-four day interval, instead of twenty-eight days. In May she did not receive any medication whatsoever and her period came at a 23 day interval, was not quite as profuse but lasted 4 days.

From May 1932, until March 1933, the patient has menstruated every twenty-three days, moderate in amount, no pain and of 3 to 4 days duration; this without any medication.

In April of this year the patient complained of some headache and dizziness, so treatment was resumed and her period appeared as usual, with relief of her symptoms.

Last month, her period was scanty and lasted but one day, but with 150 unit injections her period appeared normally. This patient has not had a major seizure since February, 1932, and her minor symptoms were completely dispelled three or four months later.

COMMENTS

It is my belief that obstetrical shock precipitated this ovarian dysfunction, and the continual lessening of the menstrual function provoked the afore mentioned severe nervous disturbances.

Excepting for a short period of rest, and with the use of sedatives, the medication employed was strictly limited to the use of hormone apy given by injection.

It is significant that as soon as the normal period was re-established, her epileptiform seizures ceased, and a comparatively long period of time elapsed before the patient required additional treatment because of a tendency to amenorrhea.

In my opinion, such cases as these will require hormone medication at variable periods, depending upon the menstrual manifestations.

Obviously a complete gynecological study should be made and such remedial measures instituted as will rescue a number of those unfortunates from permanent invalidism.

DISCUSSION

Dr. H. R. Unsworth: I, personally, do not know of any affliction that is as pitiful as the convulsive states. Convulsive seizures, after the age of twenty-five, is practically always symptomatic.

The case reported by Dr. LeDoux is undoubtedly one of ovarian-thyroid disorder, and the etiology of the convulsive seizures in this patient.

As revealed by his case report ovarian therapy has apparently adjusted this patient.

Personally my experience with this therapy in many of the nervous phenomena of women has proved very satisfactory.

I wish to congratulate Dr. LeDoux and thank him for the privilege of discussing his paper.

Dr. LeDoux: There is very little to add, except that I want to correct an impression of Dr. Unsworth, because he mentioned the occupational state of the husband and worry as a factor in disturbing this patient to a point where it may have caused her epileptic seizures. This is not the first case of this type that I have had to treat. I have had them as severe and have had a number much more mild than this one, but the thought you should carry with you, is that from her last delivery seven years ago, she never re-established her normal menstrual function and she got progressively worse until at the end of two years there was practically no menstruation at all, and her seizures began then, and that was several years before her husband was out of employment. I want to emphasize the fact that shock will produce a disturbance in menstruations so severe that it can bring about a total suspension of this phenomenon. But the patient who has her function restored and can be removed from the more or less permanently disabled class by treatment certainly gives us something encouraging not only for the patient but for ourselves as well.

URINARY ANTISEPTICS*

FRANK L. VAN ALSTINE, M. D.
JACKSON, MISS.

The last few years has seen a number of new urinary antiseptics placed on the market and I shall endeavor to evaluate a few of them as briefly as possible. Necessarily I shall have to depend on reports in current literature or clinical trials made by various physicians.

C. G. Hoffman defines the ideal urinary antiseptic as "one which if given by mouth, in suitable doses, produces no disturbance, incapable, when properly used, of damage to the kidney,

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

would produce in the urine, from the pelvis down through the entire tract, a concentration sufficient to be destructive to organisms which cause infection; and at the same time be absolutely non irritating and incapable of damage even to inflamed lining. The drug should be completely active in itself; i.e., should require no other drug to reinforce its action through altering the reaction or otherwise changing the urinary secretion." Unfortunately, in so far as I am aware, no such drug exists.

Of the older drugs methylene blue has been found entirely inefficient. Acriflavine has gained considerable popularity and excellent results in a fairly large series of cases reported. Disagreeable gastric symptoms in some patients are noted.

Urotropin, one of our oldest and best known urinary antiseptics recently received some experimental attention at the hands of Scott and Mitchell.¹ In their opinion acid sodium phosphate as an acidifying agent should be abandoned in favor of ammonium benzoate when urotropin is to be used as a urinary antiseptic. They also stress the uselessness of giving urotropin in the face of a highly alkaline urine, also of continuing the drug over a long period of time, due to its highly irritating properties.

Among the newer drugs we find the following: Pyridium, serenium, malophene, niazo, ambazin, and caprokol, of a few of which I shall speak briefly.

Riaboff² referring to pyridium states that in normal functioning kidneys the drug is eliminated in high concentration, but that in bed patients the degree of concentration rapidly decreases with the consequent decrease in bacteriocidal and bacteriostatic effect. It is not toxic by mouth and is not irritating to the genito-urinary tract even in large doses.

Rusche³ reports fairly satisfactory results in a series of cases in which he used niazo which is, briefly, a diazotized pyridine product. He found it apparently most useful in infections where the cocci group were the offending organisms.⁴ H. Sugar reported similar results but included a report of his findings where colon bacilli were the offenders. He commented on the fact that this drug was well tolerated

by the stomach as against some less well tolerated.

Ambazin was reported by Meyer Sabel.⁵ He reported a number of cases in which this drug was used in the prevention of and treatment of postoperative urinary infection. He claims to have gotten better results in 55 per cent of his cases than with other drugs, and concludes that ambazin is worthy of further study in the prevention and treatment of postoperative cystitis.

With certain of the above mentioned drugs the manufacturers advise that the fluid intake be restricted, in order that the concentration in the urine may be increased.

In my opinion large amounts of fluid do more toward freeing the urinary tract of infection than any antiseptic yet developed. And on the other hand restricting the fluids, thereby concentrating the urine, does more harm than the increase in concentration of the drug used can do good.

I have been disappointed so many times when I have compared my clinical results with the extravagant claims made by the manufacturers of various urinary antiseptics that I am convinced that water is still the physician's best friend in treating urinary tract infection.

My order to "Force Fluids" is usually the first order given when a patient with a urinary tract infection is admitted to the hospital.

If stomach irritability prevents the patient retaining fluids by mouth, clysis or infusions of physiological salt solution may easily be resorted to, but the idea is to get the fluid into the patient.

Intravenous therapy frequently used in urinary tract infections includes urotone, mercurochrome, and neo-arsphenamine in small doses, the latter being especially used in streptococcal and staphylococcal infections.

The use of vaccines have been found helpful in certain urinary infections, especially streptococci and *B. pyocyaneus*.

In gram negative bacillary infections which are the chief offenders of the urinary tract the ketogenic diet, although strictly speaking not a urinary antiseptic, has proved useful, the growth of the colon group being inhibited when the pH of the urine is decreased to 4.6 to 5 pH.

The average pH of urine of a person on mixed diet is 6 to 7.

Every case of urinary infection is a problem in itself and requires painstaking study with all the resources at the command of the physician; and probably the ideal urinary antiseptic, one that will prove effective with all cases, will never be found.

Bacteriological study will reveal the causative organism and chemical study will reveal the characteristics of the urine as a culture medium. These two factors should be known in order that proper medication may be prescribed.

The importance of routine, thorough urological study becomes at once apparent when one considers all the possible lesions that may be causative factors in an infection of the urinary tract. Intraurinary conditions such as tuberculosis, new growth, calculi, stasis, and trauma must be investigated, and if found, an effort made toward correction. Careful clinical study may reveal extraurinary conditions such as infection of teeth, tonsils, sinuses, tuberculosis, and intestinal disturbances as being contributory factors.

I do not wish it understood that I do not use urinary antiseptics, for I do. I have tried about all of them, and when I prescribe them I expect little and am usually not disappointed. My patient at least is benefitted by the amount of water ingested in swallowing the drug.

REFERENCES

1. Scott, J. M. and Mitchell, D. R.: Urinary acidifiers and antiseptics: clinical study. *Canada. M. A. J.*, 25:668-673, Dec. 1931.
2. Raiboff, P. J.: Study of pyridium as urinary antiseptic with special reference to its elimination by kidneys. *J. Urol.*, 27:329-342, March 1932.
3. Rusche, C.: Clinical report on urinary antiseptic. *Am. J. Surg.*, 15:545-547, March, 1932.
4. Sugar, H.: Internal antiseptics: further studies with new diazotized pyridin product in infections of urinary tract. *M. J. & Rec.* 136:286-287, Oct. 1932.
5. Sabel, Mayer.: Postoperative antiseptics. A preliminary report on the use of ambazin with a series of controls. *J. Urol.*, 23: 491-504, April, 1933.

DISCUSSION

Dr. J. T. Bailey (Meridian): I enjoyed Dr. Van Alstine's paper very much. I thoroughly agree with him as to the fact that we very probably will never find an absolute antiseptic for the urinary tract. I also feel as he does, that every case of urinary infection is a problem in itself. We know,

and I think we all feel as he does, that all urinary infections do better, and we get better results, by pushing fluids. I can not say that I agree with him altogether as to his idea of urinary antiseptics. I feel that in some cases I have gotten some very nice results, and probably the most valuable and most satisfactory antiseptic that we have today is one of the newer products, practically new, and that is by pyridium. I feel that I have gotten better results from pyridium than any other unless it is urotone. I have seen some very nice results from urotone. We do get very nice results from some vaccines, but as he has said, in any urinary infection you have to think about the teeth, the sinuses, the tonsils and those things, and study each case carefully. What will do one good will not do the other good. I enjoyed Dr. Van Alstine's paper, and I also want to say that I was glad he brought out the fact about neo-arsphenamine being a nice antiseptic, and doing nice work in the streptococcal and staphylococcal infections.

Dr. H. F. Garrison (Jackson): Dr. Van Alstine, as usual, did not leave much to be said. He so thoroughly covered the subject that there is very little that I can add. I agree with him heartily with reference to the urinary antiseptics. I do not know that any of them do much good. I further agree with him with reference to the water. In my line of work of course, it is difficult sometimes to get patients to take water, and in that case, we have to resort to all kinds of methods in order to give them water, particularly the smaller ones, by intravenous methods. The larger children may be coaxed to take different drinks with some sweet substance that will encourage them, but so far as the general proposition with reference to urinary antiseptics is concerned, I have seen very little good from it.

I agree with him with reference to those things that he mentioned. I, too, have gotten some very good results from several of the things that he has mentioned, but really I think that sometimes it is questionable whether the results that we do get in cases are really results of things we have given or whether something else is responsible. As to the vaccines, I suspect that in some cases the vaccines are really beneficial; in others they do no good, but as a whole and in the main Dr. Van Alstine has thoroughly covered the subject and leaves but very little to be said. The pushing of fluids in these cases is the most essential thing to be done, and I congratulate the doctor on his most excellent paper.

Dr. Van Alstine (closing): I do not think I can say anything further. I thank the gentlemen for the discussion.

ACUTE CONJUNCTIVITIS: DIAGNOSIS
AND TREATMENT*E. LeROY WILKINS, M. D.
CLARKSDALE, MISS.

Perhaps it may seem that this paper should be read as "A Resume on Conjunctivitis," as it covers rather broad territory rather lightly, and because I had to rely on text-books and such literature as I had for most of it. However, as the above title was assigned me, I shall read it under that title.

First, let us consider briefly the structure of the conjunctiva. It is essentially a mucous membrane, lining the inner surfaces of the lids and reflected on itself to cover the anterior surface of the eyeball, to the margins of the cornea. Some anatomists have it that it here changes its structure, becoming epithelial, and covering, and becoming, the epithelial layer of the cornea. Its structure varies in its different localities, palpebral, ocular and forniceal. For this reason the different areas may be attacked separately, though, in most conditions, the whole soon becomes involved. The palpebral portion is thicker, more opaque, very vascular and firmly adherent to the underlying structures. It is somewhat papillar. At the margins of the lids, it is continuous with the lining on the meibomian glands, lachrymal ducts, canals, etc. The ocular portion is thinner, fairly transparent, loosely connected, not papillar, except near the fornices, and in health, seems only slightly vascular. At the fornices the tissue is thicker, more vascular and papillar.

The eye, with its conjunctiva, because of its constant exposure during waking hours, is the recipient of many irritants and bacteria, despite nature's provision of the lashes as a shield and the tears as a constant lavage. The tears seem to exert a very definite lysing effect on many bacteria, also.

Those germs which most frequently find lodgement and growth on the conjunctiva are *Micrococcus catarrhalis*, Koch-Weeks

bacillus, some of the streptococcus and staphylococcus groups, the pneumococcus, gonococcus and *Bacillus diptheriae*; others occasionally.

Possibly the simplest and most common type of conjunctivitis is the hyperemic or dry-catarrhal type. Its causative factors are many: occupationally, from the constant irritation from dust, wind, intense dry heat, etc., or from misplaced cilia, early presbyopia, refractive errors that are uncorrected, excessive use of tobacco and alcoholics, and from calcareous deposits in the conjunctiva, which are often the result of constant irritants or refractive errors. Nasal and, or, sinus infections, blepharitis marginalis, or obstructions of the lachrymal ducts, might also be causes. The symptoms are those which are common in all the milder forms. There is congestion, at first only palpebral, of a mild degree, not accompanied by discharge, though there may be some increase in lachrymation. There is a sensation of dryness of the lids, also of heat, and slight photophobia. All of these symptoms are increased by the protracted use of the eyes, especially by poor or artificial light.

This condition is fairly common in those of fairly advanced years, may be present in incipient cataracts, and is often untractable and a source of no little annoyance to both patient and doctor. Treatment would begin, of course, with the amelioration or removal of the cause. The "old standby," boric acid, alone or in combination, baborate of soda, aqua camphora, mild solutions of zinc, and sometimes the use of some ointment or oil, all seem to be of value. A favorite prescription with me is: Acid boric, grs. XL, sodium baborate, grs. XXX, aqueous fl. ex. hydrastis, m XX, aqua camphora and aqua destil., aa qs. ad. oz. IV, to be used with either a dropper or eye-bath, several times daily. This makes a pleasant lavage, slightly antiseptic, almost neutral in reaction, slightly astringent, and very pleasant to the patient. It may be useful, also, in many of the other forms of conjunctivitis, especially after the more acute stage has subsided, or for its soothing effect between applications of the stronger remedies.

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

Another fairly common and a contagious type of conjunctivitis is that which is caused by the Koch-Weeks bacillus. It may be either quite mild and, at times, varying to quite severe. Diagnosis may be made by laboratory findings, but may usually be made by the clinical findings, the characteristic "pink-eye," from which it receives its common name, the history of contact with other cases, or during an epidemic of the disease. It is quite contagious and often makes heavy inroads when it once gets started in schools or institutions. The onset is usually mild but progresses rapidly till it reaches its height about the third day, when it involves the whole conjunctiva. There is a rather mucopurulent type of discharge of moderate amount, though this may become very copious and of purulent character. Patient complains of feeling of "sand in the eyes"; "they feel feverish and hot," or heavy. There may be present, in the more severe types, ecchymotic spots. Complications, usually of the cornea, while not rare, are not very frequent unless there has been much neglect. The acute stage lasts from a few days, in the treated cases, to two weeks or more in those neglected. Treatment of "pink-eye" is, in the usual case, comparatively simple. Most cases may be cut short and all complications avoided if treatment is begun early. Argyrol and neosilvol are perhaps most frequently used. In fact, the laity have had so much argyrol prescribed for eye diseases that they procure it either from the druggist or some friend who used some of it in her family anywhere from a few days to a year or more ago. Fresh solutions should always be used. I use neosilvol for the reason that it is not so familiar, not so "nasty" and is more stable. I believe that it should be used in strengths of 20 to 30 per cent. Zinc solutions are used by some physicians.

Gonorrhoeal conjunctivitis and ophthalmia neonatorum, which will be discussed together, are perhaps the most dangerous, in so far as vision is concerned, of all conjunctivitis. Most frequent in the new-born, though it may attack anyone, anywhere, anytime whether guilty or innocent. The prevalence in the

new-born is being greatly lessened by the public health and maternity welfare agencies, who are doing very efficient work along these lines. The use of proper preparation of the mother and the instillation of suitable antiseptics into the eyes of babies at birth are cheating the institutes for the blind of many potential inmates. It is necessary to comment just here—that not all ophthalmia neonatorum is due to the gonococcus. This will be mentioned again later. The above conditions are characterized, in the beginning, by a slight inflammation with possibly a small mass of discharge at the inner canthus, beginning in the new-born on the second or third day, though they begin as early as 12 to 18 hours; in older cases in from 12 to 48 hours after infection. Any infection or inflammation coming on in the first three or four days after birth should be considered as gonorrhoeal until definitely disproven. (The non-specific type rarely begins till the fifth to eighth day, though an infection of gonococci which has been received after birth, due to careless handling and lack of cleanliness, might occur this late). The mild inflammation progresses rapidly to a severe congestion and redness of the whole conjunctiva, with swelling and redness of the lids. Marked chemosis and often overlapping of the lids. The discharge becomes very copious and of the characteristic yellowish color of gonorrhoeal pus. The clinical picture is such that there is usually little doubt of or difficulty in the diagnosis. Of course, the presence of gonococci on microscopical examination is confirming.

The greatest danger comes from involvement of the cornea. This may be due to direct infection, an abrasion of the cornea from careless treatment, or the use of too strong antiseptics. It is also claimed that there may be a sloughing or ulceration of the cornea due to cutting off of the nutrition by the marked swelling of the surrounding tissues. Differentiation from the nonspecific form, from Koch-Weeks conjunctivitis, in the severe form, and from neglected catarrhal or the streptococcic forms can be done in the laboratory. Treatment: In the new-born, as said above, any inflammation coming on in

the first three or four days, must be regarded with suspicion. It should not be allowed to progress. Treatment should be instituted at once, just as if a definite diagnosis had been made. Then make your diagnosis and continue such treatment as may then be indicated. The gonococci may be difficult to find during the first day or two and this is when treatment means most. Frequent treatments of the eyes, include thorough cleansing of the lids and lashes, with solutions of boric acid, weak-bichloride or even sterile water. The instillation of some antiseptic following the cleansing, and the application of cold pads, unless there is corneal involvement, and this done frequently, is about the usual and most accepted treatment. Personally I use the boric flush, or the sterile water, followed by 25 to 40 per cent solution of neo-silvol. The eye is cleansed very thoroughly at least every hour, and the antiseptic instilled at least every two hours. The discharge is wiped off frequently. The cold pads are made of cotton, laid on ice and transferred to the eye and are used only once, that is, a fresh pad every time. It seems that, in this disease, a tolerance is acquired for most of the antiseptics after they have been used for a time. It may be necessary to change from one to another. Also, from the too prolonged use of the silver preparations, there may be developed an argyrosis, or an irritation. I have seen argyrosis from argyrol, not from neo-silvol. I rarely use silver nitrate in any eye. The principal points in treatment are frequent and thorough cleansing of all the conjunctival surfaces and the lids and sufficient manipulation to insure the distribution of the antiseptic to all surfaces of the conjunctiva, and the utmost care to do no damage to the cornea. I shall not discuss here the involvement of the cornea.

Purulent conjunctivitis, not specific, may occur from infections in the nose of its sinuses, severe and neglected "pink-eye", or even the simple catarrhal type may be so neglected or become the ground-work for a mixed infection, and be quite purulent. Again, resort to laboratory may be had for a diagnosis.

That treatment would be very similar to other forms.

Membranous and pseudo-membranous conjunctivitis.—Occasionally one sees a case of true diphtheritic infection of the conjunctiva. There is present a membrane, which may, as in the throat, be either in patches or confluent, of the more or less characteristic appearance and color, removed with difficulty, leaving a bleeding, raw surface, and if the case is well advanced, the tissues around the margins of the membrane may be pale and anemic. A thin sero-sanguinous, or may be a quite bloody discharge is a diagnostic point. The diagnosis may be made, in addition to these clinical findings, by the laboratory. Treatment consists of gentle cleansing with mild collyria, supportive and systemic measures, and the usual watchfulness for manifestations of toxemia in the heart and kidneys. The use of mild unguenta or oils may lend some comfort and aid in preventing adhesions. The cornea must be carefully watched and handled. Of course the main dependence in treatment is antitoxin, which, I believe, should be given in a large initial dose. I am sure that more cases of diphtheria have been hurt, or lost, by too small than by large doses of antitoxin. Repeated doses are seldom necessary if a large initial dose is given. Repeated doses may be used, however, following a large initial dose, if deemed necessary.

The pseudo-membranous type is generally much milder in every way. The membrane is thinner, seems more on than a part of the conjunctiva, has not the characteristic color and appearance, and while it may leave a bleeding surface when removed, the appearance is more granular, and its accomplishment is much easier. The discharge is similar though not usually showing so much blood. The eyelids are soft and pliant, though they may be swollen, and there is much less pain. I failed to mention in the true type that the lids are usually much swollen and are quite hard and stiff, and are painful. If the condition is due to a streptococcus, which type often follows the exanthemata, the condition may be quite severe, more rapid in progress

and very destructive. Treatment of both is the usual cleanliness, gentleness and antiseptics, etc. It seems that the discharge may be readily removed and relieved in these types, with an alkaline lavage rather than with boric. In the streptococcus type, resort may be had to the serum. I seldom use any form of streptococcus serum.

I shall only mention parinaud's, which is rather rare, and trachoma, which would require a full paper of its own.

Follicular conjunctivitis should probably come under the head of chronic. It must be differentiated from trachoma, which if one is familiar with both, should not be necessarily difficult.

The Morax-Axenfeld type is characterized by the marginal and canthal location of the inflammation, and may be acute or sub-acute or chronic. The laboratory finding of the diplobacillus of Morax-Axenfeld will confirm a diagnosis. The treatment that seems to be most effective in this form is the zinc preparations, which seem rather specific.

There are many other forms of conjunctivitis, blending with each other to such a degree with so little differentiating causes and symptoms, that I shall not attempt to mention them because of lack of time. However, I shall call attention to one other form, which I choose to call "light conjunctivitis". It is brought on by being much in the presence of intensely bright or penetrating lights, as movie studios and projecting rooms, ultra violet and other so-called therapeutic lights, oxy-acetylene and electric welding, and rarely in our climate, by snow and ice. Diagnosis is made largely by the history, occupation, etc. It is at times acutely acute. Treatment is largely symptomatic. Rest in dark room, cold applications to the lids, oil instilled into the sacs, and often an anesthesia of the conjunctiva or possibly an opiate are necessary to relieve the pain. If exposure has been too prolonged, there may be disastrous effect on the retina.

In closing, I realize that I have tried to cover a rather large territory and that I have touched only the high spots, or some of them, of conjunctivitis, and wish to give due credit

to those writers of text-books and in the literature which I possess, for much of the material used in compiling this paper.

SUMMARY

To finally sum up the treatment of acute conjunctivitis, I would like to add the following. All acute conjunctivitis, with the exception of trachoma, should be treated with the utmost gentleness, cleanliness, mild antiseptics, and most of them frequently. Strict watch should be maintained with reference to the cornea, which is the area of the conjunctiva from which most of the real trouble and danger come. The treatment of this area was entirely too voluminous to be undertaken here.

DISCUSSION

Dr. W. S. Sims (Jackson): Hyperemia. We often meet with this condition and it manifests itself by a reticular injection. The separate vessels are still distinguishable and the meibomian glands are visible through the reddened conjunctiva.

These patients' complaint is out of all proportion to the objective signs. The cause is usually an error of refraction.

The local treatment consists of boric acid and sodium bichromate.

I usually add about two grains of salt or chloride of sodium to the ounce or water. A dram of camphor water and a few drops of deodorized tincture of opium to an ounce is helpful. If the patient complains of much discomfort, about one per cent of novocain affords relief. We want to be sure to avoid astringents as zinc.

Diplobacilli Conjunctivitis. In this form of conjunctivitis, zinc is a specific.

Trachoma. If there is much congestion and discharge, it is better to first reduce the congestion with ice cold applications and a free use of some antiseptic lotion as sublimate or boric acid.

This treatment should be followed up with daily applications, of one per cent silver nitrate to the everted lids and continued until the discharge is reduced.

If there is no contraindications, as ulcers of the cornea, we are now prepared to begin the treatment with sulphate of copper. This is best done with a smooth stick. The lids are everted and the copper stick is pushed well up into the upper fornix and moved from one side to the other, the lid being lifted away from the ball by the stick. The lid is held up with the stick to protect the ball.

It is important to start with the upper fornix since this is most affected and most difficult to reach. The copper must not be applied too gently;

it must be firmly rubbed into the conjunctiva once a day, otherwise relapses are sure to occur and the case is certain to run on indefinitely. The time is shortened in some cases by mechanical means if the eyes are practically free from acute inflammation.

The best instrument for this operation is Knapp's roller forceps. In certain cases the excising of the fornix is indicated.

One case I had under treatment was complicated with entropion. In this case, I had to extirpate the tarsus.

The after treatment: copper citrate five per cent ointment is the best treatment.

Gonorrhoeal Conjunctivitis. The first thing to be done in a case of this kind is to protect the non-affected eye. We can do this with a Buller's shield and if properly applied give absolute protection to the non-affected eye.

In the treatment of the affected eye, we first apply iced compresses continuously at short intervals, both day and night. The eye must be carefully cleansed every half hour. Here we need a competent and trustworthy nurse.

When the tense and reddened condition of the lids seems to be very much less and the purulent discharge is established, a one per cent solution of nitrate of silver should be applied to the everted lids once or twice a day. If the tension is too great to separate the lids and interferes with the proper cleansing of the eye, a canthotomy should be performed. A canthotomy also removes the pressure on the ball and lessens the danger of corneal complications.

The treatment of ophthalmia neonatorum is the same with a few exceptions. The application of cold must be watched as continued use of it interferes with the nutrition of the cornea.

Spring or Vernal Catarrh. Treatment is purely symptomatic. Dilute acetic acid, one drop to six ounces, gives temporary relief. Adrenalin also gives relief. Estivin, two per cent, gives temporary relief also.

Diphtheria. The treatment is essentially that of purulent ophthalmia with two important exceptions, silver and canthotomy. Both these procedures increase the area from which toxins may be absorbed.

Dr. H. L. Arnold, (Meridian): I think Dr. Wilkins had a most excellent paper, and I enjoyed it very much. I noticed that he stressed the frequent and thorough cleansing of the eye, which is one of the most important things in the treatment of acute conjunctivitis. He mentioned only two or three solutions that he used, argyrol and neo-silvol and sometimes zinc solutions. There are a number of drugs which are of great value in the treatment of these conditions. One or two per cent solution of mercurochrome is very good, but often

is objectionable on account of staining. A weak solution of zinc is often of value. Metaphen is a very useful drug; it is non-staining and non-irritating. One main objection to the use of argyrol is that so often the patient has been using it before he comes to you. If you do not change his treatment, the patient does not think you know any more than he does. It is doubtful if argyrol and neo-silvol have much antiseptic value. The doctor does not think much of the use of silver nitrate, but I think, rightly used, silver nitrate is one of the most valuable remedies that we have. It can well be used in solution of from one-fifth of one per cent to one or two per cent, according to the degree of inflammation.

Dr. Wilkins, (closing): I want to thank the gentlemen for the discussion of my paper. I did not try to go into trachoma. By the way, I have seen during the fourteen years that I have been in the Delta only six or seven cases that I have recognized as trachoma. I don't like to use mercurochrome because the discoloring effect of it is something that I cannot get around. Dr. Arnold says he likes silver nitrate. I don't like it. Frankly, I seldom use it in the eye.

CAUSE, DIAGNOSIS AND TREATMENT OF LENTICULAR OPACITIES*

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JACKSON, MISS.

The subject assigned me is too comprehensive for a detailed discussion in this essay, therefore I shall endeavor to address my remarks to some of the most important phases of opacities of the crystalline lens.

Statistics show that in India, where cataract is most prevalent, the proportion of under-nourished people effected is highest. This is also true in the famine districts of some of the provinces of China.

Drs. Langston and Day demonstrated that in a series of thirty-four cases when albino rats were given a vitamin G deficiency diet, they were able to develop cataract in these animals in 8.5 per cent, and were able to develop the same lesions in other similar animals. This fact, combined with a number of observations which I have been privileged to make, is conclusive proof

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi Medical Association, Jackson, May 10, 1933.

that cataracts are produced by malnutrition, and especially is this true in the congenial type.

My observations of mothers of children who are congenitally blind, has been that they are usually weak, emaciated, anemic and undernourished persons. It is my opinion that if these mothers were given the proper diet during the period of gestation that children of such mothers would be born normal. If malnutrition causes one form of cataract, it may play a leading role in all forms of the acquired type.

The beginning of cataract is often coincident with the progress of wasting constitutional disease, and is of greater frequency after the age of physiological retrogression and connective tissue overgrowth. This gives rise to the thought that local starvation of the tissues of the eye is of importance in its etiology. As the tissues of the eye harden after middle life, the circulation of pabulum containing fluids in the interstices of the crystalline lens diminishes, and this stagnation of fluids in the eye undoubtedly results in the deposit of opaque material in the channels.

It must be remembered that the crystalline lens has no blood supply, but there is a continuous circulation of fluids through the channels existing between the layers of cells making up the lens; that this circulation of fluid carries nourishment and mineral salts in solution to the lens. If this circulation of fluids is interfered with, in any way or if the circulation blood in the adjacent tissues of the eye is below par, the amount of nourishment supplied to the cells of the lens is necessarily diminished. This is the basis of the starvation theory of cataract formation.

Persons who have applied to me with senile cataract have in a large number of cases had a definite focus of sepsis. I am convinced that opacities of the lens are also in a great measure due to sepsis,—generally dental.

Much thought has been given recently to the chemistry of the endocrine system with regard to the acid-base balance of the body being responsible for a certain number of opacities. Until recent years little consideration was given to the question of the acidity or alkalinity of the body fluids, but of late the importance of maintaining or restoring of acid-base balance in the

prevention and treatment of diseases has become a major problem, and much progress is being made in this direction today. It is significant that a hypo-acidity due to a dysfunction of the endocrine system would permit increasing alkalinity of the body fluids, thereby allowing a calcium deposit to form in the lens. Within the past year I have had four patients whose lenses were solid masses of calcium deposits. This, to me, is proof positive of the calcium theory, so it is obvious that any of the following causes may produce opacities of the lens, with emphasis placed on the first two named in this group; *mal-nutrition and focal sepsis*; next in line is hypertension; hardening of the lens after middle life; kidney involvement; dysfunction of the endocrine system; trauma; syphilis; undue exposure to ultra-violet rays; prolonged use of roentgen ray used in removing of superfluous growths from the lid; inflammation of the uveal tract; detachment of the retina; sloughing ulcers of the cornea; choroidal disease; and consanguinity.

DIAGNOSIS

Since the lenses of old persons naturally have a somewhat smoky look, it is unsafe to make a diagnosis of cataract by ordinary inspection. In suspected cases, it is important that a correct diagnosis be made early. The catoptric test, the ophthalmoscope and oblique illumination are all of value in the diagnosis. Failing vision is the first symptom. The use of a retinoscope and ophthalmoscope will readily determine the amount of opacities present. Oblique illumination serves to display opacities and the maturity of the cataract. The condition of the anterior chamber can be readily observed, and the presence of swelling or contraction of the lens is easily detected. The ophthalmoscope will detect its translucency. The candle test is also of value in this connection. In most cases the impairment of vision is not so great as to interfere with the counting of fingers held a few inches away from the eye, but in some instances movement of the hand cannot be detected. Light perception is retained in nearly all senile cataracts.

TREATMENT

All opacities of the lens are surgical in their entirety. A cataract operation is a work of the highest art, and eminence in this art is reserved

for the few. This remark, however, applies to the ability to successfully manage all kinds of cataracts. There is a form of senile cataract that is not difficult of removal, and it should behoove the aspirant to honors in this field of surgery to study that form (nearly ripe, fully ripe, or even slightly over-ripe cortical senile cataract) and limit his cataract surgery to that type alone until the time when his surgical success and added experience will render him fit to undertake the removal of the more difficult and complicated types. From the surgeon's standpoint, the problem is purely an individual one. He must decide for himself, he must consider his own temperament and natural dexterity. If he decides that the lens should be extracted in its capsule and that he is qualified to so extract it, he should study all methods and should attempt that one which best suits his hand. The patient's welfare is, and always will be, the first consideration.

When the patient presents himself for an examination, and a complete diagnosis of cataract has been made, it is the duty of the surgeon to frankly inform him of the true conditions, and there should be a thorough understanding—a heart to heart talk, so to speak—regarding the hazards of an operation; the patient informed that no surgeon can give an absolute guarantee as to the outcome of an eye operation. The patient is instructed as to the number of days he should stay in bed, and the number of hours he must lie with his eye upward afterward. A complete history should be taken to ascertain the date the opacity started; determine the density; the amount of light perception and projection; the amount of tension if any; the cause if possible; the amount of vision or the condition of eyes before the opacity began.

I should like to emphasize the fact that the operator should have the implicit confidence and cooperation of his patient, and above all, he must have perfect self-control. Never operate but upon one eye at a time. The patient is put to bed before the operation, and the operative eye at this time is irrigated with a 1-4000 solution of bichloride of mercury, and the eye covered with the bandage. When the patient is placed on the operating table the anesthetic is started by instilling in the eye either pantocain,

0.5 per cent solution, or cocain, 4 per cent solution, and in addition thereto, a drop of adrenalin chloride, 1-2000. It requires from ten to twelve minutes for complete anesthesia. Now that the eye is thoroughly anesthetized, and every precaution taken regarding the field of the operation, sterilization of instruments and hands, the operation is begun.

Regarding operative and post-operative complications, I desire to say that the greater the dexterity of the operator, the rarer the complications. The best eye surgeon is the man who knows how to begin and when to stop.

One of the most important complications I desire to mention is where the wound by some means becomes elliptical after operation—a condition that usually gives the surgeon a great deal of worry, if the incision should not heal by first intention, and there is a noticeable spreading apart of the edges of the incision which is liable to occur in patients with hypertension, or in a case where some of the remaining cortical substance or capsule has failed to come away at the time of the operation, and is wedged in between the lips of the incision, thus preventing healing. The procedure would be to reopen the wound, displace the prevailing obstacle, and bring the edges of the wound together with sutures. This is best done with a very small curved needle, the suture to be used either silk or linen as to the choice of the operator. The corneal edges are held with a fixation forcep, and the needle is entered from within outward, as it is almost impossible to enter the needle from the outer or smooth surface of the cornea. I should like to emphasize the fact that the needle should not penetrate the entire thickness of the cornea—only the outer structure, and much diligence must be used in making the tie, as too much stress or force would cause the sutures to cut through the epithelium and your efforts would be lost.

My limited experience with less than a dozen such cases thus treated were gratifying, and the patients made uneventful recoveries with the usual amount of vision following cataract operations.

If there should be a prolapse of vitreous during the act of expression, which may happen at any stage of a cataract operation, it is of

great significance. Any further attempts to operate should be abandoned and the wound brought in apposition as quickly as possible. If vitreous protrusion or escape seem inevitable, the operator should immediately place over the cornea some flat instrument to hold the lips of the wound intact; within a few seconds the bulging or protrusion will stop. It is interesting to note whenever there is an attempt of escape of vitreous, if the edges of the wound are held in apposition for a short time, the fluids of the eye will assume their normal shape and position, and the bulging forward toward the place of least resistance will be overcome. Last, but not least, I desire to say that all inflamed conditions of the eyes, whether before or after operation, respond beautifully to foreign protein substance; the value of mild protein in eye disease is very favorable, from the fact that we are dealing with an organ of special sense, as well as one composed of a special structure which is practically inaccessible from without, and most all inflammatory conditions yield to the injection of mild protein.

I recommend the use of cow's milk, which is treated in a water bath at boiling temperature for five minutes and allowed to cool after which it is ready for use. The dose depends somewhat on the weight and age of the patient, ranging from two to ten c.c., given intermuscularly each day until the patient is better. The injection should be given deeply into the gluteal region, and there should be a slight reaction within a few hours, with rise of temperature from 101-102° Fahrenheit. The effect of the treatment on temperature should last from six to twelve hours.

My experience with all classes of complicated eye cases has been that they responded beautifully to a protein.

SUMMARY

The oldest person I have operated upon for cataract was eighty-two years of age, and the youngest was a baby of five months. In reporting a series of 167 operations within the past two years, there were seven unfavorable results, due to post-operative complications; of these it was necessary to do three enucleations, making an average of failure of 4.2 per cent. The above number of persons named in this series were not

of my selection, and were bad risks as far as operation was concerned. The majority of these patients were referred to me by the Commission for the Blind, and I accepted them as they came. The prognosis in the cases where enucleation was done was unfavorable, and the patients were advised what the results might be. They were advised that they would possibly lose their eyes, and the operations were done at the patient's requests—as they termed it, they had everything to gain, and nothing to lose, as the eyes were of no value in their present state.

CASE REPORTS

Case reports 1 and 2: Mrs. S. and baby, both blind from birth from congenital cataract. The mother's age twenty-six, the baby's five months. The mother could distinguish objects and trace lights splendidly. The baby could scarcely trace light. The baby could tell its mother only by her voice. They were both admitted to the hospital in January, 1932. A cataract extraction was performed on the mother on one eye with the Smith-Indian method, and a desiccation of both eyes for the baby. They left the hospital on the fifth, and were advised to return in four months. They did not return until September. I did a cataract operation of the other eye for the mother, and needled one eye for the baby, as there were some remaining capsules of one eye only. They made uneventful recoveries. The mother is doing her household duties, and the baby can run, play and find its toys.

Number 3: Mr. C., age nineteen, congenital cataract of left eye, with light perception only. Vision in the right eye was 20/40 with glasses. He had consulted a number of eminent oculists who advised against an operation. He was admitted to the hospital in October, 1932, and a cataract operation performed. This was also done under the Smith-Indian method. The wound healed by first intention, and soon the operative eye was as good as the other. Ophthalmic examination showed an undeveloped nerve-head. He is now able to read and write with properly adjusted glasses, but now he has developed within the last six months a posterior polar cataract of his right eye and he only sees light with it. This young man has sinu-sinus of right frontal, which I am sure contributes largely to the disturbance of the vision of his right eye.

DISCUSSION

Dr. A. G. Wilde (Jackson): In the formation of cataracts of the nontraumatic variety, it seems that we have the same process as in the traumatic, but very slowly progressive.

The primary defect is apparently in the lens

capsule, which allows a seepage of aqueous through and into the lens substance. Each elongated lens cell then absorbs enough aqueous to become globular, and it is the accumulation of these small spheres with their opaque contents that we usually find in well developed cataracts.

Certainly calcium deposition does not seem to be the prime factor, and where the presence of calcium can be demonstrated by its staining reactions in the microscopic section, the eye has usually gone on to such an advanced stage of atrophy as to render the outcome of operation doubtful.

In deciding the functioning activity of the eye, not only must we take cognizance of the light perception and projection, but of color perception. Even with advanced cataract, colored glasses can be identified when in front of a strong source of illumination, providing the functional activity of the eye is near normal. Any disturbance in the powers of perception, projection or color identification seriously affects the prognosis after operation.

I have seen Colonel Smith do his intra-capsular extractions and have watched his patients post-operatively. It am not impressed with the adaptability of this method for our clientele. I have also seen Professor Barraquer use his suction method of lens extraction. Theoretically this looks good, but the results in the cases I saw left much to be desired. I am convinced that the average late results in these cases are not as favorable as in combined extraction by experienced operators.

As an added precaution against vitreous prolapse, I employ the Kuhnt flap routinely. This not only adds an element of strength over the incision, but seems to decrease the post-operative distortion of the cornea and thus prevent high astigmatic errors. I employ the Hess capsule forceps and remove as large a portion from the anterior surface of the capsule as is practical. No secondary cataracts are formed unless the two layers of the capsule come into apposition and include some of the lens material. When the pupillary area has been freed of the anterior lens capsule, the small amount of peripheral opacity that might later develop is so covered by the iris as to produce no visual defects.

I believe an intact zonule, and the remaining posterior lens capsule are very valuable features in preventing any late post-operative complications.

Dr. Batson (closing): I am certainly obliged to Dr. Wilde for his splendid discussion of this paper. If people would keep themselves up to the standard physically, pay close attention to their nutrition, keep their teeth healthy and their gums clean and their blood pure, there would be less opacities of the eye.

It is better to prevent disease than to attempt a cure. If expectant mothers' diets were properly

cared for and their nutrition and physical condition kept up to standard, there would be less congenital blindness.

To derive full advantage of vitamins in treating and preventing opacities I should recommend a combination of the four vitamins, A, B, C and D, in one nutritious combination.

Summarizing, the most important conditions leading up to opacities of the eye are malnutrition eye starvation, pyorrhoea of the gums, caries of the teeth, imbalance of the endocrine system.

THE SCHILLING HEMOGRAM IN PEDIATRICS*

HARRIS HOSEN, M. D.†

NEW ORLEANS

Twenty-five years ago Arneith emphasized the fact that the blood rarely if ever fails to respond to an infection. His theory was that an infection caused an inhibition of bone marrow production causing immature neutrophils to wander into the circulation. He had an intricate classification of polymorphonuclears containing five groups with as many as eighty-one subdivisions. This was all based on the degree of segmentation of the nucleus of the neutrophil. Generally, the greater the infection the greater was the number of immature cells produced by the hemopoetic system.

This classification was too complicated to be practical. In 1911 Schilling offered a modification of Arneith's ideas which has proved to be a great aid in determining the severity and prognosis of infection. With good preparations the Schilling index does not increase the labor of an ordinary blood count.

The normal count of a child of six years closely approximates that of an adult. Infants show an increase of cells averaging 12,000 to 15,000 and a differential lymphocytosis and neutropenia. As the infant grows older the count approaches that of the adult.

Schilling states that the white blood cells originate from three sources; namely, the granulocytes from the bone-marrow, the lymphocytes from the lymphoid tissue, the monocytes from the reticulo-endothelial system.

*Read before the Orleans Parish Medical Society, May 8, 1933

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He classifies the neutrophils as follows:

1. Myelocytes: the nucleus is round, oval or kidney-shaped, relatively large and vesicular. They are normally found only in the bone-marrow.

2. Juvenile or young forms: normally they are found in the bone-marrow, rarely in the peripheral blood. The nucleus is sausage or bean-shaped and vesicular in consistency.

3. Staff or stab forms: the nucleus is T, U, or V shaped which stains fairly intensely with picnotic areas present. These forms make up 3 to 5 percent of the normal blood. Degenerative staff forms are considered as mature neutrophils. They are characterized by small band-like, twisted and always hypochromatic nuclei.

4. Segmented forms: this is the true mature cell. It is similar to the staff cell except the nu-

cleus is divided into segments which are held together by a nuclear bridge. They make up 60 to 65 percent of the normal blood.

The other forms of granulocytes are the eosinophils and basophils. The eosinophils are very sensitive to the presence of infection leaving the peripheral blood stream at the onset of mild toxemias. the septic factor of Simon. Their reappearance is the earliest sign of a favorable course. Normally eosinophils make up 0.5 to 3 percent of the blood.

The basophils appear only with severe infection and disappear with the earliest improvement. They make up 0 to 1 percent of the normal blood.

Schilling arranges graphically his blood picture in the form of a hemogram which normally appears thus:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks	
		0-1	1/2-3	0	0-1	3-5	60-65	20-30	4-6		
		63-71%									

In the presence of infection the white blood cells come forth to defend the host. In a pyogenic infection the neutrophils are the first to respond. There is a bone-marrow stimulation resulting in increased production of neutrophils, variable numbers of which are immature. The factors that govern this response are, namely: the severity of the infecting organism and the resistance of the host.

Schilling divides the response of the bloodstream into three phases.

1. Neutrophilic or battle phase: if the source of infection is mild there will be little increase in the total number of cells and in the number of immature cells. The normal of 3 to 5 percent staff cells may increase to 7 or 8 percent. This is a mild regenerative shift to the left.

If the infection is moderate there will be a leukocytosis with a neutrophilia. The staff forms will increase from the normal 3 to 5 percent to 10-15 percent, because of the interference with maturation. This is a moderate regenerative shift to the left.

If the infection is severe there will be greater interference with maturation resulting in an increase of staff cells to 20-30 percent. This is a severe regenerative shift to the left.

If the infection is serious perhaps fatal degenerative changes will occur in the cells unless the source of irritation is removed. This is a degenerative-regenerative shift to the left.

With an extremely severe infection complete inhibition of the bone-marrow may take place causing a leukopenia, marked degenerative changes in the individual cells and an increase of young cells to as high as 80 percent of the total neutrophils. Such a picture is usually fatal. This is a degenerative shift to the left.

Typhoid and malaria cause an initial inhibition of the bone-marrow yielding a leukopenia and neutropenia with a relative lymphocytosis. This is a regenerative-degenerative shift to the left.

If the immature cells decrease in any of the above conditions it is called a shift to the right which is a favorable sign. If serial smears are made on a case with a very severe infection that goes to recovery, all the different stages of the neutrophilic picture will be found.

2. The monocytic or conquest phase: the monocytes respond to the infection after the neutrophils have done their work. At the incipiency of the infection the monocytes tend to disappear. When improvement occurs the staff

cells begin to leave the peripheral blood stream and the monocytes then reach a peak. This manifestation by the monocytes is of short duration, therefore frequently missed by the observer. A high percentage of monocytes in an acute infection usually indicates an approaching crisis. A high percentage in a subacute or chronic infection indicates a continuation of the condition.

3. Lymphocytic or curative phase: as soon as the monocytic phase is completed the lymphocytes increase in number until they are much above the normal. As the normal is approached the lymphocytes tend to return to their standard level, indicating complete cure. If the infection continues in a subacute or chronic form the lymphocytes will remain high; the immature neutrophils and monocytes will be above their normal values.

TECHNIC

The slides for the differential counts should be margin free smears, the blood strata of which fail to reach the edges of the glass; if the edges of the glass are reached there tends to be an accumulation and injury of the cells. Wright's stain may be used successfully.

The smear should be moved and examined by the method known as the "four field meander" technic. Examine four different fields in "meander form", i.e., move into the preparation for a distance of three fields of vision, then to the side a little, then back again beyond the edge of the smear, again a little to the side, inward and so on, until 25 or 50 leukocytes respectively, have been counted in each field.

CASE REPORTS

The following case reports are presented to exemplify the value of the Schilling index.

Case I. Lobar pneumonia: A patient, 18 months old, developed a cold followed by cough, vomiting and high fever. He was sick for several days before admittance into the hospital, where there was observed marked dyspnea, dullness and fine crepitant rales over both bases. His temperature was 104°.

As a crisis did not occur after an illness of about eleven days consultation was requested. The hemogram at this time showed a neutrophilic hyperleukocytosis, slight regenerative shift, lymphopenia and aneosinophilia; neutrophilic or battle phase. Graphically it appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks	
	21,000	0	0	0	0	8	73	17	2	Temp. 103°.	
							81				

A diagnosis of lobar pneumonia of low toxicity was made with a good prognosis for early recovery. Three days later temperature and blood picture were normal.

103° and pain in the right chest. He was admitted to the hospital on the same day as the onset of the illness. The examination revealed an acutely ill patient suffering from lobar pneumonia in the congestive stage.

Case 2. Lobar pneumonia: A patient seven years old became suddenly ill with vomiting, fever

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
1st. day	40,000	0	0	0	0	14	73	10	3	103°. Early crisis or light course expected
							87			
2nd. "	35,000	0	0	0	0	11	81	6	2	103°.
							92			
3rd. "	20,000	0	0	0	0	6	77	13	3	99°. True crisis.
							83			
4th. "		0	2	0	0	5	53	34	6	99°. Clinically well.
							58			



Upper row: reading left to right: Myelocyte; juvenile or young; staff or stab; degenerative staff.

Lower row: Juvenile or young; staff or stab; segment or mature cell; monocyte.

The first hemogram shows a marked hyperleucocytosis, neutrophilia, aneosinophilia, lympho-

penia with only a moderate regenerative shift to the left. This is the neutrophilic battle phase. Such a minor shift in the presence of a lobar pneumonia speaks for a light course of illness or an early recovery. Severe pneumonia invariably causes a marked shift to the left. The third hemogram shows a subsidence of the shift with a persistent neutrophilia. The temperature reached normal by crisis. Because of the normal shift the crisis was considered to be a true one. The fourth hemogram shows a normal blood picture. Temperature remained normal. The patient was clinically well.

Case 3. Lobar pneumonia: A patient 18 months old, suddenly became ill with cough, dyspnea and high fever. His illness continued for five days before admittance into the hospital, where there was observed a condition of lobar pneumonia involving the left lung. His temperature was 104°.

Serial hemograms appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
1st. day	12,500	0	0	0	1	27	62	10	0	104°.
				90						
2nd. "		0	0	0	0	24	62	13	1	103°.
				86						
3rd. "		0	0	0	2	25	60	11	2	102°.
				87						
4th. "		0	1	0	0	12	74	10	3	99°.
				86						
5th. "		0	0	0	2	22	68	10	0	99°. Complication expected (empyema). 102°.
				90						
6th. "		0	0	0	1	18	67	16	2	
				86						
7th. "		0	0	0	0	22	67	10	1	99°. X-ray reported lobar pneumonia.
				89						
10th. "		--	--	--	--	--	--	--	--	Died.

The first four hemograms showed a marked regenerative shift with a neutrophilia, lymphopenia and aneosinophilia; such a picture is typical of lobar pneumonia. On the fourth day the hemogram showed a marked decrease in the shift with a return of an eosinophil. This was favorable. The clinical picture looked much improved. On the fifth day the hemogram showed a return of the marked shift to the left and aneosinophilia. The temperature remained normal. From the hemogram alone a complication (empyema) was predicted. On the sixth day the x-ray reported a lobar

pneumonia of the left side involving both lobes. Patient died on the tenth day quite suddenly. The autopsy revealed malignant empyema of the left lung.

Case 4. Acute mastoiditis: A patient 6 years old developed bilateral otitis media following a severe cold. A paracentesis of both drums was done but the fever persisted. Examination revealed a patient moderately ill with discharging ears and slight tenderness over the left mastoid region. His temperature was 103°.

Serial hemograms appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
1st. day	17,500	0	0	0	0	7	57	34	2	X-ray of mastoid negative.
				64						
3rd. "	13,000	0	0	0	0	9	43	45	3	100°. Slight increase of mastoid tenderness.
				52						
4th. "	15,000	0	0	0	0	11	56	30	3	100°. X-ray reveals necrosis of left mastoid.
				67						Operation showed pus.
5th. "		0	2	0	0	4	58	30	5	98°. Clinically improved. Rapid convalescence.
				62						

Early this patient showed a slight regenerative shift to the left. The temperature was high but the X-ray was negative. The shift to the left gradually increased which was evidence of a progressive condition. Coincident with the peak of the shift to the left the x-ray showed a definite pathologic process. The shift to the left though showing only a moderate infection is quite significant, for non-malignant pustular mastoiditis being well localized usually elicits only a moderate blood reaction.

Following operation there occurred a rapid shift to the right with eosinophils returning. This phase of recovery coincides with the clinical pic-

ture of improvement which occurred.

Case 5. Acute mastoiditis: A patient 3 years old had a draining right otitis media for three months. An exacerbation occurred which was manifested by fever and pain in the region of the right mastoid. Examination revealed a discharging right ear with tenderness over the right mastoid but an absence of any edema. The x-ray report showed considerable clouding in the right mastoid.

The hemogram at this time showed a neutrophilic leukocytosis with a moderate regenerative shift, lymphopenia and aneosinophilia; neutrophilic or battle phase. Graphically it appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
	12,500	2	0	0	0	11	75	12	0	101°.
				86						

A diagnosis of acute mastoiditis with pus formation was made. A mastoidectomy was done revealing frank pus. The patient made an uneventful recovery.

Case 6. Acute mastoiditis: A patient 8 years old had a syringotomy for drainage of a left otitis media. A week later the patient developed se-

vere pain in the left ear. An examination revealed a patient acutely ill, temperature of 102°, with tenderness and edema about the left mastoid region. The x-ray showed necrosis in the left mastoid.

The hemogram at this time showed a normal differential count. Graphically it appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
		0	0	0	0	4	59	36	1	102°.
				63						

A diagnosis of acute mastoiditis in the congestive stage without pus formation was made. Nevertheless a mastoidectomy was performed which revealed a condition exactly corresponding to the above mentioned diagnosis.

Case 7. Acute gangrenous appendicitis with peritonitis: A patient 13 years old developed an attack of acute appendicitis the operation on which was delayed three days.

Serial hemograms appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
1st. day	12,500	0	0	0	20	10	61	9	0	103°. Appendectomy done.
					91					
		0	0	0	28	13	45	39	3	Clinically improved. Hemogram worse.
					86					
3rd "		0	0	0	45	10	26	14	5	Clinically improved. Hemogram worse.
					81					
4th. "		0	0	2	45	5	38	10	0	Clinically worse. Temp. 104°.
					90					
5th. "		0	0	6	42	10	32	10	0	Condition poor.
					90					
6th. "		0	0	11	40	8	30	11	0	Died.
					89					

Early this patient showed a neutrophilic leukocytosis with a severe regenerative shift which daily grew worse. On the second and third days the patient appeared to be clinically better but hematologically worse. The hematological findings were substantiated on the fourth day when the patient became much worse clinically. From this time on the blood and clinical findings were in harmony.

Case 8. Pyelitis: A patient 3 years old de-

veloped pyelitis six days after which she was admitted into the hospital. Clinically the patient did not appear extremely ill but she suffered with chills and high fever. She was treated for nine days but as the clinical condition persisted genitourinary consultation was requested.

A hemogram on the day of consultation showed a normal neutrophilic count with a moderate regenerative shift to the left; beginning conquest phase. Graphically it appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
		0	0	0	0	13	45	39	3	102°.
					58					

A diagnosis of pyelitis with no block was made. Based on the hemogram an early recovery was expected. Regardless of the hemogram a cystoscopic

examination was done which revealed no block and only a few pus cells with some bacteria in the pelves of the kidneys. The next day the blood picture appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
		0	1	0	0	6	33	58	2	Temp. normal. Rapid convalescence.
					39					

Case 9. Acute osteomyelitis: A patient 3 years old had acute osteomyelitis of the right tibia for seven days before operative interference. Clinically patient was very toxic. Examination showed

his right leg to be markedly swollen, the tissues of which were tense and tender.

The hemogram showed a leucopenia, moderate neutrophilia with a marked degenerative shift to the left and an aneosinophilia. It appeared so:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
	3,000	0	0	2	15	18	35	28	2	105°. Cells degenerated.
					70					

A diagnosis of a terminal osteomyelitis was made. The operation revealed an osteomyelitis with invasion of the soft tissues. The patient died fourteen hours later.

Case 10. Acute perforated appendicitis with general peritonitis: The patient, nine years old,

had an attack of abdominal pain for which he received two doses of castor-oil within a period of twenty-four hours. He was admitted to the hospital two days after the beginning of his illness. An operation was performed immediately. The hemograms were as follows:

Hemogram	Count	B	E	M	J	St	S	L	Mon.	Remarks
1st. day	7,000	0	0	0	30	30	18	22	0	104°. Appendectomy Generalized peritonitis.
				78						
2nd. "		0	0	5	34	30	20	11	0	103°. Hemogram worse. Clinically no change.
				89						
3rd. "		0	0	12	34	34	12	8	0	Clinically slightly improved. Hemogram worse.
				92						
4th. "		0	0	29	35	10	12	14	0	Clinically same. Hemogram worse.
				86						
5th. "		0	0	18	49	10	11	14	0	Clinically condition worse.
				86						
6th. "		0	1	22	55	7	4	11	0	103°. Progressively worse. Hypocratic facies.
				89						
7th. "		0	0	29	30	9	10	22	0	106°. Died.
				78						

In this patient the first four hemograms show a condition that progressively grew worse. The clinical picture during the first four days was not in accord with the hematological findings as the patient was apparently slightly improved. On the fifth day patient began to show clinical evidence of failure for the first time. This rapidly progressed until patient died on the seventh day.

CONCLUSIONS

1. The cases reported were selected at random from approximately three hundred fifty patients.
2. The Schilling blood count proved to be far more valuable than the blood count based on the old Ehrlich classification.
3. The differential (Schilling) count proved far superior to the total leukocyte count.
4. In all cases of pyogenic infection the Schilling count equalled or substantiated the clinical findings.
5. In a great many cases the blood count proved far more valuable than the clinical picture.
6. In a majority of cases the blood re-

sponse occurred earlier than the important clinical signs.

7. The Schilling hemogram proved to be invaluable when used in conjunction with clinical findings.

REFERENCES

1. Boies; Immature white blood cells in otologic infections. Arch. Otolaryng. 13:238-254, 1931.
2. Garrey; Basal leukocyte count and physiological leukocytosis. Proc. Staff. Meets. Mayo Clinic. 4:157-159, 1929.
3. Auer, E. S. The Schilling blood picture. Jour. Miss State Med. Assoc. 27:374-377, 1930.
4. Niehaus, F. W. Value of leukocyte counts according to Arneith-Schilling formula in clinical medicine. Med. Clin. North America. 12:395-406, 1928.
5. Weiss, A. The role of the leukocytes in infection. Med. Clin., North America. 13:757-770, 1929.
6. Alden, A. M. and DeMotte, J. A. Value of Schilling hemogram in otologic infections. Ann. Otol. Rhin. and Laryng. 40:94-142, 1931.
7. Schilling. The Blood Picture and its Clinical Significance. Mosby, 1929.

DISCUSSION

Dr. Charles J. Bloom: I wish to commend Dr. Hosen for the excellent paper he has presented tonight. It has been my good fortune to observe from 50 to 75 of the cases he has followed. The giving of this information to the profession in the

way of a helpful blood count serves in presenting to the practitioner a picture which is far more important and one which also gives an added advantage of prognosticating an illness. In other words, in making this differential blood count, we have something which would give to the practitioner an idea as to the number of cells and the different types of cells. I saw one of these cases, a ruptured appendix (following two purgatives) with peritonitis. For a day or so the child apparently appeared better, but in reality the blood count given exhibited an unfavorable prognosis two days antedating clinical manifestations.

Necessarily, the hemogram requires additional work on the part of the laboratory, as well as careful staining and an accurate count, but, in my experience, following the work of Dr. Hosen, who has been most conscientious in giving us this new aspect on blood pictures, it is invaluable in estimating the prognosis of our cases.

REPORT OF THE PASTEUR INSTITUTE OF THE CHARITY HOSPITAL OF NEW ORLEANS FOR THE YEARS 1931-1932

RIGNEY D'AUNOY, M. D.

ARCHIE FINE, M. D.*

NEW ORLEANS

During the years 1931 and 1932, the Pasteur Institute of the Charity Hospital administered antirabic prophylactic treatment with material prepared as generally indicated by Semple. We wish to describe briefly the method of vaccine production, and to present a tabulation of the treated cases together with certain statistics regarding them.

PRODUCTION OF VIRUS

All vaccine material used was produced with a strain of fixed rabies virus secured through the kindness of Parke, Davis and Company. Subdural injection of full grown rabbits with emulsions of infected stems or cords was done in the usual manner. After complete paresis had been accomplished, which usually occurred on the seventh day after inoculation, the animals were killed by ether narcosis in order to avoid the agonal bacterial invasion of the central nervous system so frequently noted when such infected animals are allowed to die. The dead animals were im-

mersed in a 5 per cent lysol solution for five minutes, skinned, and again dipped in a fresh 5 per cent lysol solution. After light external flaming, the cord and brain were removed under strict aseptic conditions. Cultures from internal and external portions of the brain and cord were made in fermentation tubes containing 0.05 per cent dextrose broth. After the cultures had been secured, an 8 per cent emulsion of brain-cord in normal saline solution was prepared, filtered through three layers of fine linen, and 1 per cent carbolic acid added. The carbolized emulsion was incubated at 37.5 degrees for twenty-four hours, after which time it was diluted to 4 per cent by the addition of sterile normal salt solution. Of this emulsion a 0.5 mil portion was injected subdurally into each of two full grown rabbits, and fifteen glucose broth cultures were made in five series of five, ten and twenty drops. Similar subcultures were subsequently made from these original cultures after they had been incubated for five days at 37.5 degrees. If the test animals were living and well three weeks after injection, and if not more than one of each cord-brain culture, and not more than one emulsion culture in any series showed contamination with any type of organism, the material was considered ready for use and a dating of three months from the date of carbolization was allowed.

METHOD OF TREATMENT

The following plan of treatment was used, each injection consisting of a 2 mil portion of 4 per cent killed virus-emulsion, except in the case of children under three years of age, in whom a 1 mil portion of vaccine was injected at each treatment.

Injuries by Proven Rabid Animals

Head Injuries. Injections were made twice daily for the first seven days, and once daily thereafter for 14 days.

Injuries to Trunk and Extremities. If multiple and severe, the same treatment was used as for head injuries.

If slight, and treatment was begun within six days after injury, treatments were continued for fifteen days, with one injection daily.

*From the Departments of Pathology of the Charity Hospital and the Louisiana State University Medical Center, New Orleans, La.

If slight, the treatment was begun more than six days after injury, treatments were continued for eighteen days, with one injection daily.

Injuries by Unlocated Animals

If the injury was received under suspicious circumstances, the same type of treatment was used as for a similar type of injury by proven rabid animals.

If there were no suspicious circumstances, treatment was given over a period of fourteen days, with one injection daily.

No Actual Injury

If rabid or suspected animals had been handled, treatment was given over a period of eighteen days, with one injection daily.

TREATED CASES

Three hundred and seventy-two cases were treated during 1931, and 230 cases during 1932. They are classified as follows, according to the suggestion of the International Rabies Conference of the League of Nations, in order that

the statistics of various institutions may be compared.

- A. Cases in which the animal proved to be rabid (by microscopic or biologic test).
- B. Cases in which the animal was diagnosed clinically as rabid.
- C. Cases in which the animal was only suspected to be rabid (stray, destroyed, or in such a condition when received that the brain was unfit for examination).
- D. Cases in which the animal was alive and well after an observation period of three weeks, or whose brain was found to be negative when examined after the observation period.
- E. Cases in which the patient received treatment without actually having been bitten (patients who handled rabid or suspected animals).

Table I records the number of treated cases in each category and classifies the types of injury.

TABLE I

Location of Injury	1931						1932						Total for 1931-1932
	A	B	C	D	E	Total	A	B	C	D	E	Total	
Head.....	8	3	9	5	74	99	7	0	10	2	21	40	138
Body.....	3	1	3	1	0	8	6	0	8	0	0	14	22
Superior extremities.....	69	17	46	8	0	140	57	1	30	6	0	94	234
Inferior extremities.....	37	8	50	5	0	100	28	1	36	0	0	65	165
Multiple sites.....	13	0	10	2	0	25	5	0	11	1		17	42
						372						230	602

Table II indicates the ages of the treated patients.

TABLE II

AGE	1931					Total 1931	1932					Total for 1931-32
	WHITE		COLORED		Male		WHITE		COLORED		Female	
	Male	Female	Male	Female		Male	Female	Male	Female			
Under 1 year	3	1	0	0	4	3	1	0	1	5	13	
1-2 years	3	3	0	2	8	0	1	0	0	1	5	
2-4 "	19	19	2	1	41	10	6	3	1	20	61	
5-9 "	47	27	4	6	84	29	17	2	1	49	133	
10-19 "	49	21	5	7	82	47	17	5	2	71	153	
20-29 "	19	20	5	3	47	19	10	1	4	34	81	
30-39 "	19	16	1	11	47	9	10	1	2	22	69	
40-49 "	11	11	3	3	28	9	1	1	2	13	41	
50-59 "	3	6	3	1	13	5	6	0	0	11	24	
60-69 "	9	4	0	0	13	1	3	0	0	4	17	
70-79 "	1	3	1	0	5	0	0	0	0	0	5	
80 years and over	0	0	0	0	0	0	0	0	0	0	0	
	183	131	24	34	372	132	72	13	13	230	602	

Table III records the geographical distribution of the patients in Louisiana.

TABLE III

	1931	1932	1931-1932
Assumption.....	2	3	5
Ascension.....	0	1	1
Evangeline.....	1	0	1
Fast Baton Rouge.....	0	1	1
Iberia.....	0	2	2
Iberville.....	5	0	5
Jefferson.....	31	22	53
Orleans.....	283	173	456
Plaquemine.....	1	1	2
Richland.....	0	1	1
St. Bernard.....	16	0	16
St. Charles.....	5	0	5
St. John the Baptiste ...	1	0	1
St. Landry.....	0	3	3
St. Tammany.....	1	1	2
Tangipahoa.....	2	1	3
Terrebonne.....	3	4	7
Washington.....	8	17	25
West Baton Rouge.....	12	0	12
Vermillion.....	1	0	1
	372	230	602

Table IV indicates the circumstances of the injury and the type of treatment given in each case.

TABLE IV

	1931	1932
Injury inflicted through clothing..	84	52
Injury inflicted to bare skin.....	220	146
Tetanus antitoxin, phenol cauteri- zation to site of injury.....	29	60
Iodine applied to site of injury....	55	11
No local treatment.....	243	117
Mercurochrome.....	0	4
Silver nitrate.....	0	1
Tetanus antitoxin only.....	175	74

Our experience with the Semple method of antirabic prophylactic vaccine treatment as modified by us leads us to conclude that it is safe, effective and economical. The material is easily prepared without the necessity of costly equipment, the virus may be stored without difficulty, and the results are eminently satisfactory.

Table V gives the number of days elapsing between the time of injury or exposure and the beginning of treatment, when such information could be obtained.

TABLE V

DAYS	1931		1932	
	PATIENTS	DAYS	PATIENTS	DAYS
1	88	1	67	
2	69	2	27	
3	35	3	21	
4	29	4	8	
5	29	5	18	
6	30	6	16	
7	18	7	17	
8	19	8	9	
9	10	9	3	
10	6	10	2	
11	4	11	5	
12	6	12	3	
13	6	13	1	
14	3	14	0	
15	5	15	1	
16	0	16	1	
17	1	17	1	
18	1	18	1	
21	2	24	1	
22	1			
25	2			
28	1			
30	3			
34	1			

NEW ORLEANS Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

RELIEF TO THE PHYSICIAN

Bulletin Number 7 of the Federal Emergency Relief Administration, under the Act of 1933, has to do with the medical care of the indigent on the roles of the Relief Administrators in states and sub-divisions of the state. Mr. Hopkin, the Director of the Federal Emergency Relief Act, has recognized that medical care of the unemployed in an important as

food, clothing, shelter, and fuel. This decision of Mr. Hopkin's is of extreme importance and it shows that he is a broadminded individual who recognizes that medical care is one of the fundamental needs of the poor. Under his interpretation of the Federal Emergency Relief Act, medical, dental, and nursing care should be paid for by the District and Regional Directors. Attention is called to the fact that it is necessary for the local physicians or for the state organization to arrange a schedule of fees for services rendered to the poor. In the three states in which this is now in effect the returns to the physician varies. In Kentucky, for example, the doctor receives approximately \$1.00 per visit, and ten cents a mile for distant trips. In New Jersey the rate is about \$2.00 a visit. From the experiences of the states that have already made satisfactory arrangements with their Federal Emergency Relief Director, apparently it is satisfactory to arrange the fee schedules on a basis of two-thirds the regular fee in any district. Hospitalization is not taken care of by the Federal Emergency Relief Act.

It has been suggested that the fee schedule should be regulated locally; there should be a community plan rather than a statewide plan, but that the parish and county societies must get the approval of the state societies, who in turn should have dealings with the State Administrators of the Federal Emergency Relief Act. The physician is obligated to keep a list of all calls. Bills are rendered at the end of the month. They should be submitted within ten days from this period if they are to be accepted. The bills are rendered subject to the penal action which provides for a fine of \$10,000 for false information. This particular clause is presumed to prevent undue padding of bills. The bills that are submitted must contain exact data as to the visits made and so on. Emergency visit may be made by the physician but if subsequent care is necessary, or if the case is a chronic case the physician is expected to be called by the social worker in charge of the family.

It is suggested that the fee schedules should be safeguarded. Definite statements should be made that the fee schedule is on a reduced basis and applies only to the emergency. This is for

the two fold purpose of maintaining proper fees for those who are able to pay and in order that workman's compensation fees will not be effected in the future.

It would seem that justice is being meted out to the physician, who in most places has been taking care of the indigent for nothing. It behooves parish and county organizations to act immediately to make arrangements for these benefits. It is understood that only members of organized medicine are in a position adequately to deal with this matter.

THE ST. LOUIS EPIDEMIC OF ENCEPHALITIS

The recent epidemic of encephalitis in St. Louis has occasioned much newspaper comment, and has been a very live topic amongst physicians and the laity. The United States Public Health service has recently issued a bulletin which it might be well briefly to abstract in view of several unusual features of this epidemic of encephalitis, and also because of the current interest in it.

It appears that the instance of the outbreak would be about 30 to 100,000 population. The ratio between the two sexes is 83 male to 100 female. The age grouping shows that 21 per cent of the cases have been in that group between the ages of 15 to 34, 19 per cent of the cases under 15 years of age, and 30 per cent in the group between 35 and 54, and another 30 per cent in those over 55. The mortality rate of 13 per cent of all cases has increased distinctly among the older members of the population who developed the disease. In the oldest age group the case fatality has been 30 per cent, while in the younger group only 3 per cent. The instance of the disease of course is very much higher among the older aged group which makes up only 13 per cent of the population.

Several unusual features of the symptomatology of the disease should be accentuated: Notably, disturbances of the motor function of the eye are unusual instead of being common, and there is more definite clinical evidence of meningeal involvement with increased spinal cell count than is usual in encephalitis. The other symptoms are those of the general febrile

disturbances initiated by gastro-intestinal disturbances in many instances and followed by severe headache, which is often the most pronounced symptom, pains in the abdomen or legs, a moderately stiff neck, and apathy going on to somnolence, stupor, coma or delirium. In the more severe cases tremor and semi-rigidity are usual. The tendon reflexes vary from day to day as do the superficial reflexes. Generally they were found to be diminished or absent. Certain irregular paralyses have been observed and hemiplegia is not uncommon.

The report states that most important is the triad of early symptoms which are: fever, evidences of cerebral involvement, and mild meningeal signs. The febrile stage does not last long, temperature coming to normal in a few days. As to the sequels, these can not at present be determined. The milder cases that have so far recovered are apparently in good health.

The precautions advised to prevent the spread of the disease include isolation of the patient for three weeks and screening of the patient.

In view of the possibility that the epidemic may spread, it is advised to be on the lookout for such cases. One patient with encephalitis whose condition is unrecognized might, in the light of our present day knowledge, spread the disease, whereas isolated it might occur merely as a sporadic case. It would seem that the sudden onset, with the three important symptoms mentioned, would be enough to put the physician on the alert promptly to do a spinal puncture and would warrant notification of the health authorities, particularly if there may be any question in regard to the diagnosis.

THE AMERICAN MEDICAL DIRECTORY

The Directory of the American Medical Association is going to be published about June of next year. It is the custom of the Association to indicate by an appropriate symbol whether or not a physician is a member of the State Medical Society. It has been found that many physicians appreciate being thus definitely indicated as members of organized medicine. It might be well for the County and Parish Medical Society officers to call the attention of their delinquent members to this in attempting to collect their

dues, or to have them reinstated if dropped from the rolls. If they are delinquent or dropped this seal of interest in organized medicine is not placed before the name. It might be well to point out to the delinquents also that many industrial

organizations and insurance companies and so on would only appoint those physicians who are affiliated with organized medicine and this information is very generally obtained from the Directory.

HOSPITAL STAFF TRANSACTIONS

KING'S DAUGHTERS' HOSPITAL STAFF MEETING Greenville, Miss.

The monthly staff meetings of the King's Daughters' Hospital, Greenville, were resumed after a month's vacation with nearly all members present on September 6. Dinner was followed by transaction of routine business and a free discussion of the two month's mortality list, and other matters related to the hospital. Dr. C. P. Thompson, the chairman, presided. The scientific program was devoted to case reports, and a discussion of malaria which, according to Dr. Shackelford, local health officer, is showing an increased incidence, for this season.

Dr. F. M. Acree reported the history and treatment of a resistant case of malaria occurring in a man, age 61. For several months he had required treatment for symptoms caused by a benign prostatic hypertrophy, but was otherwise in good physical condition. In January, 1933 a suprapubic prostatectomy was performed. Convalescence was satisfactory for a month. Then developed daily chills and temperature elevation with blood examination positive for malaria. His previous history gave no indication of malarial symptoms for the past twenty years. This attack was controlled by quinine as was a second attack three weeks later. He continued for five months having recurrences at intervals of about three weeks, despite administration of plasmochin, atabrine, and these drugs combined in average or large doses. The recurrences were eventually controlled by giving 0.3 grams nearsphenamine at three-day intervals for three weeks.

Dr. O. H. Beck presented two interesting case histories. The first was a man aged 21 who had had several chills and fever a month before, treated by himself with quinine with temporary relief. When symptoms returned he took a druggist's recommendation of a compound said to contain iodine and phenol. His symptoms grew worse. When first seen by Dr. Beck he had severe abdominal pain, jaundice, hepatic enlargement and a dark urine showing a few red cells. Smears showed aestivo-autumnal malaria, and there were 1,500,000 red blood cells per cu. mm. He was given 15½ grains of quinine hydrochloride intramuscularly. That night he became extremely ill, and hematuria was marked. Five cc. of homostatic serum were given intramuscularly, and repeated the next

day. The abdominal pain, fever, and hematuria decreased promptly after the first dose of serum, and hematuria ceased a day after the second dose. Clinical improvement was equally marked. He was given two courses of treatment of plasmochin and has recovered without recurrence.

Dr. Beck's second case was that of a boy, age 13, who, eight weeks ago, developed a moderate afternoon rise in temperature which subsided at night, followed by sweating. On the fourth day he developed purpuric areas, size of a pinpoint to that of a quarter, and the fever reached 104°F. Atabrine, one tablet night and morning for a week, was followed by normal temperature and remission of symptoms for two weeks. A yellow discoloration of the skin developed and the child grew weak. When seen by Dr. Beck, and admitted to the hospital, the liver was palpable and painful, the child was yellow, weak and vomiting. Blood examination showed 760,000 red cells per cu. mm. There were no malarial parasites and the urine was normal. Five c.c. of hemostatic serum were given intramuscularly and 500 c.c. glucose in vein. The next day 3 c.c. of hemostatic serum were given intramuscularly, 2 cc. by vein, and 300 cc. citrated blood was administered. By the following day the child had made remarkable clinical improvement, the liver was no longer palpable, nausea had ceased, the yellowness of the skin was fading, and the red cells had risen to 1,140,000 per cu. mm. Another transfusion was given and the child returned home to make an uneventful recovery.

Dr. Beck reported these two cases primarily because both received hemostatic serum. This was given following a favorable report from one of the medical staff of the United Fruit Company who had found it of benefit in cases of malaria, particularly those with hematuria. The case reported second was of interest because of the severe poisoning and anemia following a course of atabrine.

The discussion was entered into freely, and emphasized the long prevalent difference of opinion as to whether or not quinine should be given to grave cases of malarial hematuria. The relative values of the newer anti-malarial drugs were critically discussed. The increased incidence of malaria in this community was ascribed to the present economic conditions particularly the lack of funds for properly keeping open our many drainage ditches. It was predicted that an even higher

incidence might be expected next year, because of the many carriers being developed this year, unless effective mosquito control can be arranged.

John A. Beals,
Secretary.

Greenville,
Sept. 8, 1933.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on September 11, at 7:30 P. M., with twelve members of the staff and five guests present. After the regular business of the staff, presentation of the reports from the records department and analysis of the work of the hospital, the following cases from the cancer clinic were discussed:

- (1) Adeno-carcinoma of Right Breast (Grade IV).—Dr. A. Street.
- (2) Squamous Cell Carcinoma of Cervix Uteri (Grade I).—Dr. L. J. Clark.
- (3) Adeno-myo-sarcoma of Left Kidney.—Dr. G. C. Jarratt.
- (4) Adeno-carcinoma of Chest Wall (Grade IV), Recurrent, Following Carcinoma of Breast.—Dr. A. Street.
- (5) Lymphoblastoma, Malignant, of Left Cervical Nodes.—Dr. A. Street.
- (6) Squamous Cell Carcinoma of Cervix Uteri (Grade IV).—Dr. J. A. K. Birchett, Jr.
- (7) Adeno-carcinoma of Peritoneum (Grade IV).—Dr. J. A. K. Birchett, Jr.

Dr. F. Michael Smith, Director, Warren County Health Department, presented a report of the vital statistics for the month.

Special case reports were presented as follows:

- (1) Common Duct Stone and Chronic Pancreatitis.—Dr. G. M. Street.
- (2) Myelogenous Leukemia.—Dr. J. A. K. Birchett, Jr.
- (3) Pernicious Anemia With Posterior Lateral Sclerosis of Spinal Cord.—Dr. L. J. Clark.

Three-minute reports of the literature of the month were presented as follows:

- (1) Dr. A. Street.—Pilonidal Cysts and Sinuses.
- (2) Dr. L. S. Lippincott.—Chronic Rheumatism.
- (3) Dr. J. A. K. Birchett, Jr.—Placenta Accreta.

The next meeting of the staff will be held on Monday, October 9, 1933, at 6:30 P. M.

Leon S. Lippincott,
Secretary.

Abstract: Myelogenous Leukemia.—Dr. J. A. K. Birchett, Jr.

Patient—Colored, male, age 40, farmer.

Present Complaint—General weakness; mass in abdomen.

History of Present Complaint—Six months ago began to notice shortness of breath on exertion, associated with digestive disturbance, nausea, vomiting. Began to lose weight, and consulted doctor who told him he had malaria and gall bladder disease. Noticed large lump in left abdomen about three weeks ago, began to take "three sixes" with no improvement. Weakness increased and the tumor mass became larger.

The past medical and family history are irrelevant.

Physical Examination—Fairly well developed negro male of middle age, short stature; walked into clinic.

Head, negative; teeth good; tonsils negative; thyroid negative; no palpable glands or abnormal pulsation of neck. Heart action rapid, 110, regular, short systolic murmur at base. Blood pressure, systolic 110, diastolic 80. Lungs negative.

Abdomen, large mass extending from lower costal margin to crest of ileum and medially to the umbilicus. This mass is presumably enlarged spleen. The splenic notch can be easily felt. Mass is freely movable and not painful, very hard. Right side of abdomen negative. No fluid present, no areas of tenderness, no hernia.

Genito-Urinary, negative.

Laboratory—Wassermann test, negative; Kline and Young and Kahn tests, positive (2-3-plus); Eagle flocculation test, positive. Blood: Red cells, 2,290,000, many abnormal changes; leukocytes, 513,000; predominating cell is the myelocyte and myeloblast; color index, 1.06; hemoglobin, 47 per cent.

Urine: Few granular casts; few red blood cells.

A diagnosis was made of myelogenous leukemia because of enlarged spleen and the blood picture, ruling out the other diseases which have splenic tumor, such as Banti's and Gaucher's diseases, sarcoma or malignancy and chronic malarial spleen.

It was decided to first relieve the marked anemia and for this reason a donor was sought for transfusion; although fifteen donors were examined the blood of none was compatible. Patient was therefore given iron and ammonium citrate, gr. XV, three times a day and deep therapy x-ray over the splenic mass daily for 30 minutes for six treatments. There was a rapid improvement in the conditions of the patient with increase of strength, disappearance of digestive symptoms, rapid shrinkage of splenic mass and rapid increase of red blood cells.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

OCTOBER 2. Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

OCTOBER 9. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

OCTOBER 11. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

OCTOBER 11. Touro Infirmary Staff, 8 P. M.

OCTOBER 13. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

OCTOBER 13. Physiology Seminar, Tulane Medical School, 5 P. M.

OCTOBER 13. French Hospital Staff, 8 P. M.

OCTOBER 16. Hotel Dieu Staff, 8 P. M.

OCTOBER 17. Charity Hospital Medical Staff, 8 P. M.

OCTOBER 18. Clinico-Pathological Conference Touro Infirmary, 10:30 to 11:30 A. M.

OCTOBER 18. Charity Hospital Surgical Staff.

OCTOBER 19. Eye, Ear, Nose and Throat Club, 8 P. M.

OCTOBER 20. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

OCTOBER 20. I. C. R. R. Hospital Staff, 12 Noon

OCTOBER 20. Physiology Seminar, Tulane Medical School, 5 P. M.

OCTOBER 20. French Hospital Staff, 8 P. M.

OCTOBER 23. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

OCTOBER 24. Baptist Hospital Staff, 8 P. M.

OCTOBER 25. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

OCTOBER 27. Pathological Conference, Hotel Dieu 11 A. M. to 12 Noon.

OCTOBER 27. Physiology Seminar, Tulane Medical School, 5 P. M.

In support of President Roosevelt's National Recovery Program, the Orleans Parish Medical Society, at a special meeting adopted a Code for those employees working in doctor's offices. This Code was formulated by the Board of Directors of the Orleans Parish Medical Society and submitted to the General Society on August 31. At this meeting some minor changes were made by the Member-

ship at Large, but the general principle of the Code submitted by the Board of Directors was adopted. A copy of the provisions adopted by the Membership of the Orleans Parish Medical Society is herewith attached:

During the period of the President's emergency reemployment drive, that is to say, from August 1 to December 31, 1933, or to any earlier date of approval of a Code of Fair Competition to which he is subject, the undersigned (member of the Orleans Parish Medical Society) hereby agrees with the President as follows:

(1) After August 31, 1933, not to employ any person under 16 years of age.

(2) Not to work any office employee (registered nurses and graduate physicians excepted) more than 40 hours per week, in any one week. It being understood these hours may be averaged over a period of 8 weeks.

(3) Employees in physicians offices shall be classified as follows:

(1) Maids or porters, (2) office attendants, (3) clerical.

(4) Not to pay any employee as defined in paragraph 3, less than (1) \$8.00 per week, or in no event less than 20c per hour, (2) \$10.00 per week, or in no event less than 25c per hour, (3) \$14.50 per week, or in no event less than 36c per hour. It being understood that if the employee was employed 40 hours per week, July 1, 1933, that this amount of hours will not be reduced. If said employee was working less than 40 hours per week, July 1, 1933, the hourly scale may prevail and the number of hours will not be reduced.

(5) Not to reduce the compensation for employment now in excess of the minimum wages hereby agreed to (notwithstanding that the hours worked in such employment may be hereby reduced) and to increase the pay for such employment by an equitable readjustment of all pay schedules.

At the regular meeting of the Board of Directors of the Orleans Parish Medical Society held September 6 the President and Secretary of the Society were authorized to sign the National Recovery Blanket Code in the name of the Society. Same has been done and Blue Eagles have been distributed to the Membership and are at present posted in the offices of the Orleans Parish Medical Society.

LOUISIANA STATE MEDICAL SOCIETY NEWS

MADISON, EAST CARROLL AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Madison, East Carroll and West Carroll Tri-Parish Medical Society held its regular monthly meeting in Oak Grove, Louisiana, Tuesday, September 5, at 7:30 P. M., with nineteen members and guests present.

Dr. A. Street of Vicksburg, Mississippi, was the Guest Essayist of the evening. Dr. Street presented a very interesting paper on "Bone Tumors", illustrating the various types of bone tumors with lantern slides.

Dr. B. C. Abernathy of Sondheimer, Louisiana, presented a very interesting paper on "The Treatment of Gonorrhoea in the Male."

Dr. Leon S. Lippincott of Vicksburg, Mississippi, made a very interesting extemporaneous talk on "Encephalitis".

The Society voted to hold a symposium on cancer at the November meeting.

The next meeting of the Society will be held in Lake Providence on Tuesday, October 3, 1933.

G. Douglas Williams, M. D.,
Secretary.

EIGHTH DISTRICT MEDICAL SOCIETY

Unusual plans are being made for the approaching meeting of the Eighth District Medical Society, which is to be held in Alexandria, on Wednesday, October 4, 1933, from 1:00 to 6:00 P. M. in the Hotel Bentley.

The Executive Committee of the Louisiana State Medical Society will meet also on this date at 10:00 A. M., in the Hotel Bentley.

Various invitations have been extended to the officers of the State Society, as well as to other prominent physicians of the organization. The following is the program for the meeting:

1. Perthe's Disease, by Dr. Guy. A. Caldwell, Shreveport.
2. Malignant Conditions of the Breast, by Dr. John A. Lanford, New Orleans.
3. Toxic Thyroid, by Dr. Joe E. Heard, Shreveport.
4. Diagnosis and Treatment of Hypertensive and Arteriosclerotic Heart Diseases, by Dr. J. M. Bamber, New Orleans.
5. Carcinoma of the Stomach, by Dr. Alton Ochsner, New Orleans.

Unquestionably this is going to be a real opportunity for the physicians of the Eighth District. Indications point to a most successful meeting in every detail. The officers should be commended on their activities for the preparations of this occasion.

SECOND DISTRICT MEDICAL SOCIETY

The Second District Medical Society held its regular meeting on Thursday, September 21, 1933, at the home of Dr. E. P. Feucht at LaPlace, Louisiana.

A most interesting paper on the subject of "Head Injuries" was read by Dr. Lucien Landry of New Orleans, followed by a discussion of "Brain Injuries of the New Born", by Dr. Charles Bloom of New Orleans.

Officers for 1933-1934 were re-elected as follows: Dr. Joseph Kopfler Kenner, President; Dr. P. Arman Donaldson, Reserve, Vice-President; and Dr. Lionel Waguespack, Vacherie, Secretary-Treasurer. Regular members of the Society present were: Drs. N. K. Edrington, P. T. Landry, J. T. Clayton, E. P. Feucht, J. S. Parker, L. O. Waguespack, P. A. Donaldson, J. S. Kopfler. New members elected were Drs. Schmidt, Campbell, and Baker. Guests of the Society were Drs. Daniel N. Silverman, Lucien Landry, Charles J. Bloom, and P. T. Talbot, all of New Orleans.

A most delicious dinner was served by Mrs. Feucht. The next regular meeting will be held at the home of Dr. Joseph Kopfler at Kenner, on October 19, 1933.

MONROE GENERAL HOSPITAL ORGANIZATION MEETING

The Monroe General Hospital had its first meeting Wednesday night, Sept. 13. The meeting was called to order by the temporary chairman, Dr. I. J. Wolff and the matter of electing staff officers was immediately begun. Those elected were as follows: Dr. F. C. Bennett, chief of the staff; Dr. J. E. Walsworth, vice chief of staff; Dr. C. P. Gray, chief of the surgical section, Dr. W. M. Hunter, chief of the medical section; Dr. B. M. McKoin, chief of the urological section; Dr. J. Q. Graves, chief of gynecology; Dr. A. G. McHenry, chief of obstetrics; Dr. R. J. Talbot, chief of pediatrics; Dr. A. L. Peters, chief of the eye, ear, nose and throat section; Dr. E. B. Lehman, chief of radiology and pathology; Dr. J. S. Coon, chief of orthopedics; Dr. C. H. Hill, chief of proctology; Dr. E. Young, chief of records, and Dr. I. J. Wolff, secretary of staff.

Dr. Walsworth, Dr. F. P. Rizzo and Dr. G. M. Snellings were named as members of the publicity committee.

Although heads of each department were specifically named as members of the staff, it was pointed out that any physician in good standing with the medical association representing this section is eligible to practice at the hospital.

Those in attendance at the meeting were: Drs. J.

E. Walsworth, G. M. Snellings, F. C. Bennett, J. N. Johnson, C. P. Gray, P. L. Perot, J. Q. Graves, W. E. Jones, Irma Jones, A. E. Fisher, E. Young, J. T. French, H. S. Coon, F. P. Rizzo, B. M. McKoin, M. B. Pearce, R. J. Talbot, E. B. Lehman, W. M. Hunter, A. L. Peters, and I. J. Wolff

NEWS NOTE

The photograph of the late Dr. Wm. Scheppegrell of New Orleans is on exhibition in the University of Chicago's booth in the Science Building at the Century of Progress in Chicago, for pioneer work in allergy. There is also on exhibition a collection made by Dr. Scheppegrell of photomicrographs of pollen from weeds and trees.

Dr. J. J. Ayo, Raceland, Speaker of the House of Delegates of the Louisiana State Medical Society, has been at Touro Infirmary. He is getting along nicely, and will leave the hospital in a few days.

Dr. Katherine Havard of New Orleans has been elected a member of the American College of Surgeons. She is the first woman physician to be elected from Louisiana.

INFECTIOUS DISEASES OF LOUISIANA

The most interesting feature of the report of Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, concerning the reportable diseases in the week of August 19 is the large number of cases of malaria that have occurred in Louisiana, 117 being listed. Other diseases that are reported in double figures include 87 cases of syphilis, 36 of gonorrhoea, 33 of pulmonary tuberculosis, 31 of typhoid fever, and 20 of cancer. One case of poliomyelitis was reported this week. For the week ending August 26, malaria was still on the increase, 135 cases being reported. There were listed also 66 cases of syphilis, 26 of typhoid fever, 23 of gonorrhoea, 22 of tuberculosis, 20 of diphtheria, 17 of cancer, and 12 of scarlet fever. Two cases of poliomyelitis and two of meningitis were also reported. Typhoid fever cases were scattered throughout the State, Orleans Parish reporting 6, practically all of which were imported, Ouachita 3 and Iberville 3, being the other two parishes with more than 2 cases. For the week ending September 2, malaria still was listed high, there being 132 cases reported, as well as 39 of pulmonary tuberculosis, 36 of syphilis, 32 of pneumonia, 21 of typhoid fever, 22 of cancer, 18 of gonorrhoea, 17 of diphtheria, and 12 of scarlet fever. One case of poliomyelitis was reported. Rapides Parish reported 4 cases of typhoid fever. For the week ending September 9, 130 cases of malaria were reported, followed in the order of frequency by 46 cases of tuberculosis, 40 of pneumonia, 37 of syphilis, 32 of cancer, 20 of typhoid fever, 13 of gonorrhoea,

and 10 of diphtheria. One case of poliomyelitis was reported. No one parish reported more than 2 cases of typhoid fever except Orleans Parish, and 3 of the 4 cases were imported from outside the City. For the week ending September 16, malaria had fallen to 103 cases. There were listed the following diseases in double figures, 99 cases of syphilis, 51 of gonorrhoea, 23 of typhoid fever, 22 of diphtheria, 18 of pneumonia and tuberculosis each, 16 of cancer. One case of poliomyelitis was reported and one of lethargic encephalitis. Iberville Parish and Richland with 6 cases each of typhoid fever were the only parishes to report more than 2 cases.

HEALTH OF NEW ORLEANS

For the week ending August 12, the death rate among the white population was quite low, being 9.3, where as in the colored it was 26.2, raising the total death rate to 14.2 as a result of 131 deaths, 61 among the white and 70 among the colored population. The infant mortality rate was 67. The report for the week of August 19 was not received. For the week ending August 26, the death rate was relatively low, being 13.6 as a result of 126 deaths, divided 69 white and 57 colored, the colored rate being almost double that of the white. The infant mortality rate was 73 for all infants, 53 for white and 107 for colored. For the week which ended September 2, the rate jumped up to 16.1 as a result of 149 deaths, divided 83 white and 66 colored, the rate among the former being 12.7 and the latter 24.7. The infant mortality rate had risen to 107. For the week concluded September 9, there were 139 deaths, divided 82 white and 57 colored, with a rate for the whole group of 15.1, white 12.5 and colored 21.3. The infant mortality rate was 56. The death rate for the first 36 weeks of the year is 15.4, as contrasted with the rate of 15.8 last year. The death rate among the white population is 12.7, as contrasted with 13.3 last year; the colored rate has decreased slightly, dropping from 22. to 21.9.

WOMAN'S AUXILIARY NEWS

Dr. C. A. Weiss, President of the Louisiana State Medical Society has graciously granted the Woman's Auxiliary to the Louisiana State Medical Society an Advisory Committee, which consists of Dr. S. Chaille Jamison, Chairman, New Orleans; Dr. J. E. Knighton, Shreveport; Dr. Clarence O. Lorio, Baton Rouge; Dr. J. Byron Vaughan, Monroe; Dr. Claude A. Martin, Welsh and Dr. John Signorelli, New Orleans.

The Auxiliary welcomes with open arms these gentlemen, who will be able to help us as we have never been aided before.

The following is a corrected list of the Officers

and Members of the Executive Board of the Woman's Auxiliary to the Louisiana State Medical Society for the year 1933-1934 with their home address:

President, Mrs. John H. Musser, 1427 Second Street, New Orleans; President-Elect, Mrs. T. H. Watkins, Drew Park Drive, Lake Charles; Recording Secretary, Mrs. Francis E. Lejeune, 49 Audubon Blvd., New Orleans; Corresponding Secretary, Mrs. S. Chaille Jamison, 1524 Seventh Street, New Orleans; Treasurer, Mrs. Isidore Cohn, No. 2 Everett Place, New Orleans; Vice-Presidents, Mrs. George Kreeger, 905 Kirby Street, Lake Charles; Mrs. William J. Norfleet, 835 Prospect Avenue, Shreveport; Mrs. John B. Benton, Minden, La.; Mrs. John Byron Vaughan, 2004 Riverside, Monroe; Parliamentarian, Mrs. Charles E. Rew, 1337 Oakland Street, Shreveport; Chairmen of Standing Committees, Organization, Mrs. George Kreeger, 905 Kirby Street, Lake Charles; Program, Mrs. John B. Benton, Minden; Finance, Mrs. Alfred D. Tisdale, 1405 South Grand Street, Monroe; Legislation, Mrs. John L. Scales, 2782 Fairfield Avenue, Shreveport; Public Relations, Mrs. T. H. Watkins, Drew Park Drive, Lake Charles; Hygeia, Mrs. Jacob M. Bodenheimer, Delaware Street, Shreveport; Revisions, Mrs. Ray B. Leavell, 124 Pine Street, Bastrop;

Press and Publicity, Mrs. Wiley R. Buffington, 1312 First Street, New Orleans; Printing, Mrs. Brooks C. Garrett, 924 Monrovia Street, Shreveport; Archives, Mrs. S. M. Blackshear, 2306 Camp Street, New Orleans; Historian, Mrs. Hermann B. Gessner, 119 Audubon Blvd., New Orleans; Exhibits, Mrs. Robert T. Lucas, 535 Broadmoor Blvd., Shreveport; Councilors, 1st District, Mrs. H. E. Bernadas, 2301 Esplanade Avenue, New Orleans; 2nd District, Mrs. A. L. Levin, 3725 Napoleon Avenue, New Orleans; 3rd District, Mrs. P. A. Boykin, Jeanerette, La.; 4th District, Mrs. M. J. Riverbark, Haynesville, La.; 5th District, Mrs. C. P. Gray, Monroe, La.; 6th District, Mrs. E. M. Levert, St. Francisville, La.; 7th District, Mrs. Olin Moss, Lake Charles, La.; 8th District, Mrs. D. C. McBride, Alexandria, La.

BUFORD K. PARRISH

Parrish, Buford K., Mansfield, La.: Graduated from Tulane University Medical School 1916. Member of the DeSoto Parish Medical Society, the Louisiana State Medical Society, and the American Medical Association. Dr. Parrish died on August 26, 1933, at the age of 45 years. He is survived by his wife and one son.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

MEMBERSHIP NUMBER FROM OUR PRESIDENT

Herewith is a list of the counties arranged in order to show the number of physicians in each county and the number of members of organized medicine in each county. You will note from this list that a large majority of the counties in the state have sufficient physicians practicing to enable them to organize local county societies. I believe the percentage of members would be very much larger were these counties organized as separate societies. The constitution and by-laws provide for councilor's districts societies in addition to local county societies. The councilor's districts societies could take the place of the large component societies and at the same time permit the formation of county societies. I believe this is the plan we should gradually work to.

It looks like a hard proposition to get some of our officers enthused over the drive. They will probably get started after a little bit. I hope we may be able to accomplish something definite.

J. W. D. Dicks,
President.

Natchez,
Aug. 28, 1933.

MISSISSIPPI STATE MEDICAL ASSOCIATION TABULATION BY COUNTIES

County	Number of physicians	M'b'rs	Non-m'b'rs	Component or county society	Large Enough for c'nty society
1. Adams.....	21.....	17.....	4.....	Component.....	Yes
2. Alcorn.....	15.....	9.....	6.....	Component.....	Yes
3. Amite.....	8*.....	2.....	5.....	Component.....	Yes
4. Attala.....	15.....	0.....	15.....	Component.....	Yes
5. Benton.....	5.....	2.....	3.....	Component.....	No
6. Bolivar.....	41*.....	18.....	18.....	Component.....	Yes
7. Calhoun.....	14.....	5.....	9.....	Component.....	Yes
8. Carroll.....	9.....	3.....	6.....	Component.....	Yes
9. Chickasaw.....	16.....	10.....	6.....	Component.....	Yes
10. Choctaw.....	7.....	4.....	3.....	Component.....	Doubtful
11. Claiborne.....	9.....	6.....	3.....	County.....	Yes
12. Clarke.....	12.....	3.....	9.....	Component.....	Yes
13. Clay.....	11.....	8.....	3.....	Component.....	Yes
14. Coahoma.....	32.....	18.....	14.....	Component.....	Yes
15. Copiah.....	17*.....	6.....	7.....	Component.....	Yes
16. Covington.....	9.....	2.....	7.....	Component.....	Yes
17. DeSoto.....	14.....	8.....	6.....	County.....	Yes
18. Forrest.....	35.....	21.....	14.....	Component.....	Yes
19. Franklin.....	6.....	4.....	2.....	Component.....	Doubtful
20. George.....	5.....	3.....	2.....	Component.....	No
21. Greene.....	5.....	1.....	4.....	Component.....	No
22. Grenada.....	9.....	5.....	4.....	Component.....	Yes
23. Hancock.....	9.....	3.....	6.....	Component.....	Yes
24. Harrison.....	50.....	30.....	20.....	Component.....	Yes
25. Hinds.....	108*.....	73.....	33.....	Component.....	Yes
26. Holmes.....	23.....	14.....	9.....	Component.....	Yes
27. Humphreys.....	14.....	5.....	9.....	Component.....	Yes
28. Issaquena.....	3.....	3.....	0.....	Component.....	No
29. Itta-wamba.....	10.....	2.....	8.....	Component.....	Yes

30. Jackson	14	11	3	County	Yes
31. Jasper	12	8	4	Component	Yes
32. Jefferson	5	4	1	Component	Yes
33. Jefferson Davis	7	1	6	Component	Doubtful
34. Jones	33*	14	18	Component	Yes
35. Kemper	12	8	4	Component	Yes
36. Lafayette	20	10	10	Component	Yes
37. Lamar	8	4	4	Component	Yes
38. Lauderdale	55	43	12	Component	Yes
39. Lawrence	7	3	4	Component	Doubtful
40. Leake	17	2	15	Component	Yes
41. Lee	35	13	22	Component	Yes
42. Leflore	41*	18	21	Component	Yes
43. Lincoln	14	11	3	Component	Yes
44. Lowndes	25	10	15	Component	Yes
45. Madison	11	4	7	Component	Yes
46. Marion	11*	3	7	Component	Yes
47. Marshall	11	8	3	Component	Yes
48. Monroe	21	11	10	Component	Yes
49. Montgomery	12	6	6	Component	Yes
50. Neshoba	12	11	1	Component	Yes
51. Newton	16	7	9	Component	Yes
52. Noxubee	11	8	3	Component	Yes
53. Oktibbeha	13	7	6	Component	Yes
54. Panola	16	5	11	Component	Yes
55. Pearl River	11	3	8	Component	Yes
56. Perry	4	4	0	Component	Yes
57. Pike	30*	27	1	Component	Yes
58. Pontotoc	17	10	7	Component	Yes
59. Prentiss	13	7	6	Component	Yes
60. Quitman	16	8	8	Component	Yes
61. Rankin	8	3	5	Component	Yes
62. Scott	12	4	8	Component	Yes
63. Sharkey	13	6	7	Component	Yes
64. Simpson	18	8	10	Component	Yes
65. Smith	9*	1	5	Component	Yes
66. Stone	5	1	4	Component	No
67. Sunflower	31	13	18	Component	Yes
68. Tallahatchie	18	11	7	Component	Yes
69. Tate	13	8	5	County	Yes
70. Tippah	12	6	6	Component	Yes
71. Tishomingo	11	4	7	Component	Yes
72. Tunica	11	1	10	Component	Yes
73. Union	14	5	9	Component	Yes
74. Walthal	5	3	2	Component	Yes
75. Warren	42	29	13	Component	Yes
76. Washington	42	29	13	Component	Yes
77. Wayne	8	3	5	Component	Yes
78. Webster	13*	2	10	Component	Yes
79. Wilkinson	5	4	1	Component	No
80. Winston	13*	7	5	Component	Yes
81. Yalobusha	11	7	4	Component	Yes
82. Yazoo	21	7	14	Component	Yes

TOTALS	1,397	736	638
Out of county areas		23	
<hr/>			
Totals		759	
Out of state members		6	
<hr/>			
Totals		765	

The Star (*) against total number indicates one or more physicians are members of organized medicine outside of the society of which their county is a part.

ORGANIZATION—MEMBERSHIP
DR. E. C. PARKER, GULFPORT, PRESIDENT-ELECT, IN GENERAL CHARGE

	No. of phys.	No. of m'rs	Number of P'c't.	Number of Non-m'b'rs
NORTH MISSISSIPPI				
Dr. E. R. Nobles, Vice-Pres.	574	291	50.70	233

(Out of division)	2		
(Out of state)	2		
CENTRAL MISSISSIPPI			
Dr. J. A. K. Birchett, Jr., Vice-Pres.	470	258	54.85
			203 (Less 4 in other divisions).
(Out of division)	8		
(Out of state)	3		
SOUTH MISSISSIPPI			
Dr. C. C. Hightower, Vice-Pres.	353	198	56.09
			147 (Less 8 in other divisions).
(Out of division)	2		
(Out of state)	1		
<hr/>			
TOTALS	1,397	765	54.76
FIRST COUNCILOR DISTRICT			
J. W. Lucas, Councilor	246	127	51.62
			118 (Less 1 in another district).
SECOND COUNCILOR DISTRICT			
L. L. Minor, Councilor	116	59	50.86
			57 (Out of district) 1 (Out of state) 1
THIRD COUNCILOR DISTRICT			
M. W. Robertson, Councilor	212	104	49.06
			108 (Out of district) 2 (Out of state) 1
FOURTH COUNCILOR DISTRICT			
T. J. Brown, Councilor	88	34	38.64
			53 (Less 1 in another district).
FIFTH COUNCILOR DISTRICT			
W. H. Watson, Councilor	245	143	58.37
			100 (Less 2 in other districts).
(Out of district)	6		
(Out of state)	1		
SIXTH COUNCILOR DISTRICT			
H. L. Rush, Councilor	137	81	59.12
			55 (Less 1 in another district).
(Out of district)	2		
(Out of state)	2		
SEVENTH COUNCILOR DISTRICT			
J. E. Green, Councilor	157	68	43.31
			84 (Less 5 in other districts).
(Out of district)	3		
(Out of state)	1		
EIGHTH COUNCILOR DISTRICT			
W. H. Frizell, Councilor	118	84	71.19
			30 (Less 4 in other districts).
NINTH COUNCILOR DISTRICT			
D. J. Williams, Councilor	78	45	57.69
			33
<hr/>			
TOTALS	1,397	765	64.76
STATE OF MISSISSIPPI	1,397	759	54.33
MEMBERS FROM OTHER STATES			
		6	
<hr/>			
TOTALS	1,397	765	638
CLARKSDALE & SIX COUNTY			
	77	38	49.74
(Out of area)		6	
DELTA			
	169	83	49.11
			79 (Less 7 in other societies).
DESOTO COUNTY			
	14	8	57.14
TATE COUNTY			
	13	8	61.54
(Out of state)		1	
NORTH MISSISSIPPI			
	89	43	48.31
(Out of area)		1	
NORTHEAST MISSISSIPPI			
THIRTEEN COUNTIES			
	212	104	49.06
(Out of area)		2	
(Out of state)		1	
WINONA DISTRICT			
	88	34	38.64
			53 (Less 1 in other societies).

CENTRAL	178	99	55.62	77	(Less 2 in other societies).
(Out of area)		6			
(Out of state)		1			
ISSAQUENA-SHARKEY- WARREN	58	38	65.52	20
CLAIBORNE COUNTY	9	6	66.67	3	
EAST MISSISSIPPI	137	81	59.12	55	(Less 1 in other society).
(Out of area)		2			
(Out of state)		2			
SOUTH MISSISSIPPI	157	68	43.31	84	(Less 5 in other societies).
(Out of area)		5			
(Out of state)		1			
HOMOCHITTO VALLEY	45	31	63.89	13	(Less 1 in other society).
(Out of area)		2			
TRI-COUNTY	43	23	53.49	16	(Less 4 in other societies).
PIKE COUNTY	30	27	90.00	1	(Less 2 in other society).
(Out of area)		1			
HARRISON-STONE- HANCOCK	64	34	53.13	30	
JACKSON COUNTY	14	11	78.57	3	
TOTALS		1,397	765	638	

MEMBERSHIP ADVANTAGE

In this the "Membership" issue of the *New Orleans Medical and Surgical Journal*, I am glad to report that the physicians on the staff of the State Board of Health and all of the eighty-two county health officers of Mississippi are members in good standing of the State Medical Association.

Each physician in Mississippi should be a member of the State Medical Association. Every dollar paid as dues comes back as investment. When you join your local medical society you ally yourself with local, state, and national medicine. Many valuable services and advantages are the benefits of membership.

In organized medicine there is strength—standards are elevated, ethics are fostered, observed, and the best interests of the profession are protected.

The *New Orleans Medical and Surgical Journal* is received with the membership in local medical societies. Journals are mediums for making available the latest information on all medical subjects—the result of pooling of nationwide thought and experience.

At medical meetings, members are admitted to fellowship which is pleasant and beneficial.

Join the ranks and let's Hold the Line!

F. J. Underwood,
Past President, Mississippi State
Medical Association.

Jackson,
Sept. 8, 1933.

GOING UP!

With reference to our membership in the Delta Medical Society, I wish to state that whereas last

year we had 62 members, this year we have 86, and hope to enroll even a larger number for 1934.

F. M. Acree,
Secretary.

Greenville,
Sept. 6, 1933.

WILKINSON COUNTY

Since this next journal is to be the membership number I am glad to report that every doctor in Wilkinson County is a member of the society except one.

S. E. Field.

FROM COUNTY REPORTERS

Philadelphia, Mississippi,
August 19, 1933.

"Dear Dr. Lippincott:

"I am just in receipt of copy of your letter to Dr. Dudley Stennis, under date of August 17. I regret very much, that my service as reporter has been unsatisfactory. Guess I should have reported more often, but I take it for granted that other readers of the journal do not care to read a report unless it is of some interest to the profession, and that we are expected to report only such news as would be of professional interest—news concerning doctors and their families and such news items are often not available in a community like ours and I do not care to write just for the sake of writing. I am often reminded of what Ex-Gov. Patterson once said of Ex-Pres. Calvin Coolidge, he said he appreciated Calvin Coolidge for the fact that if he had nothing to say, he didn't say anything. And this is my sentiment with regard to reporting regularly regardless as to whether there is any medical news.

"I am writing Dr. Stennis to accept my resignation.

"Yours respectfully
"W. R. Hand, M. D."

"I beg to acknowledge receipt of yours of yesterday, and to say that I will accept the job of reporter for this (Franklin) county. I will do the best that I can with the limited number of doctors in the county."

S. R. Towns.

Quentin,
August 29, 1933.

"I hereby resign as county editor for the Sanatorium, Mississippi, as I have recently moved to Knoxville, where I plan to locate permanently.

"I regret that I was able to furnish so little material for the Journal, but I have certainly enjoyed the association with all of my Mississippi doctor friends and leave them with feeling of regret.

"Wishing you all the very best of everything, I am

"S. F. Strain."

Knoxville, Tenn.

Sept. 8, 1933.

"Under conditions mentioned in your letter of August 30, will be glad to accept, and assist you in every way I can.

"Sincerely,
Lucien S. Gaudet."

Natchez,

August 31, 1933.

"In answer to your letter of August 28, I wish to say that I appreciate very much being reappointed reporter for Washington County. I consider this quite an honor, and assure you that I will carry on to the best of my ability.

"Again thanking you and with very best wishes to you, and to the success of the Mississippi State Medical Association, I am,

"Sincerely yours,
"John G. Archer."

Greenville,

Sept. 1, 1933.

Dr. Archer was appointed to begin in March, 1933. His record is one hundred per cent with Washington County news items in the Journal every month since.

WHAT'S WRONG WITH NEWTON?

"Dear Dr. Lipscom:— to report that Dr. A or B has 'Jahitis' is not Edifying. I have been chagrined at some reports published by some reporters. I have not lost any of my medical zeal. True I have not sent in many reports from Newton simply None to send in that would be elevating to a real good Doctor we should be ethical and Dignifying men you make a change possibly it will do us good. You have my permission to publish this card.

Fraternally yours,
"S. A. Majure, M. D."

Hickory, Miss.,

Aug. 20, 1933.

The above was received on a post card after the president of the East Mississippi Medical Society had been asked to nominate a reporter for Newton County and a copy of the letter sent to Dr. Majure. The record shows *one* news item from Newton County in *June*, 1931—none since. This Mississippi news section of our Journal is published *every* month. Please compare:

Newton County—16 doctors; 7 members; one item of news in 28 months.

Monroe County—21 doctors; 10 members; 27 items in 28 months.

Pontotoc County—17 doctors; 10 members; 25 items in 28 months.

Winston County—13 doctors; 7 members; 25 items in 28 months.

IT CAN BE DONE! And then we would have a real Mississippi news section. Incidentally county reporters receive a reminder each month.

COMMITTEE ON COMMUNITY HOSPITAL LEGISLATION

August 30, 1933.

To The Community Hospitals of Mississippi.
Gentlemen:

In all probability the legislature will soon convene and it may proceed with sundry kinds of legislation including hospitals. Already a sub-committee on Public Welfare has proposed a very vicious bill so far as community hospitals are concerned.

Your committee has made a thorough investigation of this bill and it is positively bad and evidently originated in the mind of some one wholeheartedly opposed to the community hospitals and should it become a law our institutions would be dominated completely by a political board who would also be in charge of other state institutions and the community hospitals would indeed be helpless orphans.

We are enclosing herewith copy of letter which with other data, including our proposed bill with which you are already familiar, we are today mailing to all members of the legislature.

The most important feature of our program at this time is for the personnel of the community hospitals to get busy NOW and see your representatives and senators before they go to Jackson. Also interview your newspaper men and get them to print some of the material we are today sending them in order that public sentiment may be created in our favor. Ask them especially to publish our committee report.

Yours very truly,
E. R. Nobles, Chairman,
V. B. Philpot, Secretary.

To His Excellency the Governor,
and Members of the Mississippi Legislature.
Ladies and Gentlemen:

A copy of a proposed bill prepared by the sub-committee on Public Welfare of the Reorganization Committee of the Senate and House of Representatives, and which we presume will be submitted to your honorable body when you next convene, has been mailed us and we have carefully read same and are using this as one method of protest against the community hospitals in Mississippi being governed by this board.

We have in our files a bill creating a Board of Charities proposed by the Bilbo administration and

have very carefully compared the two and while there is some difference in the actual wording of these bills they are, in the main, similar.

During the Legislative sessions of 1928 and 1930 the community hospitals in Mississippi were whole heartedly in sympathy with the action of Speaker Bailey and the Chairman of the Appropriations Committee in their fight to defeat the old bill for a Board of Charities even though we were well aware of the fact that the defeat of the bill meant the vetoing of all appropriations made to our institutions. The community hospitals then, as well as now, strongly opposed the political turmoil which we were sure then, and are equally as sure now, would exist and combat efficiency and mean partiality and strife in our little institutions.

We are enclosing herewith a copy of a bill which has the solid backing of the Mississippi State Medical Association. We earnestly desire you to use this for the community hospitals and withdraw our institutions from the list of those contained in the bill for a Board of Charities.

For more than two years committees from the State Medical Association and the State Hospital Association have been working, planning and studying methods for the care of charity patients for the state of Mississippi. We have met many times in Jackson; we have collected data from numerous sources; and we believe our program is right. We further believe that the government of the community hospitals in Mississippi should be similar to that of the State Board of Health and we congratulate the sub-committee on Public Welfare leaving the State Board of Health out of a Board controlled by political influences.

You gentlemen who have been members of the Legislature a long time can readily appreciate the fact that no organization in the state of Mississippi has run smoother or has been freer from entanglements, turmoil, strife and scandal than the State Board of Health, a body whose members are selected, in the main, from an organized medical body that knows good material for such an organization.

A majority of the Board of Governors proposed in the enclosed bill is to be selected by three scientific bodies each of them distinct and separate but all of them familiar with hospital problems. Such a body is even freer from political influences than the State Board of Health and it is equally as essential, and even more so, for the main governing body of the community hospitals to be selected, in the main, from these scientific organizations.

We call your attention to the fact that the state does not have one penny of money invested in the institutions we represent and if we have the opportunity of caring for the charity patients of Mississippi, as recommended by the enclosed bill, they will be cared for just the same as if they were able

to pay. The state is only asked to take care of the actual cost and it would be far better for our institutions and for the people we are trying to serve that we never receive a penny from the State of Mississippi than for our institutions to become political footballs for future generations of those in power. In making this statement we want it clearly understood that it does not apply to the present Governor whom we admire and respect, but should this bill pass he would hardly be Governor two years afterwards and our desire is a permanent arrangement whereby all the people can be served efficiently in all counties of Mississippi in institutions free from any obligations of any kind politically.

Now it has been suggested that on account of so many community hospitals in Mississippi there would be too many boards. We should like to call your attention to the fact that none of the local boards mentioned in our bill receive any salary at all for their services. We should like to call your attention further to the fact that there are more than fifty community hospitals in Mississippi, if found efficient and up to a certain standard, would handle charity patients. There are local problems peculiar to each individual hospital that need the attention of a local board. Should there be a complaint from any source this board is convenient. They can have monthly meetings and approve all bills and handle situations that would be impossible for one central board to handle. Even if the members of one central board were continuously going from one institution to another at enormous expense they could hardly make any pretense of looking after local problems.

We also want to call your attention to the fact that the Board of Governors recommended in our bill, whose business it is to adopt rules and regulations in a general way for all hospitals, are paid for by the hospitals, themselves, and no expense from the State of Mississippi is encountered in any of the governing bodies.

Now, ladies and gentlemen, we should like to tell you that our committee together with officials of the State Hospital Association and State Medical Association hope before January 1st to get you very thoroughly informed in reference to hospital matters. The addresses of the latest presidents of these two organizations as well as that of other leading members of the Mississippi State Medical and Hospital Associations which go into detail concerning our program will be mailed you.

The management of the fifty odd community hospitals in Mississippi will be glad to answer any questions you may desire to ask them in reference to this plan. The many county newspapers in the state, most of whom are already friendly to our plan, will be given an opportunity to disseminate the true facts as we see them in reference to the

care of charity in the State of Mississippi so that the people themselves may be informed. Sooner or later you will know exactly where the chief opposition to our plan comes from and just why it is so.

In addition to the enclosed bill we are also enclosing herewith report of our committee made to the Mississippi State Medical Association which was adopted by that body at its meeting in Jackson in May. We ask you to read this report before going to Jackson.

In conclusion allow us to state that this committee is functioning for the State Medical Association; our program has its full approval. We are not sectional but serving the best we can for the state, as a whole, in legislative matters pertaining to hospitals.

Yours very truly,
E. R. Nobles, Chairman,
V. B. Philpot, Secretary.

FOR DISCUSSION
HANCOCK COUNTY

R. F. C.

The doctors of our section are having a lot of business but collections are few and far between, more so than necessary. I would like an expression from some of the other doctors as to whether the R. F. C. has helped their clients to the extent that they have tried to help out the doctor any at all. Personally, in my practice it has ruined my collections. I do not know of my own knowledge of one single case where it has been used to assist an individual towards future betterment or to pay one dime on past obligations due. They seem to sit and wait for the next issue.

County Health Officers

Also I would like to have an expression from the general practitioners (only) as to what their experience has been as to their having been assisted by their county health officers. Does your county health officer do any practice that you should get? You know it soon becomes a burden to the general practitioner to live if the better class of citizens, I should say the better politicians, of one's county get their practice done free, as well as when the middle and poor classes who do not want to pay if they can avoid it. It is the general opinion that your full time health officer's business is to do the practice for those who are not able to pay for a doctor's services? This is the case in Hancock County. It seems hard for them to make an effort to pay when the county health doctor can be had for nothing. He has a salary to live on. Why murder us? I am getting up a little data on this for the past few years at this time that you might appreciate later. This is about the only way to get it to you or the public, as at meetings you know who talks loudest and longest.

We cannot blame anyone for personal effort to

please the politician who takes care of his job. So it might be a grand idea to become one of those who help do this and not be quite so cowardly quiet about it. I sometimes wonder, when I see how the old general practitioner is being used as a convenience only, why there is not an organization of these forgotten, unimportant animals, so that they could at least sympathize with each other. In that case, they might even say something about their rights if there were no others there. There might be even a different vote on a few things pertaining to medicine. Think about it out loud so we can read it. It might also do you no harm to reread your old July number of the New Orleans Medical and Surgical Journal, especially on page seven, the article by Douglas C. McMurtrie of Chicago, title, "A Louisiana Decree of 1770 relative to the Practice of Medicine and Surgery."

D. H. Ward.

Bay St. Louis,
Sept. 7, 1933.

MISSISSIPPI STATE HOSPITAL ASSOCIATION
Hospital Ethics

"Where one hospital enjoys a contract with a corporation to take care of their hospitalized sick being injured in that territory, would it be ethical for another hospital in the same community to offer a special inducement in the way of a twenty or twenty-five per cent reduction from the regular hospital bills to the families of the men who are working for said corporation? That is, if A hospital has a contract to take care of the surgical and medical cases for a corporation, is it ethical for B hospital to offer to the families of the corporation who have a contract with A hospital, a percentage reduction in their bills because they belong to the families of a large group?"

The above was submitted to Dr. Bert W. Caldwell, Executive Secretary of the American Hospital Association. His reply is as follows:

"With reference to your question I would say that this procedure is definitely unethical, and not only is it unethical but it would contribute greatly to the breakdown of any good system of prices charged for hospital accommodations in any community. It should be, and is placed, I think, in the same category as one commercial competitor underbidding another for business."

Contract Hospitalization

"We have recently had some high powered individuals in this territory making an effort to contract with hospitals to put on an intensive campaign to sell hospitalization to individuals and groups at \$1.00 per head, \$2.00 per family, over the area covered by the hospitals in question. Seeing the possible dynamite in it, we had the three hospital executives to meet, discuss the matter in its entirety and then declined to have anything to do

with it. The solicitors as I understand it get the first monthly payment, and twenty-five per cent of all collections thereafter. They probably will be in your territory soon, and I hope you will look out for them."

A Code for Hospitals

"I notice in a letter from the joint committee representing the hospitals before the NRA that it is optional with any state or local council to adopt a code of their own as they see proper and it has occurred to me that the hospitals of Mississippi should have a uniform code of fair competition in so far as fees are concerned. In other words, as I see it, the cost of operating hospitals is about the same throughout Mississippi and if each and every institution could and would adopt the same schedule of fees I believe it would be quite advantageous to all hospitals and would be quite a long step forward in promoting efficiency as the management of each institution would be aware that patients would come largely because of efficiency rather than for cheap prices."

V. B. Philpot.

Houston,

August 22, 1933.

ITEMS FOR MISSISSIPPI NEWS SECTION

It is requested that all items intended for publication in the section of our Journal devoted to Mississippi News be sent direct to the Editor for the Mississippi State Medical Association at Vicksburg and before the tenth of each month. When items are sent directly to New Orleans, they must be returned to Vicksburg and sometimes there is then a delay in publication.

LET'S DISCUSS IT

"Philadelphia Hospital

Philadelphia, Miss., August 21, 1933.

"To the Members of the Miss. State Hospital Association:

"In my opinion the requirements for preliminary education before entering training are too low in Mississippi. Small institutions are using training schools to cut expenses and they do not give their students the necessary training, partly because that they do not have the proper teaching facilities, partly because they do not have a sufficient number of patients for the students to have the proper training. I have employed any number of nurses graduated from institutions in the state of Mississippi and have not yet found any of them to be what I expected a nurse to be.

"My opinion is that the minimum requirement for State Board Examination to be the minimum required by the Civil Service Commission for duty in any of the Governmental Agencies, and there are scarcely if any hospitals in the state conducting training schools that graduate nurses eligible to

receiving appointment in Governmental Agencies under Civil Service rules.

"Respectfully,

"C. H. Harrison, M. D."

CALENDAR

SOCIETY MEETINGS

- CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.
- CLAIBORNE COUNTY MEDICAL SOCIETY:
CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Nov. 8, 1933, Alcazar Hotel, Clarksdale, 7:30 P. M.
- DELTA MEDICAL SOCIETY: Second Wednesday in April and October; Rotates between Washington, Bolivar, Humphreys, Lefloe and Sunflower Counties; 2 P. M. Next meeting at Belzoni, Oct. 11.
- DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July and October; Hernando; 10 A. M.
- EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December; 3 P. M. Next meeting at Lamar Hotel, Meridian, October 19.
- HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY:
- HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July, and October, Natchez, 2 P. M. Next meeting at Natchez, October 17.
- ISSAQUENA - SHARKEY - WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, 7 P. M.
- JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, 7:30 P. M.
- NORTH MISSISSIPPI MEDICAL SOCIETY:
NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY:
- PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.
- SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June; alternates between Laurel and Hattiesburg, 3 P. M.
- TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 P. M. (Not meeting regularly this year).
- TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, at Wesson, Tylertown, Monticello and Brookhaven, 12:30 P. M.
- WINONA DISTRICT MEDICAL SOCIETY: November 7, Winona, 1 P. M.
- EIGHTH COUNCILOR'S DISTRICT: November 7, Brookhaven.

MISSISSIPPI STATE MEDICAL ASSOCIATION:

May 8, 9, and 10, 1934, Natchez.

EIGHTH COUNCILOR'S DISTRICT

The Eighth Councilor's District is planning for an extensive drive for an increased membership in her local and state associations as mapped out by President Dicks, who is following the by-laws as revised by the last House of Delegates.

President Dicks has called upon the president-elect to push the membership feature through the three vice-presidents, councilors and component society officers so that each and every eligible physician shall become a potent factor in organized medicine. The Council has urged such intensive work before but there seems to be some lethargy among our fraters for our membership has not held up to our desires or expectations.

This district (8th) will inaugurate its drive soon and push it to the final wind up. We suggest that all component societies urge a full attendance at their annual meetings in the late fall months and press the matter and collect fees for their dues for 1934. Then we shall have better protection medico-legally and find profit in our association with our fellow society members in scientific work and social features.

The Eighth District will present a most profitable program on November 7, 12:30 p. m., at Brookhaven, this being an annual feature. We are anticipating a large attendance. Secretary H. R. Fairfax of Brookhaven has the acceptance as speaker for this occasion of Dr. W. A. Wagner, Associate Professor of Oto-Laryngology, Tulane University Graduate School of Medicine; Dr. Charles J. Bloom, Professor of Pediatrics, Tulane University Graduate School of Medicine; Dr. C. Jeff Miller, Professor of Gynecology, Tulane University School of Medicine; and Dr. J. A. Crisler, Jr., of the Crisler Clinic, Memphis, Tenn. This will give our hearers a substantial post graduate course in work that will be of practical interest to them.

This is the fourth annual meeting since the organization of the Eighth District. Each meeting seems to climax the former one so we expect much from this meeting and program. Short addresses will be made by Dr. J. W. D. Dicks, President of the Mississippi State Medical Association and President-Elect, Dr. E. C. Parker of Gulfport who is an invited guest on this occasion.

The Ladies Auxiliary will meet at the same time and have plans for a most interesting program including a prominent Mississippi doctor who always has a message on any occasion.

Ye Editor and entourage will be accorded a most hearty welcome.

Brookhaven,
Sept. 13, 1933.

W. H. Frizell,
Councilor, Eighth District.

CENTRAL MEDICAL SOCIETY

The Central Medical Society resumed its meetings the evening of September 5. The meeting was held on the roof garden of the Robert E. Lee Hotel where a large attendance enjoyed a good dinner and an excellent program. The guest speaker of the evening was Dr. C. N. Arrington of Brookhaven. We hope that Dr. Arrington will be back with us again soon. The first meeting started off the season with a boom, now let us keep it up throughout the year and make this the best year ever in our local and state medical societies.

William F. Hand,
County Reporter.

Jackson,

Sept. 6, 1933.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

Dr. J. W. Moody, Charleston, president of the Clarksdale and Six Counties Medical Society, is actively cooperating with Dr. J. W. D. Dicks, president of the Mississippi State Medical Association, in his efforts to stimulate interest and boost the membership of the State Association. Dr. Moody has recently written the following letter to all the doctors within the jurisdiction of his society:

As president of the Clarksdale and Six Counties Medical Society I confess that I have not been very active in getting behind a drive which I have anticipated for some months. My main reason for the delay was that business generally would be on the upturn toward the fall months and the spirit of cooperation would be better.

As you know the membership of our society has reached a very low percentage, while there are a number of physicians in our territory who have never been members. Dr. J. W. D. Dicks, President of the Mississippi Medical Association, is anxious that as far as possible every physician be enlisted in the county and state associations.

As president of your medical society I am anxious that our membership be increased very substantially. To do this we must awake to our individual responsibility. I am making an earnest plea that each and every physician in the territory of the Clarksdale and Six Counties Medical Society shall appoint himself a committee of one to see that not only your name is enrolled but that you will make it a point to get in touch with every other physician in your immediate community, lest they forget.

If we do this, we will perform a greater service to each other and to the cause for which we serve. We need to become more closely associated as a profession. The public is looking to our profession for the prevention of disease and scientific developments for the alleviation of the unfortun-

ate who are already victims of disease. We must organize and cooperate in a more substantial way if we render this service effectively and satisfactorily.

Another very important phase of our work is the dire need of a revival of the medical and scientific interest of the physicians of the Clarksdale and Six Counties Medical Society. May I insist that the members of our society get in on the programs. If our members will volunteer to read papers, it will be unnecessary to make up our programs of guest speakers. We have plenty of competent men who can compose interesting papers. There has been some criticism and objection to our programs being monopolized by guest speakers, for the reason as already expressed is apparent. We must have a program.

We are always pleased to have visitors, and it is not my intention to criticize those who appear on the program since it is not their fault. We always welcome them to our meetings and are glad to have them enter into discussions of papers as far as propriety permits. But, as already stated, we want our membership to compose the larger part of our programs. If they fail to respond; then our progress as an association and profession must suffer, and our programs will necessarily have to be composed of guest speakers.

I am confident that we will have an interesting program for our November meeting, and I am hopeful that we will have a full attendance. If you are a member in good standing, or a delinquent member, or a non-member, we are going to expect you.

The programs for the November meeting will be mailed out at the proper time by our efficient secretary, Dr. V. B. Harrison of Clarksdale.

Hoping that you will receive this appeal in the spirit which prompted the writer in writing it, and hoping to meet you at the meeting, I am, with all best wishes,

Cordially yours,

J. W. Moody, President.

Charleston,
August 24, 1933.

Other society presidents could well follow the example of Dr. Moody in addressing appeals and stressing the importance of active participation in organized medicine to the doctors within their jurisdictions.

DELTA MEDICAL SOCIETY

A regular meeting of the Delta Medical Society will be held at Belzoni, Wednesday, October 11, beginning at 2 p. m. Following is a partial program:

Glandular Therapy in the Treatment of Func-

tional Menstrual Disorders.—Dr. James E. Wedlington, Belzoni.

Osteomyelitis.—Dr. John A. Crawford, Greenwood.

Atabrine and Plasmochin in the Treatment of Malaria.—Dr. A. M. Wyññ, Merigold.

Spinal Anesthesia.—Dr. George W. Eubanks, Greenville

Programs for Medical Meetings.—Dr. R. C. Smith, Drew.

In addition to the above papers there will be one other by some doctor who is not a member of the Delta Society.

Dr. J. W. D. Dicks, Natchez, President of the Mississippi State Medical Association, has promised to attend and will give a short talk. Dr. P. W. Rowland, Oxford, President of the Mid-South Post Graduate Medical Assembly, has promised to come.

In a talk with Dr. G. M. Barnes, Belzoni, chairman of the local arrangements committee for the meeting, he hinted that in addition to our quite interesting scientific program as outlined above, there would very likely be a stag party for the doctors at Four Mile Lake in the evening following the program. He promises that if this part of the program is included, it will be a most interesting feature.

F. M. Acree,
Secretary.

Greenville,
Sept. 6, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The physicians of the East Mississippi Medical Society met at the New City Park, Philadelphia, Thursday afternoon, August 17, Dr. Dudley Stennis, President, presiding. Thirty-three members and three guests were present.

Dr. Karl O. Stingily of the Stingily Laboratories, Meridian, and Dr. John V. James of Montrose, were elected to membership in the society. Kemper, Clark and Leake counties were officially united with the East Mississippi Medical Society. Resolutions of respect to the late Dr. C. R. Stingily as prepared by Drs. F. G. Riley, T. D. Bourdeaux and H. L. Arnold were presented by Dr. F. G. Riley and adopted by the society. Privilege tax and sales tax resolutions similar to those passed by the State Medical Association in May, 1933 and found on page 13 of the Transactions of the House of Delegates, for the reduction of physicians' privilege tax to half the present amount and elimination of the physicians' sales tax on his income, were adopted and a motion passed that the president appoint three members from each component county to make contact with representatives in their respective counties and get their influence in bringing this

about at the next meeting of the State Legislature.

Dr. T. E. Wilson, of Jackson, delivered an address on Angina Pectoris which was discussed freely by Drs. T. D. Bourdeaux, W. J. Anderson, Z. C. Hagan, W. R. Hand, William Krauss and Dudley Stennis.

Dr. W. A. Land of DeKalb, presented a case of chronic lesions about the nose which was examined and discussed by the membership.

Dr. F. G. Riley reported a case of a small child with motor paralysis following a short and apparently mild illness.

Dr. Dudley Stennis reported a case which had pains in the lower right abdomen followed by paralysis of the lower extremities.

After a short intermission, Dr. W. H. Banks introduced Mayor Gillis of Philadelphia, who delivered an address welcoming the physicians to the city. Following this address a delightful spread was given by courtesy of the wives and physicians of Neshoba County.

Next meeting will be held in the Lamar Hotel, Meridian, Thursday, October 19.

T. L. Bennett,
Secretary.

Meridian,
Sept. 9, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The Harrison-Stone-Hancock Counties Medical meeting was held September 6, at 7:30 p. m., at the King's Daughters' Hospital, Gulfport. President Evans not being able to be present, Dr. B. Z. Welch of Biloxi was made president. The secretary was also absent on his vacation.

We had a most wonderful discussion, illustrated with slides, of plastic surgery, this paper being rather poorly discussed generally for the reason that it was really too deep for us, but for the same good reason was thoroughly enjoyed by every one.

The meeting was well attended and refreshments were served by the good old King's Daughters.

We have had several new members added to our society recently.

D. H. Ward,

Bay St. Louis,
Sept. 7, 1933.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, Vicksburg, Tuesday, September 12. After a supper served at 7 p. m., the following scientific program was presented.

- (1) Congenital Syphilis—Dr. G. C. Jarratt. Discussed by Drs. W. P. Robert, S. W. Johnston, and T. P. Sparks, Jr. Dr. Jarratt closed.
- (1) Allergic Nasal Conditions With Case Reports—Dr. E. H. Jones. Discussed by Dr. H. H. Johnston. Dr. Jones closed.
- (3) Essentials In Small Pox Prevention—Dr. F. M. Smith. Discussed by Drs. T. P. Sparks, Jr., William Krauss, N. B. Lewis, W. P. Robert, W. H. Scudder, Dr. Smith closed.

Dr. William A. Smith, Panther Burn, was elected to membership.

Dr. W. H. Watson, Pellahatchie, Councilor of the Fifth District of the Mississippi State Medical Association, was present and addressed the Society on membership. He later held a conference with representatives of the three component counties to consider the matter of membership.

Twenty-three members and five guests were present. Dr. P. S. Herring, Vicksburg, President, presided.

The next meeting of the society will be held on Tuesday, October 10 at 7 p. m. The committee in charge of program is Dr. W. H. Parsons, Chairman; Dr. M. J. Few; Dr. G. P. Sanderson; Dr. H. B. Wilson; and Dr. W. D. Anderson.

JACKSON COUNTY MEDICAL SOCIETY

The Jackson County Medical Society and the Staff of the Jackson County Hospital will begin their regular meetings Thursday evening, September 14, at 7:30 o'clock, after a three months vacation. This will be a joint meeting.

J. N. Rape,
Secretary.

Moss Point,
Sept. 5, 1933.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY

The third quarterly meeting of the Northeast Mississippi Thirteen Counties Medical Society was held at the First Baptist Church, Calhoun City, September 19, at 1 p. m. The program included the following:

- Called to order—President F. L. McGahey.
- Invocation—Rev. R. B. Patterson.
- Welcome Address—Hon. A. T. Patterson.
- Reading and Adoption of Minutes Last Meeting.
- "Banti's Disease" with Case Reports—Dr. R. B. Cunningham.
- Discussion opened by Drs. G. S. Bryan and J. M. Hood.

"The Decision for Surgery in Border Line Hyperthyroidism."—Dr. J. A. Crisler, Jr., Memphis, Tenn.

Discussion opened by Drs. V. B. Philpot and M. Q. Ewing.

"Some Thoughts for our Mutual Benefit."—Dr. F. J. Underwood.

General Discussion.

"Inguinal Hernia."—Dr. H. M. Williams.

Discussion opened by Drs. W. H. Anderson and R. D. Kirk, Jr.

"A Case of Normal Obstetrics Out in the Country."—Dr. E. B. Burns.

Discussion opened by Drs. R. W. Carruth and J. E. Ellis.

Business Session.

Immediately following the business session, supper will be served.

Adjournment.

J. M. Acker, Jr.
Secretary.

Aberdeen,
Sept. 11, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society will hold its next meeting in Laurel, on September 14, at 3 p. m. The following is the program as outlined by the program committee:

1. Address of Welcome—Mayor J. W. Hosey, Laurel.
2. Response to Welcome Address—Dr. L. B. Hudson, Hattiesburg.
3. The Doctor As a Business Man—Dr. J. B. Jarvis, Laurel.
4. Surgery As It Appeared In Print 150 Years Ago—Dr. T. E. Ross, Sr., Hattiesburg.
5. Indications for Surgery in the Treatment of Fractures—Dr. F. H. Hagaman, Jackson.
6. Trials and Tribulations of the Country Doctor—Dr. A. M. Harrelson, Stringer.
7. The Treatment of Varicose Veins and Varicose Ulcers by the Injection of Sclerosing Solutions—Dr. Shirley C. Lyons, New Orleans.

The meeting will be held at the Nurses Home of the Charity Hospital and dinner will be served immediately after at the Laurel General Hospital.

J. P. Culpepper, Jr.,
Secretary.

Hattiesburg,
Sept. 12, 1933.

TRI-COUNTY MEDICAL SOCIETY

The Tri-County Medical Society held its last regular meeting at Monticello, September 12. We were treated to a good dinner and had an unusually interesting and instructive program. The attendance was a little over fifty per cent.

Dr. R. C. Massengill, who was reared in Brookhaven and is a recent graduate of Tulane University, and who has located here for the practice

of his profession, was duly elected a member of the Tri-County Medical Society. He is also part time physician for the "C. C. C." or Reforestation Camp near Caseyville.

Councilor W. H. Frizell announced the coming of the Eighth District Councilor's Meeting to be held in Brookhaven, November 7, with an unusually interesting program. Several prominent physicians from Memphis and New Orleans will take part on same. Dr. Frizell urged that all members come and bring their wives. While our membership is not as large as it was a few years ago, the interest holds up very well.

The next regular meeting of the Tri-County Medical Society is to be held in Brookhaven, December 12 when we expect to have the election of officers for next year.

H. R. Fairfax,
Secretary.

Brookhaven,
Sept. 14, 1933.

COUNTY EDITOR APPOINTMENTS

The following appointments of county editors are announced:

- Adams County—Lucien S. Gaudet, Natchez.
- Amite County—W. R. Brumfield, Gloster.
- Bolivar County—W. A. Carpenter, Cleveland.
- Coahoma County—J. W. Gray, Clarksdale.
- Franklin County—S. R. Towns, Quentin.
- Humphreys County—J. R. Jackson, Belzoni.
- Jefferson County—B. R. Clark, Lorman.
- LeFlore County—W. B. Dickens, Greenwood (reappointed).
- Pike County—T. E. Hewitt, Summit.
- Quitman—S. W. Glass, Lyon, R. F. D.
- Sunflower—U. S. Wasson, Moorhead.
- Tallahatchie—J. D. Biles, Jr., Sumner, and G. D. Bardwell, Charleston.
- Tunica—W. H. Williams, Tunica.
- Warren—F. Michael Smith, Vicksburg.
- Washington—John G. Archer, Greenville (reappointed).
- Wilkinson—S. E. Field, Centerville (reappointed).

ADAMS COUNTY

Dr. Francis Dixon, who has recently returned from New Orleans, La., is now located in Natchez, and occupying Dr. M. Beekman's office in the Beekman Building opposite the Natchez Sanitarium.

Dr. H. M. Smith has now associated with him Dr. W. H. Smith of Memphis, who expects to soon move his family in our midst. All join in welcoming Drs. Dixon and Smith in our midst.

Mrs. H. M. Smith who recently was in a most deplorable accident in which her mother and sis-

ter lost their lives, is recuperating very nicely at the Natchez Sanatorium.

The Chamberlain Rice has no news this month for the Journal.

The Natchez Hospital has been obliged to limit its work on account of lack of funds, and is only doing clinic work and emergency cases.

Mrs. Hattie Bauer, the efficient superintendent of the Natchez Sanatorium has had a recent birthday. Congratulations and here's hoping many more.

Dr. Dicks, President of the State Association, as usual is working hard to enroll new members. Let's all help him put it over.

The Homochitto Valley Medical Society meets in October for election of officers.

The Eighth Councilor's District will hold their meeting in Brookhaven next month and we look for a very large attendance.

Dr. W. H. Aikman has been ill and confined to the Natchez Sanatorium but has improved and returned to his home.

Lucien S. Gaudet,
County Editor.

Natchez,
Sept. 7, 1933.

ATTALA COUNTY

We are still on the map up at Kosciusko, by being careful. We have a fine pea crop (or I believe that they call them "life savers" since the depression) and that with a few other things makes everything lovely.

One of our associate physicians, Dr. Damar Bailey, having been on a vacation in Europe for about two months, is expected to return soon.

We are working under the N.R.A. but it is somewhat like the darky who was refused credit in August, who when looking at a N.R.A. sign said, "I sho knows what that means—no rations in August."

We need a hospital at Kosciusko just too bad, and do not have the money to build and operate one. Our state institutions are not worth much to us as they are always crowded when we have a charity patient, which is about the only kind that we have had in the last year or two.

C. A. Pender,
County Editor.

Kosciusko,
Sept. 12, 1933.

CARROLL COUNTY

The health unit of Carroll County has during the past two months initiated and waged an extensive and successful antityphoid vaccinating campaign. Your county editor has vaccinated over two thousand patients in Vaiden, Carrollton and

Black Hawk during this period. Drs. Alexander, Murphy and Sayle have added their services to this work, and we feel, due to the fact that several cases of typhoid had appeared in the county, that through this health work an epidemic has been avoided.

Over 200 cases of malaria were last month reported to the State Board of Health by the Carroll County doctors, and this led to certain vicinities taking preventative steps. This is especially true of Vaiden where an aggressive battle has been waged against the harbingers of plasmodia falciparum, vivax and malariae.

M. E. Arrington,
County Editor.

Vaiden,
Sept. 6, 1933.

COPIAH COUNTY

Dr. W. L. Little, Wesson, with his son, Dr. A. H. Little and wife of Oxford enjoyed an outing with some fishing on the White River in northern Arkansas about the middle of August. They returned by way of the Ozark National Forest and Hot Springs.

Dr. W. L. Little has recently been appointed by the State Board of Health as part time health officer for Copiah County. The supervisors of his county have given him an experienced nurse who will assist in the work, and he will continue the efficient work which has been done by the unit for the past five years.

W. L. Little,
County Editor.

Wesson,
Sept. 5, 1933.

DESOTO COUNTY

Mrs. Wright, wife of Dr. J. M. Wright of Hernando, has returned from a trip to Chicago. Mrs. Wright is a leader in the Parent-Teachers Association of her home town.

Among those who attended the Century of Progress Exposition were Dr. and Mrs. A. J. Weisinger of Hernando, Dr. A. V. Richmond and his nephew and name-sake, Albert Vernon Shannon of Lake Cormorant, and Mrs. L. L. Minor and our son Lancelot, Jr.

There has been more malaria and of a severer type this season than for years.

The vice-presidents of the component societies can be of great aid in working up the membership of the parent organization. They are in closer contact with the rank and file, especially in our larger societies.

Our president, Dr. J. W. D. Dicks, is well equipped to be our leader and let every member lend a helping hand and may we have a marked

increase of membership and interest in organized medicine.

The advertising pages of our Journal are clean and convincing. Do your part in getting more good advertisers. This helps.

L. L. Minor,
County Editor.

Memphis,
Route 4,
Sept. 9, 1933.-

FRANKLIN COUNTY

On June 7, Sherrod, the only child of Dr. and Mrs. S. R. Towns of Quentin, was married to Miss Joyce Lyon of Birmingham, Ala. Recently they have been visiting in Quentin and in Birmingham. They both received their bachelor's degrees in music from the Cincinnati Conservatory of music during 1932, he in voice and she in piano. At the opening of the next session of the Louisiana State University, they will enter its music department, where Sherrod will be an instructor in voice and Joyce will begin work on her masters degree in piano.

Mrs. S. R. Townes of Quentin, and Mrs. Flowers of Smithdale, have just returned from a week's visit to the "Century of Progress Fair" in Chicago.

Drs. Mullins and McGehee of Bude have wonderfully changed expressions on their faces lately, caused by the reopening of the big saw-mill there, which has been idle for a period of years. Your correspondent expects to "touch" them for a loan before long!

S. R. Towns,
County Editor.

Quentin,
Sept. 6, 1933.

HANCOCK COUNTY

Bay St. Louis has a new doctor, Dr. M. Wolf, a recent graduate of Tulane, with one year's internship at Charity Hospital, New Orleans, who came in with us September first. He has a nice home on south front beach, a nice office in the Masonic building, and is getting started off like a real doctor who intends to do things and do them in the right way. We welcome the doctor and wish him well. It is better to have this kind of competition than to have a quack.

Miss Beatrice Smith, daughter of Dr. and Mrs. A. P. Smith of Bay St. Louis, was married August 15 to Mr. Charles William Clark of Gulfport. They are making their home in Gulfport.

The daughter of Mrs. S. H. Anderson, of Kiln, is sick this week with a cold. She is being treated by the county health doctor, Dr. Shipp. We hope she will soon be well again.

Dr. and Mrs. D. H. Ward have had as their

guests for the past two weeks Mrs. Ward's sister and brother-in-law, Mr. and Mrs. J. C. Kreucher of Laurel.

The writer had a rather pleasant surprise recently when a total stranger came in his office and turned out to be one of his old class mates, Dr. B. E. Vowell of Leake County. The doctor has been spending a little time on the coast enjoying a much needed rest. We feel that each and every doctor in the state would be benefitted by doing the same thing, make and collect more money when they return home, be better able to do it. Really a rest is a wonderful tonic for a doctor. We have the place on the coast for you to rest and have a good time too, and at a reasonable expense. Dr. Vowell, I fear, is not as truthful as he used to be. He very sorely disappointed me in not keeping his word and coming back to see me before he left Gulfport. Possibly he will come again. Most everyone does.

We would like to hear again from our old friend, Dr. A. F. Whitehurst of Iuka, who delivered in 1931, 181 obstetrical cases and 180 in 1932. I do not doubt this for Dr. Whitehurst is one of the hardest working and most faithful doctors to his patients and friends that I have ever met in my whole life. He was my competitor when I did my first practice, and I do not hesitate to say he is the young doctor's friend and advisor.

D. H. Ward,
County Editor.

Bay St. Louis,
Sept. 7, 1933.

HINDS COUNTY

Dr. G. W. Rembett, Jackson, spent two weeks in Memphis and Hot Springs.

Dr. Julius Crisler, Jackson, is now well on the road to recovery. He is spending a time in the Rio Grande Valley and we hope that he shall soon be able to return to Jackson.

Dr. Joe Green, Laurel, was a recent visitor to the capitol city. We are always glad to see our fellow sufferers. All those who know Dr. Joe know that he has never suffered from anything. His good nature is only surpassed by his good looks.

Dr. Lonnie Moseley, Jackson, was married September 5, to Miss Frances Ransom of Aberdeen. After the honeymoon this very popular couple will be at home in Jackson.

Wm. F. Hand,
County Editor.

Jackson,
Sept. 6, 1933.

ISSAQUENA COUNTY

Dr. W. H. Scudder of Mayersville, accompanied

by his little granddaughter, Miss Trudie Langford of Grace, visited the Century of Progress Exposition in Chicago the last week of August.

Dr. J. B. Benton of Valley Park has spent several days in Mayersville this month discharging his duties as member of the county Board of Supervisors.

Dr. T. W. Huey of Grace has been kept busy treating malarial patients in his vicinity and now seldom gets a day off.

W. H. Scudder,
County Editor.

Mayersville,
Sept. 10, 1933.

JACKSON COUNTY

Dr. and Mrs. J. N. Lockard of Pascagoula have just returned from a delightful visit to the fair in Chicago.

No other doctor in Jackson county has been sick, died, got married or starved since last report, and I believe that is a fair record. If anything else has happened to any of them I do not know what it is.

J. N. Rape,
County Editor.

Moss Point,
Sept. 5, 1933.

JEFFERSON DAVIS COUNTY

Dr. G. C. Terrell and family have just returned from a very enjoyable vacation spent in New Orleans and on the Gulf Coast. He reports the fish not biting much but the mosquitoes were.

Dr. H. G. Williams and family are now taking antirabic treatments, having recently had a milch cow to die of rabies. He traded for the animal and she soon showed up with rabies and died. He had her head examined and it showed up positive. As a precaution they are all taking the treatment.

G. C. Terrell,
County Editor.

Prentiss,
Sept. 2, 1933.

KEMPER COUNTY

Kemper County Medical Society was officially annexed to the East Mississippi Medical Society at a joint meeting held in Philadelphia, August 24. The majority of the active Kemper County physicians attended and are happy to be included in an organization of this caliber.

Dr. W. P. Holliday of Oak Grove who has been critically ill, has recovered sufficiently to resume his practice.

Dr. P. C. Overstreet of Shaw has been visiting

in DeKalb during the recent illness of his father-in-law, Mr. Joseph Rosenbaum.

A. M. McCarthy,
County Editor.

Electric Mills,
Sept. 8, 1933.

LAFAYETTE COUNTY

I have very little for your October Journal. Our medical school is still functioning and we have a new pre-medical class. We are expecting with the help of Legislature to have a medical school inferior to none of the two year schools.

Our hospitals are badly in need of charity funds as the funds we obtained from the state did not last longer than June.

Will try to let you hear from me at some future date.

E. S. Bramlett
County Editor.

Oxford,
Sept. 12, 1933.

LEAKE COUNTY

Dr. W. S. Martin has returned greatly improved from the Jackson Infirmary where he went for treatment.

Dr. R. B. Wilson, formerly of Philadelphia, has located at Carthage. He will specialize in minor surgery.

The Leake County Medical Society has made application to merge with the East Mississippi Medical Society.

Dr. B. E. Vowell of Marydell is spending his vacation at Gulfport.

I. A. Chadwick,
County Editor.

Carthage,
Sept. 5, 1933.

LEFLORE COUNTY

Dr. R. B. Yates visited Memphis on August 8.

Dr. and Mrs. I. W. Barrett of Clarksdale were in Greenwood, August 13.

Dr. T. G. Hughes of Clarksdale visited his father's family on August 17.

Drs. J. A. Barnett of Leflore County Health Unit and J. A. Milne and Geo. E. Riley of the State Health Department were guests at the Rotary luncheon on August 22.

Dr. George Baskervill went to Chicago on August 23 and spent several days at the Century of Progress.

Drs. Barham and Cumming of Oak Ridge, La., were in Greenwood August 23.

Dr. and Mrs. H. T. Ashford of Clinton, visited Hon. R. E. Denman and family on August 25.

Dr. W. A. Carpenter of Cleveland was in the city August 27.

Dr. R. D. Dickins of Monticello, Ark. visited his homefolks recently.

Dr. W. H. Brandon of Clarksdale was in Greenwood August 29.

Dr. Robert B. McLean of New York, formerly of Greenwood, will be married to Miss Dorothy Trotter Witty of Winona early in October.

Dr. R. B. Yates and family have gone to Milwaukee, Wisconsin for a few days' visit. Before returning they will visit the Century of Progress. Dr. Yates has moved his office to the Physicians and Surgeons Building.

W. B. Dickins,
County Editor.

Greenwood,
Sept. 7, 1933.

MONROE COUNTY

Time flies; summer is gone. At least, September is here. But the weather is still very hot. The fields are white with the fleecy staple—those fields that were not plowed under. I can but wonder where we are headed and when we shall arrive? Memory of recent years is a nightmare and the future uncertain. But since "hope springs eternal in the human breast" and we have been taught to believe that "God rules in his heaven and all is well," let us believe that the worst has passed. Perhaps the less we think and worry the better it will be. So let us follow our leader in an unbroken line; for as Patrick Henry said, it seems "we must hang together or hang separately."

But you say, "Give us news"—yes, news. Let me see, has any new thing happened since I last wrote you? Yes, Dr. Ewing and his lovely wife spent a week at the fair. He refuses to tell me where he got the money to pay expenses. This, I think, is unkind; for I, too, would like to float a loan. Dr. Acker, I think, is in Chicago now; perhaps when he returns, he will let me know where he obtained his expense money. But I notice that the president has dropped a hint to the bankers that they had better loosen up or something might be done about it. It is great to have a kind hearted uncle who cares for us on other days than just preceding election time. I have noticed three letters arranged in this order—N.R.A. I was ashamed to ask the meaning, but I heard someone say they stand for these significant words "Nominate Roosevelt Again." Perhaps they do. But you say again, "give me news." Let me try to think. Oh, yes! Dr. Underwood has been in town and with him came his splendid wife. I am very fond of Mrs. Underwood—I believe she is my friend and friends are very dear

to me. I used to see much of her, but in recent years I seldom have this pleasure. The occasion for their visit was the graduating exercises of the training school for nurses maintained by the Gilmore Sanitarium. Dr. Underwood delivered an address on this occasion. His addresses are always appropriate, interesting and instructive. I have had the opportunity to inspect many hospitals in several states and cities. But I do not hesitate to say that our local hospital is the cleanest and nicest hospital I have ever entered. It is small but quite large enough for our needs. It has been open something over twenty years and yet its equipment and furnishings are being kept up to or ahead of the times. The supervisor of nurses is a graduate of the institution—has never spent a day in any other hospital. She is wonderfully efficient.

Malaria is more prevalent this season than for a long time. It has been said that it is because, since Dr. McElroy lectured on malaria at Greenwood Springs, and Dr. Evans and Dr. McFee had papers published along with this lecture in "The Mississippi Doctor," that our doctors know all there is to learn on the subject—so fate or fortune has given us a chance to "spread ourselves."

All roads will lead to Calhoun City on September 19th; for the Thirteen Counties Society will gather there and then. Do not fail or forget to be there. You will miss much if you should, and we, the members, will be sadly disappointed.

The sons of two of our number (Dr. C. E. Boyd and B. C. Tubb) are gone to college. They are ambitious to emulate and even surpass their brilliant fathers in the field of medicine. May they succeed in their every worthy undertaking.

"Meet me there." Do you say "where?" At Calhoun City, of course.

G. S. Bryan,
County Editor.

Amory,
Sept. 1, 1933.

PANOLA COUNTY

Dr. H. R. Elliott of Batesville made a visit recently to Rosedale to see some of his relatives.

Dr. James Q. Fountain, formerly of Memphis, Tenn., has recently located in Sardis.

Mr. Murphy Wood, son of Dr. G. H. Wood of Batesville, has gone to Houston, Texas, to accept a position to work.

The many friends of Dr. J. M. Anderson of Sardis will regret to learn that the doctor has been quite ill in a hospital in Memphis having undergone a serious operation. The latest report is that he is improving, which is, of course, gratifying.

Miss Clement of Laurel, connected with the State Board of Health Dental Hygiene Depart-

ment, has been working in some of the schools in Panola County. Her work is good and we wish she could visit every school in the county.

G. H. Wood,
County Editor.

Batesville,
Sept. 8, 1933.

PONTOTOC COUNTY

Dr. Henry Neel of Memphis is visiting his father and other relatives in Ecru this week.

Dr. J. M. Hood of Houlka and Dr. E. G. Abernethy of Algoma are taking in the fair at Memphis this week.

Dr. Z. A. Dorsey of Troy, Dr. W. H. Reid of Toccopola and Dr. E. B. Burns of Ecru are transacting business in our city this week

The Northeast Mississippi Thirteen County Medical Society will meet in Calhoun City, September 19. We are expecting a large attendance. The last quarterly meeting of this society will be held in Tupelo the third Tuesday in December.

Dr. B. S. Guyton of Oxford made a business trip to Pontotoc one day last week.

R. P. Donaldson,
County Editor.

Pontotoc,
Sept. 8, 1933.

QUITMAN COUNTY

Dr. and Mrs. E. C. Gillespie and family spent the month of July in California.

Dr. and Mrs. J. A. Walker and Mrs. J. E. Furr of Marks have just returned from the fair in Chicago.

We deeply sympathize with Dr. and Mrs. House of Sledge in the loss of their little daughter.

Eric A. McVey,
County Editor.

Lambert,
Sept. 5, 1933.

SIMPSON COUNTY

The Central Medical Society had its first meeting since July on last Tuesday night. A goodly number of the doctors were there and a real interesting program put over. Seems, however, that there is something lacking. I don't think it is originality because Jack Barksdale was there, nor personality because Harris was there, nor mental-ity because we were all there, but kinder down in the dumps. We can't be certain about anything worthwhile, but we can all get together and push organized medicine to the extent that somebody will think we are certain to get results.

Dr. A. E. Kennedy says he had a fine time over in the lene star state, sight seeing, visiting friends and relatives. Dr. Diamond also reports a good

time on the coast, and in about six hours after his return from the coast his wife presented him with a fine nine-pound boy. Both mother and baby are doing nicely.

Mr. A. W. Walker, son of Dr. and Mrs. E. L. Walker has just returned from the World's Fair. The trip was won by Mr. Walker in the Chevrolet Sales Contest.

Dr. Strain of the Sanatorium staff has moved to Knoxville, Tenn. to engage in some special line of work. We lost a good man in this section of the country when Dr. Strain left us. We wish him well as he is the type of man that the world needs. Wouldn't it be great if we all had that title?

E. L. Walker,
County Editor.

Magee,
Sept. 8, 1933.

TISHOMINGO COUNTY

Dr. and Mrs. D. D. Johnson, Belmont, have just returned from a visit to the World's Fair in Chicago.

Drs. K. F. McRae and N. C. Weldrep were pleasant visitors in Iuka this week.

Dr. R. J. Brown reports that he had a considerable number of obstetric engagements to fill last month and they all came off on the same day and he got them all. Ha! Ha!

The doctors still report that they are not getting enough money out of their practice to pay gas bills. What's going to happen when the Ford wears out? Some of them are terribly shot up now.

T. P. Haney, Sr.,
County Editor.

Iuka,
Sept. 5, 1933.

WASHINGTON COUNTY

Dr. and Mrs. Otis Beck and family of Greenville have returned from Chattanooga, Tenn. where they enjoyed a most delightful visit with Dr. Beck's father and mother. On their way home they stopped over at Muscle Shoals.

The many friends of Dr. T. B. Lewis of Greenville regret very much that he was sick in the King's Daughters' Hospital at Greenville recently, but are glad that he is able to be out again.

Dr. and Mrs. John F. Lucas of Greenville have the deepest sympathy of their many friends in the death of their grandfather Mr. C. Gillespie of Carrollton.

Dr. T. F. Wilson of Arcola is confined to his bed again much to the sorrow of his many friends. We hope that Dr. Willson will soon be able to be out again.

We wish to extend deepest sympathy to Dr. and

Mrs. L. C. Davis of Greenville in the recent loss of their sister, Miss Maybelle Wheatley.

Dr. D. C. Montgomery and sons Cameron and John Atterbury of Greenville attended the Century of Progress in Chicago this past month. Mrs. Montgomery and Billy stopped in Memphis to visit relatives during their absence.

Dr. and Mrs. R. E. Wilson and family of Greenville spent one week of August with Dr. Wilson's parents in Guntown.

Dr. E. T. White of Greenville enjoyed having his brother, Dr. Wray Johnson of Cleveland, as a visitor in his home a few days this past week. Dr. Johnson graduated in June at Loyola College, New Orleans, in dentistry, and is now located at Cleveland.

Dr. J. G. Archer of Greenville has had his brother, Mr. George Archer, of Boston, Mass., visiting him. While here Mr. Archer gave a most delightful vocal program over W.M.C., Memphis.

Dr. J. F. Lucas of Greenville motored to Carrollton several days ago to bring his wife and family home. Mrs. Lucas and the children have been visiting her parents.

All the doctors of Washington County are not only invited but urged to attend the Delta Medical Society meeting at Belzoni, October 11 at 2 p. m. The more you attend these meetings the more you get out of them, and the bigger success you help make the Society. Let's all attend and give our support to the best medical society in the world.

John G. Archer,
County Editor.

Greenville,
Sept. 8, 1933.

WILKINSON COUNTY

Dr. Harrison Butler, formerly of McComb, has opened an office in Centerville. Dr. Harrison was formerly associated with the Natchez Hospital. Recently he had been recuperating from a rather serious illness and we are glad to know that he has entirely recovered and is now ready for work. Welcome to our county. We are glad to have you.

Dr. and Mrs. S. E. Field made a business trip to New Orleans this month.

Since this next journal is to be the membership number, I am glad to report that every doctor in Wilkinson County is a member of the society except one and it is generally understood that this one is not eligible. Therefore, we are 100 per cent strong in this county. All doctors report a decided increase in work, but still no cash.

The Five County Nurses Association will meet in Centerville in regular meeting September 15, at 7 p. m.

Centerville,
Sept. 9, 1933.

S. E. Field,
County Editor.

WINSTON COUNTY

We were sorry to miss the tri-county medical meeting at Philadelphia last week, but practice with cases pending rendered it impossible to attend. We are indeed glad to have the additional counties added to our force in the Association. The doctors of this locality are looking forward with some hope of collecting some from the rentals that will be forth coming to the farmers now soon from the government.

Dr. T. C. Suttle of Beth Eden Community was in the city last week on business.

Dr. L. T. Parks of Fearn Springs was shopping in the city this week.

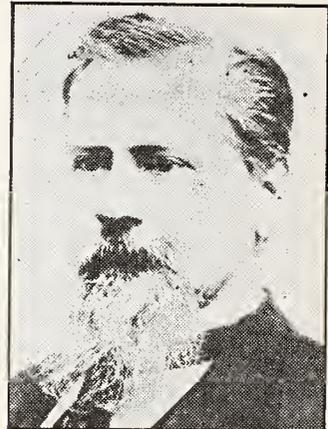
Miss Louise Richardson, daughter of Dr. and Mrs. E. L. Richardson, is back from New York, where she took some extra college work.

We hope that the next Journal will be filled with reports from every county in Mississippi.

W. L. Montgomery,
County Editor.

Louisville,
Sept. 3, 1933.

LEST WE FORGET THEIR GOOD WORKS



P. J. McCORMICK, M.D.
Yazoo City

President, Mississippi State Medical Association,
1876-7.

Dr. P. J. McCormick was born in Ireland in 1828 and died in Yazoo City in January, 1905. He came to America as a youth, settling in the south, and was engaged in the practice of medicine in Meridian, Miss., at the outbreak of the Civil War. He entered the Confederate Army as a surgeon and served throughout the four years. His son, Dr. J. I. McCormick, is a practitioner of Yazoo City.

Dr. McCormick was vice-president of the Association in 1874-5 and was made a member of the first State Board of Health.

Dr. J. I. McCormick, 1910.

NOTE.—The above is an abstract from the History of the Association. Additions and corrections are invited by the editor.

MISSISSIPPI STATE BOARD OF HEALTH

During the first six months of 1933, according to records that are practically complete, there were 182 murders and killings in the State of Mississippi. Although this number represents almost 25 per cent reduction under the first six months of last year, the statistical records received from the Dominion of Canada, with five times the population of Mississippi, show a total of only 157 homicides during the entire year of 1932. The homicide rate in Canada was one per 100,000 population; in Mississippi, this year, the rate is 17.5 per 100,000.

There have been only two legal hangings in Mississippi this year in contrast to five during the first six months of last year.

During the first six months of this year there was a reduction of 99 per cent in pardons for murder and manslaughter under the number granted during the first six months of 1932.

By the end of June, thirty-five white and one hundred forty-seven colored persons had been slain in Mississippi. These included five white women and thirty-six negro women, thirty white males and one hundred eleven negro males. Four white women were killed by white men and one by an unknown party. Twenty-three colored women were killed by colored men; nine by colored women and four by unknown persons. Sixteen negro men were killed in the act of resisting arrest and escaping prison.

In twenty-one counties no homicides were recorded during the first half of the year. In most of the counties that showed heavy homicide totals for last year the indications are that their totals for 1933 will be greatly reduced. In five of these counties, if the same rate obtains during the last of the year, their total reduction will be nearly forty per cent. Only one county (Leflore) had one or more killings each month during the six month period. Its total was nine homicides. The high mark was reached in Sunflower county with seventeen homicides during the first six months. Twelve of these killings took place in May and June.

Robbery was the cause of killing in ten of the one hundred eighty-two homicides. There are a multitude of causes besides robbery, most of them flimsy excuses; quarrels over women, drunken brawls; jealousy; gambling; family trouble; and the like. Direct information was received on one hundred thirty-one cases with reference to influence of alcohol. Between forty and fifty per cent of the killings heard from on this point were as-

sociated with liquor in some way or other. In forty-five cases it was reported that either the slayer, the deceased, or both, were under the influence of intoxicating drink. Four negroes were killed at whisky stills by officers and in several other cases the killings resulted from quarrels over whisky.

From a continuous study of the homicide situation in Mississippi for the past few years it is believed that the high rate is due to the sparsity of legal executions; too few convictions; and abuse of the pardoning power in the past. There would not be half so many murders in Mississippi if the slayers knew that their chances for escaping punishment are minimum.

Miss Gladys Eyrich, supervisor of mouth hygiene, State Board of health, attended the American Dental Association meeting in Chicago where she gave a paper and a radio talk on the subject of teaching mouth hygiene to children.

The registered nurses of Mississippi will hold their annual meeting in Meridian on November 2 and 3. This will be followed by an Institute for public health nurses conducted by Mrs. Violet Hodgson of the National Organization for Public Health Nurses. During the week following the State Nurses Association meetings, the Southern Division of the American Nurses Association will meet in Augusta, Georgia. Miss Mary D. Osborne, Supervisor of Public Health Nurses in Mississippi, will conduct a round table discussion on programs for state and district meetings.

Malaria is a serious problem and in the final analysis its control will be effected through the practicing physicians. For this reason a large part of the Board of Health's malaria control program has been to educate the general public to the necessity for a correct diagnosis and for proper and adequate treatment under the care of a physician. In its Biennial Report, the following statement is made: "Malaria is a disease that, to be effectively treated should be under the care of a physician, therefore this is stressed and self-treatment is discouraged."

The program for malaria control also includes a review of the literature for information on the most advanced methods of treatment for this disease. This information is abstracted and furnished to physicians. (No information on therapy is given to the laity). In 1932, an outline of the Sinton treatment of malaria was prepared and mailed to every physician in the State. The many requests received from physicians for additional copies of this outline necessitated a second reprint and attested to the appreciation of and need for

this service. Recent information on the use of ATABRINE and of PLASMOCHIN has been prepared by the Division of Malaria Control and will be furnished to any Mississippi physicians upon written request to this division of the State Board of Health, Jackson, Mississippi.

So far as can be ascertained, there is no complete file of the Transactions of the State Medical Association of Mississippi.

The most nearly complete file seems to be the one in the library of the State Board of Health and contains transactions as follows:

1856, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1886, 1887, 1891, 1893, 1905, 1906, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, and from 1919 to the present time.

Certainly there should be a complete file of these reports. The State Board of Health would be glad to receive as a gift any reports not listed above. The contribution will be appreciated and will be made a part of a permanent file of the reports which will be preserved for reference by future generations.

The Rockefeller Foundation has notified the State Board of Health that fellowships for a year's study at either Harvard or Johns Hopkins have been granted to the following Mississippi full-time county health officers:

Dr. Norris C. Knight, Sunflower County.

Dr. C. J. Vaughn, Holmes County.

Dr. A. R. Perry, recently of Washington County.

These physicians will begin their study in September. While they are away, Dr. J. T. Googe will direct the work in Holmes County and Dr. H. B. Cottrell will serve in Sunflower County.

F. J. Underwood,
Executive Officer.

Jackson,
Sept. 8, 1933.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. Van Alstine, Jackson.
President-Elect—Mrs. Henry Boswell, Sanatorium.
State Convention—Natchez—May, 1934.
Chairman Press and Publicity, Mrs. Leon S. Lipincott, Vicksburg.

HINDS COUNTY UNIT—OF THE WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

Friends of Dr. and Mrs. F. L. Van Alstine are delighted to welcome them home, after an extended vacation during which they visited points of inter-

est in Canada, New York, Pennsylvania and the Carolinas. Mrs. Van Alstine is our state Auxiliary president.

Among recent visitors to the Chicago Fair were Mrs. G. W. Rembert and her two attractive daughters, Lucy and Frances.

Mrs. Brister Ware accompanied her mother Mrs. R. L. Hagaman on a delightful visit to the Gulf Coast and to New Orleans.

The many friends of Dr. Julius Cristler are happy to learn that he is recuperating satisfactorily after his recent serious illness. His return to Jackson is being anticipated with the greatest pleasure.

Dr. and Mrs. W. S. Sims have with them their attractive daughter, Mrs. G. N. Swan, and small son, Joe, from Fort Sherman, Canal Zone. This popular young matron's many friends are sharing in the pleasure of her visit.

Mrs. B. F. Johnson,
Press and Publicity Chairman.

Jackson,
September 1, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA- SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The first meeting of the Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society to be held since the summer vacation will take place in the form of a luncheon at the Vicksburg Hotel at 12 o'clock, September 19.

Mrs. A. Street, who is program chairman for the year book, announces that she will have four historical programs this year, the first being on Ancient Heroes of Medicine. Mrs. Street will take charge of the first program, and every one is looking forward to an interesting paper on the above named subject.

HONOR ROLL

Your editors appreciate the cooperation and assistance of the following in the preparation of the Mississippi News Section this month:

COUNTY EDITORS: L. S. Gaudet; C. A. Pender; M. E. Arrington; W. L. Little; L. L. Minor; S. R. Towns; D. H. Dard; W. F. Hand; W. H. Scudder; G. C. Terrell; A. M. McCarthy; E. S. Bramlett; I. A. Chadwick; W. B. Dickins; G. S. Bryan; G. H. Wood; R. P. Donaldson; E. A. McVey; E. L. Walker; T. P. Haney; J. G. Archer; S. E. Field; W. L. Montgomery.—23.

COUNTY SOCIETIES: Central, W. F. Hand and Robin Harris; Clarksdale and Six Counties, J. W. Moody and V. B. Harrison; Delta, F. M. Acree; DeSoto, L. L. Minor; East Mississippi, T.

L. Bennett; Harrison-Stone Hancock, D. H. Ward and E. A. Trudeau; Homochitto Valley, W. K. Stowers; Issaquena-Sharkey-Warren; Jackson, J. N. Rape; Northeast Mississippi Thirteen Counties, J. M. Acker, Jr.; Pike T. P. Haney, Jr.; South Mississippi, J. P. Culpepper, Jr.; Tate, J. S. Eason; Tri-County, H. R. Fairfax; Winona District, E. W. Holmes.—18.

HOSPITALS: King's Daughters' Hospital

Greenville, John A. Beals; Vicksburg Sanitarium.—2.

WOMAN'S AUXILIARY: Mrs. Leon S. Lippincott; Mrs. B. F. Johnson.—2.

OTHERS: J. W. D. Dicks; W. H. Frizell; F. J. Underwood; W. R. Hand; S. F. Strain; S. A. Majure; E. R. Nobles; V. B. Philpot; N. C. Womack; C. H. Harrison; J. A. K. Birchett, Jr.—11.

Grand Total—54.

BOOK REVIEWS

Obstetrics and Gynecology (Vol. 1): By 80 Leading Specialists. Edited by Arthur Hale Curtis, M. D. 3 Vol. & Desk Index. 3500 pages with 1664 illustrations, many in colors. Philadelphia and London: W. B. Saunders Company. 1933. Per set, Cloth \$35.00 net.

These volumes, the *Archives of Obstetrics and Gynecology*, are presented by the heads of departments and by other prominent teachers in the leading medical schools of America. Dr. Arthur H. Curtis', the editor's vision in planning this work goes beyond the range of an ephemeral production; he conceived the idea that there should be a comprehensive history to portray "what America has to tell about obstetrics and diseases of women"—anatomy and physiology, accepted methods of preventive medicine, diagnosis, personal management, therapeutic treatment, surgical technique and follow up. It is planned to publish a new edition every 5 to 8 years, the work of former authors being re-edited by them or their names retained and their contributions altered and rejuvenated by those most worthy to follow in their footsteps. The contributions are in reality a series of monographs, and yet at the same time integrated into a system under the supreme authorship of one editor.

In the opening chapter, "The New Surgical Literature," Dr. Franklin H. Martin prophesies that these volumes will be an inspiration to the specialist, a guide to the independent practitioner, a model for teachers, and a comprehensive text book for advanced students.

In an historical survey Dr. Irving S. Cutter, dean of Northwestern University Medical School, offers a well balanced summary of the history of obstetrics and gynecology in Great Britain, France, Germany and America. No one is better fitted than Dr. Cutter to write on this subject.

"The Anatomy of the Female Genital Tract" is written by B. J. Anson, Northwestern University. The value of this chapter is greatly enhanced by the original drawings of W. B. Stewart, made from dissections prepared under the author's supervision. The relative size and location of the various structures have been determined with mathematical precision, with every effort being made to cor-

rect the inevitable distortion of post-mortem dissections.

Beginning section II Emil Novak, Johns Hopkins University, writes on the "Physiology of the Reproductive Organs" (exclusive of pregnancy). This contribution includes the clinical characteristics of normal menstruation, puberty and precocious puberty, the menopause, and cyclical changes in the genital canal and the ovary. In collaboration with C. G. Hartman, of the Carnegie Laboratory of Embryology, Johns Hopkins University, this author continues his subject, discussing menstruation in the light of newer knowledge concerning the physiology of reproduction. In these pages Novak is writing on his own special subject, and we especially recommend this contribution, dealing as it does with the modern endocrine viewpoint of the physiology of menstruation, and the rationale of hormonal therapy.

Section III is devoted to the morphology and physiology of pregnancy. These chapters include the maturation and fertilization of the ovum, the early development of the embryo, placentation, fetal membranes, and the deciduae. The photomicrographs of the fertilized and living ova of the monkey, showing its cleavage divisions and its growth changes are excellently portrayed. The remaining chapters in this section deal with the anatomy, physiology, and pathology of the fetus, the embryology of the female genital tract, presentation and position of the fetus, the diagnosis of pregnancy, and the management of normal pregnancy. These chapters offer a very inclusive text of the fetal and maternal physiology incident to pregnancy.

Section IV is devoted entirely to the physiology of the birth processes. It is written by J. W. Harris, University of Wisconsin. A large part of this chapter is given over to the causes of the onset of labor, the forces concerned in labor, and the clinical course of labor. Section V continues along the same line of thought, describing the mechanism of labor in vertex presentations, the conduct of normal labor, the puerperium. Section VI includes the new-born child, changes in fetal circulation following birth, and multiple pregnancy.

"The Pathology of Pregnancy" naturally centers

around the toxemias, and one entire section of this volume is devoted to this subject, which is written by R. D. Mussey and L. M. Randall of the Mayo Clinic. These authors do not speculate extensively into the theory of the toxemias, but happily have confined themselves to the clinical distinctions of these disorders. The chapter is divided into the toxemias of the early and late months of pregnancy. There is sharp separation of chronic nephritis from the true toxemias; the aspects of the latter are discussed in their antenatal care, early diagnosis and treatment.

The volume itself is excellently produced both in its text and illustrations.

J. THORNWELL WITHERSPOON, M. D.

Clinical Aspects of the Electrocardiogram, Including the Cardiac Arrhythmias: By Harold E. B. Pardee, M. D. New York, Paul B. Hoeber, Inc., 1933. 3d ed. pp. 295, with 74 illustrations.

This book, one of the best published on this subject, has been brought up to date in the third edition. Many of the chapters have been largely rewritten and much new material has been added. The author accepts the new terminology in the description of bundle branch block. The largest wave of the Q R S being upward in lead one and downward in lead three in left bundle branch block, the reverse being the case in right bundle branch block. This is not accepted by all cardiologists but has the support of many excellent investigators. He also accepts the new terminology applying to ventricular premature beats.

The reviewer would feel no hesitation in recommending this book to any one interested in this important subject.

J. M. BAMBER, M. D.

The Vitamins in Health and Disease: By Barnett Sure, Ph. D. Baltimore, Williams & Wilkins Co. 1933. pp. 206.

In a comprehensive and authoritative manner the author here summarizes the present knowledge concerning vitamins. Their history, isolation, identification and distribution in foodstuffs are given. Their relation to health and disease is fully presented. It is a meaty volume. It is worthwhile.

I. L. ROBBINS, M. D.

Psychoanalysis and Medicine: a study of the wish to fall ill: By Karin Stephen, M. A., M. R. C. S., L. R. C. P. New York, The Macmillan Co. 1933. pp. 238.

To one whose psyche has not been rendered schizophrenic by the pros and cons of psychiatry, and whose powers of analysis have not been integrated and disintegrated by the for and against school,—and being wise in the wisdom of assum-

ing a non-committal attitude and simple in not castigating one's self for a partisan view of this much debated subject, the reviewer simply wishes to state that a perusal of this volume presents most eloquently and convincingly the Freudian aspect of the situation, by an author apparently thoroughly at home in her chosen field. The book is based on a series of lectures presented to medical classes at Cambridge.

I. L. ROBBINS, M. D.

Diet in Sinus Infections and Colds: By Egon V. Ullmann, M. D. New York, The Macmillan Co. 1933. pp. 166.

This small volume is dedicated to the relief of cold and sinus infected victims. The author infers from nature and experiments that the boon is the basic or alkaline diet with the restriction of salt and animal proteins. There is a reference list and the appendix contains recipes and menus. It sounds satisfying.

I. L. ROBBINS, M. D.

Wheat, Egg, or Milk-Free Diets, with recipes and food lists: By Ray M. Balyeat, M. A., M. D., F. A. C. P. Philadelphia, J. B. Lippincott Co. 1933. pp. 149.

The title is self-explanatory. To the allergic victim, it presents recipes and food lists that he may use when the cause of his allergy is ascertained. It is a well gotten up book. There is a summary account of allergic diseases for food sensitive patients. It is adorned by several drawings stressing allergic facts. It is a good, specialized cook-book.

I. L. ROBBINS, M. D.

The Interpretation of Dreams: By Sigmund Freud, M. D., LL.D. New ed. New York, The Macmillan Co. 1933. pp. 600.

This is a new and revised edition of this classic by Freud. To those who like to ponder on the stuff that life's made of the reward will be most satisfying,—at the same time remember Kipling's "If".

I. L. ROBBINS, M. D.

Intracranial Tumors: By Percival Bailey, Springfield, Ill., Charles C. Thomas, 1933. pp. 475.

Prof. Bailey's work is a decidedly worthwhile addition to the textbook material at present available on the subject of brain tumors. The subject, handled in a logical and concise manner, is written in a style which makes it easily read. The first three chapters are devoted to the problems of tumors in general and consideration of the anatomy and physiology of the brain. There follow thirteen chapters on tumors of various classifications, these chapters following largely the clinical presentation of his material in teaching students and are amply illustrated by actual case histories.

There are chapters on general diagnosis, differential diagnosis and treatment, the last outlining the standard approaches. Dr. Bailey's pioneer work in the classification of brain tumors fits him eminently for the authorship of the present volume although it is by no means a book of histopathology.

The book is printed on dull paper as the author was tired of being blinded by the usual glossy paper used for medical text books; the type of paper makes necessary the use of pen and ink drawings for illustrations and these are beautifully done. The index is adequate and there is at the back of the book a very carefully selected bibliography to which reference is made throughout the book. In this way the reader is able to follow any particular subject in which he may be interested. The vast majority of the references are to articles in English. This is not due to any lack of appreciation of the work of the continental authors, but to the fact that the average North American medical student reads only English with ease.

While the work is intended for students it will probably find a large audience among those specializing in neurology and neurological surgery.

GILBERT ANDERSON, M. D.

Essentials of Pathology: By C. Russell Salsbury, M. D., C. M., New York, The Macmillan Co., 1932. pp. 270.

This small volume of 256 pages is particularly written for nurses and possibly gives sufficient information for its purpose. It is questionable whether such limited knowledge should be incorporated in a textbook, as so many important topics are either omitted or not given due importance.

The general set-up of the book is easy to the eye, its contents are readable, interesting, and written in simple language, the language such as even the lay person can easily understand. The purpose for which the book is published is, possibly, a good one.

J. A. LANFORD, M. D.

Surgical Pathology: By William Body, M. D., 3d ed. Philadelphia, W. B. Saunders Co., 1933. pp. 866.

With the publication of this third edition, the author has brought his book up to date. There are many commendable chapters, especially to be mentioned are those on the Thyroid, Breast, Bone and Nervous system. In the preface, the author tells which subjects he has enlarged and which chapters have been rewritten. The last chapter, "The Relation of the Surgeon to the Laboratory", is one of these. It includes in its material, the Ascheim Zondeck Test, Blood Sedimentation Test, Blood Grouping and Matching.

The author has presented his subject in an extremely interesting, readable and concise manner

which accounts for the books well deserved popularity.

EMIL BLACK, M. D.

Neuropathology: By Walter Freeman, M. D., Ph. D., D. N. B., F. A. C. P., Philadelphia, W. B. Saunders, 1933. pp. 349. Price \$4.00.

Neuropathology, by Walter Freeman, should fill a long-felt want. It covers the subject concisely and briefly and makes reference convenient. The system of attaching the references at the end of each chapter is particularly convenient in the event of one's desiring a more extended investigation of a particular subject. The book is well written and should be an asset in the library of anyone interested in neurology.

E. McCONNELY, M. D.

Allergy and Immunity in Ophthalmology: By Alan C. Woods, M. D., Baltimore, John Hopkins Press, 1933. pp. 176. Price \$2.25.

This monograph is apparently the first of several to be published by the Wilmer Institute of Johns Hopkins University. If the others are as well written, the series will be a credit to ophthalmic literature.

The foreword contains an interestingly presented history of the subject by Dr. Wilmer.

The contents include: General Considerations on Anaphylaxis, Allergy and Immunity; Experimental Studies on General Ocular Immunology; The Relationship of Allergy to Focal Reactions in the Eye; Allergic Conjunctivitis; The Antigenic Properties and Reactions of Lens Protein and Uveal Pigment; Syphilis; Tuberculosis; Therapeutic procedures.

The subject is presented in a very complete and simple manner, and the author is to be congratulated upon his unprejudiced evaluation of the literature. There are many mooted points, especially about such a comparatively new subject. The explanations of focal infections and of certain forms of conjunctivitis is interesting and of practical value. The technique of tuberculin administration is described in detail, as are the other therapeutic procedures, including nonspecific protein therapy, and specific serum therapy.

The bibliography has been carefully studied, and the index thoroughly edited.

CHAS. A. BAHN, M. D.

Fractures: By Paul B. Magnuson, M. D., Philadelphia, J. E. Lippincott Co., 1933. pp. 466. Price \$5.00.

In this book the author discusses methods successfully used by himself in the treatment of fractures and dislocations. He disregards descriptions of alternative ways and also quotations and for the most part references to the literature. There is no bibliography. In some measure this

uncommon idea of writing medical literature has much to recommend it. Many times books and papers are so replete with reference that it is difficult to determine the evaluation an author places on the varieties of theories and opinions he mentions. In this volume there is given at least one good way of treating a fracture and this good way is not overshadowed by the discussion of a variety of others. Thus the book is practical and not too long and will serve a useful purpose for practitioners and students.

On the other hand it is not a complete reference book on fractures because many methods not contained therein are widely used and accepted.

The author does not believe that the Whitman method gives a majority of good results in fractures of the neck of the femur. This opinion not uncommonly vocally expressed by individuals of experience is not frequently written and the literature contains numerous endorsements of the abduction method by well-known men. Rarely indeed is the Whitman method not recommended by an American as well-known for his work as the author. In his experience open reduction has given more satisfactory results and he describes his modification of the Brackett operation. It has the advantage that union is not absolutely necessary for a good functional result.

The author believes that overlapping is desirable in children when there is a fracture of the shaft of the femur because of overgrowth of the affected side. He does not mention Russell's method. Nor does he advocate the use of the skin cast popularized by Böhler.

The chapter on fractures of the skull is perhaps too brief and certainly is not a sufficiently detailed discussion for students, though for practical purposes the essential features are reviewed.

The book is nicely illustrated. It is recommended especially to practitioners who wish to review accepted methods of treating fractures.

HOWARD R. MAHORNER, M. D.

PUBLICATIONS RECEIVED

W. B. Saunders Company, Philadelphia: *Physiology*, by William H. Howell, Ph.D., M. D., LL.D. *The Diseases of Infants and Children*, by J. P. Crozer Griffith, M. D., Ph. D., and A. Graeme Mitchell, M. D.

The Macmillan Company, New York: *What shall I Eat?*, by Edith M. Barber, B. S., M. S. *Public Health Nursing in Industry*, by Violet H. Hodgson, R. N.

J. B. Lippincott Company, Philadelphia: *International Clinics*, by Louis Hamman, M. D.

Charles C. Thomas, Springfield: *The History and Epidemiology of Syphilis*, by Wm. Allen Pusey, A. M., M. D., L. L. D.

The International Committee for Mental Hygiene, Inc., New York: *Proceedings of the First International Congress on Mental Hygiene*, by Frankwood E. Williams, M. D. Volumes one and two.

The National Tuberculosis Association, New York: *Report to the United States Government on Tuberculosis with some Therapeutic and Prophylactic Suggestions*, by S. Adolphus Knopf, M. D.

C. V. Mosby Company, St. Louis: *Local Anesthesia*, by Arthur E. Hertzler. Fifth Edition. *Surgery of the Stomach and Duodenum*, by J. Shelton Horsley, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

NOVEMBER, 1933

No. 5

THE CONTRIBUTION OF JOHN W. MONETTE*

W. A. EVANS, M. D.
CHICAGO, ILL.

It is fitting that the annual oration should express an appreciation of a Mississippi physician who was responsible for one of the greatest contributions to epidemiology that was ever made.

The man, Dr. John W. Monette, of Adams County. The disease, yellow fever. The period, one hundred years ago.

That we may appreciate the contributions to the epidemiology of yellow fever made by Doctor Monette we must look at the background. Philadelphia, just before and during the revolution, was largely dominated in its political and social life by those who were loyal to King George. The rich, the merchants, the lawyers, the physicians, and other leaders were loyalists. It was also the period in which the physicians of that city dominated the medical profession of America.

Among the revolutionaries, however, was Dr. Benjamin Rush. He was the only physician to sign the Declaration of Independence. Because of this fact, and of his talents and dominance of Philadelphia in medicine, for thirty years at least after the Revolution Doctor Rush was the most influential physician in America.

In that period yellow fever repeatedly visited the cities of the Atlantic seaboard, as far north as New England, aye, even Canada. Philadelphia had a terrible visitation of the disease in 1793, and another in 1798. Rush, who had been

very active in his profession during all these epidemics, devoted his energies and influence to promoting his opinions as to the nature of yellow fever and methods of controlling it. In 1799 he expressed his disappointment that people were so reluctant to accept his views. After years of advocacy, he wrote:

“Having labored nearly six years to no purpose to persuade the citizens of Philadelphia,” he closed with, “Should this attempt be unsuccessful I shall hereafter mourn in secret over the continuation of an error which has been so fatal to the citizens of Philadelphia. One consolation there will be a belief that time will do justice to my opinions and that heaven will acquit my conduct.”

Time did justice to his views in more senses than one. His opinions were erroneous, they came to be universally adopted, he became the sandhedrim with whom no one dared dissent and from whom there was no appeal. Disaster followed.

Came another day. An Adams County, Mississippi, doctor dared invoke the wrath of the gods. He saw the fallacy of the Rush-born, but then orthodox, belief and method, he accumulated the evidence, he formulated an irresistible argument against it, and, he outlined a better practice based on less fallacious opinion. He fought for years for the acceptance of his views. He set machinery of epidemiologic control back on the right track, and he started progress on the road which has led to the point where the goal is in sight.

And now a statement of what was the Rush opinion. In 1799 he published two addresses which he entitled, “Observations Upon the Origin of the Malignant, Bilious, or Yellow Fever

*Annual Oration. Read before the Mississippi State Medical Association, Jackson, May 9, 1933.

in Philadelphia, and Upon the Means of Preventing It." Meanwhile, he was writing frequently on the same subject in the *Medical Repository*.

His conclusions were as follows:

As to its nature: It was a variety of malaria, "the offspring of putrid vegetable and animal exhalations."

The principal sources of it were:

1. The docks; "these contained a large quantity of filthy matter in a highly concentrated state." In New York, yellow fever was known as "dock fever."

2. The foul air of ships.

3. The common sewers.

4. The gutters.

5. Dirty cellars and yards.

6. Privies.

7. The putrifying masses of matter which lie in the neighborhood of the city.

8. Impure pump water.

The methods of control he advocated were based on two fundamentals, which he expressed as questions and answers:

"Is the yellow fever a contagious disease?"

The answer: "In the City Hospital, of Philadelphia, there was no evidence of the disease being contagious in the epidemics of 1793, 1797, and 1798." He later refers to the "rare and feeble contagion of the fever."

"Can the yellow fever be imported?" The answer: "Everything that relates to the importation of this fever is contrary to reason and facts." "It is of domestic origin."

The means of control, based on these opinions, were:

1. Clean the docks.

2. Compel every ship to carry a ventilator.

3. Wash the sewers frequently.

4. Wash the gutters every evening.

5. Remove the filth from the yards and cellars of every house.

6. Empty the privies frequently.

7. Remove the filth from the neighborhood of the city.

8. Permit no dwellings to be located on alleys.

9. Have the people eat less meat.

Dr. Rush, although a capable physician, was essentially politically-minded. His theory that

yellow fever was a variety of malaria was founded on an old European theory termed the Unity of Fevers. The speculative question was a very live issue in Europe in the last quarter of the 18th century. It became political. The French, led by Louis, contended that there were at least two fevers—typhus and typhoid. Whereupon the British, under the influence of the social hatreds which culminated in the Napoleonic wars, swung their support to the doctrine of the Unity of Fevers.

So powerful was Rush in America that he secured the adoption of the British doctrine here. In fact, the British doctrine of the Unity of Fevers became converted, even in medical literature, into the American doctrine of that name. Nor did we escape from this theory entirely until the approach of the Civil War period.

The Rush method of control of yellow fever later was known as "the Pettenkofer period of public health method." It did not die,—if it has completely died—until it failed to work when Gorgas used it in Havana in 1900.

It was into this atmosphere as the orthodox opinion and method of yellow fever epidemiology that Dr. J. W. Monette came.

Doctor Monette was born in 1803 in Staunton, Virginia. As a youth he was brought to Adams County by his father, a physician. He came there not long after the great epidemic of 1817. He was a medical student in the epidemic of 1823, and he helped his father care for the sick then. He graduated in the Transylvania University Medical School in 1825. And he went through every epidemic of yellow fever in his community between 1823 and his death, in 1851.

On December 2, 1837, he read a paper on yellow fever at Washington, Mississippi, in which paper he gave his new views. He said he began forming his opinion as a result of his experiences in the epidemic of 1823, that he gradually matured his then opinion, and, for some twelve years, he had been urging his methods "upon the citizens of Natchez and New Orleans." He wrote articles on this subject and published them in medical journals beginning with 1837. The one from which the following quotations are taken was called "Observations on the Epidemic of Yellow Fever of Natchez

and of the Southwest," by John W. Monette, M. D. (Louisville, Prentice, and Weissinger, 1842).

After reciting Rush's opinions and stating that he was taught these by the medical teachers and leaders of the period, he writes:

"Such he was taught." "Such were the opinions of the writer until he was compelled by observations to change his opinion." "Since then he has been convinced that the disease is generally, if not always imported into Natchez, as well as New Orleans, chiefly from Havana and the West Indies."

Monette was enlisted for the war. He was not only trying to correct an old opinion and to establish new methods based on the correct opinion, but his mind was clear enough for him to see that he must overthrow a popular idol and discredit his leadership if the desired purpose was to be attained. And he had the courage to make the fight.

He said:

"Dr. Rush is the great father of the doctrine of the local origin of yellow fever from putrescent matters and from city filth. The doctrine taught by Doctor Rush on this subject, enforced and promulgated by his popularity, talents, and industry, has doubtless been the destruction of thousands. Had it not been for his influence in the medical community of the United States, our northern seaports would not for so long have been subject to the pestilential visitations of yellow fever. The southern ports are still acknowledging a vassalage to his authority and to his arbitrary dictation; his disciples, immolate hundreds and thousands of victims annually upon the altar of a blind credulity."

"Then this Moloch, set up by Doctor Rush, shall no longer devour its living hecatombs of innocent people for its autumnal repast."

"At the time when Doctor Rush established his theory of a local, domestic origin of yellow fever, in contradistinction to that which ascribed it to a foreign source. . . ."

Dr. Monette's study covered such aspects of the question as meteorology, climate, clinical aspects, nature of the disease, relation to other fevers, incubation period, contagiousness, relation

of commerce and of river and road travel, and measures for control.

Among his conclusions were:

1. The disease is indigenous to the Caribbean countries.

2. In these countries the natives have it mildly and, thereby they become immune.

3. The disease is kept more alive and virulent by the immigration into the tropical and subtropical countries of foreigners and northern strangers.

4. Immunity is established by one attack of the disease.

5. The disease migrates from its home (indigenous) to the United States, but it is unable to withstand the cold winters there, and it must be reintroduced.

6. The disease spreads from foci of infection.

7. In the genuine disease fifty per cent of those attacked die. If a fever has a case fatality rate lower than that it is not yellow fever (in a foreign habitat).

8. The contagion is more active by day than by night.

9. Community filth is not an agency in causing yellow fever.

10. Yellow fever is a peculiar disease, radically different in character from the whole family of remittent and intermittent fevers.

11. The most extensive marshes in the southern part of the United States are as free from yellow fever as are the pine hills of Mississippi and Alabama.

12. The disease is not malaria, nor is it caused by decaying animal matter, or marsh miasma.

13. The temperature of the air, the humidity, wind movement, and other meteorologic phenomena do not produce yellow fever. They do contribute to its spreading.

14. It is a commercial disease.

15. Its spread is a matter of transportation and commerce relations.

16. Lime as a disinfectant is useless.

17. Blankets and wooden containers serve to spread the disease.

Among the causes of epidemics in Natchez—and he was addressing a Natchez audience—were:

1. The temperature of the air and other meteorologic phenomena.

2. The existence of an epidemic of it in New Orleans.

3. The steamboat service on the Mississippi river.

The practical measures of control he advocated, when a case of the disease appeared, were:

1. Send all the unexposed people to the country.

2. Especially see to it that the strangers are sent away.

3. Prohibit the importation of goods and people from infected places.

Since the Mississippi river was then almost the sole artery of commerce for the region in which Doctor Monette's interest lay, he advocated quarantine stations to be located below New Orleans, in the region of Forts Jackson and St. Philip, and a marine hospital nearby.

He predicted: "The day is not very remote when New Orleans will be as free from yellow fever as New York is now."

It was twenty-one years later when General B. F. Butler proved beyond controversy that Doctor Monette was right, by stopping all commerce in New Orleans. It was in 1880 that a quarantine, considerably modified, again proved the correctness of Doctor Monette's views by ending yellow fever in New Orleans. Discoveries made at the turn of the century and since have established the correctness of every basic principle of Monette's holdings.

There can be no doubt that Doctor Monette was wrong in his theory that the cause of yellow fever was gaseous in nature, and that it entered the human body through the lungs. He was wrong in that he makes no mention of mosquitoes and provided no measure for their control. But he was right in all the practical fundamentals, and he postulated some of the problems that have engaged scientific epidemiologists within the last decade.

There were such problems as: the indigenous home of yellow fever, a theme of great interest now to the world epidemiologists; the building up of the disease by importations of susceptibles, a theme that Topley, Webster, Dudley, Greenwood, and Amoss, and other epidemiologists are just now engrossed with.

That great problem posed by the contradictions in the contagiousness and infectivity of yellow fever—the answer to which came with the mosquito theory—Doctor Monette saw, was perplexed by, and tried to find the answer—but failed.

Doctor Monette died at 48 years of age after a life rich in accomplishments in the field of public health and in several fields beside. He lived to see the river country and New Orleans accept his methods. He saw river quarantine stations and marine hospitals built about where he said they should be. He lived to see the entire concept of Rush discarded. He built a sun and he lived to see it above the horizon, but he passed before the sun had caused the grass to grow, the flowers to bloom. For yellow fever remained a major menace to Mississippi for forty years and to it as a world menace finis is just now being written. Meanwhile, a century has passed.

In 1879 the Mississippi State Medical Association met in Aberdeen. One session was devoted to memorial exercises for the heroes of the medical profession of the state who died in the epidemic of 1878. These were fifty-seven in number. There were seventeen from Vicksburg and Warren County, ten from Grenada, eight from Holly Springs, three from Port Gibson, and three from Greenville.

Among them were some ex-presidents and other officers of this society. A memorial sermon was preached by Dr. B. M. Palmer, of New Orleans. A memorial address was delivered by Dr. John Browning, of Columbus; and two memorial poems were read, one by Dr. H. D. Bruns, of New Orleans, and another by Major S. A. Jonas, of Aberdeen.

The first stanza of Major Jonas' poem was as follows:

With sorrow now we spread the pall
 O'er Woodruff, Hicks, Whitehead, Monette,
 O'er Nesmith, Booth, and Hughes, and Hall,
 Ringold, Cage, Fitzgerald; nor forget
 The joyful Compton, or the brave McKee
 McCallum, Williamson, or Kinchloe,
 Or Armstead, sleeping peacefully,
 All victims of the fury of a common foe.

The Monette referred to was Dr. W. E. Monette, of Warren County, born there January 7, 1834, and certainly a kinsman of Dr. J. W. Monette.

* * *

Should flood control ever be realized on the Mississippi river, the engineering profession of Mississippi should insist that one of the important works should bear the name of Monette, and a tablet to John W. Monette should be attached thereto because of his study of the subject of flood control in the Mississippi valley.

The Mississippi Valley Historical Society might well install a library to be known as Monette Hall, dedicated to the memory of one of the ablest historians of the valley country. A tablet to Monette, their fellow historian, should be placed there by the Mississippi Historical Society or the State Department of Archives.

The Mississippi State Medical Association and the Mississippi State Board of Health are in co-operation in the control of malaria and many other diseases. They worked together to end the menace of yellow fever to Mississippi. A majority of the board are nominated by the state medical society. The two organizations have stood together, are standing together, and will continue doing so.

They might consistently stand together in honoring Dr. John W. Monette, once of Adams County; a man who made a permanent contribution to the world knowledge of yellow fever, to clinical information about the disease, and its importance as a community problem; who laid some of the foundations on which builded the men of many lands working in many fields—to the end that yellow fever shall no longer be an important menace to civilization.

With these considerations in mind, I ask you to accept this picture of our fellow craftsman and fellow citizen, John W. Monette; to put it in the keeping of the State Health Department, that it may there serve as a recognition of worth and service, and as a stimulus to our fellows in the fields of curative and preventive medicine.

THE QUESTION OF PROGNOSIS*

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The word prognosis is derived from two Greek words meaning, to forecast, or to foretell. It is the art of forecasting the progress and determination of any given case of disease, being based upon the subjective and chiefly on the objective signs or symptoms of the disease. In a broad and more liberal and scientific sense, prognosis affords an insight into the present and future happiness, the well-being and the ultimate outcome of any disease or injury. It takes into consideration whether or not a disease is curable, how long under existing conditions life may be prolonged, what influences the disease or diseases under consideration are likely to have on the individual's activities and enjoyment of life; what contributing factors may lead to its advance and what will influence its course favorably. It stimulates, therefore, more rational and scientific therapy.

Of all the chapters that have been written in medicine, the chapter on prognosis challenges the physician's knowledge. It is a fact that in years which have passed and gone, prognosis was made without accurate diagnoses or without sound pathologic knowledge, however, today the forecast of the life of any patient laboring under the stress of formidable disease is based, not only upon subjective symptoms, but upon the results of thorough physical examination, a consideration of all the features made clear through investigation. In fact, the picture which the patient presents is projected on the prognostic screen to be interpreted by a clinical mind which is well experienced in the phenomena and ultimate outcome of disease. A study exclusively of text-books will never provide an adequate understanding of the complex problems of prognosis. Such an understanding only comes through years of painstaking analysis and correct reasoning and deduc-

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

tions. I have long since refrained from setting or fixing the time of an individual's death, inasmuch as I have missed from five minutes up to twenty years and such a marked discrepancy would no doubt, deter any physician from doing likewise.

Prognosis may be viewed from two important angles, immediate and ultimate; and it seems clear and rational that all physicians should cultivate prognosis. For instance in many diseases one may be very serious as to the immediate prognosis and the other very good. A patient may be seriously and acutely ill from some of the various toxemias and the immediate outlook seems grave, while on the other hand, a so-called mild or moderate attack of rheumatic fever or diphtheria may offer a very excellent prognosis, however, the ultimate forecast may be one of gravity, for after many years either of these diseases may give rise to serious cardiac damage and precipitate sudden death, shorten life, or engender a long drawn out invalidism.

There are multiple factors which influence the prognosis of disease. Exogenous as well as endogenous influences must be carefully considered and all of the defensive mechanism of the human economy, whether cellular, humoral or otherwise must be brought under careful scrutiny. This is spoken of by Dr. Baskerville, who read a paper before this association several years ago, as the "doctor's silent partner". The influence of age, environment, and the social status of the patient should be carefully considered. Experience has taught how variable these are in different and allied diseases. Diseases which are usually well borne by infants, children and young adults, are often rapidly fatal to the aged. Endocarditis in the young is ominous while in later adult life it is less serious. General arteriosclerosis is considered dangerous and fatal during early life, while the aged may live for years with advanced arterial changes and few or no subjective or objective symptoms. The influence of occupation plays an important role in arriving at a correct prognosis. The marked increase or rather the recognition of

cardiovascular disease arising from changed social, business and professional conditions, more particularly among physicians past forty, as well as the marked and appalling increase in cancerous conditions with advancing civilization, are among the serious and vital problems which demand the most earnest thought and consideration of every physician who is in active practice. The influences of the various dyscrasias and diatheses in early and later life are important and paramount. For instance, angina occurring between thirty-five and forty-five is usually due to luetic aortitis.

In framing a satisfactory prognostic background the resistance of certain races to certain diseases should be borne in mind. It is well also for the physician to consider the fate of the antecedents of his patients as well as their descendents, therefore, it is important that a sweeping family history be taken and recorded. I have among my case records many histories of patients with very bad family histories, especially as to sudden death in several members of the family early in life. The effects of former diseases upon the human being often have an important bearing on the present prognostic outlook. A diphtheria patient may be relieved of all the clinical signs of the disease by early diagnosis and the prompt administration of a sufficient number of units of antidiphtheritic serum, however, there is a dangerous prognostic outlook if the patient is allowed to exercise too violently for a month or two, in the precipitation of sudden death due to a myocardial damage following in the wake of the diphtheria toxemia.

The prognostics of the various infections teach the paramount importance of the urgent need of long surveillance, of the knowledge of the individual patient, and a full recognition of the danger done to the vital organs, more particularly to the heart and brain. This is particularly true of rheumatic fever, scarlatina and other exanthemata, pneumonia, influenza, typhoid, sepsis and septicemia. One should be guarded in making a favorable or unfavorable prognosis in the neuropathic tendencies and in the in-

dustrial domain of traumatic neuroses.

The profound influence of acute infectious diseases on existing chronic diseases, is in many instances overlooked, incorrectly interpreted, or not considered in framing the prognosis. The refinements in diagnosis in recent years, together with a large background of clinical experience, offer a more satisfactory basis for a more intelligent and safe prognosis. Many outstanding and fundamental details must also be considered. The physiognomy, the facies of the patient, the expression, the luster or dullness of the eye and the position of the patient in the midst of disease are important. The physician's observations are broadened and made more accurate as the number of observed cases increases.

The subject is so broad in its ramifications and applications that any attempt to review the various diseases upon which a prognosis should be made would be too time-consuming. The more serious conditions, however, may come up for discussion, such as the cardiorenal states, malignancies, and the acute infectious processes.

Auricular fibrillation, better known as delirium cordis, is usually brought about by some underlying toxemia and is often noted in Grave's disease or not infrequently from large doses of digitalis, but it means profound myocardial damage.

Heart block, partial or complete, due to an interference with the passage of impulses from the auricles to the ventricles, not infrequently brought on by the long continued use of digitalis and the various toxemias, means myocardial disease of a serious import.

Angina pectoris and coronary thrombosis are serious conditions, however mildly presented, and often tax the physician in his prognostic domain. Sudden death may be precipitated with the first attack, however, should the patient be fortunate enough to survive the initial attack he may live for years with freedom from any subjective discomfort. This happy outcome is the result of an established coronary circulation.

Hypertension, the champion in the causa-

tion of cerebral and cardiac tragedies, demands the closest study of every prognostician. A hopeful attitude should be exercised toward the patient. Some individuals have little or no trouble with hypertension, while others have no end of subjective complaints and are extremely hard to manage. The subject is open to wide speculation as to whether or not such cases will ultimately end in a cerebral or cardiac death. I have had in my experience four patients with a systolic pressure of 300 mm. and a diastolic of 180 mm., of whom two were young individuals under thirty-five, one a colored married woman, another a white male. The colored woman lived five years in this condition and died of acute heart failure. The white male died of cerebral hemorrhage after a few hours' illness. The other two were in patients past fifty, a white male and a white married female. The female lived nine months after I had discovered her hyperpiesia and died suddenly of cerebral hemorrhage. The male lived two years after I first saw him and died of a cardiac and nephritic tragedy. Physiologists constantly remind us that hypertension is a symptom and not a disease. All physicians through experience and observation have certain definite impressions about what ultimately happens to patients with hypertension.

The factors, however, which influence the prognosis of hypertension are not at all clearly defined, but in a vague way we fully appreciate them. I am of the opinion that heredity plays an important part in any patient's vascular system. Hamman of Baltimore gives an interesting resume of a group of hypertensive cases over a period of years. Of 314 hypertensives calculated from the date of discovery, he found the following:

	End of 2 Years	End of 5 Years	End of 10 Years
Living	281	145	30
Dead	33 (10.5%)	77 (30%)	107 (78%)

The prognosis in atherosclerosis is based largely upon whether the condition is associated with hypertension. Arteriosclerosis general, or localized, with or without hyper-

tension is a very common condition at and after middle life, and every physician is familiar with the ravages and tragedies this condition brings about. Even the laity has a wonderful knowledge of some of the tragic incidents which are arterial in origin. I am of the opinion that the oft-repeated statement, "A man is as old as his arteries", holds good, or to phrase it more aptly, "A man is as old as his myocardium". In approaching a study of prognosis in arteriosclerosis many factors come up for consideration. Many individuals with marked general arteriosclerosis live for a number of years without experiencing any apparent or real subjective or objective inconvenience, more particularly if unaccompanied by impairment of the renal function, or by hypertension. Not infrequently in claudication of the lower extremities a calcified femoral artery may be observed in the roentgenogram, when the temporals, radials and brachials are not sclerosed. The most frequent causes of death are familiar to every clinician; cerebral hemorrhage, cerebral thrombosis, myocarditis, angina, uremia, and occasionally gangrene of the extremities.

The malignancies open up a fertile field for prognosis, and while early diagnosis or recognition of malignant tendencies are important, the physician and surgeon alike are on the alert as to what the ultimate outcome will be. It is generally conceded by all that carcinoma of the breast if diagnosed early and followed by radical surgical procedures offers a favorable outlook if the patient can pass the five year period without any evidences of metastasis. A primary malignancy of the lung, however, even when first diagnosed usually offers no more than two or three months more of life for the patient. Cancer of the colon offers a more hopeful prognosis, inasmuch as its progress is slow and due to the limited lymphatic supply, metastasis is long delayed. Radical and palliative surgery offers a more favorable outlook as to the immediate prognosis. It is generally conceded that sarcomata of the bones and other tissues and organs of the body, which rapidly metastasize are of bad

early prognostic import. Malignancies of inaccessible regions due to delay in diagnosis, such as primary mediastinal malignancies, carcinoma of the head of the pancreas and massive malignancy of the brain offer the gravest prognosis.

DISCUSSION

Dr. W. L. Little (Wesson): I do not like to let a paper like this go by default. I can not add much to it, except to thank the gentleman for the paper, but it reminds me of a patient I saw some 15 years ago when we first began to take blood pressure. When I began studying medicine in 1888 we did not have all those means of making correct diagnosis; some of the doctors were up in the air when we first began taking blood pressures. I took the blood pressure of a poor old woman and it was 238. I thought she would be dead right away. I do not remember how many years ago but about 6 or 8 years, I was called to see her again when she had been eating some meat against the instructions of her physician and her blood pressure then was 320. She is living today and walking about the house—an invalid, it is true—but she is enjoying her children and her grand-children and getting along pretty well.

I was impressed also by a paper read by Dr. Mc-Lester of Birmingham at the meeting of the Southern Medical Association a number of years ago, following along the same line—be guarded in your prognosis, especially in high blood pressure cases. He pointed out the fact that there were many alarmists among physicians. Tell your patient "your blood pressure is so and so, and you have got to go to bed and stay a few months and go on a diet and take things easy" and in a few years the patient comes in very well. I appreciate the paper very much.

Dr. John H. Musser (New Orleans): I want to say that I think this is a very philosophical and beautifully presented paper from the point of view of the internist. There are two or three details of prognosis which I should like to mention briefly. The first of these is that prognosis of the disease depends, as Dr. Dearman has said, of course, upon a very thorough examination of the patient. He spoke of abdominal carcinoma. Think how much information can be obtained just from the rectal examination when there is a question of the diagnosis and consequently prognosis. A thorough study of the patient is very likely to lead to a definite and probable prognosis.

I have been impressed by the pleasure which patients take in prognosis which is faulty. A very excellent physician practiced some years ago. His patients I saw frequently after his death; they used to delight in telling me that they had been told that they would live only two, three or four years

and they had survived the physician and outlived him by many years. I have no doubt but that all of us have had a similar experience. In regard to blood pressure, I practically never make a prognosis based on the diagnosis of hypertension observed on the first examination. Time and time again it will happen that the blood pressure is elevated when the patient is first examined; ultimately it goes down, particularly when they are relieved of the stress and strain that is particularly common in hypertensive disease.

I can add another case to the one he mentioned incidentally. I had a patient whose blood pressure was first observed in 1901 with an old fashioned sphygmomanometer which stood about two feet high. Her systolic pressure was 225. Blood pressure observations were made practically every six months up until about 1928, when that particular individual died of cardiac failure. During this time her blood pressure was never under 200. This case has taught me to be particularly wary in giving a bad prognosis to any woman whose blood pressure is high.

Dr. Dearman (closing): I have very little further to say. The question often arises whether it is best to apprise a patient of the gravity of his heart condition and I think we should be very tactful in doing this. We may be able to advise a friend or relative of the severity of the situation. Not infrequently large estates are involved when just a word or the signing of a name will save considerable embarrassment and legal entanglements.

It is my policy to advise a patient that he has heart disease in order to enlist his co-operation in any regimen that I may outline, but I have never advised a patient that he is liable to drop dead at the breakfast table. I lead him to believe that the outlook is hopeful and that if his heart is not well compensated he is advised to curtail his activities in order to prolong his life and comfort. We should be very guarded in the prognostic outlook in dealing with a patient inasmuch as many individuals with a seemingly decompensated heart live for many years fairly comfortably and with very little subjective inconvenience.

INTESTINAL OBSTRUCTION, THE IMPORTANCE OF EARLY DIAGNOSIS AND OPERATION*

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In presenting the voluminous subject of intestinal obstruction I will not attempt to discuss, in the time allotted me, all of its various phases, etiology, symptomatology and

treatment but to call special attention to that phase of the subject that is most important, its early diagnosis and operative treatment.

Acute intestinal obstruction is so frequent and its early recognition so important that we must keep in mind its ever present shadow. We must be mindful that acute intestinal obstruction is the most death dealing condition that we encounter in the abdomen and that the death rate ranges from zero, in early operated cases, to one hundred per cent in delayed or non-operated cases. Up to about forty years ago surgery was looked upon as a means of last resort, largely on account of pain, fear and hazard and most surgery done was only palliative. It appears that the major technic of general surgery has probably reached a standardization but it is in the perfection of minor details that we are able to reduce the morbidity and mortality of surgical procedures in the abdomen.

As the years have gone by we have gradually attained to modern surgery because of safer means of anesthesia, asepsis and antisepsis, better technic and, last but not least, good surgical judgment. In spite of all betterment which modern surgery has brought us the day has yet to arrive when unavoidable deaths do not occur, early and remotely, following abdominal surgery, and we still encounter too many cases of intestinal obstruction and lose too much valuable time in diagnosing the condition and instituting surgical procedure, usually the only means of relief.

In regard to causative factors of acute intestinal obstruction we should always bear in mind the part played by the surgeon. There are too many cases of obstruction following all kinds of abdominal operations. Prophylaxis against intra-abdominal disaster following abdominal surgery is as essential as is toxoid against diphtheria. The prophylactic treatment consists of abandonment of pre-operative and post-operative catharsis and the avoidance of unnecessary trauma and peritoneal contamination during the performance of laparotomies. Adynamic ileus occurs earlier post-operative than the mechanical ileus and is characterized by the absence of colicky and intermittent pains. Both dynamic

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

and adynamic ileus may be the result of prolonged operation, carelessly induced anesthesia, rough handling of abdominal organs, mauling the intestines, gauze packs, loss of heat, time and fluid, and the leaving of unperitonealized surfaces. Gauze packs and abdominal retractors are a fruitful source of intestinal obstruction that can largely be obviated by properly induced anesthesia and an incision large enough for adequate work. Rough gauze dissection and pulling and tearing of tissues instead of sharp dissection are also causes of many cases intestinal obstruction following laparotomies. While it is true that we encounter many cases of intestinal obstruction occurring in all ages from birth to senility and from many causes ranging from abnormalities at birth to senile malignancies, by far the greater number of cases of obstruction follow drainage cases of appendicitis and work done in the female pelvis.

The earlier in life that a surgeon realizes how much insult the peritoneum will stand when the pathology has been removed, without the aid of a foreign body, the sooner will he be free from the nightmares and worries subsequent to most abdominal operations. It is in such cases that drainage is used more to the disadvantage than to the advantage of the patient. It is marvelous, in many instances, to note the smoothness of the convalescence following the removal of pathology in the abdomen without any provision for drainage, even in the removal of the gall bladder, though Lord Moynihan, the greatest living surgeon, maintains that on account of the occurrence of fifteen per cent accessory cystic ducts in cholecystectomies, it is safer to put in a small wick drain. There are some cases following abdominal surgery in which provision for drainage should be made, such as uncontrollable hemorrhage and colon and gas bacillus infections, and if the latter is suspected, the abdominal wall should be left open to the peritoneum. However, the indiscriminate use of drainage tubes in the abdomen works untold hardships on too many patients. We must realize that any foreign body in the abdomen causes a secretion and

irritation that primarily and secondarily is a source of trouble.

As a prophylactic measure and to insure a smooth convalescence following abdominal surgery there is no greater means than the use of the duodenal tube employed either intermittently or continuously. In cases that are bad or cases that we expect to be bad it is well to insert the tube before the patient awakes, by this means we lessen nausea and vomiting, ballooning of the stomach with gas and many symptoms that follow severe abdominal operations and thus guard against intestinal obstruction.

There are so many causes of intestinal obstruction and a great many of them so infrequent that I will mention only a few that we are most likely to encounter. Other than obstruction following surgery which is the most likely factor, we have strangulated hernia, malignancy, intussusception, volvulus, mesenteric thrombosis and foreign bodies lodged in the canal. Intestinal obstruction caused by impaction of large gall stones, fecal impaction, hair ball and other foreign bodies are of rare occurrence but are not to be forgotten as a causative factor especially when the symptomatology is not so pronounced. Volvulus, fortunately for mankind, is of very rare occurrence but on account of the danger of early circulatory disturbances and gangrene early recognition and operation are most important. The same is true of mesenteric thrombosis, only early recognition and operation without delay will prevent a catastrophe. External hernia with strangulation is the one form of intestinal obstruction about which we can be positive as to the diagnosis before opening the abdomen and in many cases in which we open the abdomen for other suspected conditions we encounter internal hernia obstructions. Intussusception, especially of the ileum into the cecum, is an occasional occurrence and often confounded with acute appendicitis and only diagnosed by operation; the clinical symptoms and blood picture being identical with those of acute appendicitis. It is indeed unfortunate for the patient to have this condition diagnosed as appendicitis as the death rate, treat-

ed nonsurgically would be one hundred per cent while that of appendicitis treated expectantly would not be more than twenty-five per cent.

The obstructions that we encounter on account of malignancies are so insidious in their nature that they should be termed occlusions, for in reality that is the condition found at operation, the growth gradually closing the canal though it will eventually come to a complete obstruction. This form of obstruction must be handled in quite a reverse manner from acute obstruction from all of the other causative factors. It is in this type of obstruction that we must make haste slowly, we should have a barium x-ray examination, both by mouth and enema, in order to determine what operative course, curative or palliative, to pursue.

The early symptoms of acute intestinal obstructions are pain, intermittent in character, vomiting, shock, accelerated pulse and normal or **subnormal** temperature. The later manifestations are abdominal distention and obstipation. The diagnosis of intestinal obstruction must be made with a very confusing array of signs and symptoms and with very uncertain methods of diagnosis yet it must be made promptly. There must be a careful history taking with especial reference to past surgery and similar attacks, there must be a physical examination sufficiently general to eliminate intercurrent diseases and to investigate all areas of the abdomen, all hernial openings, all rectal pathology and in women all pelvic pathology. A urinalysis and blood count should be made and blood taken for a clinical study though there is no justification for delaying operation until this type of investigation can be concluded. The tendency to lose sight of the clinical aspects of the condition by laboratory methods should not obviate the necessity for speedy operation in every instance of intestinal obstruction.

Relative to examination of the gastrointestinal tract by x-ray in suspected acute intestinal obstruction it is well to bear in mind that no barium should be given by mouth but flat plate x-ray findings are valu-

able if too much time is not lost in the procedure. This method is useful in showing the water and gas levels and the contour of the bowel. While this method is useful in a way, and helpful as a diagnostic measure early surgery should not be delayed by such procedure. However, in middle-aged and elderly people, especially where the symptoms are not so urgent, the barium meal and enema x-ray findings are most valuable as a diagnostic measure.

To sum up the subjective and objective symptoms of acute intestinal obstruction with all of the various signs and symptoms of the various causes of the condition would take hours so I will only say that if we bear in mind the cardinal symptoms, pain, nausea, vomiting, gaseous distention and obstipation when confronted with a case of suspected intestinal obstruction we will not go far afield in making a diagnosis of that condition. I do not know of any condition that internists and surgeons alike fear and loathe and in which they vacillate as they do in this condition.

I have nothing new to present in the treatment of intestinal obstruction but I simply call attention to the well known facts and emphasize some that I think important in improving surgical results in mechanical obstruction of the bowel. There is no field in abdominal surgery that challenges our attention more than this. Refinements in surgery of the appendix, gall bladder, stomach and pelvic organs may save four or five per cent more lives than now whereas in acute intestinal obstruction an improvement of from twenty to fifty per cent in our results is possible.

In the treatment of acute intestinal obstruction we must rely only on one means for a cure and that is surgery. At the present time it is estimated that we save from forty to seventy for each one hundred cases of obstruction; we should save ninety. An application of our present knowledge of the pathology, symptomatology and operative management is all that is necessary to save ninety per cent of obstructed cases. Nowhere in surgery is the dictum, "An early operation by

a novice in surgery is safer than a late operation by a master" more applicable. When its progress is proclaimed by severe colic like pains repeated every few minutes woe unto the patient and discredit to the physician when such pain is eased by a hypodermic of morphine for it delays operation many hours and obscures otherwise obvious signs. The same can be said of purgation only in a greater degree as it does the patient more harm than morphine and puts more strain on an already weakened bowel. Abdominal pain when sufficiently severe to require a hypodermic of morphine generally demands that the patient be hospitalized at once and that means be taken to determine the cause of the pain, again a dictum should be applied, "Brother stay thy hand" when it comes to the giving of morphine or purgation in acute intestinal obstruction.

There is the same picture in early or late operation in cases of acute intestinal obstruction as there is in many other surgical conditions of the abdomen, simple appendectomy or ruptured appendix, and simple cholecystitis and obstructive jaundice from stones in the common and hepatic ducts. With the lights that we have before us we can determine when and how to keep our patients from getting into such dire calamity as noted by gangrenous appendix and common duct stones. By such lights and means of knowing we should recognize intestinal obstruction and by early operation encounter a mild instead of a severe and death dealing condition. We have learned during recent years that gunshot wounds of the abdomen must be operated upon early, usually during the first twelve hours, to be successful, and the same ratio is almost true of acute intestinal obstruction. If we are to be successful and save life operative procedure must be done within twenty-four hours. By far the greater number of cases of acute intestinal obstruction, especially those following surgery, are from bands of adhesions which need only cutting, that is, if early operation is done, but if delay has been long, the gut may be so impaired that resection must be done or else the distal and proximal ends of the bowels

be brought out of the wound with an anastomosis at a later date. Enterostomy is advocated by some good men with excellent results, and many lives have been saved by such means but to my mind it is a blind procedure and fraught with too much risk to be of much avail. However, here, as in many other instances, encountered in delayed surgery, a drowning man will grasp at a straw. There has been a great deal of work done along experimental lines and in the laboratory to determine the cause of death from acute intestinal obstruction which has caused Holden, of Portland, to advocate freeing the obstruction and putting a glass tube into the bowel, a temporary enterostomy, drawing the fluid from the obstructed bowel, then taking the tube out of the bowel, closing the opening and then closing the abdomen without drainage. He has achieved remarkable success with his cases thus treated and for many years his work has been very greatly commended.

It is wise to take such steps, pre-operatively, as may be necessary to forestall shock such as blood transfusions, saline and glucose given intravenously, and invariably, glucose and saline, subcutaneously, during the operation. In acute intestinal obstruction spinal anesthesia is the anesthesia par excellence. It affords perfect abdominal relaxation, facilitating the ease and rapidity of relieving the obstruction. We must always bear in mind that a patient with acute intestinal obstruction is seriously ill and should have adequate and quick work. The experienced surgeon is content to save life even though he must return later to finish his work. It is the tyro who must complete the operation even though he lose the patient.

If the general rule in surgery which is: eliminate non-surgical conditions and then operate at once, is adhered to strictly in cases of acute intestinal obstruction many lives will be saved. Faith in medical treatment for strictly surgical conditions is a depraved and baseless faith which can terminate only in disaster. It is my conviction that we lose too much valuable time in making a diagnosis and then in opening the abdomen

in suspected cases of intestinal obstruction. If nothing is found, at least no great harm has been done and the medical treatment can be continued. I know that I have never had a case to succumb as a result of an early, exploratory laparotomy but on the other hand I have lost some as a result of not opening the abdomen before the door of hope was closed to the patient.

DISCUSSION

Dr. J. W. Barksdale (Jackson): I am sure that this is a very timely paper and should receive much serious consideration at the hands of this Association. There are some papers that should be read almost once a year, and a paper on intestinal obstruction is one of them. I think it is a condition that is so commonly encountered and is so often overlooked, at least for a day or two, that it is wise to bring matters that commonly occur in our practice frequently to the attention of both the surgeon and the practitioner of medicine.

I was very forcibly impressed with some parts of the doctor's paper. He said it is a wise surgeon who will do a life saving procedure and go back at some later date and finish his work. It has been my motto that he who fights and runs away will live to fight another day.

I want to call attention to pain—persistent pain—as an indication for surgical procedure in general and more particularly as supplied to acute intestinal obstruction. A number of years ago I read before the Southern Medical Association a paper on persistent pain as an indication *per se* for operation in cases of acute abdominal inflammatory troubles. I do not know that that was the first paper that was ever read on that subject stressing this one symptom, but he who waits for the refinements and niceties of diagnosis when exploration of the abdominal cavity is urgently indicated is doing what Dr. Payne said, he is throwing away much valuable time that may result in the loss of the patient if this delay is to long continue.

Many experimental studies have been conducted as to the cause of death in acute intestinal obstruction. Notable among these experiments were those by Dr. Harvey Stone at Johns Hopkins, and I think we are all of one opinion that it is the toxins of these conditions, particularly toxic substances under pressure which when absorbed produce death with greater or less rapidity. Now, if you open up, if you relieve the obstruction and permit this highly toxic material to find its way into the healthy bowel it will absorb like a dry sponge. That absorption is going to be very rapid. I am a believer in enterostomy in practically all cases of intestinal obstruction. It is the simpl-

est thing that you can do toward relieving the obstruction. It is surprising in what a large number of cases the cause of the obstruction wherever it may be will relieve itself in the course of a few weeks or months after this primary procedure is done. It is with but slight risk to the patient that the operation is done, and the highly toxic material escapes through a bowel that is not absorbing to any great degree. Now, I make two sharp lines of distinction between mechanical and other obstructions, whatever the cause of the mechanical obstruction may be. In a dynamic obstruction I do not think pain is a prominent factor in the case. I think that adynamia is the result of peritonitis and that the peritonitis is the thing you have to combat, the other being part and parcel of a distinct medical entity, and not the most alarming one. If allowed to go on for a sufficient length of time the obstruction *per se* may be the cause of death. In mechanical obstruction as in the case of every acute inflammatory condition in the abdomen, pain is the first and, to me, the most important symptom, and any persistent pain—and by persistent pain I mean a pain that stays for several hours, in which you can exclude the colics, is sufficient reason to open the abdomen. I do not think that is radicalism, for when you get in you find you are justified. But persistent abdominal pain is in itself an indication for exploration of the abdomen. You may make a diagnosis of intestinal obstruction or whatever occurs to you as the diagnosis, but if you are not correct, you will find something else that will have justified the laparotomy. I am not attempting to minimize the making of a correct diagnosis before exploration, but as Dr. Payne says, if you are encountering intestinal obstruction you are dealing with a condition that does not permit of any considerable amount of delay, and delay on your part may mean the life of the patient. If there is the slightest doubt that these patients have other forms of acute inflammatory trouble that leads us into a large field of discussion which I am not going to enter here, because my views as well as those of a great many of you are at variance as to what constitutes an absolute indication for abdominal operation. I believe in operating on the acute gall bladder. A great many do not. Sixty-four per cent of a given number of men believe in operating within the first twenty-four hours after the inception of the attack and other men that you ought to wait. I for one, and I want this distinctly understood by a great many of my friends here who have taken issue with me in the past, I believe in operating within the first twenty-four or forty-eight hours after the beginning of inflammatory conditions in the tube, and those of you gentlemen who see the tremendous amount of de-

struction that can be brought about by delay in cases of this sort should agree. At least 30 per cent of the entire number of admissions of women to the local charity hospital are due to inflammatory trouble in the tubes. That is getting a little bit afield so you may differ with me, but for me, I have one great danger sign and that is that any persistent abdominal pain that lasts over four or five hours means an abdominal exploration with me.

Dr. F. M. Acree (Greenville): Dr. Payne has told you, in his discussion of intestinal obstruction, of the importance of its early diagnosis and operation. I shall not attempt to add anything to Dr. Payne's paper for he has covered the subject well. I wish merely to stress again the importance of its early diagnosis and early operation.

McIver, writing in the December, 1932, *Archives of Surgery* on "Acute Intestinal Obstruction," says that "there are three salient factors that affect the mortality"—and names as the first factor "the lapse of time between the onset of the obstruction and the operation."

Early diagnosis and operation is important in any age of life. One has only to review the literature to bring out this fact. In the 1929 *Year Book of Pediatrics*, E. Edberg, writing on "Intestinal Obstruction in Infants," states that "early diagnosis is essential and surgery is indicated from the outset." Owen H. Wastén, in "Radiology" for July 1931, writing on "Intestinal Obstruction," calls attention to the high mortality in patients operated on for intestinal obstruction and states that "this is due in large measure to late diagnosis". It is as true in old age as in infancy and middle life. Nasher, in his text book on geriatrics states in his discussion on intestinal obstruction "unless soon relieved is rapidly fatal."

Dr. John Paul North, September, 1929, *International Clinics* has very graphically and forcefully brought out in results of delayed diagnosis and operation in this condition. He says, "Acute intestinal obstruction occupies a prominent place in the current clinical literature largely because of its high mortality rate. This is variously placed at from 25 to 50 per cent. A compilation of some series recently reported from the larger clinics gives a figure of 29.2 per cent in a composite group of 1,635 cases. This is sufficiently grave to challenge attention, particularly since it is far in excess of the inherent mortality of the disease, when properly diagnosed and managed. At the moment the single means at our disposal for remedying this alarming and humiliating situation is earlier diagnosis and operation. The consequences of delay are most surprisingly shown by a chart illustrating the 'mortality of delay.' Two hundred cases are reported. If the duration of the time between

obstruction and operation is under 6 hours the mortality rate was 9 per cent, from 7 to 12 hours, 17 per cent; 13 to 24 hours, 23.2 per cent; 25 to 48 hours, 23.3 per cent; 49 to 72 hours, 48 per cent, and over 72 hours, 59.4 per cent. Who is responsible for the tardy arrival of the patient at the operating table? Either indifference on the part of the patient in presenting himself to the attending physician, or a late diagnosis by the latter must account for the misspent hours. Indifference results from ignorance and can only be corrected by such enlightenment as is already being undertaken with regard to cancer and acute appendicitis. Late diagnosis is in some measure due to the teachings of the standard text books on the subject. Emphasis has been laid upon late rather than early symptomatology; the picture of terminal toxemia is given rather than that of obstruction."

Dr. J. Gould Gardner (Columbia): I wish to compliment Dr. Payne on his fine paper. This subject is always interesting to the surgeon and it is well to keep the important facts well in mind at all times.

Those of you who have read the articles in the *American Journal of Surgery* during the past year would recall what splendid information was contained in these. I am not going to take up the diagnosis. We know that in babies the obstructions are usually due to congenital deformities or mechanical happenings; in young people it is usually due to infection—usually on the right side in the region of the appendix; and in old patients it is usually on the left side, produced by a growth.

I would like to stress the importance of the proper preparation of these patients. Usually they are rushed into the hospital as physical wrecks suffering from shock, dehydrated from vomiting, the serious loss of fluids and necessary body salts. It is not right to rush these patients immediately into the operating room. It is time well spent to put these patients to bed, apply external heat if necessary, and give them say 1000 c.c. of 5 per cent solution of glucose in sterile water to which is added 20 c.c. of buffer solution. Ten to twenty units of insulin may be added to the solution. The proper buffering of your solution is important if you are to get the best results.

For a number of years I have been advocating the use of spinal anesthesia in cases of intestinal obstruction. All of us who have operated upon these cases with a general anesthesia and have had the bowels come out and almost strike us in the face can appreciate the wonderful advantages of spinal anesthesia. The bowel completely collapses with complete relaxation of all muscles in the abdomen. In intestinal obstructions it is the anesthetic par excellence.

There is just one thing I wish to say about drainage—for sometime we have used a glass tube bent at an angle of 45 degrees with a slight bulb at each end to permit of easy attachment of the bowel to the proximal end and a rubber tube to the distal end connected to a bottle. A glass tube does not kink; the angle permits it to lie flat on the abdominal wall or on the dressing; it is large enough to permit of free drainage of even large plugs; and it is easy to remove.

Dr. M. Q. Ewing (Amory): I enjoyed Dr. Payne's paper very much. I am impressed with several things. If there is anything a surgeon should have a decided opinion upon, it is intestinal obstruction—mechanical obstruction, and I want to emphasize some things that were said. I want to particularly emphasize the rule laid down by Dr. Barksdale that persistent, unrelieved abdominal pain that has lasted six hours is a direct indication for opening the abdomen whether you have made a diagnosis or not.

The next thing I would like to mention is this question of enterostomy in acute intestinal obstruction. I believe enterostomy should be done on all cases of late obstruction—all cases, and enterostomy can be done with an almost infant sized catheter, because the contents of the small intestine are almost liquid, and if a Witzel enterostomy is done you will never have to close one afterwards.

The next thing I wish to mention in relation to enterostomy is do it in late obstructions regardless of the condition; don't attempt to relieve your obstruction if it is too late—simply do your enterostomy because I believe, like Dr. Barksdale does, that the contents above the obstruction are highly toxic and will be absorbed just like a sponge by the bowel below. If it is late leave it alone; if it is early relieve your obstruction, and I do believe every surgeon should have a very decided opinion about what to do in intestinal obstruction. The worry about what to do should never come up. The pain after six hours is an absolute indication for opening the abdomen.

Dr. F. W. Smythe (Memphis): Many years ago, before I was a medical student, with my late father, I visited the clinic of Dr. John B. Murphy. During this clinic a visiting physician asked Dr. Murphy what did he consider the greatest mistake in surgery, and Dr. Murphy answered, "procrastination." That word has always impressed me and it is applicable certainly to these cases of intestinal obstruction. For it is certain that a case with an acute mechanical obstruction is doomed without surgery. He has no chance without operation and each hour's delay decreases what chance he may have.

I was glad to hear Dr. Barksdale mention pain. I too, give it much consideration, however, not quite

so much as the doctor. I lean more to Lord Moynihan's teachings. He says that in a patient with an abdominal lesion there are three important symptoms—persistent pain, persistent nausea and persistent rigidity, and insists that any two of these symptoms warrant an exploratory.

I use x-ray frequently in these acute cases, usually only the flat plate. Frequently a characteristic finding results, often this study lets one more definitely locate the point of obstruction and allows him to make his surgical approach accordingly. At times barium enemata are indicated. I do not think barium should be given by mouth.

Whenever the patient's condition admits, I explore to ascertain the cause of the obstruction. In some cases it may not be proper to directly attack the cause at that time, and an enterostomy will tide the patient over in an emergency. However, there are cases, such as internal strangulated hernias and other cases with gangrenous intestine, in which enterostomy alone will not take care of the emergency. In these cases it is necessary to relieve the strangulated bowel and to remove any portion of the gut which is gangrenous. In such cases it is not often advisable after resection to do the anastomosis at once, however, the ends of the intestine can be brought to the outside and this accomplishes the aim of the operation, namely, drainage from the bowel. If drainage is accomplished it makes no difference whether it is on the outside or it progresses normally through an anastomosis.

In cases of obstructions lasting some hours and the cause is relieved and the peristaltic waves do not progress beyond the obstructive point, an enterostomy should be done above this point. For often, even if the color of the intestine is good and the blood supply is satisfactory, there is an impaired nerve supply and until the nerve tone has been restored, no peristalsis crosses the obstructive point and some cases without enterostomy will die from paralytic ileus.

The anesthetic of choice in a vast majority of these cases is spinal. It minimizes the trauma and practically prevents evisceration.

And finally, may I state that with an acute abdominal emergency, one should not wait to learn but look to see.

Dr. D. T. Brock (McComb): I want to stress two points brought out by Dr. Gardner's discussion of this splendid paper. We know that the immediate seriousness of intestinal obstruction is not so much the mechanical obstruction itself as it is the severe intestinal toxemia with absorption of toxins and the marked and progressive alteration in the chemistry of our blood and body tissues—a marked disturbance of the acid-base equilibrium, chlorides decreased and dehydration serum. I do not believe

that these patients should be rushed on the operating table without first being prepared as brought out by Dr. Gardner. Frequently you will have cases that when you give your glucose and especially your hypodermic saline solutions you will get relief from what you had thought was an organic obstruction. Especially will you see this happen often in post-operative paralytic obstructions. If these cases have had an ether anesthetic they naturally have an acidosis to begin with.

The other point that I want to stress is the choice of spinal anesthesia in these obstructions. It has been my happy experience in a few cases to have my obstruction relieved on the operating table after giving a spinal anesthesia and waiting a few minutes before starting operation. On the theory that the intestinal toxemia and altered blood changes cause stimulation of your sympathetic inhibitory nerves of your bowel and are responsible for the obstruction, a sphanchnic or spinal anesthetic will block this stimulation and frequently your bowel empties without your exploratory operation or your enterostomy.

Dr. G. A. Hendon (Louisville, Ky.): This subject of acute intestinal obstruction is perhaps the most vital one that presents itself to the medical profession today. The reason I say that is because of the fact that a cross-section of the mortality statistics from all over the country still shows a 50 per cent mortality rate and the same mortality persisted fifty years ago. Of course, there are clinics and groups and certain hospitals in which this high rate of mortality does not persist, but taking it by and large, and taking the cases as they come, that is the prevailing work-out.

That proves that somebody is going wrong somewhere. I believe there are two reasons for it. I believe that one is the fact that the patient or his attending physician waits too long to have the operation done, and I believe the other reason is that the surgeon attempts to do too much after he gets into the belly. The most irresistible impulse is that which urges him to do a complete classical operation and I think in an intestinal obstruction he, thereby, sacrifices his patient. I have been very much interested because it has fallen to my lot as professor in the University of Louisville to teach this subject. I have come to the conclusion that the statement I am going to make may sound radical, but I am more and more convinced of its truthfulness as time goes on and that is that in any condition where abdominal pain, nausea and absence of diarrhea prevail, one has ample justification for opening the abdomen. Those symptoms classify the condition as a surgical one—pain, nausea and the absence of diarrhea.

It is a pretty well settled fact that those three symptoms that I have named indicate an involve-

ment of the serous coat of the intestinal tract, while pain, nausea and diarrhea will indicate an involvement of the mucous coat of the intestinal tract, which places it in the domain of medicine. Another very radical statement and perhaps exaggerated, that I have found to be truer the longer I live, is that under no circumstances anywhere, at any time give anybody a purgative that has any pain in their abdomen. I do not believe that there is any more vicious doctrine ever taught than that which supports the theory that a pain in the abdomen is due to some foreign irritating matter that can be washed out by the administration of a purgative. I do not subscribe to that doctrine at all.

In regard to the delay, Dr. Acree presented some very interesting figures, but if one will cast up an average of all the calculations he presented he will come to the conclusion that each hour's delay means one per cent increase in mortality—that patients who have been sick from intestinal obstruction one hour before operation will have a one per cent mortality and so on. I operated once on a patient that had been obstructed 112 hours and I got 112 per cent mortality.

Another important point that has been brought very forcibly to my mind is that one should never employ over five minutes in searching for the site of the obstruction. When one opens an abdomen he can quickly sweep his finger around where obstruction prevails—the hernial regions, the appendix region, the sites of previous abdominal operations, and the sigmoid. The latter is where obstruction occurs from malignancy. If you wish to read the bowel, reach down in the pelvis, pick up the collapsed portion. It is much easier to trace the collapsed bowel than the distended portion.

If this obstruction has proceeded for as much as 18 hours, then I believe that your chances will be very much better if you do enterostomy and wait for conditions to become improved before releasing the obstruction. It is a very important consideration as to how you do the enterostomy. I have had the privilege of contributing an operation that was presented to you by one of the speakers, and I find it so far superior to the Witzel that I have even forgotten there was a Witzel. If you will think for a moment you will see that if performing a Witzel operation you are violating one fundamental mechanical law, and that is if you attack two substances of unequal density, the one of least density will always yield under strain. In doing a Witzel operation, one has to climb up the tube by sewing successive folds of intestine to the tube and the bowel under these circumstances is very much disintegrated, and when you introduce the needle to pass the sutures, you are liable to tear the gut. My operation consists in inserting a Pezzer catheter through a small opening in the gut

and throwing a purse string suture around the stem. I believe it was objected to on the ground that it was hard to remove. It does not have to be removed. When convalescence is established all you have to do is to draw your catheter up as far as you can and cut it off, flush with the abdominal wall and let it drop into the intestinal canal. I have done that repeatedly, and never had any occasion to regret it. It never has produced any obstruction. You will find a more adequate description of that procedure in Dr. Rankin's new book which I noticed on sale in the lobby.

Now in regard to the administration of morphine. I have always regarded pain as a witness, and after the witness has testified he may be excused and go on his way. He doesn't need to stay around in the court house. All I want to find out is *did* this patient have pain? Therefore, I am not at all averse to relieving my patient with an adequate and sufficient amount of morphine. The only special preparation that we use in advance of the operation is gastric lavage which is of vital importance because these patients will often vomit and drown themselves in their own secretions while on the operating table.

In regard to glucose and saline solution, I believe the most essential element in the relief of your patient is to introduce these substances into the circulation at the *physiological rate of delivery*—that is, to let them go into the circulation at the same rate that they are taken up and distributed, and we have found after a careful study that the maximum rate is about 200 c.c. an hour, or about 3 c.c. a minute and if you will observe that rule, you do not have reactions, you do not have difficulty in the metabolism of the solutions. For that purpose I have made and developed a cannula and an apparatus which delivers the glucose at whatever rate you desire. The process should be started before you begin your operation and it will sustain your patient during the operation and can continue thereafter for a week or two weeks if you so desire.

One more word in regard to the symptoms. The symptoms that are given to us in the text books are not the symptoms of intestinal obstruction. They are the signs of impending dissolution. They are the signs that the patient is going to die. It is certainly not within the range of wisdom or good judgement to withhold diagnosis until all the symptoms possible are developed. Just one thought that I would like to leave with you, and that is this. The only hand that paints a perfect picture of pathology is the hand of death.

Dr. W. H. Parsons (Vicksburg): A few years ago in conversation with Dr. Hendon, I became interested in his method of managing cases of intestinal obstruction, and on a great many occasions since,

I have been impressed in visiting different hospitals to note that in a large majority of instances these two simple maneuvers adopted by Dr. Hendon have not been employed.

The method suggested of doing an enterostomy is exceedingly simple and in my experience has been invariably satisfactory. At first I had some difficulty in removing the catheter and was rather averse to cutting it off flush with the abdominal wall. More recently I have however, on a good many occasions, followed the suggestion of Dr. Hendon and in no instance have undesirable sequelae resulted.

The intravenous drip suggested is equally satisfactory. I have employed this method of administering fluid in a fairly large number of cases. It eliminates the necessity of repeatedly annoying the patient by administration of multiple infusions. It enables the fluid to be administered at the proper temperature and what is vastly more important the proper rate of intake is guaranteed. Our experience at the Vicksburg Hospital has been that the drip will not function on an average more than five or six days, the vein then becomes thrombosed and if intravenous therapy is indicated for a longer space of time the cannula must be removed and replaced in a different vessel.

A study of any series of cases will promptly demonstrate, as the essayist and those who have discussed this paper have indicated, that the essential in the reduction of mortality from intestinal obstruction is that there shall not be delay in establishing the diagnosis and instituting proper treatment. Four years ago Dr. Hendon contributed rather extensively to the literature pertaining to this subject and he reiterates now that pain and nausea, in the absence of diarrhea, mean almost invariably a surgical lesion. That has likewise been our experience.

Finally then, I would say that if a patient suffering with intestinal obstruction is so fortunate as to have the condition recognized early and intelligent, conservative surgery performed, with due attention post-operatively to the maintenance of body heat and with adequate attention to the blood chemistry, recovery is to be expected. Certain technical maneuvers previously discussed are, however, of value.

Dr. Payne (closing): I thank the gentlemen very much for their free and adequate discussion of my paper. I do not think there is any thing in surgery that demands any quicker attention than an acute intestinal obstruction.

I wish to say, relative to spinal anesthesia, that we have been doing spinal anesthesia for a good many years. I would sound a note of warning, however, against depending on spinal anesthesia in any operation that would possibly extend over thirty

minutes, and even then to always have other means of anesthesia at hand. In a case of intestinal obstruction that we had last week the spinal anesthesia did not work, and had it not been for ethylene which could be used very promptly, at that time, we would have gotten into trouble. It may be, possibly, that we have not gotten the spinal anesthesia down to the 100 per cent efficiency that some of the men have, but I do want to sound the note of warning, not to depend entirely on spinal anesthesia under any condition, and especially in those operations that will last more than thirty minutes.

I was glad that Dr. Hendon gave me the opportunity to say something relative to morphine. I feel toward that just as he does, that if you have a patient in the hospital and ready to go to the operating room, it would be criminal to withhold morphine at that time, but how many of those cases are delayed beyond the six hour limit after you have administered a dose of morphine?

I believe that in conditions of malignancy we find, as I stressed in my paper, those cases of gradual occlusion of the bowel. I think that in a great many instances we have the enema deceive us as to the movement of the bowel; that we get feces from the bowel below the obstruction and we are put under a false light by that evidence. Possibly, if we had given that enema ourselves instead of trusting it to someone else, we might not have been thrown off our guard.

I believe that enterostomy has saved a great many lives; on the other hand, I am sure that where there are multiple obstructions, they can not be relieved by it. Of course if there is only one site of obstruction then that can be taken care of with an enterostomy. In regard to enterostomy as advocated by Holden, we recently had a case of acute intestinal obstruction that had been treated for forty-eight hours with salines by mouth, pituitary extract, etc. After the abdomen was open, while manipulating the bowel, on account of the severe distention the bowel burst thus emptying out the bowel contents. We simply closed the opening in the bowel, closed the abdomen with provision for drainage as the peritoneum had been contaminated. The woman made an uneventful recovery.

CANCER*

TOM SPEC JONES, M. D.

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Forty years of surgery! Fifteen years of radium! Twenty years of organized educational effort on the part of the American

Society for the Control of Cancer! Hours upon hours of untiring study and work and thought and experimentation in countless laboratories by numberless scientists! A yearly expenditure by one organization of a hundred thousand dollars! Every medical publication coming from the press contains one or more articles on Cancer! Indeed, almost daily, some reference is made in the lay press regarding it! Is there one other single subject in the whole universe, thought of, talked of, written of, by scientists and laymen half as much! And well it might be, for in spite of all, cancer continues to take its annual toll in North America of 150,000 lives. A city five times the population of our beloved Baton Rouge is wiped from the face of the continent year after year. What an indictment! Cancer is as old as time, yet during the past thirty years there has been an actual increase of more than fifty per cent.

With its insatiable demands, unceasingly, increasingly it continues with its unappeased hunger to register its ravages. We are told by a distinguished authority that he has traveled all the countries of the earth and studied all its tribes and peoples, and he has never seen one case of cancer in a vegetable—or fruit-eating people. Another world-renowned scientist tells us that if we eliminate meats and white breads from our diet and take a daily dose of mineral oil we will not have cancer. Still another luminary states that he has never known a case of cancer of the gastro-intestinal tract in a person who had sound teeth and a clean mouth. With these facts before us, let us take stock and see what we have really learned about cancer that is actually worthwhile.

When you ask what is really known of cancer, the answer comes:

1. It is a process of cell-division—that much is certain.
2. It may be microbic, or it may be physiochemical in origin. Surely, its course is affected by certain chemicals.
3. It is probably influenced by heredity.

*To have been read before the Louisiana State Medical Society, April 1933.

4. It begins usually from some chronic irritation.

5. It is not communicable.

6. It is most frequent in the fifth decade.

7. It progresses more rapidly in the young—slower in the aged.

8. It is on the increase.

9. Pain is not an early symptom, but comes late.

10. It is curable, while yet local, by surgery, radium and roentgenray, or a combination of the three.

Compared to the results of study and investigation of the other great scourges with which man is affected, it would seem that we have failed. When we have arrived at the actual, positive, definite cause of cancer, we may hope for a satisfactory treatment, but, until then, we must strive to accomplish what we can with our present inadequate methods, remembering that, as the case now stands, prevention and early diagnosis stand out pre-eminently as offering the greatest possibilities for good.

GASTRIC CANCER

The most frequent type of cancer met with is cancer of the stomach. It is not possible to secure exact figures because our only available source of information is the Reports on Mortality Statistics of the United States Bureau of Census, and, unfortunately, they classify stomach and liver cancer together. It is probable, however, that gastric cancer represents about one-third (Virchow) of all cancers in the body. It must be remembered at the outset, that if anything is to be accomplished in the treatment of cancer, it is essential to begin while the trouble is local and confined to one circumscribed, localized area. Furthermore, it must be borne in mind that pain is not an early symptom and a diagnosis must be made before the stage of pain is reached, for the disease has then very probably metastasized, and, of course, it is too late to do more than palliate. The early diagnosis of gastric cancer rests with the family doctor or general practitioner. When a patient in the fifth decade applies for treatment for a digestive disorder and the usual

remedies fail to give prompt and complete relief, he should not procrastinate or take an attitude of indifference toward him, but he should know that the responsibility is his, and his alone, and he should refer the case at once for complete and thorough study by laboratory and roentgenray, for, after all, the roentgenogram must make the diagnosis. Of course, it is expensive and probably troublesome, entailing a lot of work and study, but when you realize that the most frequent of all cancers is gastric, and that your patient has failed to get relief of an apparently minor ailment by the usual methods, it is clearly the duty of the attending physician to point out the dangers and insist upon thoroughness of investigation. Of course, once the diagnosis is made, the case becomes purely surgical, and the only hope lies in early radical operation.

CANCER OF THE COLON

When I graduated in medicine one of my friends of the Tulane Faculty invited me to his home to give me a post-graduate evening of practical advice. This good man will never know how many times I have thanked him for that—to me—"invaluable evening." The sum and substance of his talk to me was to be thorough in the examination of every case I had the privilege to see. He told me with emphasis that if it was inconvenient or impossible to be thorough with the examination, not to undertake to treat the case at all, but to decline it. It is said (Goldbacher) that 95 per cent of all cancers of the colon can be felt with the index finger. A man in the cancer age consults you for trouble which you decide is in his colon. How simple and easy it is to slip on a glove and make sure, at least 95 per cent sure. And yet how often do we fail to do it because of hurry or because there isn't a glove at hand? Again, if your efforts are to be rewarded you must not withhold a diagnosis until he is passing blood and mucus, accompanied by painful stool and with symptoms of partial obstruction. It is too late then! The early and valuable symptoms of cancer of the colon are mainly gleaned from the history he gives you. He comes with the story that

for thirty years he has enjoyed a perfect bowel habit, but for the past few weeks he has been upset. He has taken laxatives and tried all manner of diets and played golf and worked in the gymnasium and, for some reason, he can not re-establish his former regular movement. No loss of weight or appetite; no pain; no blood or mucus. No symptoms whatever, except a recent inexplicable interruption of his bowel habit. The responsibility here is grave. You have a right to make a few suggestions and prescribe the usual remedies, but these failing to properly and promptly correct the trouble, the responsibility is yours to get him to the roentgenray and proctoscope and laboratory. There is yet ample time to rescue him. "Watchful waiting" will not save him. Here, again, when you have made your diagnosis it becomes a surgical affair.

Cancer of the skin, face, tongue, mouth, bladder, and prostate should be so easy of recognition that it is unpardonable for any one of them to become so advanced as to be hopeless. In each of these conditions the proper application of sufficient radium by an experienced physician is probably the preferable form of treatment.

CANCER OF THE BREAST

Twenty-five per cent of all cancers appear in the female breast. The normal anatomic position of the breasts with the simplicity of inspection and the ease of palpation would seem to preclude the possibility of the development of a fatal condition. Yet, the facts are that one out of every four cancers is situated in the female breasts. To me it is perfectly inexcusable and can be explained only in three ways.

Remember always that in its incipiency it is purely a local and, therefore, a perfectly curable condition. To a considerable proportion of this twenty-five per cent of cancers must be charged simple ignorance. Notwithstanding the tremendous effort on the part of the profession, the American Society for the Control of Cancer and a large number of independent workers interested in the cause, as well as educators writing in the lay press, hoping to inform the public,

there still remains a great number of people uninformed on the danger signals. Second, it is thought, purely from modesty, a large number of women, well informed on the subject, carry their secret, realizing the whole time what the danger is, but hesitating to seek aid and advice. Lastly, and I blush to say it, a surprisingly large number of breast cancers develop and even metastasize in patients who have consulted doctors and are told that, at present, the tumor is benign but must be "carefully watched."

Just what is meant by "carefully watched," I ask you. Very recently I have seen a patient who lived in a large city and who consulted a doctor said to be prominent in the profession, and was told that there undoubtedly was a breast tumor, and "it must be watched." She called upon him at intervals for two years, then he referred her for operation. She then had a type II carcinoma and had a radical operation. A simple mammectomy when he first saw her would have saved her life. Just how it benefits the patient for her and the doctor to "watch" a benign tumor for several years and allow it to become malignant, is a procedure I must confess is beyond my understanding. You might as well say to a patient; "Yes, you have acute appendicitis, but we must watch it carefully, and as soon as it ruptures and you develop peritonitis, we will call a surgeon."

It is important, vitally important, for people to know that you do not have to be old to develop cancer. It is common in the fourth decade, not infrequent in the third and may be seen too often in children. Of course, it is met with oftenest in the fifth decade, but all too often it is found earlier. It is almost equally common in the married and the unmarried, the sterile and the fruitful. Heredity is not important. Just because there have been cases of cancer in the family does not mean that you must have it. On the other hand if you are fortunate enough to be able to boast a cancer-free history, it is no guarantee that you will not have it. There is a history of heredity in about twenty-five per cent of those affected,

and, while this may be disquieting, it is insufficient to alarm, yet of course, those with such a history should be stimulated to greater watchfulness. Blows, injuries, trauma from various causes may lay the foundation for trouble, but I think most often they direct attention to a pre-existing but unnoticed condition. It is claimed that cancer of the breast has never been observed in a patient who passed through lactation normally.

The study recently of ten thousand breast cancers certainly gave me a tremendous help and straightened me out on a subject which had, for a long time, been a nightmare; the question of chronic mastitis. The analysis showed that carcinoma was not as frequent in cases giving a history of chronic mastitis as in those which did not have it.

What is the duty of the doctor in preventing breast cancer? First of all the medical man, the internist, the family doctor should not presume to pass on the question. His course is simple—advise her to consult a competent surgeon. When he does this his responsibility ceases, for he has done his patient a genuine service. To advise her to “carefully watch” leads to but one result—**tragedy**. Every and any breast pathology should be referred to the surgeon and the responsibility placed upon him. No doctor, whether he be surgeon or not, should assume the responsibility of dealing with pathology in the breast unless he be qualified by training and experience to correlate the clinical findings, the appearance of the gross specimen and microscopic study of the tissue sectioned.

There is no justification in the removal of a breast for chronic mastitis just because it is feared it may lead to cancer, for it has been proven that it does not. In a case of chronic mastitis, which is causing great pain and has resisted other forms of treatment, and in cases of pendulous breasts with chronic mastitis, where, for esthetic reasons it is desirable, a simple mastectomy is justifiable. I think the general rule of removing tumors and growths from the breast is very wrong. If a tumor be small, simple, superficial, circumscribed, unattached, (for

example, cyst, lipoma, adenoma, fibroma) and its removal does not involve trauma to the mammary gland, it may be proper to remove it. But if the mass or growth or lump or tumor be within the gland, or a part of it, or firmly attached to it, or beneath it, even though there is not the slightest suspicion of malignancy, the safe and proper way to deal with it, is to perform a simple mastectomy. The removal of a growth imbedded in the mammary tissue and attached to it, as they so often are, may be followed by a cicatrix far more dangerous, from the standpoint of cancer, than the original pathology was. In the moderate-sized breast if skilfully done, a mastectomy causes very little, if any, deformity or mutilation or defacement. If the patient be beyond the childbearing period and the breasts are large and pendulous, in order to attain symmetry, a bilateral mastectomy may be done. After all, it is only a minor operation.

The surgeon should not attempt breast surgery unless he has called to his side a well-qualified pathologist, who stands by and immediately after the specimen is removed and examined by the operator, rushes to the laboratory to make a frozen section and study it and report as quickly as possible to the surgeon. While the pathologist is hurrying with his utmost speed to complete his examination and bring the report, the surgical team marks time, for the procedure from here on will be determined by what the microscope reveals. It matters not how positive he may be that there is no likelihood of malignancy, the conscientious and capable surgeon has this rush diagnosis by his pathologist arranged for, because he knows that, even with the most skilled and experienced operator, a mistake is possible without the aid of the pathologist.

In dealing with a frank and positive cancer of the breast, Dr. Williams and I have adopted the following routine which, we think, is the safest method of procedure. Immediately after the diagnosis is made a massive dose of radium is applied to the breast area and axilla. During its application, the position of the radium is changed at

regular intervals in order to insure thorough and complete exposure of the entire area. Two weeks following the use of the radium, the radical operation is done. After all tissue has been removed, and before the wound is closed, the patient is rolled to the roentgenray room where she is given a deep roentgenray exposure directly in the open wound for a period of thirty minutes. She is then returned to the operating room and the wound closed, always being certain that there is a complete change of instruments, etc. Three weeks later, when the wound is healed and she is convalescing, she is given a course of deep roentgenray therapy consisting of three sances at two-day intervals.

There are some facts concerning the technic which are of interest to the operator. The pre-operative use of the radium is thought to seal the lymphatics and absorptive factors and thereby discourage metastasis at the time of operation from the necessary handling of the tissues. The idea of Dr. Jackson of washing and scrubbing the surfaces of the open wound with large quantities of hot saline before closure is certainly a very logical one, for the spilling upon the raw surface of any cancer cells will, of course, act as a graft and start a new focus of growth wherever they lodge and are allowed to remain. After this washing has been completed, the area is exposed to the roentgenray with the view of destroying any cells which may have remained in spite of the "Jackson toilet." In dealing with a condition of ulcerated surface it is well, before beginning the operation, to cauterize the raw area with carbolic acid and alcohol or a strong solution of silver nitrate, and then to suture over it, and well beyond the edges, a piece of rubber tissue, in order to prevent leakage from the cancerous mass during operation. It is also a wise plan to isolate and inclose the mass, by using a long needle and the fulgarizer, in a wall of impermeable coagulum, and then give this a wide birth during the operation. The greatest care should be exercised to prevent any contact between the cancerous mass and the fresh wound. It is a rather strange phenomenon

that a malignancy may be transplanted and engrafted to any part of the individual's own body, but can not be conveyed to another person. Because of the great surface exposure, length of incision, loss of blood and time consumed, a radical breast operation is accompanied by a greater amount of shock than perhaps any other surgical procedure. It should, therefore, be the purpose of everyone present to do all they know before, during and after operation to prevent and relieve shock. One of the early and certain signs of recurrence, before any other suggestion comes up, is painless and unaccountable swelling in the hand and arm. A case of breast cancer is not regarded as permanently cured until five years have elapsed from the date of operation and the patient is found to be in good health at that time.

CANCER OF THE UTERUS

Uterine cancer just about divides the honors with cancer of the breast from the point of view of frequency, constituting about twenty-five per cent of all cancers, whereas cancer of the breast leads in point of curability. Cancer of the womb differs with its running mate, too, in that it is very much more common in married and child-bearing women. Indeed, it is the present belief of most authorities that the vast majority of cervical cancer is the end result of childbirth. It becomes frequent after thirty-five years of age, increasing in frequency up to the age of fifty-five. Its richest harvest is claimed during the decade which is evenly divided by the menopause.

When we know that only about twenty-five per cent are curable after development, and when we believe that the resultant damage of the cervix at childbirth by fracture, lays the foundation for its development, and further, that the proper post partal care of the cervix would prevent its development, common sense should guide us to the only reasonable course of activity. This line of reasoning, then, brings us to the conclusion that the weight of responsibility rests upon the accoucheur. It is my firm conviction that no doctor should accept a case of confinement unless he feels it a very positive part

of his duty in the case to relate the dangers to the patient at delivery and demand of her as her share of the responsibility that she report to him, when the baby is three months old, for examination of the cervix. At this time he should regard her as his care until he has eradicated every particle of cervical pathology. When he has accomplished this, he has fulfilled the obligation which he assumed when he accepted the case for delivery.

Normally, the vagina does not have any more discharge from it than the normal eye or nose or ear. It is nothing less than tragic that every woman could not know that any amount of any kind of vaginal discharge is abnormal and dangerous. For some unaccountable reason they seem to think that just because it is the vagina, it is all right for them to have a leucorrhœa. I often say to them that they remind me of David Harem and the fleas on his dog. He said, "A reasonable amount of fleas was good for any dog, because it kept him from worrying about being a dog." In contrast, the smallest amount of vaginal discharge should be a source of such alarm that the lady should not rest content until it is entirely cured.

If the postpartal case is seen at three months, whatever pathology that may be found to be present is very apt to be slight or moderate. Tears, eversion, erosion, infection, etc., should have prompt treatment. It is criminal to say to a woman that she has not finished her child-bearing career and she must wait until she is through having her children before having her pathology attended to. Aside from constituting a potential cancer, the diseased cervix is just as much a focal infection as teeth or tonsils or what have you? carrying with it the very same possibilities of calamity. Early after childbirth the infection in the cervix is superficial and easily cured, usually resolving itself into an office case. As time goes on the deeper structures become involved, the situation grows more and more serious, resulting in the typical chronic irritation, regarded as precancerous. The management

of this condition is quite different. The entire cancer-bearing area of the cervix should be removed. This may be accomplished by high amputation with the knife, which is not satisfactory for the reason that it is at times followed by such a degree of scar-formation as to be, itself, a focus of chronic irritation. Then, the entire cervix may be destroyed, or burnt away with the actual cautery. Again, the resultant cicatrix is considerable, and may even be followed by stenosis, requiring a second operation. The preferred method is to employ the cauterodyne and to ream out the entire area of disease, after the technic of Sturmdorff. Following the use of this instrument, healing takes place without scar tissue, the entire denuded area being covered with squamous epithelium, and presenting an appearance not unlike the original normal cervix, soft and smooth. It is my opinion that every cervix, where the deeper structures are involved in the process of disease, should be dealt with in this manner, and, furthermore, I believe that malignancy of the cervix would lose its present place of prominence in the incident of cancer. In any event, when operating upon a diseased cervix, it should be the invariable rule to remove a piece for biopsy. As in the case of a breast tumor, to advise a case of chronic endocervicitis to "watch and wait" is to invite disaster.

After the development of uterine malignancy, but one course is open. The cervix must be destroyed as thoroughly and completely as possible with the cautery, a massive dose of radium applied and, as soon after as the condition will permit, perform a pan-hysterectomy. Statistics give a mortality of from thirty-five to seventy-five per cent, which, of course, justifies the effort at rescue.

It is generally thought that excessive bleeding at the menopause is strongly suggestive of cancer. In my limited experience, it has most frequently been caused by a fibroid. This is the case when one who has gone past the climacteric several years without any sign of blood, and suddenly and unexpectedly has a copious hemorrhage, this

case is quite apt to find that an old and neglected endocervicitis has become malignant. It is with the hope of forestalling just that tragedy that I make this appeal for the early radical treatment of the chronic cervix.

At the risk of taxing you beyond endurance I wish to relate to you an observation of a phenomenon which has made a very serious impression upon me. I am not unmindful that the limitations of my experience as well as my small sphere of activity would not count for much as statistics are measured, yet I have seen this often enough in the thirty years that I have studied medicine to be impressed with the belief that there is something to it. The picture is one of an individual who has reached midlife. He has not been a strong, hardy man. Yet he has not, by any means, been an invalid. Most of his life has been spent making every effort to keep well and remain at work and meet his obligations. It is generally accepted by all who enjoy his friendship that he was never a strong man. He has been moderate and temperate and careful. All at once, as if by magic, with no change in daily routine and with no explanation for it, he blooms out in health. He gains in weight and strength and is so happy he is literally bubbling over. His friends notice his improved health and rejoice with him. This goes on for a few months or a year—about long enough for all acquaintances to become accustomed to the new order. And, presto! One night, like a bolt out of a clear sky, he develops abdominal pain, the doctor is called, he feels a mass, the patient then recalls that, for the past few weeks he has not been feeling as well as usual. Gall-bladder, gastric cancer, carcinoma of colon, carcinoma of liver! Cancer has developed somewhere. It would seem to be in line with "the theory of cancer" expressed by one authority (Bulkely) that every individual, at birth is given, by nature, a "dormant cell." It may be situated anywhere in the body, but remains quiescent until he reaches that inexplicable period when for some unaccountable reason, he bloomed out and, for the first

time in life, enjoyed robust health—and the dormant cell, likewise, bloomed out—into a malignancy. His hilarity and joyousness and exhilaration over his improved health served as a screen behind which the early signs of cancer were so successfully hidden that they did not attract his attention until it was too late.

Cancer does not develop suddenly in normal tissues, but always slowly in tissues that have been altered by inflammation and disease. It thus appears to be an accepted fact that the major forms of cancer which are the cause of the great majority of deaths, are due to controllable factors, usually some form of chronic irritation.

I may be regarded as radical. To this indictment I plead guilty, but I try to justify it with the conviction that the rapid, certain course of cancer is a condition which requires radical thought and action if you expect results.

MENTHOL-BORACIC ACID SOLUTION*

LOUIS LEVY, M. D.
NEW ORLEANS

Were it not for the unusual success that has been my fortune to encounter with the combination of antiseptics which I believe I was the first to use, I would hesitate bringing such a fundamental subject before this body. But after reviewing the literature I note that in different periods cognizance of special antiseptics has been taken by eminent surgeons and teachers. The antiseptic value of boracic acid was first advocated as a surgical application by Lord Lister. Employing it as a dressing for wounds in the form of boracic acid lint, a cold saturated solution as a lotion, and in ointments, he found it most efficacious as an antiseptic application. Its part in the antiseptic system has subsequently been emphasized by many surgeons. Dr. Denegre Martin has stressed the advantages of boracic acid for treatment in infections of the hands.

In about 1912 mercury bichloride solution

*Read before the Orleans Parish Medical Society June 12, 1933.

was generally used as a moist dressing. After the application of iodine, it was noticed that a slough occurred at the site of the iodine application when mercury bichloride was used. I had always used boracic acid after the use of iodine as an antiseptic solution, which served my purpose only fairly well. Feeling that mercury bichloride was entirely impractical, I resolved to attempt an improvement on boracic acid solution.

Impressed by the relief from Menthol in its use in nasal sprays, douches, and ointments, I decided to combine menthol and boracic acid in sufficient proportions for the antiseptic value of both. Having tried various proportions, I found it most efficacious in boracic acid, two grams to a pint and menthol one fourth of a grain to a pint. In these proportions its antiseptic value approached the ideal in the comfort rendered to the patient. The addition of menthol in this solution seems to increase the antiseptic value many times. This combination is not only of great antiseptic value, but also the refrigerant effect of menthol lessens pain, gives a sensation of lowered temperature and also, lessens the demand for narcotics or sedatives in all severe cases in which it was used.

The types of cases in which menthol-boracic acid solution were used were: staphylococcal infections, streptococcal infections, colon bacillus infections, deep infections such as postoperative treatment for bone felons and palmar abscesses, skin infections such as eczema that did not respond to other types of treatment, ulcers of the leg, infected lacerations, and traumatic infections.

The treatment in all these cases must be carried on as with other solutions; that is, removing the underlying cause, putting parts at rest, and establishing sufficient drainage. The solution in all cases must be in thorough contact with every part of the infected area, which is best accomplished by continuous drip with solution of atmospheric temperature. In the winter the temperature must be that of the atmospheric temperature of the heated room. As a solution heated sufficiently to kill organisms will destroy tissues, cool solutions were used in all of this work. All cases should be copiously dressed with gauze and immobilized. The continuous drip

supplies the antiseptics and keeps fresh menthol pouring on the infected area, and by its action gives a sensation of lowered temperature and lessens pain.

Comparing those cases treated with menthol-boracic acid solution with those treated with Carrel-Dakin solution, potassium permanganate solution, mercury bichloride solution, normal saline, iodine solution, and magnesium sulphate solution, it was found that more beneficial results were obtained by the use of menthol-boracic acid solution than by the use of other solutions. In many instances of lacerated or incised wounds, after the incisions were nearly pus free, sutures were taken with uniformly good results.

The following cases will illustrate the efficacy of menthol-boracic acid solution.

Mr. F. A., admitted January 22, 1923. Infected right hand, middle finger, following punctured wound caused by thorn on Christmas tree on December 24, 1922. He had been treated with various solutions and splints and was in serious condition when brought to Hotel Dieu, January 22, 1923. Examination revealed infected right hand, forearm and arm, extending from tips of fingers to axilla. Menthol-boracic acid treatment started and after two days, many pus pockets drained, and tubes inserted, improvement noted after second day of treatment. Multiple incisions made in arm and forearm on third day. Patient gradually improved, and was discharged April 13, 1923. Extent of infection can be realized when it is shown that at the end of the treatment patient had many ankylosed joints, and could only use fingers and elbow joint with limited motion.

Mrs. E. R., admitted March 20, 1931. Streptococcal infection of left hand following a puncture by safety pin. Patient previously treated, incisions had been made on dorsal and palmar surfaces, incisions extending from palm of hand to middle of forearm. With the usual splinting and dressings, menthol-boracic acid treatment instituted. Improvement noted in twenty-four hours. Temperature reduced, patient more comfortable and angry appearance abating. Patient remained in hospital twelve days. Treatment was continued at office. Patient was discharged in about forty-five days with partial ankylosis of fingers and wrist.

Mr. N. C., infected hand following fish fin puncture wound of index finger; hand angry, swollen; evidence of palmar abscess on admission to Hotel Dieu. Patient's temperature 103°, index finger had been drained by another surgeon, and various solutions and ointments had been used on hand. Menthol-boracic acid treatment started, palmar ab-

scess drained next day after admission. Patient showed improvement after first day, and was discharged after about one month's treatment during which time there was a loss of bone of first phalanx of index finger.

Many cases of minor infections that respond to treatment within a week have not been tabulated, the results just as gratifying as the more serious ones. Many cases of eczema have responded to menthol-boracic acid treatment. After many failures with other solutions, this solution can be placed in the armamentarium of dermatologists as the following case will illustrate.

Miss J. C., had an eczema of unknown origin of hands which was treated by many dermatologist with no success. Menthol-boracic acid application cleared it within a week. Whenever there is a slight recurrence it is promptly cleared up by the application of this solution.

Ulcers of the leg can easily be made ready for treatment of the underlying cause or grafting by the application of menthol-boracic acid solution.

Erysipelas and infections of face have been successfully treated with menthol-boracic acid solution.

Mrs. E. D., was seen by me on October 4, 1929. Her face on right side swollen to about twice its normal size following the pricking of a pimple on nose about one week previous. Had been treated with application of ichthyol and reported that she was getting progressively worse. Temperature at time of examination was nearly 104°. Applications of menthol-boracic acid solution started, her whole face being covered with several thicknesses of gauze. Dressings were kept soaked. Improvement was noted within eight hours. She progressively improved, and slough was removed in part from alae nasi on fourth day after treatment was started. She was under active treatment for about two weeks. After infection was overcome dry sterile dressings were applied for one week longer.

CONCLUSIONS

Menthol-boracic acid solution has proved to be a most satisfactory solution in all types of infections, with the exception of gas bacillus infections in which cases it has not been tried. It gives comfort to patients, it lessens the use of opiates, and shortens the course of treatment.

BIBLIOGRAPHY

- Atkinson, F. P.: The uses of boracic acid, *Practitioner*, Lond., 24:254, 1880.
- Atkinson, F. P.: Some of the uses of menthol, *Brit. M. J.*, 2:433, 1918.
- Birch, J.: Fatal poisoning by borax, *Brit. M. J.*, 1:177, 1928; also, *Lancet*, 1:287, 1928.
- Brose, L. D.: Death following the external use of powdered boracic acid, *Med. News*, Phila., 43:199, 1883.
- Cane, L.: On boracic acid as an ordinary dressing for wounds, *Lancet*, Lond., 1:734, 1876.
- Fox, N.: Menthol, Effect on nasal mucosa, *Arch. Otolaryng.*, 11:48, 1930.
- Godlee, Rickman J.: On the antiseptic system, *Lancet*, 1:694, 1873.
- Goldstein, H. H.: Useful irrigating fluid (boracic acid and iodine) for septic wounds, *J. M. Soc. New Jersey*, 28:492, 1931.
- Greene, W. W.: Boracic acid in surgery, *Boston M. and S. J.*, 103:249, 1880.

Martin, E. Denegre: Injuries and infections of hand, *New Orleans Med. and Surg. J.*, 77:85, 1924.

McWalter, J. C.: Boracic acid eczema, *Brit. M. J. Lond.*, 1:1002, 1915.

Ramsdell, C. M.: Boracic acid in surgery and gynaecology, *Tr. Texas M. Ass.*, Austin, 116:128, 1886.

Wokes, F.: Antiseptic value and toxicity of menthol isomers, *Quart. J. Pharm. and Pharmacol.*, 5:233, 1932.

DISCUSSION

Dr. J. E. Isaacson: It has been my pleasure and opportunity to observe and use the menthol-boric acid solution in the treatment of infection, as described by the essayist, for 15 years. In the beginning, I was somewhat dubious as to its results, knowing that boric acid was only mildly antiseptic, and believing the action of menthol to be only one of refrigeration. The facts, however, have convinced me, and I have used the solution religiously with gratifying results in that period of time.

Dr. Levy is to be congratulated on his paper, and personally, I have found the solution to be excellent in all cases in which I have tried it.

Dr. Louis Levy: In regard to the method of application, see that it is kept in contact with the infected area all the time, by using tubes, by making incisions, by placing of gauze, or putting it even in bath as we formerly used the old bichloride bath.

I have used this solution after hemorrhoidectomies, perineorrhaphies and episiotomies, where the places are exposed, and the solution was of great benefit.

THE USE OF THE LABORATORY*

A Discussion of the Factors Which Determine the Value of Laboratory Work

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The value of laboratory work depends upon three factors, the specimen, the test, and the interpretation. The specimen must be of the right kind and must be so collected and forwarded as to reach the laboratory in good condition. Such data should accompany the specimen as properly to identify it and to indicate the test desired. There should be a brief statement of the clinical condition of the patient for this may suggest additional tests and will aid in the interpretation of the findings. That the laboratory work should be done well goes without saying.

A report on a test is not a diagnosis. A report on a throat culture, reading "diphtheria bacilli present", does not make a diagnosis of diphtheria—the patient may be a carrier and his present illness be due to some other disease. Finding of typhoid bacilli in the feces does not establish a diagnosis of typhoid fever—the patient may be a carrier. However, finding typhoid bacilli in the blood, by culture, does establish a diagnosis of typhoid fever. A negative Wassermann test does not exclude syphilis in suspected primary infection unless the lesion has been present for six weeks—hence the time element enters into the interpretation of the test. On the other hand a positive Wassermann test under the same conditions would not prove that the present lesion was syphilitic, for syphilitic infection may be of long standing and the lesion be due to something else.

A detailed consideration of some of the more frequently used tests will demonstrate more clearly the importance of the above mentioned factors.

Wassermann Test. The Specimen: If blood is drawn with a syringe, which has been boiled, and put in a bottle, which has been sterilized, it will be contaminated in at least one third of

the instances. This procedure may be surgically aseptic but it is not bacteriologically sterile. If the specimen is examined immediately or is kept cold enough to prevent the growth of bacteria, this slight contamination is of no consequence. But if the bacteria multiply because the specimen is not examined immediately or is not kept cold, as when specimens are sent through the mail, especially in warm weather, the growth of these contaminating bacteria produces changes in the blood which cause it to become hemolyzed or anticomplementary, these changes being easily detected, or to give false positives which cannot be detected in the test. For these reasons blood collected with a syringe and put in a bottle is not satisfactory for the Wassermann test unless precaution can be taken to prevent the growth of contaminating organisms. Keidel tubes should always be used when specimens are to be sent some distance to the laboratory. Blood in Keidel tubes practically always reaches the laboratory in good condition.

Identification of the specimen: One would think it would not be necessary to mention this. But frequently we receive specimens without the patient's name or other mark of identification and occasionally one without the physician's name. The clerks have become very expert in placing these specimens but when there is not even a post mark they simply must throw up their hands.

Interpretation: A great deal of work has been done comparing one test for syphilis with another, but not so much has been done in interpreting, to the physician, the findings in any particular test. Each physician's experience with the test is limited. Just think what could be done in a laboratory running as many as 33,000 tests a year as the State Board of Health Laboratory does, if sufficient data accompanied each specimen. First they could be grouped for analysis into treated and untreated cases; and, in treated cases, according to the time elapsed since the last treatment. Then in the untreated cases, into very early cases, suspected primaries, cases with active lesions in which a differential diagnosis is necessary. And finally cases with indefinite symptoms which may or may not be due to syphilis. In the primary stage the test is negative for a time

*Read before the Section on Hygiene and Public Health at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 11, 1933.

after the appearance of the lesion. If in a suspected primary lesion, the test is negative, if the time elapsed since the appearance of the lesion is given, a statement of the probable significance of a negative test in that particular case could be given. If lesions other than primary are present and the test is positive, the patient might have syphilis but the lesions be due to some other cause. Finally in old and relatively inactive cases the Wassermann test becomes negative. If the data are supplied, in a particular case, an opinion could be given as to the relative value of a negative test. Of course interpretation of laboratory findings cannot be made by technicians but must be made by one with medical training.

Culture of Feces For Typhoid Bacilli. It is easily demonstrated that typhoid bacilli in feces will be killed out by the growth of colon bacilli. Therefore unless the specimen is to be examined immediately, something must be added which will inhibit the growth of colon bacilli and which will not destroy the typhoid bacilli. Thirty per cent glycerine has been found satisfactory for this purpose. But the proportion of feces to 30 per cent glycerine must be right. If there is too much feces, the growth of the colon bacilli will not be inhibited and a negative finding on such a specimen is worthless. Too often too much feces is added. The quantity of feces should be approximately one fourth that of the 30 per cent glycerine. If formed, the feces should be broken up and thoroughly mixed with the glycerine. Unless the physician will see to it that the specimen is properly collected it is hardly worth while sending it to the laboratory. Again if the specimen is not placed in glycerine immediately when passed but is allowed to stand until growth of colon bacilli has taken place, obviously a negative test is of no significance. To insure that the feces is placed in the glycerine promptly it should be insisted upon that the feces be placed in the glycerine *while still warm*.

Finally it is reasonable to suppose that if the intestinal contents are passing through the intestine slowly there will be an increased growth of colon bacilli with presumably a deleterious effect on the typhoid bacilli. Therefore, tentatively, I am stating that unless the intestinal

contents are moving fairly rapidly, a mild saline cathartic should be given. I believe that if this procedure were carried out the finding of typhoid bacilli in typhoid carriers would be more constant than now reported. Unless the physician personally checks on the collection of the specimen, too often it will not be done properly. As to the significance of a negative finding in a case of suspected typhoid fever: In a rather small series of cases Hiss found the cultures positive; 1st day to 10th, 10.7 per cent; 11th day to 20th, 50.0 per cent; 21st day to convalescence 81.2 per cent. Consequently the evaluation of a negative finding must take into consideration the time elapsed since the onset of the disease. I am inclined to believe, with proper collection of specimens and improved laboratory technic, the percentage of positives could be increased.

At this point, just a word about the laboratory. The idea is too prevalent that almost any one with a little training can do good laboratory work. Just as much depends upon native intelligence, broad fundamental education, special technical training, experience, and constant practice as in the clinical practice of medicine. Technicians can be used in the laboratory to advantage, just as assistants can be used by physicians and surgeons. Technicians are those who are trained to carry out a certain procedure precisely as stipulated. The decision as to what procedure is to be used should be made by one of greater education and experience and, in a clinical laboratory, interpretations should be made only by one with medical training.

The culture of feces for dysentery bacilli is the same as that for typhoid bacilli practically up to the last step so that a test for typhoid bacilli is also a test for dysentery bacilli and vice versa.

The presence of typhoid bacilli in the feces does not absolutely establish a diagnosis of typhoid fever. The patient may be a typhoid carrier and the present symptoms be due to some other cause. But this would not occur very often. The same is true in the case of diphtheria or other carriers.

Agglutination Test and Blood Culture For Typhoid Fever and Agglutination Tests For

Undulant Fever and Tularemia. In our laboratory we discourage the sending in of a drop of dried blood for the Widal test for typhoid fever. The test is not now as valuable as formerly from a diagnostic standpoint since so much typhoid vaccine is being given, as the typhoid vaccine will cause a positive test. The length of time the test will remain positive after administration of the vaccine is variable, probably not very long. Now then if we had complete data on all specimens on which a Widal test is done we would have enough material so that we could state, in terms of percentages, the varying length of time the test remains positive and evaluate the significance of the test in each particular case. Another illustration of the importance of supplying data with specimens.

In place of the drop of dried blood we are insistent upon a Keidel tube full of blood with the data slip completely filled out. Then we do an agglutination test, which is to be taken for what it is worth in the light of what has just been stated, a blood culture for typhoid bacilli, an agglutination test for undulant fever, and if there is enough serum left, a Wassermann test. If there is anything on the data slip that suggests the possibility of tularemia, we make this test also. No blood culture is made unless the blood is in a Keidel tube. Blood in bottles or test tubes will not do, the reason for which is indicated in the discussion of specimens for the Wassermann test.

Now as to the interpretation of the findings. Park and Williams state that in typhoid fever the agglutination (Widal) test is positive in the first week in 20 per cent of the cases; in the second week, 60 per cent; in the third week, 80 per cent; and in the fourth week, 90 per cent. This shows how little reliance can be placed on a negative test in the early stages of the disease, just at the time the clinician is most in need of aid in making the diagnosis. On the other hand Park and Williams state that typhoid bacilli were found in the blood (culture): in the first week in 89 per cent; second week, 73 per cent; third week, 60 per cent; fourth week, 38 per cent; and after the fourth week, 26 per cent. This shows how much more valuable, in the early stages of the disease, the blood culture is than the agglutination test. Furthermore the

finding of typhoid bacilli in the blood establishes an absolute diagnosis of typhoid fever and is the only test that does.

As on every specimen, in a Keidel tube, for typhoid is run a test for undulant fever, so every specimen for undulant fever of tularemia is subjected to the agglutination test and blood culture for typhoid fever. By doing this we have diagnosed undulant fever when typhoid fever only was suspected and have diagnosed typhoid fever, by blood culture, when undulant fever only was suspected. Every now and then we find a positive Wassermann when the other tests are negative.

A word about blood cultures in general. If the specimen is taken when the temperature is normal it will always be negative and consequently the test will be of no significance. In cases in which the temperature fluctuates the specimen should be taken when the temperature is at its highest. If taken when the temperature is relatively low the culture will in all probability be negative. On the data slip should be stated the general course of the fever and the temperature at the time when the specimen was taken.

Time permitting, it might be profitable to discuss in detail the collection of specimens for all of the various tests, the data which should be supplied, and the interpretation of the findings, also to classify the diseases indicating what tests would be of value in each disease. But perhaps the above is sufficient to demonstrate the importance of the various factors which determine the value of laboratory work.

What has been said applies particularly to laboratories which receive specimens from the outside. In a hospital laboratory the pathologist is able to see to the proper collection of the specimen, to obtain such information as he desires, and also to advise as to what tests would be of most value in a particular case.

DISCUSSION

Dr. L. S. Lippincott (Vicksburg): I think that Dr. Kemmerer has brought us an excellent paper. I can only agree with everything he has said. I take no exceptions to anything. I am glad that he made the point that interpretation of laboratory examinations should be made by a person with medical training. I would like to add a little to that and say a person with medical training,

who is devoting most of his time to laboratory procedures. Every doctor or every person with medical training does not attempt to perform gall bladder operations or do brain surgery. In the same way every medical man is not capable of interpreting laboratory results. Especially is this becoming more and more true as the procedures become more complicated. It is no disgrace when you have a patient that you think may need laboratory examinations to ask the man who is doing laboratory work as to what examinations would be of value.

Too often also we forget that the patient belongs to the clinician and laboratory aid should be asked only after the clinician has made up his mind or nearly made up his mind about what that patient has; that the patient may have one of several conditions and assistance and advice is desirable in the decision. The laboratory should not take the place of the careful physical examination or a careful history. It does not take the place of the physician. Too often there is a tendency when a patient comes in and the diagnosis is not evident to turn him over to the laboratory with the idea that the laboratory will give a hint, will make the diagnosis. That is not a good method.

In regard to the technician, there is too much tendency to think that any girl who has been shown how to test urine is able to make a diagnosis. If you were working constantly with these girls you would see the great necessity of complete training, and experience in a technician counts most of all. There are no two patients just alike, as you know, and in the same way there are no two laboratory specimens submitted exactly alike. That girl may go on doing the same thing for a long time, but if you give her something different to do, unless she has had experience, she will be lost. You teach your nurses to take blood pressure, to take temperature, may teach them to take your histories, but you do not expect those nurses to tell you the blood pressure findings mean hypertension or that fever means scarlet fever or measles. The diagnosis is your job. In the same way we do not expect technicians to make diagnoses for us. I have been interested in training technicians for some years. Before that time I was trying to teach laboratory work to medical students. At first we had a course of 14 months for laboratory technicians. We soon found that was not enough, and now we require them to spend two years, and often they should have more. When it comes time to give a certificate to a girl we often rather hesitate to say that she is capable of going out and working without supervision. The American Society of Clinical Pathologists has recognized this fact and has established a national registry of technicians. If a technician is registered and

has a certificate each year, it stands for something. Now it is required that before a person shall be allowed to take laboratory training, she shall have one year of college work in which special attention shall be given to biology and chemistry. We should have more registered technicians because it really means competency in training.

Just a word in regard to the taking of specimens. It means all the difference in the world whether you are going to give your doctor an accurate finding or not. We had a letter come in from a doctor asking for some swabs because he said he thought he was having some diphtheria cases. We sent the swabs and they came back in a day or two. We planted cultures and everyone of them was sterile. This seemed unusual and we went back to the tubes the swabs had come in and found on the outside of the glass some smears. We washed off the smears and planted cultures from the washings. Four out of six showed diphtheria bacilli. The doctor had put the tubes and all down in the throats. That is extreme, but every one does not know how to take specimens properly and to the best advantage. If you do not know, it is worth while asking someone to do it for you.

CLIMACTERIC HYPERTENSION*

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This paper deals with those cases of hypertension occurring in women complaining of disturbances related to the cessation of menses which are either just beginning or just over.

Most authorities interested in this period of life and its pathology agree that there is a condition known as climacteric hypertension. The literature on this subject is scanty, somewhat obscure and frequently contradictory. Most works on circulatory pathology rarely ever mention this form of arterial hypertension. In general the opinions favoring frequency of climacteric hypertension are more numerous. According to the writers on the subject, increased blood pressure during the menopause may be observed in over 50 per cent of these cases.

*Read by title before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

The upper limit of normal systolic pressure in the menopausal age is 145 to 150. Life insurance company statistics list average normal systolic pressure in woman 45 years of age at about 130 mm. of mercury; diastolic normal 90 to 100. Patients with repeated readings over 150 mm. of mercury by several readings are considered hypertensive.

Clinicians unanimously admit two types of arterial hypertension, one linked with the vascular or renal apparatus, accompanied by symptoms of lesions of those organs, the other in which hypertension is the only phenomenon, frequently unaccompanied by subjective symptoms and in which after careful examination and study there cannot be disclosed any lesion of the vascular or renal apparatus.

The characteristics of essential hypertension occurring during the menopause are:

(1) The variability or fluctuation of the hypertension from hour to hour and day to day, through the influence of excitement, work, fatigue, digestion, etc.

(2) The diastolic pressure is not increased to correspond with the systolic; there is a high pulse pressure.

(3) There is little evidence of increased tension by palpation of the arteries; one is surprised by the high reading of the sphygmomanometer.

(4) The absence of subjective symptoms in the majority of women. In some cases headache, nausea, palpitation (especially at night) and ear noises are present.

(5) There may be a hyperglycemia and a low carbohydrate tolerance test, this being quite constant.

(6) Blood pressure can be influenced by the injection of papaverine (Barath).

As to the pathogenesis of the essential hypertension, putting aside the possibility of an incipient chronic nephritis or arteriosclerosis which with out present methods of examination we are unable to disclose, there are several hypotheses. Maranoms hypothesis, according to which it depends on the hyperfunction of the medullary portion of the suprarenal is one. Galata supports this theory reporting a case showing immediate and per-

manent improvement following unilateral suprarenalectomy. Crile suggest denervation of the adrenals for similar conditions.

Culbertson has assumed that the hypophysis might play a large part in the mechanism of hypertension. Decio is inclined to a hyperfunction of the suprarenal cortex. Recent investigations of Gluy, Donzelet, and Kistinios blame an insufficient secretion of the pancreas. Gutman, Hopkins, and others feel similiary about the thyroid. Hare, Sheen, and Vincent, knowing the hypotensive action of the ovary, feel that the glands failure would predispose to a hypertension.

The hypothesis of suprarenal hyperfunction seems most plausible. An evident antagonism exists between the interstitial ovarian function and that of the suprarenalthyroid function. There is also a direct connection between the suprarenal function and the regulation of arterial pressure. However, one cannot deny the correlation between the menopausal syndrome and the decreased ovarian function of the menopause.

The characteristics of hypertension occurring during the menopause associated with arteriosclerosis and renal disease are:

(1) The hypertension is not variable but is constant. The highest readings are found in this form and as a rule are persistently high.

(2) The diastolic pressure is increased in proportion to the systolic. The pulse pressure is lower in this type.

(3) There is evidence on examination of arteriosclerosis or impaired kidney function.

(4) Decompensation, angina pectoris, suffocation, headaches, psychical symptoms, and mental weakness are more noticeable in this group.

(5) This type of hypertension does not disappear with the menopause but is continuous.

(6) On examination, changes in the eye grounds are the rule. There are signs of kidney insufficiency, a night and day polyuria with a low specific gravity. Casts are almost regularly found; albuminuria more frequently than in essential hypertension. The blood shows secondary anemia in contrast to the

other types. There is regularly a nitrogen retention.

ETIOLOGY

As to the causes of this type of hypertension during the menopause aside from the arterial and renal damage due to acute and chronic disease there are mentioned numerous others. Maranon thinks the hyperadrenalemia associated with other factors also contributes to the vascular lesions. He feels that the hypercholesterinemia in the climacteric due to hyperplasia of the adrenal cortex would favor the production of an arteriosclerosis. Heredity seems to influence hypertension. It has long been noted that different members of the same family show a tendency to hypertension (McElroy). The stocky built, short neck, tendency to obesity is recognized as a family trait. Volhard and Fahr are inclined to accept the possibility that the cause may be found in some physiologic product of metabolism which acts on an arteriosclerotic basis. Uterine fibroids have long been thought to cause a hypertension, but Polak, Mittell and McGrath, after long study, have concluded that such is not the case, but that in those cases in which hypertension existed with uterine fibroids the patients were over forty years of age or were subject to vascular or renal disease.

Another cause of a considerable number of cases of hypertension during the menopause very probably is the toxemia of pregnancy. After a careful study of the literature I find that this factor is given very little or no consideration by numerous authors.

CLINICAL OBSERVATION

In the past four years I have observed 34 cases of hypertension occurring during the menopause. Of these eight could be classed as essential hypertension, the remaining 28 as the other type. Of the eight cases of essential hypertension four had borne no children, one did not give any history of toxemia of pregnancy, three had definite histories of toxemia. Of the 28 cases of hypertension showing lesions of the vascular or renal apparatus, there were four women never having born children, two cases giving no history of toxemia of pregnancy and seven-

teen cases giving a definite history of toxemia of pregnancy. Of the two groups there were 20 out of 34 cases or 58.8 per cent giving a very definite history of toxemia of pregnancy. I realize that this series is too small to draw any definite conclusions and that the diagnosis of these cases was made on history alone but the figures are significant and the subject would merit study in a clinic where more cases are available for study. I might add that my interest primarily in gynecology and obstetrics led me to enquire as to the history of toxemias of pregnancy in these cases.

Peckham and Stout in a series of 545 consecutive deliveries of toxemic patients at John Hopkins Hospital, excluding eclampsia and vomiting of pregnancy, report 66.6 per cent have been examined from four months to four years later and 40 per cent were found to have a definite nephritis. This was found to be more frequent in the old age group and among multiparas.

Harris, in a study of 55 out of 83 cases of late toxemia of pregnancy returning at the end of one year, found only 22 were normal; the remainder showed signs of chronic renal involvement, twice as great in multiparas as in primiparas. In his experience renal damage is more likely to follow pre-eclamptic toxemia than eclamptic, the former running a more prolonged course.

Hughes finds that patients showing marked edema and albuminuria during pregnancy are more likely to have permanent renal or arterial damage. This is more marked in the multipara.

Cauvin and Herrick in studying 165 cases of hypertensive toxemia of pregnancy found that 122 or 74 per cent exhibited disease of the circulatory system from six months to six years post-partum.

Thus it is evident that it should be remembered in prenatal care of toxemic cases, that not alone do we have the responsibility of a successful termination of pregnancy for the mother and child, but the prevention of permanent cardiac or renal damage or the reappearance of the hypertensive state during the menopause.

These cases should be guarded by special medical care during pregnancy, discouraged from often repeated attempts at childbearing and observed over a period of years for evidence of arterial or renal disease.

REFERENCES

1. Barath, E.: In Menopaus. Klin. Wehnschr. 7:643-44, 1928.
2. Cauvin, J. & Herrick, W. W.: Relation of hypertensive toxemia of pregnancy to chronic cardiovascular disease. J. A. M. A. 457-59, 1927.
3. Harris, J. W.: After effects of the late toxemias of pregnancy. The Johns Hopkins Hospital Bull. 35:103, 1924.
4. Herrick, W. W.: The toxemias of pregnancy and their end results from the viewpoint of internal medicine. 111. Med. Jour. 210-20, 1932.
5. Hughes, L. H.: Sequelae of the toxemias of pregnancy from a medical point of view. Med. Jour. Australia. 11:880-81, 1930.
6. Galata, G.: Grave climateric hypertension treated by unilateral suprarenalectomy. Arch. d.mal.du coeur. 22:722-33, 1929.
7. Lehfeldt, H.: Blood pressure in menopause. Zentralbl.f.Gynaek. 50:2889-2895, 1926.
8. Magyary, K.von.: Changes in blood pressure in menopause. Monatschrift f. Geburtsh u. Gynaek. 86:31-35, 1930.
9. Maranon, G.: Climateric hypertension. Rev. franc. d' endocrinol 2:408-22, 1924. Abst. Jour. A. M. A. 84:1703, 1924.
10. Maranon, G.: The Climacteric. C. V. Mosby Co. 1929.
11. McElroy, J. B.: Tice Practice of Medicine. Vol. VI.
12. Munk, F.: Hypertension in Menopause. Deutsche med. Wehnschr. 90:403-17, 1926.
13. Nielson, A. L.: Relation of hypertension of the menopause to arteriosclerosis. Am. J. Obst. & Gynec. 15:212-15, 1928.
14. Peckham, C. H.: Chronic nephritis following eclampsia. Bull. John Hopkins Hospital. 45:176-188, 1929.
15. Peckham, C. H. & Stout, M. L.: A study of the late effects of the toxemias of pregnancy. Bull. Johns Hopkins Hospital. 4:225-245, 1933.
16. Reichman, W.: Hypertension during menopause. Deutsche, med. Wehnschr. 56:402, 1930.
17. Stander, H. J.: Medicine. 8:1, 1929.
18. Wiesel, J.: Hypertension in menopause. Med. Klinik. 20:1274-76, 1924. Abst. J. A. M. A. 83:1283, 1924.

ASPHYXIA NEONATORUM*

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Being listed as a pediatrician, I first want to offer my apologies to the obstetricians and other physicians who do obstetrics, before reading this paper on the old old subject of "Asphyxia Neonatorum". Realizing that asphyxia neonatorum is merely a symptom

of disease, being caused by a variety of conditions, however, this being so peculiarly prone to occur in the new born has lead us to almost universally accept it as a disease entity. Everyone who does obstetrics is sure to have noticed that asphyxia to a certain degree is practically always present in the newborn. It makes one think that it is possibly a physiological necessity, so we will look upon asphyxia neonatorum as a matter of degree of asphyxia, or rather a severe asphyxia beyond normal limits. For a number of years I have been very much interested in the resuscitation of the newborn and I am sure the same is constantly in the minds of every conscientious physician who does obstetrics. He should feel that at every delivery there is a possibility of respiratory failure. I trust that my humble efforts in presenting this paper will at least be the cause of more study and be a checkmate toward reducing so much of the old heroic measures which have been employed in the past toward resuscitation of the newborn and which have, no doubt, very often inflicted serious injury to the baby. While studying for the preparation of this paper, its importance was more forcibly impressed upon me when I received a report from our Mississippi State Board of Health on "Infant Mortality" by our good friend, Dr. Underwood. In studying this report, it was most gratifying to see the progress that Mississippi is making toward the reduction of infant mortality, being next to the lowest in the southern states. However, it is very disappointing to see from these figures that 28.6 per cent of our deaths in infants occurred under one day and 52.6 per cent under one month, which makes one wonder as to whose door this blame shall be placed. It is peculiarly interesting to note that premature births in the State of Mississippi total 358, injuries at birth only 80, unknown 984. It is also noted that not only 728 died the first day, 294 died between the first and sixth days and 149 between the seventh and thirteenth days. Since the above figures must be facts, it proves to us that some monstrous enemy is at our door and we must use every known instru-

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

ment of warfare in putting down a barrage against this enemy, especially towards lowering the number injured at birth. I know of no better words to express the means of accomplishing this than those of Dr. Underwood:

"To accomplish this important benefit to home and community life, fathers must be taught to properly evaluate the service, and mothers to place themselves under the care of a competent physician during early pregnancy. Medical students by adequate training and experience under supervision, and medical practitioners by reading, group conferences, and "brush up" courses must keep abreast of the best methods in obstetrics and pediatrics. Student nurses must receive more adequate instruction during training, and public health nurses must become better teachers in health education."

Asphyxia neonatorum in the past has been looked on as a condition of the newborn in which there is subaeration of the blood, producing oxygen lack and carbon-dioxide excess. This is now considered by many to be a misconception, claiming asphyxia involves both low oxygen and low carbon-dioxide content in blood and tissues. It is caused by anything that tends to retard the interchange of oxygen and carbon-dioxide in the blood and may occur before, during or after delivery. The most common causes will be discussed later. Because of the sub-aeration of the blood, the carbon-dioxide content gradually rises and the oxygen content gradually falls. From normal up to double its normal value, excess carbon-dioxide in the blood is the physiologic respiratory stimulant; at concentrations more than twice the normal value, it has an anaesthetic effect and depresses the respiratory center. Thus it is seen that when gaseous interchange is deficient enough to cause the carbon dioxide content of the blood to reach a value more than twice normal, along with a corresponding oxygen deficiency, there will be no tendency toward respiration and the baby dies unless artificial respiration is employed immediately.

N. J. Eastman, in studying the chemical

changes in the blood of asphyxiated babies, found the carbon dioxide content to be about twice that of the normal newborn infant's blood. This being the case, his argument is that the use of carbon dioxide as a resuscitating agent is superfluous and possibly harmful in as much as it may tend to intensify an already existing acidosis .

It has been customary to divide asphyxia neonatorum into two clinical types, asphyxia livida and asphyxia pallida. In reality these are only two stages of one condition, asphyxia livida being the early and asphyxia pallida being the terminal stage of the condition. The pathological changes of asphyxia are due to two primary factors, venous engorgement and aspiration of fluids. There is generalised venous distention and arterial depletion, giving rise to a condition similar to traumatic shock. Depending upon the amount of fluids aspirated, the trachea and bronchi are filled with mucus, amniotic fluid, blood or meconium. In case of asphyxia resulting from birth injury, of course other pathology will be present. This is one of the reasons for not using such heroic and drastic methods towards resuscitating the baby as you might convert a small intracranial hemorrhage into a large one with a fatal termination. I wish that every obstetrician would begin now, as a routine, to take 10 to 20 c. c. of blood from the vein of the mother and immediately inject intramuscularly into every newborn babe. I personally feel that the lives of a great many babies will be saved by this procedure.

The symptomatology of asphyxia neonatorum varies with the stage of the condition. In the first stage, or asphyxia livida, the skin is blue or livid, the pupils react to light, the inspiratory efforts are frequent and gasping, the heart's action is loud and forcible, the muscles are tense, the umbilical vessels are engorged and pulsating and the skin is warm. As this stage gives way to asphyxia pallida, the child becomes limp and pale, ceases to make respiratory efforts, the muscles are limp, the temperature falls, the heart sounds grow weak, the umbilical cord grows flabby and ceases to pulsate. The

anal sphincter relaxes and allows the passage of meconium. When this stage is reached, recovery never occurs unless prolonged and persistent efforts at resuscitation are employed.

Before birth a baby in the uterus has no tendency to breath because its respiratory requirements are entirely satisfied by the placental circulation. The respiratory center is functional but not stimulated to activity, because the carbon dioxide level of the blood is kept by means of the placental circulation in equilibrium with that of the maternal blood; the respiratory center of the mother functions so as to keep the oxygen and carbon dioxide values of the fetal blood at normal limits. Ashfeld gave sphygmographic evidence that in the latter months of pregnancy rapid superficial abortive respiratory efforts are constantly being made by the fetus at the rate of 50 to 60 per minute. As delivery occurs, the placental circulation is so interfered with that the carbon dioxide content of the baby's blood rises and the respiratory center is stimulated and respiration begins. In a normal labor this does not occur until the baby's head at least is delivered; no inspiratory effort is made until respiration is possible. The normal termination of placental circulation is due to separation of the placenta, to diminution in its area of attachment or to hemostatic effect of the immediate post-partem, uterine contraction, all of which occur only at or after the birth of the baby.

Any factor which causes earlier interruption of the placental circulation will tend to produce a subnormal aeration of the fetal blood which, unless quickly relieved, will terminate in asphyxia. Such factors are premature separation of the placenta, placenta praevia, prolapsed cord, taut loop of cord about fetal neck, tetanic contraction of the uterus, etc. Maternal conditions having the same effect are respiratory or cardiac disease, traumatic shock, hemorrhage, eclampsia, etc., which cause sub-aeration of the maternal side of the placental circulation and consequently of the fetal side. All of these factors are effective when respiration is impossible and

so death from asphyxia is inevitable unless immediate delivery occurs.

During and after delivery, asphyxia results either from depressed activity of the respiratory center or from pulmonary obstruction. Drugs such as opium or morphine, especially within the last few hours of delivery, often cause decreased irritability of the respiratory center and furnishes our argument against the use of the so-called "twilight sleep" during delivery. Similarly, the prolonged use of ether and chloroform given the mother during labor may also depress the respiratory center and inhibit respiration even when there is no other factor present. As stated before, intracranial hemorrhage not infrequently effects the respiratory center and causes asphyxia in a similar manner. If the baby makes its inspiratory effort when the trachea and nasal passages are filled with fluids, these substances are aspirated and asphyxia ensues unless the air passages are promptly cleared out. In such a case the baby will make several convulsive gasps but will eventually cease its respiratory efforts unless you remove this pulmonary obstruction.

The prophylactic treatment of asphyxia neonatorum calls for rare judgement on the part of the obstetrician, since often the salvation of the baby means grave danger to the mother. For example, in case of premature separation of the placenta or of placenta praevia, rescue of the baby is attended by much greater risk to the mother. In general, however, anything alone to improve the general condition of the mother will give the baby a better chance for life. The indiscriminate use of pituitrin during labor, aside from its danger to the mother, is a frequent cause of fetal asphyxia, as it often causes a tetanic contraction of the uterus that shuts off the blood supply to the baby. This is especially true where there has been too early rupture of the bag of water, especially is this true with the premature baby. I shall digress and repeat again, the obstetrician should be very cautious in his use of morphine and anaesthetics during labor, in view of their depressant effect on the respiratory

center of the baby. The primary aim of treatment of the asphyxiated baby is to restore the blood gases to their normal values. It is always first necessary, however, to make sure that the air passages are free from any obstructing material. Immediately after delivery the child should be suspended by the feet and the fluid in the mouth and nose aspirated by means of a soft rubber bulb. No obstetrical kit should be considered fully equipped without this bulb and a soft rubber catheter. Stripping the throat gently with the fingers from chest to chin will usually bring the fluids from the trachea to within reach of the aspirating bulb. When the bronchi are filled with fluid, Schultze's maneuver is probably the most successful one to clear them, especially when an assistant is on hand to aspirate when the baby is in the head-down position.

The existence of so many methods of resuscitation is evidence that none are without their disadvantages. The ideal method, therefore, must be one in which the danger of traumatism is at a minimum, in which the fluids in the air passages are best removed, in which the body heat of the baby is best maintained and in which the aeration of the lungs is sufficient. Schultze's method is certainly the most efficient one, but at the same time the most violent and the most chilling to the baby. However, in cases with fluid in the air passages not otherwise removable, it should be employed carefully for a short time in order to clear the bronchi. The Byrd-Dew substitution for Schultze's method is less violent but does not clear the passages nearly so well. Compression of the thorax with the hand is likely either to produce insufficient respiration or damage to the thoracic wall. La Bordes's method of rhythmic traction on the tongue enjoys much more popularity than it deserves, (I believe). The use of alternating hot and cold baths, of spanking the buttocks and feet will be successful only in mild cases of asphyxia. Cold baths should certainly have no place at all in this treatment because it is most essential that the body heat of the baby be maintained.

Too little consideration is given by most physicians to the vital part that carbon dioxide plays in respiration. It must be borne in mind that any means of artificial respiration employed at too fast a rate will lower the carbon dioxide of the blood to a level insufficient to stimulate respiration; a rate too slow will not supply enough oxygen so there is no golden rule to ascertain the correct rate. Yandell Henderson in 1928 recommended that the baby be made to breathe oxygen containing 5 to 6 per cent carbon dioxide; this would be ideal were it not for the expense and the mechanical difficulties involved. Mouth-to-mouth breathing is just as physiological and can be applied to any case. Normal expired air contains enough oxygen for the baby and its carbon dioxide content will prevent the development of apnea or carbon dioxide deficiency in the asphyxiated baby. A combination of mouth-to-mouth breathing and the Byrd-Dew method of artificial respiration seems to me to be the most rational treatment. This must be continued for at least 30 minutes or longer, or until the baby begins breathing. The baby must be kept warm, either by being supported in a tub of warm water or by being wrapped in a warm blanket. There should always be several layers of gauze between the mouth of the operator and that of the baby to prevent introduction of bacteria into the baby's mouth. Of course, this method would be very hazardous should the donor of this expired air be suffering from some acute upper respiratory infection. Care must also be taken not to make the movements too vigorous or to blow with enough force as to injure the baby's lungs. Again let me insist that you do not give up too soon as it is not uncommon to have infants recover who for several hours have appeared dead. The work of Smith emphasizes this. He demonstrated by the electrocardiograph that after a newly born infant's heart beat had disappeared clinically that it was still present. The gravity of this disorder increases with the duration and difficulties of labor and the weakness and the irregularity of the heart beat. Veit, many years ago,

showed by his statistics that the mortality after a second stage of labor of four hours or more was three times greater than when the second stage had lasted from one to two hours. Poppel estimates that the death rate of asphyxiated infants within the first week of life is seven times that of the baby born unasphyxiated. I feel that every effort should be exerted towards resuscitating these asphyxiated newborn babies. No one should ever satisfy his conscience by laying the baby aside and saying that if a baby will not breath by itself there is little need to work with it. Now I trust that since hearing this paper every physician doing obstetrics will resolve to practice better obstetrics, as I am thoroughly convinced that our infant mortality in the first days of life can be materially reduced. Diligent attention and prenatal management of the mother in order that any of the complications which would tend to produce asphyxia can be treated early and you can be ready to institute at once measures which will at least give the infant the best chance for life.

I have refrained from mentioning the special instruments of procedure such as Drinker respirator, administration of pure oxygen or its combination with carbon dioxide, as they are procurable only in hospitals. The use of the different drugs such as cobeline, caffeine and strychnin, all have their places and are worthy of trial.

DISCUSSION

Dr. N. S. Womack (Jackson): Approximately 240,000 children die in the United States annually. Of this number, 60,000 deaths are due to antenatal and natal causes. As the doctor said, 28.6 per cent of these deaths occur the first day, and a large percentage of these deaths are due to asphyxia neonatorum. This mortality rate is entirely too high.

Now the causes are closely identified with the measures of prevention, the cause as considered from the maternal side—necessity for prenatal care. In the City of Denver in 1930, out of 1000 pregnancies that were supervised from the beginning of pregnancy to delivery, as compared to 1000 pregnancies unseen or uncontrolled or not examined during that period of time, the mortality rate in the one unsupervised was 178 per 1000. The mortality rate for the babies whose mothers were closely supervised, who had been examined for pelvis ailments, diet, and all those things that make for

the health of the mother and the child, the mortality rate was 15 per 1000 as compared with 178 in the other.

There is no question but that the use of opiates—of spinal anesthesia—the use of anesthetics in large doses, greatly magnify the mortality rate among new born. We cannot get away from it. It has been proven by numerous post mortems of new born babies that die the first day and after to the tenth day, that partial atelectasis exists. If we had a collapse of the entire lung we could make the diagnosis by roentgen ray, but in a great many the lungs dilate gradually during the first two weeks of life, and it is a good idea to have on hand and be prepared to use oxygen and carbon dioxide to administer it every 12 or 24 hours to those cases who show signs of not breathing normally.

The question of the close observation of the mother during pregnancy, her nutrition and her measurements are important. The administration of oxygen and the recognition of intracranial hemorrhage are important.

Dr. Joe E. Green (Laurel): Dr. C. J. Lewis was to have discussed this paper, but he could not be present and he asked me to take his place. Dr. Riley was a little bit worried he said he was, over the fact that these obstetricians might jump on him. We are mighty thankful to him, because that is the one thing on this program we wanted. Just wait, we country doctors, and obstetricians and pediatricians are going to show you boys and surgeons something. This is a very important subject, and I had a paper I was going to give you Jackson boys on this very thing. How often have you doctors delivered a baby and it was fine, but it just wouldn't breathe, and you wondered what was the matter. It is simple, and it can be prevented, and one of the things is the maternal side of it. You had better watch your babies for asphyxia neonatorum. The treatment of it is simple, the first thing that has been emphasized, we want to emphasize again. Clear that baby and do it right. Lift that baby gently and be sure you get all the fluid out of the mouth, and then throw them over your shoulder and spank them.

There is a treatment—a simple treatment—I want to discuss with my good friend Riley, because he just doesn't know about it. Oxygen and gas is the thing. The first is to use in delivering the baby where it is possible. I do it in the home. It is not such an expensive outfit, and when the baby is delivered under gas, which is the best anesthetic in the world—give the mother plenty of oxygen, and you will not see a blue baby. If that fails you have got a simple, inexpensive remedy at home and you could get this instrument; the gas is already mixed properly in there; there is a bag that you can fill up with gas and carry it 15 miles in the country and if that baby won't breathe but his heart is beating fine, give him one good shot of gas and

oxygen and you will see him turn from the color of these chairs and in about three or four minutes he will squeal like a panther. It is a shame and a disgrace the number of babies we are losing, because we don't give them the proper care. This outfit is cheap and will take care of 23 babies.

I have been trying to get these doctors to give blood for the last 10 years, even down in New Orleans they have agreed there might be something to it. Don't say the mother won't permit it; they will let you do anything you want to. Pull out that blood and shoot it in the baby and it won't hurt him a bit.

Dr. W. P. Robert (Vicksburg): I have been sitting here trying to summon enough courage to get up and express my appreciation to Dr. Riley for this most excellent essay upon a most timely subject. After listening to Joe Green just now, it is possible that you can put up with a few remarks from me.

The importance of asphyxia neonatorum as a cause of death should be apparent to every one here. The first quarter of an hour after birth is the most dangerous period of life. The mortality here is as great as that of any month thereafter. Intelligent treatment of the newborn would make a difference of at least one life in every hundred and save more lives than the eradication of either poliomyelitis or encephalitis lethargica. Why are medical students taught at length all the intricate methods of prolonging an old man's life a few hours or days and so little, comparatively speaking, about the newborn infant who may grow up to be an Al Capone or President of the United States?

The obstetrician can do much to prevent asphyxia. The pediatrician seldom sees such a case unless it has been blue for an hour or so. The essayist has covered the causes very thoroughly, namely—

1. Brain injury.
2. Interference with placental circulation.
3. Mechanical obstruction to breathing (due to congenital anomaly or aspiration of mucus).
4. A depressed respiratory center due to drugs, anesthetics, etc.

Up until three years ago the treatment of asphyxia in the newborn was just as crude as it was one hundred and fifty years ago. Recently much more time and study has been spent in this field and many devices are sold today—Drinker's machine, McKesson's gas machine and Flagg's outfit for intra-tracheal insufflation. They cost more than they are worth. With your permission, I'll describe a very simple, practical and efficient method of handling the newborn. Hold the child by feet and milk the trachea with the finger. Clean the mouth with gauze. Wrap in a warm blanket and if not crying by this time aspirate the pharynx with a 25c rubber bulb. If the baby is not breathing freely,

some form of artificial respiration must be resorted to. If you can't buy the \$23.00 machine described by Joe Green, mouth to mouth insufflation will suffice. When the expected response is not obtained immediately, I resort to the following method, first suggested by Mathieu and Holman. Have baby in the warm blanket on a table with the head off and held extended. The right index finger is inserted to the back part of the tongue and locating the slit at its base. A small sterile rubber catheter is inserted with the left hand so that the tip eventually finds itself beneath the index finger and at the small slit. Then by slight depression of tip of catheter it is in the larynx. You may be sure that it is in the larynx by advancing the right index finger into the oesophagus. Next the catheter is pushed down 3 or 4 cms. and suction is applied. After being satisfied that the air passage is open, remove and clean the catheter. Reinsert and attach glass tube to its end, having cotton inside the tube to act as a filter. By alternately blowing through catheter and gently compressing the chest you have an efficient method of carrying on artificial respiration for hours if necessary. Of course the lungs of the newborn may be ruptured very easily. The tidal air at this time is only 40-45 c.c., and our first inflation should be around fifteen c.c. If you'll just puff into the glass tube exactly as if you were blowing small smoke rings there will be no harm done.

In certain cases, especially those due to morphine given to the mother during labor, alpha lobelin works like magic. The usual dose is 1/20th of a grain and the best place to administer it is in the umbilical vein. If the cord has been cut, milk the vein toward the umbilicus after the drug is given.

Remember that all babies should be handled as if they had intracranial hemorrhage. As emphasized by the essayist, be gentle.

It is not practical to give blood to all newborns but I have made a practice of giving 15 c.c. of whole blood intra-muscularly to all prematures.

Spinal punctures usually do more harm than good. If intracranial hemorrhage is suspected, give the blood as suggested and then wait several hours anyway before relieving the intra-cranial pressure.

Again I want to thank Dr. Riley for bringing this very important subject to our attention.

Dr. H. F. Garrison (Jackson): I would like to add a little note of thanks for the doctor's paper. It certainly is timely; also Dr. Green's and Dr. Robert's discussions. I think the doctor has gone into the subject very thoroughly, and has shown us that he has given it a great deal of thought and study. There is no doubt but what many babies have been lost all over this country, in all probability, by a little too rough treatment.

Dr. Green mentioned the simpler things. Of course, in the hospitals we have the more advan-

tageous use of our larger machines where we can measure our oxygen and carbon dioxide a little better, but in cases like he spoke of, going out in the country, it is very nice to have those things, because lots of times a lot of babies can be saved by these simple things.

The matter of the little bulb the doctor speaks of is very valuable and a lot of times is of great benefit. Dr. Riley has given us a very timely paper, and as Dr. Green mentioned we are very much interested in babies and children and should certainly feel very deeply appreciative for this paper, and also for the discussions.

I was especially interested in what Dr. Robert said about the spinal tap and the administration of blood. I think by far the most important is the administration of whole blood, the administration of the carbon dioxide and oxygen mixture is probably the two most important things and then the ordinary cares that go along with it. Too rough treatment is the thing to be condemned in these cases.

I appreciate Dr. Riley's paper and want to congratulate him, because he has certainly delivered a very timely paper.

Dr. W. H. Frizell (Brookhaven): I want to congratulate, not so much Dr. Riley on the presentation of his paper, because I had the pleasure of having him on my section once before, as the Chairman of this Section on Medicine who was wise enough to include in his excellent program a topic to be discussed that is so frequently occurring in our practice. Have you stopped to think one time, gentlemen, what a great percentage of your practice is in the diseases of children? Have you stopped to go over it, you gentlemen of internal medicine, to think what a great percentage of your practice is under 12 years old?

The other feature that Dr. Riley gave a most practical discussion on, that is how many of the babies of Mississippi are delivered at Mississippi hospitals, how many are delivered by pediatricians? We have scarcely a handful of men who lay claim to be pediatricians in Mississippi. That is itself a newborn child in the Mississippi practice. These things must be made, and there is one subject which is largely preventive—I am sure we don't pay enough attention to diet in the expectant mother. How often do you see a mother who is probably in the early months of pregnancy—who soon gets over her nausea and begins to pick up weight. Follow them, watch them gentlemen, don't let them gain too much. They may have a large pelvis, but you let them indulge too freely in carbohydrate and take on fat and you are going to have a most difficult delivery. Take that into consideration.

I want to say one thing about pituitrin—a Godsend in obstetrics, but it will not do to use indiscriminately; it will not do to use irrationally, but

a Godsend to mothers if used discreetly. I want to add that often I have seen some fine attendants at hospitals use ice. Give me hot water, hot towels. After the head is delivered, keep your hot applications on your child's head, and then make the child's head dependent and don't be too rough about it. If these little things will be watched I think we will add a great deal to bringing Mississippi cut and making it still higher. Only Arkansas is ahead of Mississippi in the South in this great work of bringing down our death rate in infants.

Dr. Riley (closing): Just one other point which is of greater importance than many doctors seem to think. Do not give up your efforts towards resuscitation of the newborn too soon. I have heard good doctors make the remark that if the newborn baby failed to breathe of its own accord there was no need for help on the doctor's part. Never be guilty of putting the baby aside without offering your assistance toward helping this baby to breathe. It has been shown by the electrocardiograph that newborn babies', although clinically dead, hearts were still functioning as long as thirty minutes thereafter. Remember your teachings towards the resuscitation of a drowning person, and do not give up too soon.

I wish to thank everyone who kindly entered into the discussion of my paper.

TUBERCULOSIS OF THE EYE: A SYNOPSIS OF THE CURRENT LITERATURE*

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The subject assigned to me was iritis, but our chairman was generous enough to suggest I might broaden the subject in any way I should wish. It is hard to divorce the iris from the other parts of the eye in discussing tuberculosis. I shall, therefore, in my remarks include some observations on ocular tuberculosis in general, while quoting eminent authorities on the whole subject.

Finnoff¹: "1. Acute tuberculosis of the eye is rarely recognized as a distinct clinical entity in ophthalmic practice.

"2. The clinical appearance of acute tuberculous, iritis is usually similar to

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

acute iritis from causes other than tuberculosis, although it is likely to run a milder course.

"3. When acute tuberculous iritis occurs it is usually an early symptom of the chronic form of the disease.

"4. Acute relapses often occur in the chronic form."

"Tuberculosis of the iris, like tuberculosis in other parts of the body, is essentially a chronic disease. It is characterized chiefly by the formation of nodules in the iris stroma, deposits on the posterior surface of the cornea that resemble cold mutton fat, and eventually the absorption of iris pigment. The diseased process is rarely confined to the iris but is usually associated with tuberculosis of other parts of the uveal tract.

"Without the presence of nodules in the iris it cannot be differentiated clinically from other forms of acute diffuse iritis. The only means available for accurate diagnosis is histological examination or animal inoculation of excised iris tissue. This is obviously impracticable in most cases.

"In the nodular form one occasionally sees an acute onset, and in the beginning of the disease the inflammation resembles the iritis that occurs in focal infections, syphilis, and so on. The pain, photophobia, and other symptoms may be less severe in tuberculosis, but in other respects the symptoms may be the same.

"In a few weeks, however, so-called mutton fat deposits appear on the posterior surface of the cornea in the tuberculous type, and nodular thickenings appear in the iris stroma or on its surface. Careful search with the corneal microscope reveals evanescent grayish nodules at the pupillary margin of the iris."

In his experiments with two hundred rabbits Finnoff⁴ found conjunctivitis in all cases that had keratitis. Also some had ulcers to develop in the conjunctiva and lids, and in nearly half of these tubercle bacilli could be found in the secretions.

He describes the choroiditis patches: Ill defined oval patches, which were lighter in color than the surrounding fundus, were the first changes which occurred. These soon became

yellow in color—pigment granules began to appear on the surface of the masses, and the tubercles became clearly circumscribed. The pigment which was seen on the surface of the tubercle gradually moved toward the periphery of the lesion and was deposited there. In the atrophic stage the lesions were seen as brilliant white, round or oval areas, with a few pigment granules scattered over the surface and pigment banked up at the margin of the lesion or as irregular peppered patches of pigment. Often localized detachments of the retina occurred over the choroidal tubercles. These were seen as brilliant pearl-like areas in the fundus.

"The first objective symptoms are seen in the iris, next in the cornea, then the conjunctiva and lids, and then the choroid. The typical iris findings are ridged iritis and caseous tubercles. The tubercles of the iris usually have blood vessels running over their surface."

Dr. Edward Jackson,⁴ in discussing this paper, says: "Taking the large number in any community that are infected to some extent with tuberculosis, the cases presenting ocular lesions are unusual, or even rare. Repeatedly the fact has been brought out—that where the diagnosis was based on tuberculosis of the eye, the patients were found to be tuberculous elsewhere."

Jackson⁵ also at another time has this to say: "At first there is no inflammatory hyperemia excited, to oppose the process of tubercle formation—It is one of the dangers of tuberculosis that vascular reactions come late."

Verhoeff²: "Chronic tuberculosis of the iris is coming to be recognized as a common condition. Small tubercles, often visible on clinical examination, occur in the iris and can sometimes be found microscopically in a piece of iris removed by iridectomy for secondary glaucoma. The tubercles are composed of epithelioid and giant cells. The onset of the iritis is insidious and painless. Conglomerate tuberculosis of the iris is extremely rare. I have seen it in only two cases clinically. The condition occurs exclusively in young persons."

Regarding a case of acute iritis that he reported he stated: "I have never hitherto observed microscopically the type of iritis found in this case. The features of the case especially

noteworthy were the rapid onset with pain and congestion, the fibrinous exudate in the pupil, and the active exudation of macrophages from the posterior surface of the iris in the vicinity of the lesions. The clinical picture was that of an acute 'rheumatic' iritis.

"This case, therefore, strongly suggests that some, possibly many, cases of acute iritis supposed to be due to dental infections and the like are really tuberculosis in origin. Certainly, in any case of acute iritis in which there is recognizable pulmonary tuberculosis, the iritis should now be suspected to be tuberculosis."

In reporting a case of localized chorioretinitis in which the globe was enucleated and studied microscopically³ he says: "In a typical early case, there is seen in the fundus a rounded or oval, almost white, slightly elevated area with ill defined margins, which may be about the size of the optic disc or several times larger. Within this area, the retinal vessels may be partly or wholly obscured, while the vessels approaching it may show white mantles and apparently constricted lumina. Occasionally, small hemorrhagic extravasations are seen within or adjacent to the area. In this vicinity, a number of small white spots may be observed, and rarely there is a smaller area nearby, similar to the larger one. The vitreous is filled with fine opacities. Later, there may be moderate ciliary congestion, desmetitis, and, in severe cases, posterior synechia. A delicate exudate may extend into the vitreous from the porus of the optic disc. The area becomes more or less pigmented, but, as a rule, not markedly so until healing begins. The vitreous opacities may become larger and more numerous, and finally completely obscure the fundus. After the process subsides, there is left an atrophic, irregularly pigmented area in the choroid. The retinal vessels usually resume their normal appearance.

"Since the microscopic examination showed it to be tuberculosis, it is logical to assume, excluding syphilis from consideration, that localized chorioretinitis is never produced by any cause other than tuberculosis. Certainly, there is no reliable evidence to the contrary. In my opinion, one microscopic section of a typical lesion is far more valuable as evidence than all the infected tonsils, tooth roots, accessory si-

nuses, etc., that have been found in all the cases combined."

Wilmer⁵ says that tuberculosis of the eyes was described as early as 1816. In discussing Finnoff's conclusion that every tissue in the eye can be involved except the lens, he says that even the lens can be involved secondarily by having the circulation and nourishment interfered with. He quotes Derby as saying, in substance, that if you analyzed the American literature, tuberculosis is perhaps given as the cause of uveitis in 10 per cent or less of the cases, in European literature 50 per cent and upwards. He thinks theirs too high and ours too low.

Also he mentions various ophthalmologists who find tuberculosis of the eye in cases varying between the extremes of one in 200 up to one in 4600.

Prof. J. Meller of Vienna is mentioned as using tuberculin injections as a routine method of treating chronic iridocyclitis, and only when it fails, he uses other methods, claiming that a severe focal reaction confirms the tuberculous nature of the cases.

Quoting Wilmer: "My limited experience conforms to that of others of wider knowledge that the patient who does not have a tuberculous focus is practically invulnerable to ordinary amounts of tuberculin, but when the contrary state exists, the patient's tissues, including the skin, are sensitive to a minute amount. I have seen a very extreme general and local and disastrous focal reaction to 0.50 milligrams of O. T. injected under the skin in a suspected tuberculous subject, and no reaction whatever to 5.0 milligrams in a person when it was necessary to quickly exclude tuberculosis.

"After all sources of infection, except tuberculosis, have been excluded, the intradermal use of O. T. affords a safe and definite method of determining the patient's hypersusceptibility to tuberculin."

In making the intradermal test he injects one tenth cc. of the glycerin broth as a control, and 1/10,000 milligram of O. T. is injected ten cm. from the control. The patient is watched carefully forty-eight hours. If no reaction in forty-eight hours, then he gives another injection of 1/1,000 milligram. In forty-eight hours, if no reaction, then 1/100 milligram is injected. He

continues increasing the injection up to 1.00 milligram before calling the case negative from minus reactions.

His theory is as follows in substance: Bouillon filtrate (O. T.) is used subcutaneously, 1/1,000,000 milligram twice weekly, then 2/1,000,000, then 3/1,000,000, etc., up to one milligram and even much higher under close observation. If an unfavorable reaction develops, stop until the reaction disappears, and then drop back a bit on the size of the dose and come up again. General treatment is carried out, plus atropine if the iris is involved.

Wilmer quotes Dr. George Douglas Head⁸ thus: "I first began the use of Koch's old tuberculin subcutaneously for diagnostic purposes in the year 1895. Since that time I have tested more than one thousand persons suspected of harboring either pulmonary, pleural, glandular, peritoneal, bone and joint tuberculosis in so insidious a form as to require a specific test to establish the diagnosis. I wish to state here that from a large experience extending over many years with abundant opportunity to watch patients so tested from year to year, I have never observed any evidence to prove that tuberculosis was disseminated by the use of tuberculin subcutaneously, but, on the other hand, have a firm conviction that this diagnostic test with a good reaction has a healing effect upon the lesion in its insidious and low grade forms."

Woods and Rones⁷ state that: "Four German observers report a total of 392 cases of various forms of ocular tuberculosis treated with tuberculin injections. Of these 46.5 per cent are reported healed; 37.3 per cent improved; 16.2 per cent unimproved."

Since apparently healed cases have recurrences they have the patients return every four months for retesting, and, if they give positive skin tests at any time, the therapeutic treatments are repeated, and while the initial dose is 1/1,000,000 milligram the patients are carried up to sixty milligrams before the series of treatments are regarded as completed. In reporting on a large number of cases, 10 per cent of the series had evidences of tuberculosis elsewhere than in the eyes, 25 per cent had recurrences after improvement, 45 per cent appeared healed, 45 per cent were improved,

and 10 per cent showed no improvement.

Clapp⁹ says: "1. Profuse retinal hemorrhage in young adults is usually the result of tuberculosis.

"2. Great care must be exercised in giving intradermal tuberculin test, as an erroneous interpretation may alter the diagnosis.

"3. Tuberculous retinal lesions are usually benefitted and are often entirely healed by tuberculin therapy when the tuberculin is given in properly graduated doses and under very careful supervision."

Lemoine¹⁰ of Kansas City thinks the reason for unfavorable results with the use of tuberculin is due to the repeated injections being given in too short intervals, that the negative phase from one injection is not over before the next is given. He uses the test and therapeutic treatments much the same as Wilmer's described above, except that the time between treatments is longer.

Suker and Cushman¹¹ in reporting on sixteen private cases emphasized the general care of the patient particularly as to nourishment, and in regard to tuberculin treatment had this to say: "In view of the fact that ocular tuberculous lesions are self-limited, we hesitate to claim too much for the treatment. But after watching the patients clinically, the improvement in their eye condition began so rapidly and continued so regularly, in contrast with their history of the duration of the process, that we feel that the tuberculous condition was definitely shortened by the use of tuberculin and the general care."

Their summary is: "To conclude, we believe that

"(1) Chronic inflammatory conditions of the eyes are often tuberculous.

"(2) Selected cases may be treated with tuberculin.

"(3) General therapy is just as important as specific therapy, and fundamentally improper nourishment may be the basic factor in the development of tuberculous infection as well as proper nourishment the great factor in its cure."

Lloyd¹² of Brooklyn says that it is his conviction that most of the so-called focal infections of the eye are really tuberculosis. He uses the roentgen ray quite a bit in treating these cases. He says that "clinical experience and the

extended observations of well known observers, as well as the experiments of Finnoff and Cataneo, show the wisdom of considering every intraocular hemorrhage as a tuberculous lesion of a vessel unless other cause can be found."

Perhaps one of the most significant developments in ophthalmology is discussed in an editorial by Dr. Crisp¹³ on the subject, "Is Sympathetic Ophthalmia Tuberculosis?" He tells of the work of some Japanese on the use of tuberculosis vaccine (called A. O.) in cases of sympathetic ophthalmia, with wonderful results claimed.

More significant yet is his description of the work of Meller and Lowenstein of Vienna in isolating the tubercle bacilli from the globes in cases of sympathetic ophthalmia. He says they quote and approve Hippel's statement that "the histologic picture of sympathetic ophthalmia contains nothing that is in any respect in opposition to the diagnosis of tuberculosis." Meller uses the Japanese tuberculin A. O. and also mercury in treating sympathetic ophthalmia, which he is positive has tuberculosis as its etiology.

After having gone through a great deal of literature on this subject, much of which I can't even mention for lack of time, I have gathered in substance the following impression of ideas from the majority of outstanding ophthalmologists:

1. Ocular tuberculosis, which has been regarded by Americans as somewhat rare, is being diagnosed more often lately. By Europeans it is considered quite prevalent.

2. Retinal hemorrhages in the young are conceded by most oculists as having tuberculosis as the etiology.

3. Circumscribed or isolated patches of chorioretinitis are probably of tuberculous etiology.

4. Tuberculous iritis is usually a chronic process which had its beginning insidiously and without much pain, although there are exceptions.

5. No part of the eye, unless perhaps the lens, is immune.

6. Intradermal tests with tuberculin are regarded as safe and desirable in suspected cases by many eminent oculists and considered as dangerous by a few.

7. Tuberculin used therapeutically is accepted as the main line of treatment by the majority, with the usual general care which is advised in other forms of tuberculosis. Some oculists are afraid of tuberculin therapy.

8. Increasing evidence is being gathered to the effect that sympathetic ophthalmia may be tuberculous in nature.

I wish to acknowledge with grateful appreciation the kindness of Dr. William C. Finnoff of Denver for lending me the lantern slides to be shown at this time. Dr. Finnoff's wonderful work on this subject has been an inspiration to me, and I feel that his research articles could be read with great profit by any oculist.

BIBLIOGRAPHY

1. Finnoff, William C.: Tuberculosis in the etiology of acute iritis, *Am. J. Ophth.* 14:127-132, 1931.
2. Verhoeff, F. H.: Acute tuberculous iritis, *J. A. M. A.*, 95:583-585, 1930.
3. Verhoeff, F. H.: Histologic observations in a case of localized tuberculosis chorioretinitis, *Arch. Ophth.* 1:63-70, 1929.
4. Finnoff, William C.: A report of the changes found in the eyes of rabbits following the injections of living tubercle bacilli into the common carotid artery, *Tr. Am. Ophth. Soc.*, 1923.
5. Wilmer, W. H.: Clinical aspects of ocular tuberculosis, *Arch. Ophth.*, 57:1-18, 1928.
6. Jackson, Edward: A present understanding of tuberculosis, *J. Indiana M. A.*, 17:403, 1924.
7. Woods, A. C. and Rones, B.: The therapeutic use of tuberculin in ocular tuberculosis, *South. M. J.*, 21:613-619, 1928.
8. Head, George Douglas: A Clinical Study Upon the Exhaustion Type of Hidden Tuberculosis Infections, A. Blakinston's Sons and Company, Phila., 1924.
9. Clapp, C. A.: A case of tuberculous retinitis, *Am. J. Ophth.*, 13:4, 1930.
10. Lemoine, Albert N.: Ocular tuberculosis. *Am. J. Ophth.* 14:439-444, 1931.
11. Suker, G. F. and Cushman, Beulah: A clinical study of sixteen cases of ocular tuberculosis. *Am. J. Ophth.* 13:781-791, 1930.
12. Lloyd, Ralph I.: Tuberculosis of the eye, *Am. J. Ophth.* 13:753-780, 1930.
13. Crisp, W. H.: Is sympathetic ophthalmia tuberculosis, *Am. J. Ophth.* (March) 1933.

DISCUSSION

Dr. A. G. Wilde (Jackson): That the interior of the eye is liable to infection by the tubercle bacillus is a comparatively recent conception. Up to 1890 it was regarded as immune to that type of involvement. We now recognize that ocular tuberculosis shows several clinical types, and it must be given serious consideration whenever we are confronted by a slowly progressive involvement of the uvea, with considerable thickening of the iris stroma, either diffusely or in nodules, and at the same time a surprisingly small amount of pain or inflammatory reaction.

The Europeans report a much greater incidence of tuberculous infection of the eye than ourselves. This probably arises from two reasons. First, tuberculosis itself is much more prevalent in clinical amounts than in this country. For instance in Austria, practically every young adult who was a child at the time of the war blockade, has a demonstrable tuberculous infection. Second, due to their avid studies of microscopic pathology, they are more alert than ourselves in interpreting its clinical signs.

In an endeavor to learn the rate of tuberculous uveitis, I reviewed some of my clinical records, and of the last 51 cases tuberculosis was evidently the cause in nine, or about 18 per cent. This has not been found especially in the young, as our text books emphasize, but in middle life. They are usually women at or about the time of menopause who believe themselves in good health, and who develop this intraocular slowly progressive reaction, that has a predilection for the filtration angle. The surface markings of the iris are destroyed by the slowly accumulating exudate, the sclera overlying the region of Schlemm's canal becomes thin so that the uveal pigment shows through, and in advanced cases this goes on to actual perforation.

The characteristic thing is the small amount of pain or acute inflammatory reaction.

Synechias quickly develop, the pupillary space becomes filled with an inflammatory membrane, and the posterior surface of the cornea is thickly dotted with large wax-like or fatty droplets, that unfortunately have been called "decemetitis". As Decemet's membrane is not involved in the inflammatory process, such a term should never be employed. This can last for years, with exacerbations

of one or two weeks whenever the individual's resistance becomes low. Eventually the eye goes on to atrophy, due to the organization and contraction of the intra-ocular membranes.

These patients are not among those showing frank and rapidly progressive pulmonary involvement. Personally I have been greatly disappointed by my inability to diagnose tuberculosis from fundus examinations. During three years I examined all proven cases of tuberculosis at the Walter Reed General Hospital at Washington, and in only one did I discover what I assumed to be a miliary tubercule of the choroid.

It is interesting to recall that not only is sympathetic ophthalmia typically tuberculous in its pathology, but that the lowly chalazion, is likewise identical. The former conception that these are cysts and arise from the Meibomian glands has been shown to be erroneous. There is no cystic membrane and they develop as a caseous degeneration of the tarsus that microscopically give the perfect picture of tuberculosis. However the tubercle bacillus has never been demonstrated. We know these arise especially in negroes, in the poorly nourished and the pre-tuberculous children but the offending bacillus has thus far eluded detection.

Dr. H. R. Fairfax (Brookhaven): I personally want to thank Dr. Guyton for his excellent paper. The subject has been covered by Dr. Guyton and Dr. Wilde.

Dr. W. L. Hughes (Jackson): I have seen several cases like Dr. Guyton has described where atropin would control the condition.

Dr. Guyton (closing): I have nothing to add further to this. As I stated in the beginning, there is nothing original in my paper. What I have given you is simply a digest.

NEW ORLEANS Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society
under the jurisdiction of the following named
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not later than the twentieth of the month preced-
ing publication. Orders for reprints must be sent
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REMOVAL OF THE THYROID IN HEART DISEASE

Very frequently criticism is made of experi-
mental studies because the applicability and
practicability of the results are by no means
clear cut and frequently are highly theoretic. At
times, however, the application of research in-
vestigation which appeared most remote at the
time it was reported has proven ultimately to
be extremely practical. A study of the blood

flow in certain thyroid conditions seems a far
away problem from the control of congestive
heart failure. Yet in a recent paper by Blum-
gart and his associates* it is shown that because
the speed of blood flow has been demonstrated
to be increased in thyroid conditions, it is pos-
sible to relieve congestive heart failure through
decreasing the load on the circulation by reduc-
ing the basal metabolic rate. Sub-total thyroid-
ectomy will not do this, but these authors have
found in a series of cases of congestive failure
and anginal failure without thyroid disease that
complete removal of the thyroid exerts a very
definite improvement in the patient's condition.
It is true that these patients have only been ob-
served for a short time, but certainly the results
are almost encouraging. Thus two patients with
angina pectoris have had no further heart pain
since complete thyroidectomy. In the nine pa-
tients with congestive failure who were unre-
lieved after prolonged and adequate medical
treatment, it is now possible for them to be up
and about without cardiac symptoms, or signs
of failure. One patient died from acute pulmon-
ary edema twenty-two days after the opera-
tion.

These patients have shown some of the gross
evidences of post-operative hypothyroidism, but
it has only been necessary in two instances, for
short periods, to resort to substitution therapy.
Such treatment in the other patients at the date
of this report had not been indicated.

DEATHS FROM INFECTIOUS AND PARASITIC DISEASES IN THE UNITED STATES

During the year 1932 there died in this coun-
try from all causes a total of one million, three
hundred and four thousand and some odd people,
a considerable improvement over the death rate
of the previous two years.

The infectious and parasitic diseases were re-
sponsible for death in 156,492 instances. By
far the largest number of deaths in this group
were occasioned by tuberculosis, with some 75,-

*Blumgart, Herrman L., Riseman, Joseph E. F.,
Davis, David, and Berlin, David D.: Therapeutic ef-
fect of total ablation of normal thyroid on congest-
ive heart failure and angina pectoris. *Arch. Int.
Med.*, 52; 165, 1933.

000 people dying from this, it is believed, preventable disease. Sixty-seven thousand of these people had tuberculosis in the respiratory system and the next most frequent system involved was the central nervous system and its coverings, with slightly over 2,000 deaths from this type of tuberculosis. Acute disseminated tuberculosis caused a few over 1,000 deaths while tuberculosis of the intestines was in numbers slightly under 2,000. It need hardly be emphasized that many of the respiratory system deaths were associated with tuberculosis elsewhere. Syphilis is recorded as causing 10,664 deaths, a totally inadequate and misleading number because the disease is undoubtedly responsible for innumerable numbers of deaths that are listed under some other cause, an example of which is seen in the 7,000 deaths from syphilis of the central nervous system listed under another name. The same might be said of syphilis in regard to its involvement of the heart and blood vessels.

Next to tuberculosis, influenza brought about a greater number of deaths than any other of the infectious diseases. The rate of influenza incidentally has almost doubled in the past three years. The next two diseases in frequency in regard to death rate are whooping cough and diphtheria, each of which cause over 5,000 deaths in children every year. Whooping cough, in so far as we know, is a disease which cannot be adequately controlled, but such cannot be said of diphtheria. There is absolutely no excuse for any child dying of diphtheria. An optimistic note can be heard from the fact that diphtheria deaths have decreased about 400 in the past year. Scarlet fever, in spite of the fact that it is occurring in much milder form than in the old days, caused slightly over 2,500 deaths in the United States, and measles, "the most infectious of infectious diseases," dropped from the figures of 3,500 the preceding years to slightly under 2,000. The death rate of measles is not predictable because epidemics come and go in cycles of four or five years. Obviously 1932 was a year in which measles was not very wide spread in the United States.

Typhoid fever, with its 4,356 deaths, is a declining cause of mortality but even then there are entirely too many deaths from this strictly

preventable disease. Another preventable disease is malaria, yet 2,567 persons died from a disease which is not only preventable but should be curable.

Smallpox caused only 38 deaths in the United States, demonstrating what can be done in the prevention of infectious diseases. Erysipelas brought on 1,900 deaths, while leprosy killed only 25. Poliomyelitis and lethargic encephalitis each caused somewhat over 800 deaths while epidemic cerebro-spinal meningitis occasioned 1,655. The figures for these infections of the central nervous system are materially lowered from those of 1931 and 1930.

When all the various forms of infectious diseases are considered it can readily be appreciated that most of them are preventable. There is no more reason why there should be over a thousand deaths from tetanus in this country any more than there should be over 75,000 deaths from tuberculosis. Perhaps sometime in the distant future it will be possible through education and through hygienic control of the people as a whole and as integral members of society to control practically all the infectious diseases. Such is not the case at the present time but it is a much to be hoped for *desideratum*.

NEWS OF THE E. R. A.

In the State of Louisiana considerable progress has been made in securing action from the administrators of the Federal Emergency Relief funds. The progress that has been made is rapid, and were it not for the fact that there has been considerable delay in the parish societies in answering the questionnaire sent out from the State Society, probably the final arrangements to pay the physicians for services rendered to those on the Emergency Relief rolls would have been consummated. However, it is hoped that replies will come in more promptly than they have.

In the State of Mississippi the schedule of fees has been arranged between the medical profession through its representatives and the State Relief Administrators. Probably medical relief is now functioning in this State.

The physician should bear in mind that the

funds in the hands of the Relief Administrator are limited, and that it is necessary for him to spread the moneys assigned by the National Government over as broad a surface as possible. Therefore, when the relief arrangements are completed, it is decidedly the duty of the doctor to cooperate in every possible way with the administrators. Such cooperation implies a minimum number of calls commensurate with the

safety and proper care of the patient, the dispensing of inexpensive drugs, and demanding only such nursing service as is absolutely needed. It is only through the help of the physician that efficient and economic service can be rendered.

In conjunction with this matter, the reader should note the letter of Dr. C. A. Weiss to Governor O. K. Allen, a copy of which is in the Louisiana State News.

HOSPITAL STAFF TRANSACTIONS

TOURO INFIRMARY STAFF MEETING

The first regular meeting of the Touro Infirmary Staff since summer vacation was held Wednesday, October 11, 1933, at 8:00 P. M. Dr. I. I. Lemann, Chairman, presided.

Dr. D. C. Browne presented two cases of bacterial allergy. One was a case of marked pylorospasm, the other a case of asthma in a young girl, 12 years of age. Both were treated with vaccines prepared from foci of infections, in addition to the eradication of these foci. Both were apparently cured.

The cases were discussed by Drs. Heninger, Silverman, Efron, and Womack.

Dr. A. L. Levin¹ showed two patients. The first was a girl of 10 years of age who had recovered from malignant neutropenia. The second case was an individual who apparently had had pernicious anemia with a normal gastric juice. This man was 76 years of age.

These cases of Dr. Levin were discussed by Drs. Kearney, Silverman, Eshleman, Fershtand and Lemann.

Dr. L. Landry demonstrated radiograms and discussed the technic and use of bone grafts. Dr. Gessner discussed the presentation.

There followed a presentation of several interesting cases with their autopsy records, selected by the program committee. These were discussed by the staff prior to the reading of the autopsy protocols.

Willard R. Wirth, M. D.

MERCY HOSPITAL STAFF MEETING

The Mercy Hospital Staff resumed its regular meetings September 28, 1933, being called to order by the President, Dr. Frank Chalaron.

The most important business was that which took place during the Executive Session, which was the reading and adoption of the new constitution and by-laws as amended by the Committee, composed of Drs. E. L. Leckert, Chairman, E. A. Ficklen, J. J. Irwin, W. P. Gardiner, Theo. F. Kirn. The new constitution and by-laws were adopted in toto with exception of the meeting night, which was changed from the third Friday to the third Thursday of

each month. Next in order was the reading and adoption of the Rules and Regulations for the Internes, as drawn up by a Committee composed of Drs. J. Briere, Sr., E. Zander, and Theo. F. Kirn.

A very interesting presentation was that of Dr. Philip deVerges, who discussed spontaneous pneumothorax illustrating by a case report in an infant 19 months old. X-ray pictures of this case from its onset to its final discharge were shown by Dr. DeVerges. He said in part in discussing this interesting condition that it is a disease which is rare in children under three years of age. It was first recognized in 1803, but Laenec in 1817 first discovered it as a clinical entity. Tuberculosis, the usual cause in adults, probably plays a small part in the infantile form of the disease.

There are a number of theories regarding the actual rupture of the lung tissue. The most commonly accepted ones are: Ulceration of a subpleural tubercle, tearing of a small rent in the visceral pleura by an adhesion or tag attached to the chest wall, rupture of an emphysematous bleb and the rupture into the pleural cavity of an abscess. In those cases where the accident follows, a sudden and perhaps severe strain or effort such as hard coughing, a severe jolt, a rupture bleb or the pull by an adhesion is usually the offering cause. Pneumothorax has been divided into the open, closed and valvular type depending upon the nature of the opening into the pleural cavity. Recent study of the mechanism of pneumothorax tends to consider most of them as more or less valvular in the beginning, air entering on inspiration with less difficulty than it is expelled on expiration. It will continue to enter a patent opening so long as the intrapleural pressure is negative and after becoming positive aids in closing the opening, and the edges, if they approximate may heal. This explains why in so many cases aspiration of air is promptly followed by a return of the distressing symptoms since the negative pressure produced, reopens the perforation. This fact is the basis for treating some of these cases by injecting more air. In addition to the size and nature of the opening, another prominent factor influencing the character

and course of a pneumothorax is the matter of adhesions. In their absence, the pneumothorax is complete and the lung lies in the vertebral gutter like a sausage. Where adhesions are prevalent the pneumothorax is partial or localized and to an extent depending on the size, location and number of them. The symptoms and physical signs are usually striking.

ANDERSON INFIRMARY STAFF MEETING
Meridian, Miss.

The regular monthly meeting of the Staff of the Anderson Infirmary was held on October 6, with the following members present: Drs. H. L. Arnold, W. J. Anderson, W. Jeff Anderson, J. T. Bailey, James Bennett, T. L. Bennett, T. G. Cleveland, Virgil Creekmore, M. L. Flynt, R. L. Fowler, H. S. Gully, Walter Holladay, E. B. Key, William Krauss, F. G. Riley, Carl Stingily, T. A. Strain and H. F. Tatum.

The meeting was called to order at 7:00 P. M. by the president, Dr. T. G. Cleveland, after which the minutes of the last meeting were read and approved. A motion was made and passed to dispense with the reading of the reports from the various departments of the hospital for the past month on account of consuming the time that was to be used in the discussion of two interesting clinics presented by Drs. Virgil Creekmore, and H. S. Gully.

The first case was one of marked viscerotoposis complicated with chronic malaria. Laboratory and roentgenray findings were presented and discussed by Drs. M. L. Flynt, William Krauss, Carl Stingily, and H. S. Gully.

The second case was one of infectious nephritis following an attack of influenza about March 1 of this year. Patient, colored male, aged 21 years; blood pressure 267/180; heart compensating. Discussions by Drs. Carl Stingily, H. F. Tatum, M. L. Flynt, F. G. Riley, and Walter Holladay.

Following adjournment the Staff retired to the dining room for lunch.

Meridian,
October 10, 1933.

KING'S DAUGHTERS' HOSPITAL STAFF
MEETING
Greenville, Miss.

The King's Daughters' Hospital has for the past few years served a delightful banquet dinner to members of its medical staff at their regular monthly meeting. This banquet, prepared by Miss Jean Peck, dietician, was enjoyed by all, preceding the staff meeting. Wednesday, October 5. Dr. C. P. Thompson, the chairman, presided, and but few members were absent.

After disposing of routine business the meeting proceeded to its scientific program.

Dr. G. W. Eubanks presented the history and findings related to a case of sporadic anterior poliomyelitis. The patient, a boy aged 17 years, had suffered an attack of chills and fever, with severe headaches three weeks earlier. He had been given quinine and had continued taking five grains daily until first seen by Dr. Eubanks. He had had no chills and believed that he had had no fever after the first three days. He was able to be up and do some work but tired easily. Three weeks after his attack of chills, while picking cotton, he noticed some difficulty in grasping the bolls. He developed headache and pain in his arms and the calves of his legs. He stopped work and while walking home stumbled and fell twice, though not dizzy. He was in bed for five days with headache, malaise, and great weakness of arms and legs. When first seen by Dr. Eubanks he was unable to move any of the extremities, except slightly, and all deep reflexes were abolished. There seemed to be some immobility of facial muscles, but no definite involvement of cranial nerves or pupillary reflexes. At no time had he been abnormally sleepy or mentally disturbed. The physical examination was entirely negative except for the paralysis; temperature 98.6°F. The spinal fluid was under slight (not measured) excess of pressure, and the cells numbered 18, all lymphocytes. Blood and spinal fluid Wassermann reactions were negative. There were 12,800 leukocytes per cu. mm., 70 per cent polynuclears. Continued rest in bed was advised, quinine was discontinued and elimination promoted. At present, after one week, the paralysis has decreased. He is able to move both arms and can stand and take a few steps with difficulty.

Dr. Eubanks presented the case as one of poliomyelitis developing extensive and practically symmetrical paralysis, the acute state having been unnoticed by the patient. Encephalitis seemed to be excluded by the lack of cerebral symptoms and the normal ocular reflexes.

Dr. R. E. Wilson said the case resembled multiple neuritis, which sometimes follows malaria and quinine therapy, but that the spinal cell count and rather rapid improvement were against this diagnosis.

Current medical literature was reviewed by Dr. D. C. Montgomery and Dr. H. A. Gamble.

Dr. Shackelford, county Board of Health officer, informed the staff that malaria was still on the increase, and that a local outbreak of scarlet fever had apparently been controlled without spreading to other localities.

John A. Beals,
Secretary.

Greenville,
October 6, 1933.

MISSISSIPPI BAPTIST HOSPITAL
STAFF MEETING
Jackson, Miss.

The regular staff meetings of the Mississippi Baptist Hospital were resumed on September 19, with 24 members present. Dinner was enjoyed in the dining room of the hospital.

The superintendent of the hospital, Mr. Alliston, made a few remarks on the condition of the hospital and was called out, having to leave early.

A discussion of the staff rules and regulations and pledge to be signed was entered into and copies of the same were presented to all those present. A motion was made by Dr. Armstrong and seconded by Dr. Wall that the rule in regard to the pre-operative record and operative record was not being adhered to and that the president write a letter to the superintendent calling this fact to his attention and asking that he take action accordingly.

Dr. Garrison made a short talk on the free use of the operating room on Sunday when same was not necessary and asked that the staff try to give the corps in the operating room as much rest as possible on Sunday.

The list of interesting causes of deaths that had occurred in the hospital since the last meeting in June was discussed and offered some interesting facts.

The committee on the courtesy division of the staff will be ready to report at the next meeting in October.

L. W. Long,
Secretary.

Jackson,
October 10, 1933.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the Staff of the Vicksburg Sanitarium was held on Monday, October 9, at 6:30 P. M. After reports from the Records Department and Analysis of the Work of The Hospital and a report of vital statistics from the Warren County Health Department by Dr. F. Michael Smith, Director, the following cases from the Cancer Clinic were discussed.

Carcinoma of Prostate.—Dr. R. A. Street, Jr.

Squamous Cell Carcinoma of Cervix Uteri, (Grade I).—Dr. G. M. Street.

Squamous Cell Carcinoma of Toe (Grade I).—Dr. J. A. K. Birchett, Jr.

Basal Cell Carcinoma of Shoulder.—Dr. G. M. Street.

Squamous Cell Carcinoma of Penis (Grade III).—Dr. J. A. K. Birchett, Jr.

Special Case Reports were presented and discussed as follows:

1) Staphylococemia Following Infection of Arm.—Dr. G. M. Street.

(2) Hyperthyroidism.—(Two Cases).—Dr. J. A. K. Birchett, Jr.

(3) Blood Dyscrasia.—Dr. R. A. Street, Jr.

Three Minute Reports of the Literature of the Month were given as follows:

1. Arachnidism.—Dr. L. S. Lippincott.

2. Guanidine Intoxication.—Dr. G. C. Jarratt.

3. Roentgen ray Examination of Children for Tuberculosis.—Dr. R. A. Street, Jr.

Dr. L. S. Lippincott discussed the high incidence of malaria this year and presented comparative figures of blood examinations showing malaria in the period from January 1, 1920 to September 1, 1933. The average positive findings for the period by months were as follows: January 0.3 per cent; February 0.6 per cent; March 0.7 per cent; April 1.0 per cent; May 1.8 per cent; June 2.6 per cent; July 3.6 per cent; August 3.8 per cent; September 4.8 per cent; October 4.7 per cent; November 2.9 per cent; December 1.8 per cent. For the period the total examinations for malaria were 41,615 with positive findings in 2.3 per cent (13 years, 9 months). Positive findings for this year from January 1 to September 30, were 4.3 per cent. Blood examinations for September, 1933 showed malaria in 11.7 per cent, the highest in more than thirteen years and more than double the average for the period.

Dr. F. Michael Smith, Director of the Warren County Health Department, presented a graph of the incidence of reported malaria for the City of Vicksburg and Warren County for the years of 1930, 1931, 1932, and 1933. The graph was based on cases of malaria reported by physicians, some of which were not proved by blood examinations. The highest incidence in the period reported was in September, 1933, with 125 cases. The next highest incidence was in September, 1932, with 45 cases reported.

The staff voted to refer the matter to the Issaquena-Sharkey-Warren Counties Medical Society with the suggestion that a committee be appointed, that committee to invite other interested bodies and organizations to aid in bringing about an eradication of mosquitoes in this community.

The meeting closed with a lunch.

The next meeting of the staff will be held on Tuesday, November 14, at 6:30 P. M.

Abstract.—Staphylococemia Following Infection of Arm.—Dr. G. M. Street.

Patient.—White female, aged 16 years, student, admitted to hospital September 13, 1933.

Present Complaint.—Swelling, pain, redness, and open discharging ulcer upper third of left forearm. Continuous high fever, irregular chills, great prostration, nausea and vomiting, pain in upper left chest and shoulder. History of Present Complaint.—Onset about two weeks ago, while riding, horse fell, throwing her over head. Left arm cut and scratched in the gravel of the road. Little attention was given to the wound other than having the scratches painted with iodine. Several days

later one of the wounds began to become swollen and painful and has steadily grown worse. Three or four days ago began having chills and fever. Was treated for malaria without any benefit. Swelling and pain in the arm has continually increased although one area apparently localized and has begun to discharge pus. Temperature higher each day and now continuous. A present 105°F and has been 103°F and 105°F for the past 24 hours. Past History.—Can recall no serious illnesses. Always strong, robust and healthy. Family History.—Not remarkable. Physical Examination.—Temperature 105°F.; pulse 110, regular; blood pressure 112/76; respiration 22, regular. Well nourished. Tongue coated. Large tender nodes in left axilla. Left arm and forearm greatly swollen; discharging abscess at upper third of forearm; numerous blebs covering area around the discharging opening. Large area of bluish red to bright red brawny hard swelling around this area. Left hand swollen and tight but not red. Heart rapid; apparently some enlargement; faint systolic murmur over the apex, not transmitted. Some rales, slight dullness of right lung. Moderate tympanites. Laboratory.—Urine negative. Blood: Leukocytes, 15,600; small lymphocytes 17 per cent, large lymphocytes 2 per cent, neutrophils 81 per cent of which 34 per cent were band forms. No malaria found. Blood culture showed gram positive *Staphylococcus albus* in 24 hours; confirmed by another blood culture two days later. Culture from discharging abscess showed many gram positive *Staphylococcus albus* and many gram negative bacilli. Course and Treatment—Glucose, 5 per cent in saline, 1,000 cc., intravenously, September 13 and September 16. Blood transfusion 500 cc., citrated whole blood, September 14. *Staphylococcus bacteriophage*, 10 cc. in 500 cc. normal saline, intravenously September 16. Massive wet dressings were kept on the entire upper left extremity continuously. Systematic general treatment. Oxygen tent used the last 36 hours on account of cyanosis and difficulty in breathing. Temperature continued to range between 103°F and 106°F. Death occurred on September 19, 1933.

Abstract.—Hyperthyroidism.—Dr. J. A. K. Birchett, Jr.

Patient—White female, aged 38 years, married, first seen in clinic, July 19.

Present Complaint—For past year has been feeling badly; no definite symptoms except irritability, loss of weight and shortness of breath. Went to family physician, who told her that she had heart trouble and gave her digitalis and advised rest. For past two months has been much worse, has nervous spells with crying, and says her heart feels as if it were going to jump out of her body. Her sister noting her condition insisted that she come in for examination and basal metabolism.

Past History—General health good up until year ago when present condition developed. Has two children, normal deliveries. Family History—Father living and well, aged 68 years; mother living and well, age 70; one sister living and well. No tuberculosis, cancer, or goitre in family. Physical Examination—Tall, gaunt looking, white female extremely nervous, marked tremor and typical masked appearance of exophthalmic goitre. Heart rate 160, sounds weak, and soft systolic murmur at base. The physical examination otherwise was negative. Laboratory—Wassermann, Kline and Young, and Kahn tests, negative. Blood picture normal. Basal metabolism, DuBois +60 per cent; Harris-Benedict +73 per cent. Course and Treatment—Admitted to hospital July 19, 1933. Under observation, taking large doses of Lugol's solution, 30 minims three times a day, and away from excitement. August 4, basal rate showed improvement, DuBois +52 per cent and Harris-Benedict +68 per cent. August 5, Lugol's solution was increased to one dram three times a day and on August 10 basal metabolic rate was DuBois +16 per cent and Harris-Benedict +30 per cent. August 12—Subtotal thyroidectomy under local anesthesia with preliminary nembutal, morphine, and hyoscine. The gland was large, very friable and bled freely; approximately five-sixth of gland was removed. Operation was well borne, no gas being necessary. Voice control was normal during and after surgery. There was a rather marked exacerbation after patient was put to bed, pulse rate being 200. Oxygen was started and condition began to improve rapidly. Glucose was given intravenously twice daily for three days and Lugol's solution, ten minims three times a day, by mouth as soon as able to swallow comfortably. Patient improved rapidly and was discharged from hospital on ninth postoperative day. Condition at this time excellent. Heart rate is 80, no tremor and has gained 18 pounds of weight.

Patient—White female, aged 48 years, married.

Present Complaint—Nervousness, loss of weight, sense of heaviness in chest. Palpitation of heart. History of Present Complaint—In January of this year began to get nervous with rapid loss of weight; in 60 days lost 30 pounds. While working overtime as bank clerk began to "go to pieces"; would have to go to rest room and have crying spells with extensive nervousness; when attacks were over pulse would be very rapid and would feel extremely weak. This went on for seven weeks when on the 5th of April there was a complete collapse and she was taken home from her work in a very agitated and upset condition and when seen by me was in the midst of a hyperthyroid exacerbation; pulse 180, laughing and crying at intervals, very nervous, tremor marked. Past History—Three normal deliveries; eclampsia with last baby. Menorrhagia

which was controlled by radium in 1929; appendectomy in 1912. For past four years general health has been excellent. Family History—Father dead, aged 75 years; mother dead, aged 80 years, pneumonia; two brothers dead, one tuberculosis, one gunshot wound. No cancer in family. Several members of family have had thyroid enlargement and two aunts were operated upon for this condition. Physical Examination—Under nourished and developed female evidently suffering with acute wasting disturbance. Evidence of enlargement of thyroid with the right lobe mostly involved. Dental caries; small buried tonsils. Tendency to exophthalmos. Pulse 150, no murmurs. Well healed appendectomy scar (right rectus). Skin dry and brawny. Reflexes hyperacute. Laboratory—Wassermann, Kline and Young, and Kahn tests, negative, blood picture negative; no anemia; urine negative. Basal metabolic rate DuBois +33 per cent, Harris-Benedict +42 per cent. Course and Treatment—Patient was told that surgery was necessary for a cure but declined to have this method of treatment. Rest in bed with Lugol's solution, ten minims, three times a day was given. Improvement was very slow, the next basal metabolic rate on May 16 showed DuBois +58 per cent and Harris-Benedict +47 per cent. As condition was going from bad to worse we advised ligation of thyroid arteries so as to get patient in condition for thyroidectomy. On May 15, double ligation of superior thyroids was done as basal metabolic rate was going up (from +26 on May 8 to +47 on May 16). The reaction from this slight surgical procedure was most severe. A marked thyrotoxicosis developed which almost overwhelmed the patient and she only recovered because of use of oxygen continuously for 72 hours and large amounts of glucose solution intravenously. Morphine was also given freely. After this exacerbation had subsided the patient refused further surgical treatment.

We then turned to roentgen ray and she received 20 minutes for eight doses over thyroid. There was no evidence of any marked improvement four weeks after the first roentgen ray treatment was given. The patient was getting very discouraged and it looked as if we were in a rather hopeless state when I decided, on consultation with Dr. Ochsner of Tulane, to give large doses of Lugol's solution. I had been giving only 15 minims three times a day. I, therefore, gave dram doses of Lugol's solution three times a day for a period of 10 days and then took a basal metabolic reading, which showed a rate of +13. The nervousness was much relieved and the pulse rate was 110. With the basal rate down and the toxicity of the patient so much relieved she welcomed surgery as a method of relief when she was told that she would have a recurrence of the toxic symptoms after the effects of the Lugol's solution had worn off. She gladly accepted and subtotal thyroidectomy was done on

August 2. There was little reaction from surgery, although all precautions were taken including placing patient in oxygen chamber immediately for 24 hours. Patient is now at work, has gained 25 pounds and all symptoms have disappeared. Comment—These cases are presented because of the good results obtained from much larger doses of Lugol's solution than are usually advised. It has been thought that large doses of Lugol's solution were toxic but there was no evidence of toxicity in these cases.

Abstract—Blood Dyscrasia.—Dr. R. A. Street, Jr.

Patient—White female, aged 56 years, widow, admitted to the hospital September 24, 1933.

Present Complaint—Sharp pains across lower lumbar region and down both hips; bleeding from gums; purpuric spots over lower and upper extremities. History of Present Illness—One and one-half months ago began to note sharp pains across the lower lumbar region and down both hips; several large blue spots on the inner aspects of both thighs. Confined to bed by the pain. Local physician prescribed brown pills to be taken at night and followed by a saline purgative the following morning. Patient thought pills were calomel. Rapid improvement in pain and several days later was able to be up and about. At this time noted swelling of gums but no bleeding and no soreness of mouth or throat. This soon subsided. Felt much improved up to ten days before admission when slight bleeding from gums occurred and large and small purpuric spots appeared over lower and upper extremities but not on body. Local physician again consulted and prescribed calcium by mouth and rest in bed. Condition did not improve. There has been moderate fever at times during the day not associated with cough, sweats or any abdominal pain. No history of tarry stools or hematemesis. Appetite not as good as usual but no nausea. Bowels are sluggish and there has been some gaseous distention since onset of illness. No history of taking any drug before onset of present illness or of having had any injection. No renal or cardiac symptoms. No history of vertigo or gait disturbance, no visual disturbance. Past History—General health excellent up to onset of present illness. No appreciable loss of weight at any time; gained in weight during past year or so. Menstrual history normal up to ten years ago when there was excessive bleeding at periods and some clots were passed. Patient was admitted to this hospital and complete hysterectomy, cholecystectomy, appendectomy, and excision of a breast tumor were performed by Dr. Gus Street on July 10, 1925. Pathological report showed adeno-carcinoma of left breast; appendicitis, chronic; endometritis chronic; adenoma of endometrium (polyp); salpingitis, chronic, bilateral; cystoma of ovary (bilateral); one papilliferous. Recovery was uneventful and there was no further trouble up to

four months ago when physical examination showed a few internal hemorrhoids of little significance. Scarlet fever at age four; no history of malaria or typhoid. No history of excessive bleeding from injuries or excessive blue spots from pinches or blows, or spontaneous. Family History—Father killed by gunshot wound at age of 40 years; mother living in fair health, aged 85 years; one half-sister living and well. No tuberculosis, cancer, insanity or blood dyscrasia. Husband died 18 years ago of malarial hemoglobinuria. Physical examination—Temperature 101.4°F.; pulse 130; respiration 22; blood pressure 120/70. Well developed; fairly well nourished; sallow complexion; generalized pallor. Skin warm and dry. Eye fundi showed moderate arteriosclerosis; several old and new areas of small hemorrhages in both right and left retinae. Conjunctivae pale. Nasal mucous membrane pale; pharynx slightly reddened. Gums dark brown in color around margins of teeth; oozing of bright red blood from the gum margins. Tongue slightly coated and pale. Blowing systolic murmur at apex of heart, not transmitted. Old well healed scar under left nipple. Spleen barely palpable; not tender. Well healed midline abdominal scar. Several large bluish areas of discoloration along the middle and anterior upper surfaces of the lower extremities; numerous small areas of reddish and bluish red discolorations over both arms. No enlargement of lymph nodes. Laboratory—Urine not remarkable; no blood. Blood: hemoglobin 47 per cent (Newcomer); erythrocytes 4,710,000; color index 1.38; coagulation time 3 minutes; bleeding time 3 minutes; leukocytes 15,900; differential leukocyte count, small lymphocytes 72 per cent, large lymphocytes 19 per cent, monocytes 1 per cent, neutrophils, mature 2 per cent, band forms 5 per cent; eosinophils 1 per cent; platelets 288,000; reticulocytes 0.35 per cent; no malaria found. Erythrocytes show some anisocytosis, some poikilocytosis, slight polychromatophilia, rare stippled cells, numerous microcytes, rare macrocytes. Was-

sermann, Kline and Young, and Kahn tests, negative. Course and Treatment—Transfusion, 500 cc. citrated whole blood on day of admission. Iron ammonium citrate, 20 grains three times a day; chlorate mouth wash. On the day following admission the blood showed chlorides 436 mg. per 100 cc. of blood; icterus index, 3.5; fragility normal. Agglutination tests for typhoid, paratyphoid "A", paratyphoid "B", and undulant fever were negative. Liver extract three cc. intramuscularly. Bleeding checked slightly after transfusion, and the day following blood showed erythrocytes 2,440,000; Hb. 52 per cent; leukocytes 4,600; differential leukocyte count—small lymphocytes 60 per cent; large lymphocytes 32 per cent, monocytes 1 per cent, neutrophils, mature 1 per cent, band forms 5 per cent, young forms 1 per cent; no malaria found. Urine still negative. Partial clot retraction in 24 hours; not complete in 48 hours. A second transfusion of 500 cc. of citrated whole blood given; deep roentgen ray therapy, 20 minutes, in region of spleen, 200 kv., 5 milliamperes, using 1 millimeter copper filter. Pain remained about the same; patient feeling well but moderate fever. On September 28, blood showed little change. On September 30, deep roentgen ray therapy again given, 20 minutes over spleen posteriorly. Blood showed an increase in total number of leukocytes, 8,300, with relatively little change in the differential count; hemoglobin had dropped to 47 per cent. October 1, 25 minutes of deep roentgen ray therapy over spleen anteriorly. October 2, 25 minutes of deep x-ray therapy over spleen posteriorly. October 3, hemoglobin was 62 per cent, erythrocytes 2,720,000, and leukocytes 4,709; differential leukocyte count was essentially the same. Patient was given several injections of calcium gluconate in the vein when first admitted but this was discontinued after the first day. On October 3 and 4, 0.5 grams of adenine sulphate in 25 cc. sterile water by vein. Examination of blood today (Oct. 9) does not reveal any increase in granulocytes. The diagnosis is not clear and certainly the prognosis should be guarded.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

November 3—Pathological Conference Hotel Dieu, 11 A. M. to 12 Noon.

November 3—Physiology Seminar, Tulane Medical School, 5 P. M.

November 6—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

November 8—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

November 8—Touro Infirmary Staff, 8 P. M.

November 10—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

November 10—Physiology Seminar, Tulane Medical School, 5 P. M.

November 13—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

November 15—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

November 15—Charity Hospital Surgical Staff.

November 16—Eye, Ear, Nose and Throat Club, 8 P. M.

November 17—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

November 17—I. C. R. R. Hospital Staff, 12 Noon.

November 17—Physiology Seminar, Tulane Medical School, 5 P. M.

November 17—Mercy Hospital Staff, 8 P. M.

November 20—Hotel Dieu Staff, 8 P. M.

November 21—Charity Hospital Medical Staff, 8 P. M.

November 22—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

November 24—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

November 24—Physiology Seminar, Tulane Medical School, 5 P. M.

November 27—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M. Election of Delegates to the Louisiana State Medical Society. Nominations for officers for 1934.

November 28—Baptist Hospital Staff, 8 P. M.

November 29—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

During the month of October the Society held two regular meetings at which time the following programs were presented:

Monday, October 9—Joint Scientific and Third Quarterly Executive Meeting.

Arthritis—By Dr. Clyde Brooks.

Discussed by Dr. Oscar W. Bethea.

The Dangers of the Promiscuous Use of Spinal Analgesia—By Dr. H. R. Unsworth.

Discussed by Dr. H. B. Alsbrook.

Infection in the 'Innocent-Looking Cervix' as a Causative Factor in Pelvic Lymphangitis—By Dr. Thomas Benton Sellers.

Discussed by Dr. H.W. E. Walther.

Monday, October 23—Scientific Meeting.

Symposium on Cancer

Dr. E. von Haam—The Constitution of the Cancer Patient.

Dr. Chaille Jamison—Cancer from the Standpoint of Internal Medicine.

Dr. Urban Maes—The Surgical Ethic in Malignant Disease.

Drs. Samuel and Bowie—The Field of the Roentgenologist in Malignancy.

There was no discussion from the floor.

Reports of the officers and of the various special and standing committees for the Third Quarter were presented.

Of particular interest was the report presented by Dr. John J. Archinard, Chairman of the Periodic Health Examinations Committee for 1933. Dr. Archinard presented a most elaborate program suggesting the staging of a pageant by the Society in conjunction with this activity. Dr. Archinard showed lantern slides depicting floats to be included in this pageant. The report was received with enthusiasm and the unanimous co-operation of those present was pledged to aid in carrying out these suggestions. It is planned to stage this demonstration in March at which time the American As-

sociation of Physical Educators will be in convention in New Orleans.

The membership was apprised of a plan whereby medical care for those carried on the rolls of the National Welfare Committee will be paid for by this committee and plans were immediately instituted to present a tentative schedule to the local committee so that the members of the Medical Society may be remunerated for such services. This plan would relieve the free clinics of the care of these individuals, and, at the same time, bring a large financial return to the members of Organized Medicine.

The final plans for the establishing of a Credit and Collection Bureau in the office of the Orleans Parish Medical Society were presented by the Secretary, and following approval by the membership same was put into operation the next day. Within the first week of its existence, this Bureau has been able to collect some of the accounts placed with it by the members.

The Society has under consideration the report submitted by a committee of which Dr. Chaille Jamison is Chairman to aid in solving the economic problems now facing the Medical Profession, and at the same time to curtail exploitation of the profession by insurance schemes fostered by the laity. It is planned to distribute to the membership copies of the deliberations of this Committee for their consideration.

The Secretary has requested the Chairmen of the various Abuse Committees to have their reports ready for consideration of the Society early in November in an effort to adopt recommendations of these committees before the end of 1933. As an aid in formulating opinions before considering these reports there has recently been distributed to the membership copies of the Philadelphia County Medical Society report.

A resolution was adopted by the Society requesting members to refrain from entering into contracts or agreements pertaining to group medical services until such contracts or agreements had been approved by the Orleans Parish Medical Society.

Reports of the Judiciary Committee as presented by the Chairman, Dr. Emmett Irwin, were received and accepted by the Society.

Resolution Adopted by the Orleans Parish
Medical Society

Your Hospital Abuse Committee herein presents for your consideration the following resolution:

WHEREAS, it has come to the knowledge of the membership of the Orleans Parish Medical Society

that application has been made by the Board of Administrators of Charity Hospital to the Federal Public Works Committee of Louisiana for an allotment of \$9,600,000.00 of Federal Funds to be devoted to the erection on the Charity Hospital grounds of a new 26-story hospital building, and,

WHEREAS, in certain public appearance of the representatives of the Board of Administrators of Charity Hospital made before said Federal Public Works Committee, it has been stated that the plan of said Administrators for the obtaining of and the repayment of said \$9,600,000.00 contemplates the establishment in said new building of Pay Wards; and,

WHEREAS, the inclusion of such revenue producing pay wards would be a radical departure from the character and standard of non-pay public service, and it would necessarily follow that the State institution, known as Charity Hospital at New Orleans, would thereby be placed in competition with the several splendidly conducted and privately operated pay institutions, resulting ultimately in the closing and dissolution of such institutions as Hotel Dieu, Mercy Hospital, Baptist Hospital, Touro Infirmary, French Hospital and Eye, Ear, Nose and Throat Hospital; and,

WHEREAS, the Charity Hospital is one of the largest of its kind in the United States and offers a higher percentage of free beds to the population than any other community, and,

WHEREAS, the new Hospital building is unnecessary at this time, the present accommodations being ample, providing admissions and treatment be confined to indigent patients exclusively; and,

WHEREAS, the proposed enlargement of that institution will impose an additional tax burden on this State because of the fact that a large portion of the funds provided for this expansion must be reimbursed and the interest thereon must be paid plus the great expense of maintenance which must be borne by the tax payers of this State.

THEREFORE, BE IT RESOLVED, that we, the members of the Orleans Parish Medical Society, in regular meeting assembled at the corporate domicile in the City of New Orleans, on this Monday, October 23, 1933, do hereby object to the proposal of the Board of Administrators of Charity Hospital to negotiate the financing of said new Hospital Building; and for the reasons hereinabove assigned, we do respectfully file this our protest with the Federal Public Works Board, with the request that the petition of said Board of Administrators of Charity Hospital be denied; and,

BE IT FURTHER RESOLVED, that a copy of these resolutions, duly certified, be forwarded to the Federal Public Works Board of Louisiana and to the proper departments at Washington, and to such other public boards or bodies of interest in the premises, and to Louisiana State Medical and

Surgical Journal, and the Journal of the American Medical Association.

The Society recognizes the existence of many abuses of the profession and by the profession. The Society places the responsibility of such abuses on each and every member of this Society for any and all abuses to which he may be a part, and such a member is answerable to the Society.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 8/31/33	\$ 979.11
September receipts	395.09
TOTAL CREDITS:	\$1,374.20
September expenditures	\$ 492.04
ACTUAL BOOK BALANCE: 9/30/33	\$ 882.16

Resolutions of the Condolence Committee

Resolutions were adopted on the death of three active members of the Society who died during the Third Quarter as follows:

Dr. James Phares O'Kelley, head of the Ear, Nose and Throat Department of Tulane University School of Medicine and Chief of the Oto-Laryngological Department of the Baptist Hospital died suddenly at his home July 17, 1933, following an attack of indigestion.

He was born 63 years ago in Tensas Parish, Louisiana, and was graduated from Tulane University in 1894. He studied medicine in London and then began practice in New Orleans. Recently he was chief of staff of the Baptist Hospital.

Dr. O'Kelley was a member of the Orleans Parish Medical Society, the Louisiana State Medical Society and the American Medical Association.

His activities covered many outside interests in this city, he having been President of the New Orleans Country Club, head of the Tulane University Alumni Association and of the Delta Tau Delta Alumni Society. He was a Mason, a member of the Boston Club and had been head of the Twelfth Night Revelers Carnival organization.

Dr. O'Kelley in 1898 married Miss Clemence DeBuys of New Orleans. He is survived by his widow, three sons and one daughter.

The profession and the community have lost an able member and a worthy citizen.

With a feeling of irreparable loss the Orleans Parish Medical Society records the death on July 21, 1933, of Dr. E. Denegre Martin, one of its most able, enthusiastic and loyal members.

The son of John Massie Martin and Emma Denegre, he was born on Eureka Plantation, St. Landry Parish, Louisiana, March 23, 1863.

He entered Springhill College, Mobile, Alabama, in 1878 and the University of Louisiana (now Tu-

lane University) in the fall of 1879. It was in 1887 that circumstances and persuasion influenced him to enter Tulane University Medical School. In 1889 he gained an appointment as interne at the Charity Hospital through a competitive examination and served in this capacity until a year after his graduation in 1891, when he was appointed a member of the visiting staff of the hospital with which he was still connected at the time of his death. At the same time he was appointed assistant to Dr. F. W. Parham, Professor of Minor and Clinical Surgery in the New Orleans Polyclinic. In 1889 he was made Professor of Minor and Clinical Surgery and when Dr. Parham retired to become a member of the Board of Administrators of Tulane University, Dr. Martin succeeded to the Chair of Surgery in the Polyclinic and retained this position in the Graduate School of Medicine of Tulane University until he became Professor of Surgery Emeritus in 1932.

In 1891, a few months before graduating, he was appointed House Surgeon to the Women and Children's Hospital, a new institution which was organized for the purpose of training nurses, and was the first training school for nurses in the South. This valuable service was continued two years later through the medium of the New Orleans Sanitarium, later the Presbyterian Hospital which he was instrumental in organizing and where he served as House Officer until 1894. He held the position as Assistant Sanitary Inspector with the City Board of Health for a time.

Dr. Martin did general practice until 1905 when he began to devote his entire time to surgery. He loved the reconstructive phase of the work and this, combined with his natural mechanical trend of mind, led him to what he considered his best work in surgery. The following is quoted from his autobiography, — "I have always been proud of my two contributions to fractures, first, Fractures of the Femur, which has been most successful in certain chosen cases and has also acted as a measure of relief to old people; second, Fractures of the Patella with the buried wire splint which has proved successful in nearly 100 per cent of the cases."

In 1901 Dr. Martin was president of the Orleans Parish Medical Society; in 1907 President of the Louisiana State Medical Society; in 1908 vice-president of the American Medical Association. He was a member of the Southern Surgical Association, a charter member of the Southern Surgical Association, a charter member of the American College of Surgeons and Southern Medical Association.

In 1925 Dr. Martin was appointed Dean of the Graduate School of Medicine of Tulane University and resigned in 1928. In 1930 he was accorded the dual honor of being chosen honorary and faculty member of the Stars and Bars Chapter of the Alpha Omega Alpha Medical Fraternity. He had

conferred upon him the degree of LL. D. by Springhill College in 1932.

He was surgeon of the New Orleans & Northeastern Railroad from 1896 to 1907 and Chief Surgeon from 1907 to 1917; when the road was sold to the Southern Railway System he retained the position of local surgeon; he was, also, surgeon for the Southern Pacific, the Louisville and Nashville, and the New Orleans and Great Northern and consultant for the Illinois Central.

He was on the visiting staff of Charity Hospital from 1891 to 1925 and consulting surgeon at the time of his death, also consulting surgeon of the Eye, Ear, Nose and Throat Hospital and Touro Infirmary.

Despite the enormous amount of work required to fill so important a place in his profession, Dr. Martin still found time to write, contributing some sixty-odd papers on medicine and surgery, the last "A suggestion for the relief of deformity after the removal of large benign tumors of the breast" which he expected to read at the staff meeting of Touro Infirmary on Wednesday following his confinement to bed.

He derived great pleasure in helping internes and young graduates over rough places and to older men, too, he was most liberal with his tremendous store of common sense knowledge. There was always some witticism on the end of his tongue or a bit of humor "up his sleeve". If ever the personality of one man embodied a delightful blend of physician and of good Samaritan it was Dr. E. Denegre Martin.

Dr. Edward Joseph DeBergue died at the Baptist Hospital, in New Orleans, on September 20, 1933 at the age of sixty-two years. He had been ill several months before entering the hospital.

Dr. DeBergue was graduated from the Tulane School of Pharmacy in 1897 and from the Tulane School of Medicine in 1908. He was engaged in general practice and served as assistant coroner of Orleans Parish for 16 years and as inspector for the Louisiana State Board of Health four years.

During the World War, Dr. DeBergue served as a physician on transports carrying troops to France.

Dr. DeBergue was a member of the Orleans Parish and Louisiana State Medical Societies.

He leaves two nieces and two nephews and a host of friends and many grateful patients to mourn his loss.

LIBRARIAN'S REPORT

The summer months marked a new high record for the use of the Library at this time of year. Listed below are the subjects on which material has been collected by the Library staff during August and September.

Arteriovenous anastomosis of the nose.

Mendelung's disease.
 Toxin or toxoid in diphtheria.
 Treatment of osteomyelitis.
 Saline solution intracutaneously in edema.
 Cancer of tonsil.
 Rupture of kidney.
 Antiseptic use of dyes in infections of urinary tract.
 Manganese.
 Dietetic value of citrus and lemon.
 Broder's Index of malignancy.
 Injection of Phosphoric acid in treatment of kidney stone.
 Lithopedion.
 Danger of over-treatment and under-treatment in thymus disease.
 Therapy in epidemic encephalitis.
 Enuresis.
 Diseases of the antrum.
 Therapy in experimental peritonitis.
 History of blood transfusion.
 Insanity caused by drug addiction.
 Hypertension, 1931-33.
 Barbituric derivatives in toxemias of pregnancy.
 Atheroma.
 Schizophrenia.
 Anesthetics in obstetrics.
 Causes of scordinemia.
 Pulmonary lobectomy.

While on vacation, Miss Marshall visited two medical libraries which she had not had the opportunity to see heretofore,—the Jackson County Medical Society Library in Kansas City and the Library of the University of Nebraska School of Medicine in Omaha. Each library showed points of interest in its own type.

During August and September, 152 volumes have been added to the Library. Of these 55 were received by binding, 85 by gift and 12 from the New Orleans Medical and Surgical Journal. A notation of new titles of recent date is given below.

NEW BOOKS

- College of Physicians of Philadelphia—Transactions. 1932.
 Lee, R. I.—Fundamentals of Good Medical Care. 1933.
 Wellcome Research Institute—Exhibits at Chicago Exposition. 1933.
 Laurens, Henry—Physiological Effects of Radiant Energy. 1933.
 Southern Surgical Association—Transactions. v. 45. 1932.
 A. M. A.—Council of Pharmacy and Chemistry Report. 1932.
 U. S.—Census Bureau Manual of Joint Causes of Death. 1933.
 Robinson, W. J.—Law Against Abortion. 1933.
 Bailey, Percival—Intracranial Tumors. 1933.
 Harris, Henry—California's Medical Story. 1932.
 Salsbury, C. R.—Essentials of Pathology. 1932.
 Sneed, W. L.—Orthopedics in Childhood. 1931.
 Johnson, B. J.—Child Psychology. 1932.
 Boyd, William—Surgical Pathology. 1933.
 Rockefeller Foundation—Methods and Problems in Medical Education. v. 2-3, 1924-25.
 Howell, W. H.—Textbook of Physiology. 1933.
 Griffith, J. P. C.—Diseases of Infants and Children. 1933.

FREDERICK L. FENNO, M. D.,
 Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

A LETTER FROM THE STATE PRESIDENT

The following letter was sent to Governor O. K. Allen under date of July 17, by Dr. C. A. Weiss. It requires no comment, as it shows that the President of our State Organization very early in the summer started the preliminaries to secure funds for the physicians in conjunction with the Emergency Relief Administration.

Hon. Oscar K. Allen, Governor,
 State of Louisiana,
 Baton Rouge, La.

Dear Governor Allen:

Quoting from a recent editorial in the Journal of the American Medical Association under the date of July 1, 1933.

Now that federal funds have been made available, physicians and hospital administrators, wherever state and local funds are inadequate to provide relief should lead the way in asking the governors of their respective states, if they have

not already sought Federal Aid under the Federal Emergency Relief Act of 1933, to seek such aid at once. If the State has already obtained a grant under that act, the use of it to afford relief for illness and injury may be demanded. The first effective move in any case must be made by the governor of the state, who alone is authorized by the act to make application for a federal grant.

Acting upon this information I beg to submit the following questions relative to the use of the above fund.

(1) Have you as Governor of the State of Louisiana applied for the funds provided by the Federal Emergency Relief Act, and if so, is this fund available at the present time for the care of the indigent sick and injured of our state?

(2) Have any of the hospitals of Louisiana requested the use of this fund?

My inquiry is prompted by the fact that the medical profession as well as the hospitals of our

state have and are continuing to care for an ever increasing number of patients without any means of support, unfortunate victims of the existing economic depression. This unfortunate condition of affairs has worked many hardships upon the medical profession and added greatly to the expense of our hospitals.

The members of the medical profession, as well as the hospitals, are always willing and ready to extend aid and comfort to suffering humanity. However, if our Federal Government is providing for the compensation of physicians and hospitals in caring for the unfortunates requiring our services, and a fund is available for this specific purpose, I can see no reason why we should not make use of same.

If these funds are available, or should they become available, can you inform me what steps are necessary to obtain the use of them? Appreciating your cooperation in this matter, and thanking you for the desired information, I am,

Respectfully yours,
C. A. Weiss, M. D., President.

SOUTHERN MEDICAL ASSOCIATION NEWS

With every prospect of a banner meeting, the Southern Medical Association moves on to Richmond for its next annual convention, beginning on the 14th and extending through the 17th of November.

Probably at no time in the history of the nation has solidarity of effort and thorough accord of spirit been more necessary than at this moment when the clouds of the devastating depression seem to be breaking. The physicians of the South, always alert to opportunities and obligations, can "do our part" just now in no more effective way than by bringing to one another the stimulus that flows from the companionship, from the broadening of ideas, from the actual dissemination of new thought that always mark the sessions of this great organization.

It seems fitting that this girding of the medical forces of the South for the New Day that is dawning should occur in the capital of the Old Dominion, the focal point of so many stirring events in the history of the United States. To-day a metropolitan area of wide dimensions and a medical center of real note, Richmond, of a yesterday that reaches back to the dawn of English occupancy of this continent, is filled with memorials of great names and greater deeds that, along with its natural beauties, lend it a lure, a charm equaled by few other American cities. To these physical and historic embellishments it adds a warmth of hospitality that assures a genuine and winning welcome to our Association.

In behalf of the profession in this city as expressed by your host, the Richmond Academy of Medicine, we extend to the physicians of the South

cordial greetings and expression of our earnest desire to have you with us during these notable sessions. General and sectional programs have been admirably arranged and the clinics and scientific exhibits will offer demonstrations of lively interest. Local committees will spare no effort to contribute to the comfort and convenience of the delegates and such guests as may accompany them. The social diversions offered by the city will be engaging and the points of interest here and in the surrounding territory will lead you into many delightful byways. Let us hope, then, to see you among this great host. It will be our pleasure to solve your problems of transportation, of hotel reservations, or of anything else that may be bothering you. If you have established no other contacts, the undersigned will be very gratified indeed to receive your communication and direct it into the proper channel for immediate action.

Joseph F. Geisinger, M.D.,
Chairman Publicity Committee,
Stuart Circle Hospital, Richmond, Va.

NEWS NOTES

At a recent meeting of the American Congress of Radiology held in Chicago, a National Board of Qualifying Radiologists was established, approved by the American Medical Association. The purpose of this National Board is to qualify by examination physicians who propose to practice radiology as specialists. The appointments to this Board were made by the officers of the following international radiological societies; American College of Radiology; Radiological Society of North America; American Roentgen Ray Society; American Radium Society; and the Section on Radiology of the American Medical Association.

Dr. Leon J. Menville, Asst. Prof. of Medicine and Radiology, Tulane University, was elected a member of this National Board.

At the last meeting of the American College of Surgeons held in Chicago, Dr. C. Jeff Miller was elected to serve a three year term of office on the Board of Regents of the College. At this same meeting Dr. Alton Ochsner was re-elected as a member of the Board of Governors to serve four years.

Dr. H. W. Kostmayer, Dean of the Graduate School of Medicine of The Tulane University of Louisiana, held a clinic and read a paper on "Office Gynecology" at a meeting of the Pike County Medical Society held at McComb, Miss., on October 5, 1933.

Prof. Isidore Cohn of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana presented a paper in the symposium on fractures at a meeting of the American College of

Surgeons held at Chicago, Ill., the week of October 4, 1933.

Dr. C. L. Brown has been elected the head of the Ear, Nose, and Throat Department of Baptist Hospital to succeed the late Dr. J. P. O'Kelley.

Surgeon M. F. Haralson, U. S. P. H. S., has been relieved from duty at Balboa Heights, C. Z., and assigned to duty at the Marine Hospital, New Orleans

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information.

For the week ending September 23, the following diseases were reported in double figures: One hundred and fifteen cases of malaria, 61 of pulmonary tuberculosis, 34 of syphilis, 27 of pneumonia, 25 of gonorrhoea, 24 of cancer, 15 of typhoid fever, 12 of diphtheria. The typhoid fever cases were scattered throughout the State, Lafayette Parish reporting the most, namely, 4 cases. One case of poliomyelitis was reported from Franklin Parish, and 2 cases of epidemic meningitis, 1 each from Bossier and DeSoto Parishes. For the thirty-ninth week of the year 1933 the incidence of malaria was found to be increasing, there being 144 cases reported in this week. There was also a slight increase in pneumonia, 33 cases being listed. Other diseases occurring in double figures were 29 cases of cancer, 28 of diphtheria, 27 of pulmonary tuberculosis, 21 of syphilis, 19 of gonorrhoea, 18 of typhoid fever, and 14 cases of a disease which rarely appears in any considerable numbers, namely, septicemia. Caddo Parish reporting 4 cases of typhoid fever showed a great incidence of this disease than any other parish. A case of poliomyelitis was reported from East Baton Rouge Parish. Malaria was still decidedly on the increase in the report of the fortieth week of the year which ended October 7, there being 183 cases reported. The other diseases that were prevalent included 32 cases of diphtheria, 28 of pneumonia, 26 of cancer, 23 of pulmonary tuberculosis, 22 of syphilis, and 11 of typhoid fever. Franklin Parish with 3 cases led the parishes in the number of cases of typhoid fever reported. From Franklin Parish there was reported 1 case of poliomyelitis. For the week ending October 14, malaria showed an increase of 1 case, 184 being listed this particular week. This is a perfectly astounding figure, a little more than six times the five-year average for this particular week. Some clinic must have sent in a large number of report cards, because syphilis jumps from 22 cases to 121 in this particular week. Gonorrhoea was reported in 36 in-

stances. There were also put upon the list 33 cases of pulmonary tuberculosis, 30 of diphtheria, 27 of cancer, 17 of pneumonia, almost exactly equivalent to the five-year average, 13 cases of typhoid fever, and 14 of scarlet fever. Orleans Parish led the other parishes in the number of cases of typhoid fever, 5 being reported, but there was 1 of these cases imported from outside of the City. Jackson Parish came next with 3 cases and the other parishes which reported cases showed only 1.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending September 16, the mortality rate in the City of New Orleans was 15.3 for the population as a whole, whereas it was only 10.2 for the white citizens and 27.7 for the colored, these figures being obtained from a total death of 141, total white deaths; of 67, and of colored deaths 74. Reports for the week ending September 23 showed a total of 147 deaths, 94 of these were in the white and 53 in the colored group. The death rate for this week was 15.9, for the white 14.3, and for the negro 19.8. The infant mortality for this week was 168, due very largely to the deaths of 21 negro infants under one year of age, giving a mortality rate for the negro infants of 322. The following week showed a slight decrease in the number of deaths in the City, there being 135, divided white 71 and colored 64, with a death rate for the group as a whole of 14.6, for the white population 10.8, for the colored 23.9. The infant mortality rate was 90. This week the rate was practically the same among the white and the colored population. In the corresponding week of 1932 there were 125 deaths. There was a further decrease in the number of deaths reported in the first week of October, there being 124, 68 being from the white race and 56 from the colored. The total death rate was 13.4, for the white population 10.4, for the negro 20.19. The death rate for the first forty weeks of the year was slightly under that of the first forty weeks of the year 1932, there being 15.3 as contrasted with the 1932 rate of 15.6.

INTERNATIONAL UNION AGAINST TUBERCULOSIS

The annual meeting of the Council of the International Union against Tuberculosis, whose chairman is Professor Nolen (Netherlands), was held in Paris, on Saturday, July 22nd. Delegates from fourteen countries attended this meeting. At 10 a. m. an administrative session took place at the Headquarters of the Union, 66 Boulevard St. Michel, Paris. It was decided that the Conference

of the International Union would be held in Warsaw on the 4th, 5th and 6th of September, 1934.

U. S. CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following named open competitive examination:

Junior Medical Officer (Interne)

Applications for the position of junior medical officer (interne) must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than November 15, 1933. Vacancies in this position at St. Elizabeths Hospital, Washington, D. C., and in positions requiring similar qualifications, will be filled as a result of this examination. The entrance salary is \$2,000 a year, less a deduction of not to exceed 15 per cent as a measure of economy and a retirement deduction of $3\frac{1}{2}$ per cent. A further deduction of \$60 a year will be made for quarters.

Competitors will not be required to report for a written examination, but will be rated on their education and experience. Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city, or from the United States Civil Service Commission, Washington, D. C.

WOMAN'S AUXILIARY NEWS

AN INVITATION TO RICHMOND

If you have never been to Richmond, haven't

you always wanted to come? And if you have been to Richmond, haven't you always just longed to come back? Well, this is the time to make that dreamed of trip. In addition to the lovely old landmarks of history and tradition you have seen before or read about, we are able now to visit lovely restored Williamsburg with its governor's palace and House of Burgesses standing again "with the glory that was Greece and the grandeur that was Rome". Many of the beautiful old homes have been restored and they with their gardens are enchanting. The whole atmosphere is saturated with the spirit of two centuries ago.

Only a few miles from Williamsburg is old Jamestown with its air of brooding sadness as one walks among the bits of construction which are all that remain of the efforts of those first brave men who came to Virginia.

A trip to these interesting shrines is included in the entertainment being planned by the doctors' wives of Richmond for the wives of doctors who will come to the Southern Medical Association in November. Committees have been busy with plans for weeks and a most cordial welcome awaits you. We urge you to come.

Sylvia Burns Sanger
(Mrs. W. T. Sanger)
Press Chairman of
Woman's Committee

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

FROM OUR PRESIDENT

The Members of the Mississippi State Medical Association:

In this day of the "new deal" it seems that we still have one "forgotten man" not yet remembered and provided for. I am inclined to think that he is the original "forgotten man". As far back as history goes, the doctor seems to have been the forgotten man. Apparently he is still occupying this unenviable position.

In all the plans for rehabilitation of different classes of our population there seems to be no plan for aid to the hard pressed physician. During these days of financial stress, I doubt if any class of our population has carried any heavier burden than the physician. Yet, be it said to his everlasting credit, I have not heard of one doctor who has asked for help, even when he did not know how he was going to make ends meet. He has carried on regardless of the storm and has met it erect, shoulders thrown back, and chin up, without a whimper. He has gone his rounds day by day in his efforts to relieve suffering humanity, never sparing himself physically.

It seems to me that he is entitled to some lightening of his burden. The doctor is called on to pay his taxes and contribute his money for the various organized charities of our land. He fulfills his duty as a citizen just as any other good citizen of our population. It would appear that his debt to society would have been paid but apparently the public thinks otherwise. He is expected to give his professional services to the indigent free of charge, thus laying an additional burden upon our already hard-pressed physician.

No one would deny the right of the individual doctor to bestow his medical charity wherever he sees fit in his practice; that is his own privilege and I feel safe in saying that it will continue to be given freely.

Federal, state and organized charities are entirely different propositions. These agencies expect to pay for all other services they obtain; why not medical services? Why should one class of our citizens be singled out to bear a double burden?

I think it is time this burden was lifted from the shoulders of the physician. As long as the profession sits supinely down and permits this imposi-

tion, the situation will not be corrected. Organized medicine should take a definite stand against this unjust practice and endeavor to abolish this discrimination against the medical profession.

By all the rules of justice the physician is entitled to a just remuneration for this class of work. There is no valid reason that the doctor should work for the federal, state or organized charities free of charge. The grocer does not furnish his groceries free to the indigent. Neither does the druggist furnish the drugs free called for on the prescription obtained gratis from the physician.

I recommend that our county and component societies give this subject thoughtful study to the end that our profession be relieved of this burden and the original forgotten man remembered.

J. W. D. Dicks,
President.

Natchez,
October 8, 1933.

MEMBERSHIP

The membership campaign of our president, under the direction of the president-elect, is progressing. The following is the gain in membership of the component societies:

Gain In Membership

Society	Number of Members		Per Cent Gain
	May	Oct.	
1 East Mississippi	76	85	9
2 Winona District	36	40	4
3 Homochitto Valley	32	35	3
4 Harrison-Stone-Hancock ...	34	37	3
5 Tri-County	23	25	2
6 South Mississippi	70	76	6
7 Central	106	115	9
8 Issaquena-Sharkey-Warren	40	43	3
9 Northeast Mississippi	107	115	8
10 Claiborne County	6	6	0
11 Clarksdale & Six Counties	44	44	0
12 Delta	83	83	0
13 DeSoto County	8	8	0
14 Jackson County	11	11	0
15 Pike County	28	28	0
16 Tate County	9	9	0
17 North Mississippi	44	41	*3.

*Loss.

Present Membership Of Total Physicians In Jurisdictions

Society	No. of Physicians	No. of Members	Per cent
1 Pike County	30	28	93.33
2 Jackson County	14	11	78.57
3 Homochitto Valley	45	35	77.78
4 Issaquena-Sharkey-Warren ..	58	43	74.14

5 Tate County	13	9	69.23
6 Claiborne County	9	6	66.67
7 Central	178	115	64.61
8 East Mississippi	139	85	61.15
9 Tri-County	43	25	58.14
10 Harrison-Stone-Hancock	64	37	57.81
11 Clarksdale & Six Counties...	77	44	57.14
12 DeSoto County	14	8	57.14
13 Northeast Mississippi	212	115	54.23
14 Delta	169	83	49.11
15 North Mississippi	89	41	46.07
16 South Mississippi	165	76	46.05
17 Winona District	88	40	45.45

Standing By Districts

District and Councilor	No. of Physicians	No. of Members	Per cent
1 Eighth—W. H. Frizell	118	88	74.58
2 Fifth—W. H. Watson	245	164	66.94
3 Ninth—D. J. Williams	78	48	61.54
4 Sixth—H. L. Rush	139	85	61.15
5 Third—M. W. Robertson ...	212	115	54.23
6 First—J. W. Lucas	246	127	51.63
7 Second—L. L. Minor	116	58	50.00
8 Seventh—J. E. Green	165	76	46.05
9 Fourth—T. J. Brown	88	40	45.45

Watch for your standing next month!

THE MEMBERSHIP CAMPAIGN

As Vice-President of the Southern District, and in charge of the membership campaign in this District, I want to make a personal appeal to all physicians of my District. Will you not make it your business to aid your councilor in a personal way to bring every worthy doctor into line. Individual and personal work is the only real means of accomplishing results.

Councilor D. J. Williams, one of the three of the Southern Division, has made a complete report of his District, giving the exact status of every physician in the District who is not a member of the Association. Councilor Williams has this to say:

"The condition of the state medical association is not quite as bad as each of you seem to think. If you will stop to think seriously, I am sure each of you will agree with me that there are a number of doctors or men practicing medicine in our state who should not be members and are not entitled to membership in any ideal State Medical Association. I regret that this number is entirely too large and that the majority of this number cannot be made fit by including them in our membership. Those of you who have followed closely the proceedings of the House of Delegates have heard me express the idea that there should be a premium on membership and we should not have to corral and drag in indifferent, worthless members."

Dr. Williams' position is, in my opinion, correct. Every real doctor should seek membership in the

State Medical Association, considering it an honor to be a member, and a privilege to work with such a group of high class professional men. Yet the best of men sometimes sleep and fail to grasp the opportunities about them. With a little prodding they will arise to the occasion and be of service to themselves and the Association. They know, but have forgotten for the time being, that practically all good doctors are members; that they have never known a doctor to drop out of the Association without beginning at once to deteriorate; that when they drop out of the Association, they do not feel right—are a little jealous, cantankerous, develop the inferiority complex, and do not have that ambition they once had of being a great doctor and having a part in the onward and upward progress of our great profession. We, as members who are awake, owe it to our sleeping brothers to arouse them and point them again to the goal ahead.

The Association can and should aid in one other way in gaining new members and this is by improving the Association. This can be done by better attendance of the present membership, better programs, more whole-hearted fellowship, and less petty, selfish politics. The formation of selfish clans within the Association seeking unearned benefits at the expense of the Association will utterly destroy it. The big and broad development of the profession as a whole is the ideal the Association should strive to attain.

C. C. Hightower, M. D.

Hattiesburg,
October 4, 1933.

FREE DOCTORIN'

In this day of depression (with all due respect to Roosevelt we are not in the clear yet) when every body is trying to cut down on over production and in the hours of work, few if any seem disposed to give a kindly thought to the doctor. His poor back is now badly galled and has been for sometime; now the latest irritant to the wound is this:

"Mississippi C.C.C. Bulletin No. 1 Paragraph No. 6. Selected men are to be given a thorough physical examination by the County Health Officer, and any man not physically fit should not be placed on the selected list. This will prevent many disappointments at the recruiting station, and will prevent numerous boys going to needless expense in preparing to go to camp."

(Signed)

George B. Power, Director of Selection.

It is but natural to wonder by what right the Director of Selection for the C.C.C. camps calls on the County Health Officer to do this work. Uncle Sam has announced that his policy will be

to distribute many millions of dollars as widely as possible throughout the country. But so far as I know no effort has been made to distribute any of this to the doctors in private practice. The grocer has not been asked to furnish supplies to the camps without cost, it is quite certain that the camp equipment was paid for and all the personnel is being paid a living wage. Why then should the medical examinations be done without cost?

Every physician does his full quota of charity, in addition to contributing as liberally as possible to the various local and national welfare funds. But assuredly no one feels that the work done for the government should be done free of charge. As a matter of fact it has long been the custom for contractors and merchants to expect a better profit on their government business than on any other. But the doctors are expected to do their work for nothing.

J. S. Ullman.

Natchez,
September 30, 1933.

MISSISSIPPI STATE BOARD OF HEALTH
Felix J. Underwood, Executive Officer
Jackson, Mississippi

October 2, 1933.

Dr. J. S. Ullman,
Natchez, Mississippi.
Dear Ullman:

"Copy of letter dictated to Mr. Power within a few minutes after I read your letter, is enclosed.

"If, by chance, your splendid editorial was sent to others, please follow it up with copies of my letter to George Power.

"I had not seen the bulletin, or I would have acted on this earlier. I am of the opinion that Mr. Power will promptly countermand his request and arrange for the work to be done by local physicians as it was before. I feel sure that he must have been requested to do this by Harry Hopkins, Federal Administrator, Washington, D. C. But, be that as it may, I think George will do the right thing by us.

"With best wishes, I am

Very truly yours,

Felix J. Underwood.

"MISSISSIPPI STATE BOARD OF HEALTH
"Felix J. Underwood, M.D., Executive Officer
"Jackson, Miss.

October 2, 1933.

"Mr. George B. Power, Director,
"State Board of Public Welfare,
"New Capitol,
"Jackson, Mississippi.

"Dear Mr. Power:

"Copy of letter with editorial attached from Dr. J. S. Ullman, Natchez, is enclosed. I agree fully

with the sentiment expressed in this editorial. I have not seen the bulletin quoted, but granting that it is quoted correctly, I may state that it is not right to require or even to request the county health officers to do this work. Local physicians should do it and be paid for it.

"In all my dealings with you, you have been as just and fair as possible to all concerned, and I believe that when you carefully consider this matter in the light of the actual need of practicing physicians of this State that you will immediately request the welfare workers not to ask the county health officers to make the physical examinations. Or, if they have already made this request of the health officers, the welfare workers should promptly go to them and inform the health officers that they will not be required to make them.

"I doubt if you realize the amount of destitution among the medical men of this State. They are too proud even to admit it, much less to ask for aid; and this work in the eighty-two counties of Mississippi will be helpful to them. I grant you that in some instances it would possibly simplify and expedite the procedure to have the health officers make the examinations, but that is aside from the real issue. Furthermore, the health officer is quite busy already and has long hours carrying out his program of vaccination, sanitation, and public health education. In the final analysis, the health officer is not supposed to make examination of adults except in the case of food-handlers who are examined periodically by him in the protection of the public health. If the health officer makes general physical examination of adults, he would have little time for public health work, and he encroaches upon the rights of the private practitioner. It is very important that we carefully guard against putting aside any definite policy now set up defining the line of demarcation between the fields of preventive and curative medicine. It would engender hard feelings toward health officers by physicians in private practice and health officers are dependent upon the practicing physicians for the success of their county programs.

"The enclosed copy of letter received a few days ago is only a sample of many received each month in this office from physicians who are trying to get by during these fearful times.

"You and I have always gotten together on mooted questions, and I feel sure that this appeal for justice to the medical men of the State will receive serious and favorable consideration.

"I am dictating this at a late hour Sunday night—in fact it is now ten minutes to twelve—and I am leaving town at an early hour in the morning. This accounts for my not calling at your office for a discussion of this matter.

"With personal regards, I am

Very truly yours,

Felix J. Underwood, M.D."

EMERGENCY RELIEF

At a recent meeting of the Harrison-Stone-Hancock Medical Society the enclosed matter was discussed, and we are wondering why Mississippi has not been accorded the same treatment in the line of fees as the State of New Jersey.

It is the opinion of our Society that this matter should be brought to the attention of the physicians of Mississippi throughout the channel of your valuable Journal. We, therefore, request you to kindly publish the enclosed matter in full if possible. If unable to publish in full please publish that part that will reveal the discrimination that is being made. If you cannot use this matter kindly return same to me.

Yours very truly

Riley Burnett,
Chairman.

Biloxi, Mississippi,
October 6, 1933.

"CHARLES H. SCHLICHTER, M.D.

"556 North Broad Street

"Elizabeth, N. J.

"Sept. 25, 1933.

"Dr. Riley Burnett,

"Gay Building,

"Biloxi, Mississippi.

"Dear Dr. Burnett:—

"I beg to acknowledge receipt of your letter of September 19.

"In the early spring, during the month of March, the New Jersey State Emergency Relief Administration approached the medical profession of the State through the New Jersey State Medical Society and offered to compensate the doctors for work done among those persons who were unable to pay for medical service; that is, those who were able to provide food and shelter for themselves but were unable to provide medical care. A copy of this letter addressed to Dr. Lippincott, President of the Medical Society of New Jersey is marked 'A' and is enclosed herewith.

"The matter was referred to the Welfare Committee of the New Jersey Medical Society and a committee was appointed to meet the representatives of the New Jersey State Emergency Relief Administration and draw up a suitable form of agreement for the working out of this plan. This committee consisted of the Chairman of the State Welfare Committee, the Chairman of the Board of Trustees, the Secretary of the State Medical Society, one member of the Board of Trustees of the State Medical Society and the councilors of the five Councilor Districts of the State Medical So-

ciety. After a number of meetings an agreement was finally arrived at which was satisfactory to both sides. The State Emergency Relief Administration was prompted to make this offer to the medical men of New Jersey because it realized that the doctors were carrying an enormous load by caring for a large number of people who were unable to pay. In other words, they were doing a large amount of charity far beyond the usual amount that our profession has always gladly and willingly done.

"The State Emergency Relief Administration further wanted to keep the people in personal relation with their family physicians and to keep them from becoming charity minded or from developing the free clinic, free hospital and charitable medical service habit.

"At a meeting held in May, a preamble and resolutions were sent to the State Emergency Relief Administration, a copy of which, marked 'B' is enclosed herewith. This was the basis for the negotiations. You will notice in that preamble that several broad propositions were stressed and, on the whole, these were accepted by the State Emergency Relief Administration. A sketch of the plan of organization was also drawn up and finally embodied in the agreement, marked 'C'. The agreement was then drawn up and a letter sent out to the Presidents and Secretaries of the various County Medical Societies, copy of which, marked 'D' is also enclosed. The entire agreement was submitted to each of the twenty one County Societies for their approval and, with slight modifications to fit the fee basis of each County, some of which are rural and have a lower fee basis, it was adopted by all. This agreement, marked 'E' is also enclosed.

"The plan has been in operation in some of our counties for a period of several months and is working very nicely. Doctors are being paid for the work they are doing and, through the watchfulness of the County Societies, politics have been kept out: that is, when the patient who applies for relief comes to the Relief Administration, the first question he is asked is, 'Who is your family doctor?' If he replies that he has one, well and good. The order is made out to that doctor. If he says he has no family doctor, he is then asked who last attended him or his family. Replying in the negative, he is then handed a list of physicians who have signified a willingness to cooperate in the plan and told to make his choice from among them and to present the order given to that doctor. In this way the work is distributed where it really belongs, to those who are and have been taking care of their unfortunate patients, and it makes it impossible to give all, or a greater part of the work, to a politically favored few.

"Should you care to get more information from the State Emergency Relief Administration, write

to Col. Joseph H. Bigley, State Manager, Department of Standards and Research of the New Jersey State Emergency Relief Administration, 540 Broad Street, Newark, N. J. Col. Bigley was a great help to the medical profession in the organization of this work and is continuing his interest in it.

"I have just received from the Federal Relief Administration at Washington, D. C., the 'Rules Regulations No. 7 governing medical care provided in the home of recipients of employment relief.' I have not as yet had time to read it but in skimming it over, I find it is practically the same plan which we originated. It might be well to send for it.

"I trust that the enclosed matter may be of use to you. If there is any way in which we can help you, kindly call on us and we will do all we can to be of assistance. We believe the plan to be fair to the State, fair to the Medical Profession and to the patients, inasmuch as it gives the patient the right to the choice of a physician and it keeps the relation between the family physician and the patient intact.

"Very truly yours,

"Chas. H. Schlichter."

"A"

"Dr. A. Haines Lippincott,

"President, Medical Society of New Jersey,

"Camden, New Jersey.

"Dear Dr. Lippincott:

"The State Emergency Relief Administration is desirous of receiving the cooperation of your Society. It is our feeling that the following important points should be discussed:

"(1) Establishment of a uniform procedure of authorizing medical care to the Emergency Relief Administration's clients in various towns throughout the State.

"(2) During this emergency there is an increasing need for medical care and a need of a larger number of physicians to take care of this increasing load.

"(3) Establishment of a uniform fee for home visits and office visits.

"(4) Establishment of a uniform fee for special visits.

"(5) Procedure for rendering bills for services given to relief cases.

"(6) The use of National Formularies or U.S. Pharmacopoeia in issuing prescriptions for Relief Cases.

"(7) The appointment of a State Committee to be advisory to the State Emergency Relief Administration.

"(8) Appointment of committees by County Societies to cooperate with county and local municipal relief administrations.

"It is our suggestion that your Society appoint a committee to meet with this administration with a view to discussing the above 8 points and

endeavor to arrive at an equitable basis of operation.

"If you will be so good as to advise the undersigned when it would be convenient for such a committee to meet with him, it will be greatly appreciated.

"Yours very truly,

"(Signed) J. H. Bigley,

"State Manager, Dept. of Relief Work,
of the New Jersey State Emergency
Relief Administration."

"B"

"PREAMBLE"

"In accepting this opportunity to cooperate with the E.R.A. the medical profession acknowledges its responsibility first and foremost to provide the best possible medical care to the indigent poor of New Jersey; and secondly to the profession itself to promote and safeguard its interests.

"Several broad principals may be enumerated:—
"The medical society enters into this plan for the period of the emergency only and it shall have the power to designate when the emergency is over.

"The control of the administration of the medical relief shall reside with the society thru its designated state and county committees.

"The present and future policies shall be subject to the approval of the society.

"The preservation of the personal relationship between the doctor and patient shall be paramount.

"The fee schedule in general shall be on a basis of about 2/3 the customary fees.

"The payment of fees shall be arranged on as simple and easy basis as possible to facilitate collection by the doctors.

"It shall be agreed that medical relief shall be supplied by the individual physicians, preferably by the patients' own or previous physician and shall insure free choice of physician by the client.

"Clinics shall not be formed, except as approved by the Medical Relief Committee of the State.

"It shall not be the policy to develop and centralize medical care in the hospitals or clinics except in so far as special diagnostic and treatment aids are needed.

"The E. R. A. shall not pay physicians for work in clinics; nor shall it pay hospitals for admission clinic charges.

"It shall not be the policy of the E. R. A. to substitute midwives for physicians in obstetric cases.

"Problems will arise in some counties requiring special recognition and treatment.

"It is recognized that there are grave inherent dangers in this plan such as the development of a beauracracy both in the medical organization and the E. R. A.; that favoritism to certain physicians may develop; that unethical practices must be watched.

"The designation of who shall receive medical

relief as provided by the E. R. A. is primarily for the E. R. A. to decide. However, the Medical Relief Committee of the State may make suggestions.

"That the Medical Society enter into this plan for one year or for the emergency only."

"ORGANIZATION"

"C"

"The organization of Medical Relief shall be as follows:—

"A Medical Relief Committee of the State known as the Medical Relief Committee of the State Society whose duties shall be as follows:—

"1. To formulate policies and plans in cooperation with the E. R. A.

"2. To carry on a close liaison with the E.R.A.

"3. To organize sub-committees in each county to be known as the Medical Relief Committees of the County.

"4. To act on all complaints or requests either from the E. R. A. or the county committees.

"5. To gather as accurate reports as possible of the work in each county.

"6. The district councilor on the committee shall act as organizer and supervisor of the work in the counties in his district."

"MEDICAL RELIEF COMMITTEE OF THE COUNTY.

"Shall be appointed in each county.

"Shall organize to supervise the work in each county in cooperation with the County Relief Administration.

"Shall maintain at all times direct control over the Medical Relief.

"Shall have power of approval or adjustment of bills, such as those objected to by the E. R. A. as being exorbitant, false or technically incorrect.

"Shall have frequent contact with the E. R. A.

"Shall secure monthly reports of the amount of work done, bill presented, bills paid, doctors receiving payments and amounts, and any other pertinent information.

"Shall be zealous to provide the best medical care—cooperate with the other health organizations, particularly nurses.

"D"

"To the Presidents and Secretaries of the County Medical Societies:

"The Medical Relief Committee of the State Society submits herewith a memorandum of an agreement entered into with the State Emergency Relief Administration which outlines the practices to be observed in taking care of Emergency Relief clients.

"In reading through this plan you will observe that we have agreed to set up in each county a medical committee to be known as the Medical Relief Advisory Committee of the county to co-

operate with the county director in order that the principles set forth in this plan may be started into operation.

"The Committee, therefore, requests you to take the following immediate steps:

1. The County Society shall appoint or elect a committee of not less than five members to be known as the County Medical Relief Advisory Committee.

"2. This committee shall immediately prepare, for submission to the County Director, a list of licensed physicians within the county who are willing to accept Emergency Relief cases.

"3. The committee shall contact the County Director of Emergency Relief at once to arrange a fee schedule for the Emergency Relief clients.

"4. While the maximum fee of \$1.00 for an office call, \$2.00 for a house visit, and \$25.00 for an obstetric case have been agreed upon, the rate for your individual county shall be based upon a proportion of from $\frac{1}{2}$ to $\frac{2}{3}$ of the prevailing average fees in your county. Several parts of the plan are worthy of special attention.

"The doctors shall strive to take care of the clients in the home and shall only refer them to the hospital for emergency conditions.

"The method of submitting bills shall be carefully studied and it should be noted that no cases shall be charged to the Emergency Relief Administration unless properly authorized.

"It will be necessary to inform every member of your society about the details of the plan and it will be published in the next issue of the State Journal.

"The committee stands ready to assist in any way possible to help in organizing or to smooth out troubles which may arise. We have promised the Emergency Relief Administration the whole hearted cooperation of the profession.

"Respectfully submitted,

"Spencer T. Snedecor,

"Chairman Medical Relief Committee of Medical Society of N. J.

"James Fisher, Secretary."

"E"

"Report of the Medical Advisory Committee
Of the Medical Society of New Jersey

"PLAN OF ORGANIZATION AND FUNCTION

"1. Organization

"In accordance with resolutions passed by the Medical Society of New Jersey and as agreed to by Col. Joseph H. Bigley, representing the Emergency Relief Administration, Mr. John Colt, State Director of Emergency Relief, has appointed the following physicians as members of the State of New Jersey Emergency Relief Administration Medical Advisory Committee.

Dr. C. H. Schlichter, 556 N. Broad St., Elizabeth.

Dr. Christopher C. Beling, 109 Clinton Ave., Newark.

Dr. S. T. Snedecor, Hackensack.

(Representing the Medical Relief Committee of the Medical Society of New Jersey.)

"II. FUNCTION

"A. This committee shall meet with designated officials of the Emergency Relief Administration to formulate plans and to consider jointly, problems, questions and issues involving the interest of the Medical Profession, to consider complaints, and to maintain a liaison between the Emergency Relief Administration and the Medical Profession.

"B. This committee shall aid in the interpretation of these policies to local Medical Societies, physicians, and the public at large.

"C. This committee shall aid in the organization of county medical advisory committees to consult with the County Directors of Emergency Relief."

"STATE OF NEW JERSEY

"EMERGENCY RELIEF ADMINISTRATION

"MEDICAL RELIEF POLICIES

"RELATIONS WITH CLIENTS AND PHYSICIANS

"1. The preservation of the personal relationship between the doctor and patient shall be held paramount.

"2. Medical relief shall be supplied by the individual physicians, preferably by the patients own or previous physician, which shall insure free choice of physician by clients. Free choice of hospitalization in any accredited hospital shall be permitted.

"3. A uniform procedure for authorization of medical care shall be established for each county. This procedure should not be in conflict with the following requirements.

"4. All authorizations for medical care shall be issued in writing on the regular Relief Order Blanks with the exception that telephone authorizations should be immediately followed by such a written order. This order authorizes the doctor to provide medical care for a period not to exceed two weeks or involving more than ten visits or representing an expenditure of not more than \$20.00. Medical care for more than two weeks shall be based only on a written renewal of the original order, such renewal not to be issued until after a reinvestigation of the case in the home. The Emergency Relief Administration shall not suggest the name of any one physician. It may provide rosters of physicians.

"5. Medical care for prolonged illnesses, such as arthritis (chronic), asthma and chronic heart disease shall be authorized on an individual basis, and in general shall be limited to not more than one visit per week over a period not exceeding three months. In the instances where more frequent visits seem to be in-

- icated for a short period, additional authorization for such service should be required.
- "6. Authorization for emergency service rendered by a family physician may be provided, if the physician reports to the Relief Administration within 48 hours the name and address of the sick indigent person, and the occasion for the emergency visit. Such cases are to be considered as exceptional and the approval, if given, should be conditioned upon the acceptance by the Emergency Relief Administration of the indigency of the patient to whom such emergency service is given.
- "7. The Emergency Relief Administration may authorize payment for medical care as a special or single phase of relief to a family or individual.
- "8. The Emergency Relief Administration shall not pay physicians for work in clinics; nor shall it pay hospitals for admission clinic charges. However, this administration may pay for unusual extra charges in connection with service to clinic charges such as expensive x-ray service or unusually involved laboratory work, but only when essentials in the treatment of emergency cases.
- "9. The physician shall decide whether the patient requires hospitalization but except in serious emergency the Emergency Relief Administration shall be notified sufficiently in advance of admission to permit it to establish the property of accepting public responsibility for hospital charges.
- "10. Operations shall only be certified to for medical or surgical emergency conditions.
 "(A) The so-called elective operations shall not be performed on relief cases unable to meet their hospital and doctor bills.
- "11. Only regularly licensed doctors of medicine shall be authorized to treat clients. This clause shall not, however, interfere with necessary treatment which may be performed by registered visiting nurses, under medical direction and supervision. It shall not be the policy of the Emergency Relief Administration to substitute midwives for physicians in obstetric cases.

"REMUNERATION PROGRAM

"1. A schedule of rates at which doctors may be reimbursed by the Emergency Relief Administration for services rendered to patients of any given county will be set up by the County Emergency Relief office. These rates shall be established by the County Medical Society through its Medical Relief Committee in conference with the County Emergency Relief Director. These rates as established

by each county shall be effective subject to the approval of the Medical Relief Committee of the Medical Society of New Jersey and the State headquarters of the New Jersey Emergency Relief Administration.

"SUBMITTING OF BILLS

"1. Monthly bills shall be rendered by the doctors to each municipality from which authorization to provide medical attention at public expense has been received. Inasmuch as bills are to be charged against the calendar month in which the medical care was authorized two bills are to be furnished.

"(A) One to cover charges for care rendered to patients whose total course of treatment was completed during one calendar month.

"(B) The other to cover charges for care of patients whose course of treatment started in the previous calendar month and ended in the current month.

Each bill shall list the number of patients and the number of visits made to each of these patients and the total cases shall support each bill and those authorizations shall cover all charges on the bill for which payment is sought. Since the charges for each patient must be accompanied by the authorization for those charges (From ERA-A. 18), bills will not be submitted for any case until the course of treatment is completed or the extent of the authorization as shown in paragraph 4 of the Relations with clients and physicians, is exhausted.

"2. Doctors should be advised that they must procure the signature of the patient or the head of the patient's family on all authorizations (Form ERA-A. 18) as auditors will not pass bills unless the signature of the client or the head of his family is so affixed.

"3. The individual physician shall have the right of appeal from "A" Grant communities to the County Directors of Emergency Relief for payment of his bills.

"DRUGS

"1. All prescriptions for necessary drugs and medicines shall be filled from the National Formulary of U. S. Pharmacopeia or from a Hospital Formulary. Payments for proprietary remedies shall not be reimbursed.

"2. Physicians should use the less expensive drugs where possible. If expensive drugs are considered essential a written order should be obtained.

"RELATIONS WITH MEDICAL SOCIETIES

"1. A medical advisory committee shall be appointed by the State Director to assist in formulating plans to make these proposals effective. It shall be the joint responsibility of the Emergency Relief Administration and the Medical Society that the plans evolved be mutually acceptable to both sides.

"2. The Medical Society enters into this plan

for a period of one year and it shall have the power to designate when cooperation with the Emergency Relief Administration shall cease.

"3. Future changes in policy shall be agreed upon mutually.

"4. In each county the County Medical Society shall appoint a Medical Relief Committee to advise the County Director of Emergency Relief concerning medical problems.

"5. The same relationship shall pertain to the County Medical Relief Committee and the County Director of Emergency Relief as exists between the State Director of Emergency Relief and the State Medical Relief Committee. All matters in dispute shall be considered jointly by the County Director of Emergency Relief and County Medical Relief Committee.

"6. This committee shall supply to the County Relief Administration an approved list of duly qualified and regularly licensed physicians residing within the county who desire to accept relief cases.

"7. The committee shall have power to discipline physicians and to request removal from approved list. Appeals from the decision of county medical relief committees may be taken to the State Committee by individual physicians excluded or removed from the list of approved physicians.

"RELATIONS WITH OTHER HEALTH AGENCIES

"1. The Administration and its cooperating medical committees shall be zealous to provide the best medical care and cooperate with other health organizations particularly hospitals and agencies providing nursing service to the indigent sick in their homes.

COUNTY EDITOR APPOINTMENTS

On nomination of Dr. John B. Howell, President of the Central Medical Society, the appointment of the following county editors is announced:

HINDS COUNTY—William F. Hand, Jackson (re-appointed).

MADISON COUNTY—John W. Melvin, Camden.

RANKIN COUNTY—J. B. Ainsworth, Florence.

SIMPSON COUNTY—E. L. Walker, Magee (re-appointed) and W. J. C. Weimers, Sanatorium.

YAZOO COUNTY—H. E. Frizell, Vaughn.

GOVERNOR CONNOR HELPS RESEARCH

When State Health Officer Underwood and W. T. Harrison, Surgeon, U. S. P. H., appealed to Governor Conner for permission to have convicts volunteer for experimental work in the transmission of epidemic encephalitis, type B, he was prompt in his response granting his consent.

This is the second time that our state has been selected for such an important research. It is recalled by all that Goldberger carried out his epochal research in 1915, using Mississippi convicts.

The progressive spirit of cooperation shown by our officials, our climate and the fact that the state is some distance from the field of infection has caused it to be selected again for important research. Governor Conner's prompt and enlightened cooperation wins the respect and gratitude of physicians everywhere.

J. S. Ullman.

CALENDAR

SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CLAIBORNE COUNTY MEDICAL SOCIETY:
CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: November 8, 1933, Alcazar Hotel, Clarksdale, 7:30 P. M.

DELTA MEDICAL SOCIETY:

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July, and October, Heruando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December; 3 P. M.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY:

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July, and October, Natchez, 2 P. M.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, 7:30 P. M.

NORTH MISSISSIPPI MEDICAL SOCIETY:

NORTHEAST MISSISSIPPI MEDICAL SOCIETY: December 19, Tupelo.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June; alternates between Hattiesburg and Laurel, 3 P. M.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 P. M. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, at Wesson, Tylertown, Monticello or Brookhaven, 12:30 P. M.

WINONA DISTRICT MEDICAL SOCIETY: November 7, Winona, 1 P. M.

EIGHTH COUNCILOR'S DISTRICT: November 7, Brookhaven, 12:30 P. M.

MISSISSIPPI STATE MEDICAL ASSOCIATION: May 8, 9 and 10, 1934, Natchez.

MISSISSIPPI STATE BOARD OF HEALTH

The Clarksdale City School Board, through its secretary, Dr. T. M. Dye, has made request that all school children in Clarksdale be tuberculin tested. Dr. Mildred Fatherree, Sanatorium, with the cooperation of local physicians and the director of the Coahoma County Health Department, will make these tests and will follow them up with physical examinations of chests and roentgenograms in cases which indicate the need for further examination.

Each year several children in the Clarksdale schools develop active tuberculosis. The Clarksdale City School Board is to be congratulated for so closely looking after the health of the students and the Board is fortunate in having as its secretary Dr. T. M. Dye, Secretary of the State Medical Association. It is unfortunate that every school board does not have a progressive physician as a member.

Drs. R. N. Whitfield, T. W. Kemmerer, and J. A. Milne of the State Board of Health, attended the meeting in Indianapolis of the American Public Health Association, October 9-12.

The State Board of Examiners of Nurses held examinations on October 2 and 3, at Jackson. Better showing were made by those examined than any previous group to come before the examining board.

The State Board of Health takes pride in pointing to the fact that at the September meetings of county boards of supervisors when budgets were made that not a single full-time county health department was discontinued. Less trouble was encountered than ever before in getting appropriations for local health work; in several counties the appropriations were increased.

The five Mississippi public health nurses who were recently awarded scholarships have just begun four months' graduate study. Miss Mary E. Brooks of Sunflower County and Mrs. Martha L. Pigford of Lauderdale County will attend Columbia University. Mrs. Nettie O. Turner, Leflore County, Miss Evelyn Morgan, Pike County, and Miss Roberta Mahoney of Washington County will study at Vanderbilt.

The Commonwealth Fund of New York through its program of cooperation with the State Board of Health, makes five scholarships available to public health nurses each year. Tuition, travel and a monthly stipend are paid the nurses.

On October 6, Dr. Underwood attended a conference in Washington of public health workers, pediatricians, and others for the purpose of outlining a national child health recovery program. This conference was called by Miss Frances Perkins

of the Federal Labor Department, which department paid all expenses of those invited to the conference. At this meeting, the prevalence of malnutrition among the young of the Nation was discussed and plans made for doing something for these children.

The epidemiology of the outbreak of encephalitis in St. Louis has since the beginning pointed to the possibility of mosquitoes as vectors of the disease, but as the epidemic has progressed this theory of mode of transmission has gradually given way to the contact theory as is held by most authorities in the case of poliomyelitis. However, since the mosquito theory has been extensively discussed, and is held by some individuals to be the most likely mode of transmission, it has been necessary and essential to determine this point. Negative evidence of mosquito transmission in man would be most valuable as expensive mosquito control measures would, in the presence of epidemics, be avoided.

Therefore, on September 19, the U. S. Public Health Service made known to the Mississippi State Board of Health its wish to conduct an experiment in the Mississippi penitentiary to prove or disprove the theory that encephalitis is transmitted by the mosquito.

A joint request was promptly made by the U. S. Public Health Service and the Mississippi State Board of Health to Governor Conner to select ten prisoners, between the ages of 21 years and 39 years, who would volunteer their services for the experiment. The Governor gave his consent and out of fifty prisoners who volunteered, ten were selected to take part in the experiment.

Mosquitoes which had fed on the bodies of persons in St. Louis having encephalitis were brought to the Sunflower Hospital, Parchman Prison Farm, and were given human blood meals from the arms of volunteers.

So again, Mississippi's penitentiary in which Goldberger proved to the world the etiology and therapy of pellagra, has become a laboratory for science.

Possibility of executive clemency for the "volunteers to science" was seen in the precedent established by Governor Earl Brewer in connection with the pellagra research of the late Dr. Joseph Goldberger in 1915.

Dr. W. T. Harrison, of the U. S. Public Health Service, and Dr. W. P. McDavid, penitentiary physician, are assisted by others in the experiment.

Results of the experiment will be made known as soon as the work is concluded and sufficient time has elapsed for development of symptoms, if any.

In connection with the encephalitis experiment just described the following brief story of the Goldberger pellagra experiment in Mississippi in

1915 will doubtless be interesting to the readers of the Journal.

PELLAGRA EXPERIMENT IN MISSISSIPPI PENITENTIARY—1915

In 1915, Goldberger and Wheeler of the U. S. Public Health Service made an experiment, attempting to produce pellagra in healthy men. This experiment was carried out at the farm of the Mississippi State Penitentiary, a few miles east of Jackson. On an isolated spot at this farm 3200 acres, there is a prison camp, with cottages for officials, a hospital, barn, stables, and the like. During the period of the experiment, there were quartered in this camp an average of between 70 and 80 convicts, all white males. In this number were twelve, who, accepting an offer of pardon made them by Governor Earl Brewer and with the assurance of proper care and treatment should such be needed, volunteered to submit themselves to the experiment. There had never been a case of pellagra on the farm.

The twelve men were quartered in what was called the "new hospital building," a small screened one-story cottage about 500 feet from the "cage" in which the other convicts were domiciled. From the time of its organization the squad was strictly segregated and under guard day and night. From February 4 to April 19, 1915, these men were kept under observation without any change in diet. Having detected no evidence of pellagra during this preliminary period and having established the desired routine work and discipline, the diet was changed at noon April 19, 1915. On July 1, 1915, one of the men was discharged from the squad on account of prostatitis. This left eleven, with ages running from 24 to 50 years, who remained on the prescribed diet until October 31, 1933.

The quality and quantity of food consumed weekly by these men were as follows:

Biscuits, 41.81 lbs.; corn bread, 24.56 lbs.; grits, 27.06 lbs.; rice, 24.25 lbs.; fried mush, 33.87 lbs.; brown gravy, 37.81 lbs.; sweet potatoes, 23.62 lbs.; cabbage, 4.25 lbs.; collards, 23.75 lbs.; cane syrup, 5.94 lbs.; making a total of 255.67 lbs. of food consumed during the week, or 3.32 lbs. per man per day, having caloric value of 2,952 calories per man per day. The sugar was white granulated, the syrup home-made cane syrup. No vegetable fats entered into the diet. The corn meal grits were of the best quality obtainable in the local market.

The weekly work performed by these men was as follows: White-washing fences and buildings, two and one-half days; sawing lumber, two days; resting two and one-half days.

The entire population of the camp was kept under observation and served as controls. The work done by the volunteers was about the same as that done by the other convicts, such differences

as existed were in favor of the volunteers, especially during the latter part of the experimental period. The general sanitary environment was the same for volunteers and controls, but the hygienic environment—personal cleanliness, cleanliness of quarters, freedom from insects, especially bedbugs—was decidedly in favor of the volunteers.

Of the eleven men on the above diet outlined above, not less than six developed symptoms, including a typical dermatitis, justifying a diagnosis of pellagra. The nervous and gastro-intestinal symptoms were mild, but distinct. The dermatitis was first noted between September 12 and 24, 1915, or not later than five months after the beginning of the restricted diet. The skin lesion was first recognized in all cases on the scrotum. Later, lesions appeared on the backs of the hands in two cases and the backs of the neck in one case. A diagnosis of pellagra in these cases was concurred in by Dr. E. H. Galloway, Secretary of the Mississippi State Board of Health; Dr. Nolan Stewart, formerly superintendent of the Mississippi State Hospital for the Insane at Jackson; Dr. Marcus Haase, professor of dermatology in the University of Tennessee; and Dr. Martin F. Engman, professor of dermatology in the Washington University Medical School, St. Louis, Mo.

From these experiments, Goldberger and Wheeler concluded that pellagra had been caused, in at least six of the eleven volunteers, as the result of the restricted diet on which they subsisted.

Felix J. Underwood,

Executive Secretary.

Jackson,

October 11, 1933.

SECOND COUNCILOR DISTRICT

Conditions in this district are better than they were a year ago. The physicians are squarely behind their able president, Dr. J. W. D. Dicks, in his efforts for organized medicine. President Dicks has divided the state into three divisions; this councilor district is in the first or North Mississippi Division. Dr. E. R. Nobles of Rosedale, one of the vice-presidents will assist in the promotion of our work in this district. We welcome the doctor and will lend every aid possible. Secretaries Eason, Little and Minor have been on the job constantly; our percentage of membership will be much better this year than last. Our county vice-presidents have been urged to work in their respective counties to get the members to attend the meetings, to get new members and to get all to take more interest in their medical organizations.

Dr. Dicks is working hard and capably. Let every man do his best.

L. L. Minor,

Memphis,

Councilor, Second District.

Route 4.

October 10, 1933.

CENTRAL MEDICAL SOCIETY

A regular meeting of the Central Medical Society was held September 5. Following a delicious banquet dinner at the Robert E. Lee Hotel, where 58 members and guests were present, Mr. H. T. Newell, spoke for 10 minutes on the necessity of supporting the spirit of the N. R. A.

Dr. E. L. Green presented an excellent paper on "The Intramuscular Injection Method of Treating Pernicious Anaemia With Liver Extract." One case report was made and one patient presented in connection with this paper.

Dr. W. F. Henderson spoke on "Hernia of the Stomach Through the Diaphragm Causing Hemorrhage". The essayist has had several such cases and few, if any, have been reported in the literature.

The visiting essayist, Dr. O. N. Arrington, talked about "Cholecystitis" and laid especial stress on the symptoms and treatment of these patients following operation.

The following was submitted by the Committee on Members:

DR. B. L. CULLEY

"Whereas, Life, with its ever changing cycle, brings a new order, the old giving way to the new, yet when the one hands down a heritage of God, the other does well to cherish this gift and to study the elements that made for such beneficence; and the posthumous glory soon sings into forgetfulness, yet the verities of a true life live long after that life has dropped into the tongueless silence of a dreamless sleep; and,

Whereas, an estimate of one's worth is oft times biased by personal regard and a true evaluation lost in the mazes of circumstances, still there does come a realization of a distinct loss, when a worthwhile man does slip moorings from earth, and,

Whereas, there has passed from God's foot-stool, a man, who in his youth knew and endured the struggles so common to the youth of his day, yet in that same youth did align his hopes and life to the teachings of the Great Physician; who, when he became an honored member of the medical profession, did practice that art without the least breath of suspicion of wrong doing on his part; whose home life, as husband and father, was exemplary in all respects; whose life in his Master's cause was so consistent that his final illness overtook him while praying in the church he loved so well; and,

Whereas, in the passing of our confrere, Dr. B. L. Culley, our medical society has suffered a keen loss, for there has passed from among us a man, who could and did pursue the even tenor of his way, ministering to those who needed his care, living up to the strictest interpretations of medical ethics, never forgetting that he was a gentlemen;

and in civic and church life, ever standing for what he deemed to be right, unswayed by popular prejudice; and though men may have differed from him, never did they doubt the sincerity of his convictions; and in his home life he brought to the inner circle those Christian virtues that mean more to the home than social prestige or financial dominance; therefore,

Be it resolved by the Central Medical Society of Jackson, Mississippi, in regular session, this the fifth day of September 1933, this being the first meeting of this organization since the demise of our associate, that this society grieves at the passing of our late fellow practitioner, B. L. Culley, that we, as medical men and citizens of the community have lost a real friend; the profession an honest and capable exemplar of our art and a loyal supporter of all that made for its betterment, and the community, a man whose place can not easily be filled; and be it

Further resolved, that these resolutions be spread upon the minutes of this organization and a copy be furnished the family of our departed associate.

J. P. Wall
Geo. E. Adkins
H. C. Sheffield

Dr. O. N. Arrington invited each member of the Society to the next meeting of the Tri-County Society.

The meeting adjourned at 9:30 P. M. until the first Tuesday in October at 7 P. M. at the Robert E. Lee Hotel at which time there will be another banquet, plenty to eat and maybe, to drink.

Robin Harris,
Secretary.

Jackson,
September 20, 1933.

CENTRAL MEDICAL SOCIETY

The October meeting of the Central Medical Society was held at the Robert E. Lee Hotel at 7 o'clock, October 3,—with 42 doctors present. After partaking of a good dinner the following program was carried out:

Dr. T. W. Kemmerer introduced Dr. Sanchezvigil, Director General of Public Health and Director of the National Institute of Hygiene at Nicaragua. Dr. Sanchezvigil will appear on the program next month. He is studying our methods of treating malaria.

Dr. H. W. Garrison, Jr., gave a case report on encephalitis in a baby several years old which was very interesting. It was not of the epidemic type. Drs. Noblin, Ricks, Garrison, Underwood and Womack discussed the case report.

Dr. W. S. Guyton, Pickens, discussed his own case,—a case of myasthenia gravis, progressive

paralysis of the muscles of deglutition. Discussed by Dr. A. G. Wilde.

Dr. Bris'er Ware's paper on "Acute Hemorrhagic Pancreatitis" was very interesting. It was discussed by Dr. Armstrong.

Dr. J. G. Thompson read a paper on "Treatment of Malaria", giving the history of treatment down to the present time, the use of plasmochin, atabrine, etc. Discussed by Drs. Ricks, Long, Womack, and Simmons.

Appropriate resolutions in regard to the deaths of two of our members, Dr. Coker of Eden, and Dr. Anderson of Forrest, were presented.

Dr. Julius Crisler was welcomed back after several months' absence. The minutes and resolutions were approved and passed without reading. The November meeting will be at the Robert E. Lee Hotel.

Robin Harris,
Secretary.

Jackson,
October 10, 1933.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

This is an advanced notice of the regular semi-annual meeting of the Clarksdale and Six Counties Medical Society on November 8.

The incumbent officials are striving to create a revival of professional interest within the Society, but an increased membership is imperative if the program is to succeed. The very foundation of organized medicine in America is a spirited local medical society. The custody of ideal, ethical and scientific medicine rests with the local societies. The future welfare and success of local medicine depends upon the moral, financial and professional support of each individual practitioner residing in the precincts of his respective society.

The past sense of pecuniary insecurity has driven the practitioners into a lethargy of indifference with a forfeiture of the spirit of cooperation and the birth of unethical competition. Suspicion and greed have wormed their way into the ranks of the profession and promise to demoralize organized medicine. Economic distress has fanned the smoldering embers but it is more of an excuse than a reason for the gradual dissolution of the county societies. The crying need at present is professional patriotism to curb the wholesale desertion from the local societies.

High standards have been achieved by organized medicine and are shared by all physicians alike, but resting on won laurels can do little toward the maintenance of the standards in the face of threats of the present social revolution. Now, as never before, organized medicine needs you, and needs you badly. Won't you support your own organization, the Clarksdale and Six Counties Medical Society?

Come to the meeting, pay your dues and volunteer for a paper on the program. See your colleagues and urge that they to renew their membership,

Fraternally yours,

V. B. Harrison,
Secretary.

Clarksdale,
September 21, 1933.

DELTA MEDICAL SOCIETY

The annual meeting of the Delta Medical Society was held at the Court House, Belzoni, Wednesday, October 11, at 2 P. M. The program as announced by Dr. F. M. Acree, Secretary, was as follows:

2:00 P. M. Meeting Called to Order.—Dr. J. C. Higdon, President.

Invocation.—Rev. A. T. Pope.

Address of Welcome.—E. P. Brooks.

Response.—Dr. H. A. Gamble.

Business Session

Scientific Program

Glandular Therapy in the Treatment of Functional Menstrual Disorders.—Dr. James E. Wadlington, Belzoni.

Osteomyelitis.—Dr. John A. Crawford, Greenwood.
Spinal Anesthesia.—Dr. G. W. Eubanks, Greenville.

Atabrine and Plasmochin in the Treatment of Malaria.—Dr. A. M. Wynn, Merigold.

Programs for Medical Meetings.—Dr. R. C. Smith, Drew.

The Neurotic Patient.—Dr. James S. McLester, Birmingham, Ala.

BARBECUE

At "Four Mile Lake", 7 P. M.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society will meet in the Lamar Hotel, Meridian, Thursday afternoon, October 19. Dr. William Krauss, formerly of Memphis, now affiliated with the Stingily Laboratories, Meridian, will be officially voted to membership in the society.

The following program has been prepared.

Fracture of the Elbow Joint, Demonstrated by Lantern Slides.—Dr. J. S. Speed, Memphis.

Discussion opened by Dr. L. V. Rush, Meridian.

Discussion of Some Heart Disorders.—Dr. Leonard Hart, Meridian.

Discussion opened by Dr. T. W. Cooper, Meridian.

Dr. Eugene Johnson of Memphis, Tenn. will appear on the program. Title of his subject not known at time of this writing.

Discussion opened by Dr. M. L. Flynt, Meridian.

Meridian,
October 10, 1933.

T. L. Bennett,
Secretary.

HARRISON-STONE-HANCOCK COUNTIES
MEDICAL SOCIETY

October meeting will be held at the Biloxi Hospital, Wednesday, October 4, 7:30 P. M. Subject to be announced.

Riley W. Burnett,
Acting Secretary.

Biloxi,
Sept. 30, 1933.

ISSAQUEUA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, October 10 at 7 P. M., with nineteen members and two guests present. After supper the following scientific program was presented:

1. Treatment of Syphilis With Reference To Its Complications.—Dr. T. P. Sparks, Jr.

Discussed by Drs. N. B. Lewis, S. W. Johnston, G. M. Street, H. H. Haralson, G. W. Gaines, L. S. Lippincott, F. M. Smith and P. S. Herring. Dr. Sparks closed.

2. Preoperative Care of Prostatectomy Cases.—Dr. G. P. Sanderson.

Discussed by Drs. S. W. Johnston and T. P. Sparks, Jr. Dr. Sanderson closed.

3. Irritable Colon.—Dr. W. D. Anderson.

Discussed by Dr. L. J. Clark. Dr. Anderson closed.

Dr. G. Y. Hicks, Vicksburg, and Dr. V. O. Stewart, Anguilla were elected to membership.

Dr. L. S. Lippincott presented statistics to show an increased incidence of malaria and Dr. F. M. Smith presented similar statistics from the Warren County Health Department. The Society adopted the following resolutions:

WHEREAS statistics and the experience of the members of this Society show that the incidence of malaria in and about the City of Vicksburg is the highest this year that it has been in many years and possibly the highest that it has ever been, and,

WHEREAS malaria incapacitates many citizens from performing their usual occupations, causes much suffering, and sometimes causes death, and,

WHEREAS reports of a high incidence of malaria are a strong deterrent to prospective visitors and industries because of fear of infection, and,

WHEREAS malaria is transmitted by mosquitoes and it is a proved fact that mosquitoes can be eradicated,

BE IT, THEREFORE,
RESOLVED

THAT the president of this society appoint a malaria committee, that representatives of the Warren County Health Department, the Vicksburg Chamber of Commerce, the Mayor and Commissioners of the City of Vicksburg, the Board of Su-

pervisors of Warren County, and the United States Engineers, be asked to join the committee of this Society, and that the joint committee thus formed be urged to use every effort to bring about a mosquito free community thereby eradicating malaria.

Leon S. Lippincott,
Secretary.

The president appointed as a committee Drs. L. S. Lippincott, S. W. Johnston and B. B. Martin.

The next meeting of the Society will be held at the Hotel Vicksburg on Tuesday, November 14, at 7 P. M. The committee in charge of program is Dr. N. B. Lewis, Chairman; Dr. G. W. Gaines, Dr. I. C. Knox and Dr. W. H. Scudder.

ADAMS COUNTY

During October, Dr. John W. D. Dicks, President of the Mississippi State Medical Association, was a guest of the Pike County Medical Society at McComb and the Delta Medical Society at Belzoni.

The Homochitto Valley Medical Society met in Natchez on October 12, for the annual election of officers and the appointment of committees for the State meeting in Natchez in 1934.

There was also a presentation of a photograph of Dr. John W. Monette, one of Mississippi's pioneers in medicine, to the Society at this meeting at which was present a grandson of Dr. Monette, Mr. Gerard Brandon of Natchez.

The Women's Auxiliary of the Homochitto Valley Medical Society also met in Natchez in beautiful Duncan Park.

Everyone in Natchez marking time waiting for better times which we hope soon to come.

We are looking forward to a fine state meeting next May at which time we anticipate a splendid attendance. Dear Old Natchez awaits you to welcome you and make you happy for having come.

Lucien S. Gaudet,
County Editor.

Natchez,
October 9, 1933.

COPIAH COUNTY

Dr. L. R. Reid of Jackson, has located at Rockport with his office in the Moore building. The citizens of this town and section, which is one of the most prosperous in Copiah county, are jubilant with having a physician locate with them.

W. L. Little,
County Editor.

Wesson,
October 3, 1933.

DESOTO COUNTY

The physicians of the county are all busy in their practice and are trying to collect from those owing them. While there is a vast room for improvement, conditions are no doubt better.

The Mississippi State Medical Association News

in our New Orleans Medical and Surgical Journal is indeed interesting. I read every line. I read Drs. Bryan of Monroe, Dickins of LeFlore, Wood of Panola, Donaldson of Pontotoc and all others. I was glad to see an article from my old time friend, I. A. Chadwick of Carthage, Leake County. Keep up the good work.

L. L. Minor,
County Editor.

Memphis,
R. F. D. No. 4.
October 10, 1933.

HANCOCK COUNTY

Mr. Editor, I am a little late this time but cannot help that either.

The Harrison-Stone-Hancock Medical Society met October 1 in Biloxi with the Biloxi City Hospital; meeting well attended and a good meeting; some very interesting cases brought before the meeting.

The doctors of our county who are doing general practice are not so busy as a few months ago. The county health officer seems quite busy, but his practice is so scattered over the county that he has long trips to make. We have five supervisors and each one has friends to do medical relief for, or he might let his political machine get weak some places. He is the man to control the county health officer, wheel in a wheel you see. I am informed that the writer lost a patient this month to the county health officer, at the request of the member of the board from that beat. I think this might be true as the patient has not shown up since that time to me for treatment, not to pay his bill. Two birds at one shot, by the county health officer. Well, the game law is now open it seems. You see we have a good man for a county health officer. The board of supervisors appreciate his ability to do things. He now has full control of who is admitted to our little hospital for charity treatment. I think this is a very nice arrangement as he travels the county more than any other doctor in the county, therefore, know the needs of the people better, etc. Really it might be a good idea to have only a county doctor to look after the entire county. Possibly some of us poor devils who try to make a living on our own merits get a salary too as an assistant to the county health doctor. His business is or will get to be very heavy under present conditions and arrangements. Well, there has been nothing put in force as yet to deprive the colored midwives of their jobs.

Dr. M. J. Wolf, of our town had visitors from New Orleans and he with his wife had an enjoyable time fishing for one day.

The writer went shrimping; didn't have such a nice time first trip out as we happened to get out over the water too far on a loose plank and

it kicked up and had us trying to regain balance for a long time—seemed long time, but finally realizing that there was no chance to avoid the thing and simply had to leap as far out into the water as possible to avoid hitting lower part of the wharf. Well, the wharf is not so high but it did seem far enough to the water but it was possible to get out anyway. Also after getting out and feeling grateful for same realized that the only glasses we possess was left behind and nothing to do but go back for them. It had been said that we resembled a porpoise while diving for them, but now we have them just the same and had better luck next trip out.

Dr. J. C. Buckley has also had a nice trip and vacation; now back on the job as usual.

Dr. A. P. Smith also recently had a nice trip and vacation.

Dr. Russo of New Orleans visited Dr. Ward last Sunday. He owns a home in Waveland, lives there through the summer and week ends in winter.

Dr. E. C. Parker, of Gulfport, is away for a ten days' trip at this time.

D. H. Ward, M. D.
County Editor.

Bay St. Louis,
October 11, 1933.

HINDS COUNTY

The Central Medical Society met the evening of October 4 with a good attendance. The program was splendid. Many lively discussions developed from the reading of the papers.

Dr. Julius Crisler, who has been away from his office for about six months, has returned to Jackson and resumed his practice. We are all delighted that Dr. Crisler has regained his health.

Dr. Wm. F. Hand, Jackson, has just returned from Detroit where he spent his vacation visiting the various hospitals and clinics of that city.

Dr. Nathan Kendall is away for two weeks spending his vacation in Pennsylvania. Dr. Kendall finished his hospital work at Lackenau and shall most certainly have a pleasant and instructive visit there.

Wm. F. Hand,
County Editor.

Jackson,
October 7, 1933.

ISSAQUENA COUNTY

Dr. E. H. Wilson of Vicksburg was a distinguished visitor to Mayerville last week in attendance at the October term of our Circuit Court, having been called here as a witness in an important railroad case. While here he and Dr. W. H. Scudder were appointed by the Court to pass on the sanity of one of the state prisoners charged with highway robbery. The hat bands of the two doctors were

subjected to a very severe strain at being called on to act as alienists, but they were fully equal to the occasion. Subsequent developments in this case have proven the soundness of their decision. Why send to Halifax for medical talent!

Both Drs. J. B. Benton and T. W. Huey were in attendance at this Court. Our doctors have always been important personages in the affairs of our county.

Dr. W. H. Scudder, accompanied by his granddaughter, little Miss Trudie Langford of Grace, recently spent a week in Chicago at the great Century of Progress Exposition. It is certainly outstandingly unique in its class. It is different, incomparable. In daring departure from the ordinary it outclasses anything ever before presented to the public. It is overwhelming! The doctor claims to have taken this outing just for his little granddaughter's benefit, but really he has always wanted to see something big, or grand, even before he missed the Centennial in Philadelphia, and the other World's Fair in Chicago in 1893.

W. H. Scudder,
County Editor.

Mayersville,
October 10, 1933.

LEE COUNTY

Lee County has had a black eye a number of times this year and it was my fault. I only wish I could get things done like my good friend Dr. Bryan. I know that I can never do as well as he does in writing or anything else. When he promises he will it is done. Truly he is the greatest man in the profession. His influence and work for the profession will live long after he has gone.

Lee County was well represented at our last meeting at Calhoun City and we all had a good day and enjoyed a splendid program and even though it was awful hot we got cooled off with some of the best bottled coffee that I have ever tasted. No one took time to ask the brand—it was all good.

Dr. J. L. Kellum is now located at Saltillo doing his stuff and he is a real doctor and a man whom you can always depend on to do what he thinks is right.

Dr. R. D. Kirk will attend the meeting of the A. C. S. in Chicago and also see the fair.

Several of our doctors are planning to attend the Southern Medical Meeting at Richmond in November. It is a great trip in the autumn season to drive to Richmond over the Blue Ridge Mountains and let me suggest that you get the old flivver out and oil it up and let's take that ride. It will only take a day and a half to drive it and oh, boy, you will enjoy it.

We are having lots of malaria and a little typhoid and lots of everything and the doctors are

quite busy and with the rush in collections. Boys, we are still living and that is about all.

We are glad to have "Grand Dad" Dr. W. C. Spencer out and about again. He has been disabled for several months. It is always an inspiration to meet Dr. Spencer and to know him is to love and honor him.

Just tell the other doctors that we Lee County doctors are one hundred per cent for the exemption from the sales tax and for the repeal and for the more equal distribution of the charity fund of the state and anything else that is for the good of the profession.

R. B. Cladwell,
County Editor.

Baldwyn,
October 7, 1933.

LEFLORE COUNTY

Dr. George J. Mancill, Indianola, was in Greenwood September 8.

Dr. George Baskervill visited Jackson on September 9.

Dr. J. D. Biles, Sumner, visited his daughter, Mrs. Bell, while attending business in Greenwood on September 19.

Dr. B. H. Higdon, Sunflower, was in the city September 29.

Dr. and Mrs. L. B. Otken went to Chicago October 1 on the American Legion Special to attend the Convention, and also the fair.

Dr. George Baskervill left October 1 for New York City to attend the "World's Series," the guest of Hugh Critz. If the Giants win he will be in his office on October 10.

Dr. Stirling Claiborne, who is serving his internship at Massachusetts General Hospital, Boston, is on a visit to his home here.

Mrs. Y. T. Eggleston, Jr., nee Miss Frances Anderson, formerly technician for the late Dr. J. P. Kennedy, has accepted a position as technician at the Greenwood-Leflore Hospital.

W. B. Dickins,
County Editor.
Greenwood,
October 7, 1933.

MONROE COUNTY

Whew! Wasn't September a scorcher? But October, I hope, will be better. At least, it has opened up nice and cool.

All my doctors are in good health, but they are pretty busy, I think. It is evident that we are having more malaria to deal with than we have had for several years. However, we do not report nearly as much as formerly; for we have stopped calling every thing we meet malaria. Our county laboratory has been worth untold sums to us and our people. The saving in quinine, alone, would pay the running expense of this laboratory. When I

was acting county health officer, my doctors would report thousands of cases of malaria in a single month. I knew this was wrong. After I had succeeded in establishing this diagnostic laboratory the incidence of malaria crumpled at once. Now, our doctors rarely treat or report a case as malaria until the diagnosis is verified. We have a most efficient technician and the hardest worker I ever knew. She made and reported an examination for every seven minutes of her working hours in the month of September. These specimens—all kinds—are sent in to her and she phones reports to the doctor sending them immediately after examination. Our people are completely sold on the idea and appreciate the service more than they do any public service they get. This laboratory is not in competition with any commercial laboratory; for the people could not pay for this service. And the poorest people as well as the more well to do get the service, just the same. I am convinced that more of our recent graduates in medicine would locate in the rural districts if they knew they could get laboratory help in their work. I maintain that the country people are entitled to the best medical and hospital service that can be given any people. The county laboratory and community hospital is the solution of this crying need and perplexing question. Correct diagnosis is fundamental in scientific practice of medicine. And any other kind of medical practice is criminal. These last two statements lead me to wonder if we, doctors, keep our records and our consciences clear and clean in our dealings with the sick and near sick? I wonder if we do not encourage, and even, practice a little Voodooism? It is so easy to look at a tongue, insert a thermometer, write a prescription and charge two dollars (then collect *it if we can*).

I wonder if I am preaching a bit or, maybe, just running afield?

I regret to know and chronicle the fact that Dr. E. D. Boozer's eldest son (a fine, manly, youth) is not well and, perhaps, may not be well for some months. Here is hoping that he progresses to complete recovery at the earliest possible day.

How I regret that all my friends did not meet me at Calhoun City on September 19. We had a wonderful meeting—a splendid program and the finest spirit of brotherhood imaginable. Many of our friends from beyond our borders were there. Quite a few from Memphis, Greenville and elsewhere were there. The picnic dinner served at six o'clock at the fair grounds was up to any standard that might be used in judgment. The hospitality of the citizens of Calhoun was splendid. Doctors, lawyers, ministers and, above all, the LADIES, went beyond all bounds to make us enjoy our visit. The society voted to hold one meeting each year at Greenwood Springs (in Monroe county). This

meeting is to be, either in June or September of each year—this because the meeting must of necessity, be held in an open pavilion. I heard some one whisper that it might be well to have the other summer meeting at Calhoun City. But if that should be proposed Dr. Walker would want the other TWO meetings at Houlika. That would never do; for he and Philpot would be enemies for the remainder of their lives. This simply must not happen.

Our December (Christmas) meeting will be at Tupelo. Meet me there.

G. S. Bryan,
County Editor.

Amory,
October 3, 1933.

PEARL RIVER COUNTY

Once again I find time, or take time, to write a few lines. If all the calls were answered now the physician would soon work himself to death and be a pauper in addition. It is well that we are able to say no sometimes.

Quite a number of surgical cases have been brought to the hospitals in this section recently. Few of them are able to pay for the operation. The merchants in this county say that there is a slight increase in business but the physician will be about the last fellow to feel it it seems.

The South Mississippi Medical Society met in Laurel on September 14. Those attending from Pearl River County were Drs. V. B. Martin, N. W. Fountain, and G. E. Godman. After the program, which was a very interesting one, dinner was served on the lawn of the Laurel General Hospital by Mrs. Varnado, superintendent of the hospital. It was an excellent repast and enjoyed very much.

The county health department has been quite busy getting matters of sanitation looked after and in getting immunization work done. It also has a dairying industry under its supervision amounting to well above \$100,000.00 per year. This is the outgrowth of the standard milk ordinance passed by the City of Picayune in 1929. It was passed as a public health measure to provide safe milk for the people of the city. But it has now reached further, a market was developed in New Orleans for Grade A pasteurized milk, the surplus is sold there, and at present this industry is developing rapidly. There are at present about twenty-four Grade A dairies in the vicinity of Picayune with about eight others in course of construction.

I note the questions for discussion in the October issues of the Journal. I wish to state that the physicians of Pearl River County, some of them at least, have received some remuneration thru the R. F. C. In a few instances glasses have been secured for school children of indigent parents from

eye specialists and paid for by the R. F. C. The people who receive aid, however, do not use any of that aid for paying their physician. They are not allowed any money, only clothes and groceries. In a number of cases the druggist has been paid for medicine to be used by these people. This has been done in many instances. In a good many cases the physician gets something, about enough for expenses, but it comes directly from the relief worker and not from the patient. There is a large percentage of the people who receive aid who just loaf and wait for the next issue. Some of them refuse work when it is offered them so long as they can get anything from the R. F. C. The physician gets nothing out of any of these people.

I hope that you get some expression from the general practitioners of this county. I feel sure that there will be no just accusations against the county health officer here of having deprived the general practitioner of anything. Whenever it becomes necessary for him to do such practice as will please the politicians to the detriment of the general practitioner, in order to hold his position, he expects to resign at once and become a general practitioner himself.

G. E. Godman,
County Editor.

Poplarville,
October 3, 1933.

PIKE COUNTY

The Pike County Medical Society is one hundred per cent in membership, having for years enjoyed the cooperation of all the doctors within its territory.

Dr. B. J. Hewitt attended the Railway Surgeons' Convention in Chicago, August 10, 11, and 12. While there he and his family also enjoyed the World's Fair.

Dr. G. W. Robinson was present at the Railway Surgeons' Convention in August. He and his family remained a week to enjoy the Century of Progress Fair.

Dr. L. W. Brock and family motored to Chicago to take in the World's Fair.

Dr. T. E. Hewitt was in Chicago attending the Railway Surgeons' Convention August 10, 11, and 12. After the convention Dr. and Mrs. Hewitt enjoyed the World's Fair.

Dr. M. D. Ratcliff attended the Radiological Convention the latter part of September.

Dr. T. Paul Haney, Jr., county health officer, and his family have recently returned from a short vacation trip.

Dr. Bamber, nationally known heart specialist of New Orleans was the visiting physician at the September meeting of the Pike County Medical Society. The afternoon was taken up by a heart

clinic. In the evening Dr. Bamber delivered a lecture on the diseases of the heart.

Dr. T. Paul Haney, Jr., Miss Anna Belle Lesser, and Miss Inez Driskell attended a health conference in Cincinnati the early part of October.

At the October meeting, the Pike County Medical Society sponsored a G. U. Clinic at the afternoon session. Dr. H. W. Kostmayer of New Orleans gave a most interesting lecture. The society was honored in having as its guests Dr. J. W. D. Dicks, President of the State Medical Association, and Dr. L. J. Clark of Vicksburg. Dr. Dicks spoke concerning the activities of the state medical work; Dr. Clark read a carefully prepared paper before the society, his subject, Parathyroid Disease.

T. E. Hewitt,
County Editor.

Summitt,
October 9, 1933.

PONTOTOC COUNTY

The health of Pontotoc County is gradually improving. Still have some malaria but it is gradually giving away. We have had very little typhoid in county this year. As county health officer, I have been giving quite a lot of typhoid vaccine, in round numbers 8,000 up to date. Fifteen or twenty years ago we would have as many as fifty cases of typhoid in a month. I attribute the change to the better hygienic conditions and the number of people being inoculated against it. I have given 255 complete treatments against diphtheria this year.

The Northeast Mississippi Thirteen County Medical Society met in Calhoun City in September with the largest attendance we have had this year. We had a very interesting program. Dr. Underwood was present and gave us some splendid ideas. We are always glad to hear from Dr. Underwood. Our next meeting will be the third Tuesday in December at Tupelo, at which time we will elect officers for next year.

R. P. Donaldson,
County Editor.

Pontotoc,
October 7, 1933.

TISHOMINGO COUNTY

Dr. A. E. Bostick and family have just returned from Washington City where they visited relatives and made inspections of quite a number of places of interest while there.

Dr. Whitehurst has recently visited his daughter and reports that she is well pleased with M. S. C. W. which she is attending.

Dr. T. Paul Haney, Jr., McComb, is visiting his father and mother Dr. and Mrs. Haney, Sr., Iuka.

We most assuredly did enjoy our meeting at Calhoun City on 19th ult. The papers were super-

fine, the discussions were good and the entertainment most excellent.

T. P. Haney, Sr.,
County Editor.

Iuka,

October 7, 1933.

WARREN COUNTY

Last month the venerable Dr. Samuel Pool, of Leakesville, a practicing physician for fifty years and not retired as yet, visited his son, Dr. W. C. Pool of Cary. While on this visit Dr. Pool, accompanied by his son, attended the staff meeting of the Vicksburg Infirmary at its August meeting.

Dr. George Street during the past month made a business trip to Rayville, Louisiana.

Dr. and Mrs. B. B. Martin made an overland trip to attend the Century of Progress Exposition at Chicago.

Dr. Edley H. Jones, so we are informed, last month just had to see Chicago and the "World's Fair."

We are informed that Dr. W. P. Robert and Dr. Tom Sparks of the Vicksburg Hospital staff did not "come from Alabama with a banjo on their knee," but during the month of August they visited Alabama with a ——— anyway for a spree.

Honorable Joe Folse was an invited guest at the staff meeting of the Mississippi State Charity Hospital, Vicksburg, at its last monthly meeting. Mr. Folse as we understand is Secretary of the Mississippi State Budget Committee. He addressed the meeting and held the undivided attention of those present. He stated, as we understood him, that the problems of any organization, people or individual, were to a great extent due to inefficiency; that if the doctors of the country would face facts and recognize facts, and approach these facts in an intelligent manner and with efficient action that they would solve successfully their problems. He complimented the State Charity Hospital for maintaining the number of beds they maintain at the low cost of maintenance.

Dr. H. C. Owen of Holly Bluff, was a visitor to our city last month and while here attended the monthly staff meeting of the Vicksburg Sanitarium.

Town talk advises us that Dr. C. J. Edwards forgot that he was a throat and nose specialist for human beings, but in his subconscious activities spent several days on the Coast trying to persuade the "finny tribe" to open their mouths and let him introduce a crooked probe.

Dr. H. Edmondson, Edwards, was a visitor in our city the past month and attended the monthly staff meeting of the Vicksburg Hospital.

We are reliably informed that Dr. J. A. K. Birchett, Jr takes his vacation beginning Oct. 5, and immediately goes in training for a few days to qualify as best man at Dr. Gilruth Darrington's ap-

proaching wedding. Best wishes to partners and sparring partners.

A beautiful wedding was solemnized in the home of Dr. and Mrs. Vincent Bonelli, 2200 Cherry Street, Vicksburg, on Sept. 26, when their daughter, Miss Gladys, was given in marriage to Mr. Edward S. Butts, of our city. The wedding ceremony was performed by Dr. W. H. Morgan of the First Baptist Church, Vicksburg. The happy couple are honeymooning on a Caribbean voyage.

The local Y. M. C. A. of Vicksburg, sponsors several classes in cooperation with the State Department of Vocational Education. One of these classes that has been conducted for several years is open to the second and third year student nurses and laboratory technicians of the several hospitals of our city. The course is an eight months' course with one hour a week given to didactic lectures, quizzes, oral and written examinations. The subject matter taught is general and special bacteriology of transmissible diseases with nursing and bed side care of same. The class is taught by Dr. F. Michael Smith, of the Warren County Health Department, and the first assembly and organization of the class for this session was held Thursday, Sept. 21, with an enrollment of forty-three students.

The Mississippi State Tuberculosis Association held its annual convocation at the Robert E. Lee Hotel, Jackson, Wednesday, Sept. 27. The following wives of doctors of Warren County attended this meeting. Mesdames H. H. Haralson, Leon S. Lippincott, Sidney W. Johnston, and F. M. Smith. They report a satisfying banquet and an interesting and educational session.

Dr. H. T. Ims,
County Editor.

Vicksburg,
September 30, 1933.

WASHINGTON COUNTY

Dr. E. T. White, Greenville, spent ten days in Hot Springs this past month where he enjoyed a complete rest.

Dr. H. A. Gamble, Greenville, attended the meeting of the National Cotton Seed Produce Association at the Hotel Peabody, Memphis, on September 12.

Dr. R. N. Crockett, Winterville, spent a few days in Memphis with friends during the past month.

Dr. Paul Gamble, Greenville, made a short trip to Arkansas where he was busy looking after farming interests.

Dr. H. A. Gamble and Dr. R. E. Wilson, Greenville, attended the Northeast Mississippi Thirteen County medical meeting which was held at Calhoun City during the latter part of September. They reported a most instructive meeting and complimented the doctors in that section both on the

scientific meeting and the entertainment that was given.

It is with deep regret that all of the friends of Dr. T. F. Wilson of Arcola learned of his death on September 23. Dr. Wilson was beloved by all who knew him. This section will greatly miss him, and the sympathy of not only those of his profession, but of all his friends goes out to his family.

Greenville,
September 29, 1933.

John G. Archer,
County Editor.

Dr. T. F. Willson of Arcola, prominent Washington County physician and planter, passed away at the King's Daughters' Hospital, Greenville, September 23.

Thomas Friend Willson was born near Richmond, Virginia, 54 years ago. For a time he lived in Powhatan County. After receiving his education in the schools of his native state, he was later graduated from a medical college in Richmond.

Dr. Willson came to the Delta and Washington County in 1900 and for more than thirty years practiced his profession and engaged in farming in the Arcola community.

He was prominent in the civic affairs of this county. Dr. Willson served as president of the Delta Medical Society in 1927, and was a member of the State and Southern Medical Associations. He was a member of the Episcopal Church.

Dr. Willson was for many years a member of the executive committee of the Washington County Red Cross Chapter and held the position also of recording secretary.

In 1914 he was married to Mrs. Clara B. Downs who survives along with three sisters, Misses Sally, Mary Webster and Ethel Willson, all of Ballsville, Virginia.

Dr. T. F. Willson stood high in his profession and was beloved by all who knew him. He was a true gentleman, a real friend, and he will be greatly missed by all who knew him.

WILKERSON COUNTY

Our little community was indeed saddened during the past week by the death of two of our physicians, Dr. N. Norwood Street of Lonoke, Ark., and Dr. J. O. Robert of Mars Hill, N. C.

DR. H. NORWOOD STREET

Dr. Street died suddenly at his home in Lonoke, Oct. 2, and was brought to Centreville for interment. He was sixty-five years of age, born at Street, Wilkerson County. A graduate of Tulane University in 1890, he began the practice of medicine in Gloster and after practicing there for ten to twelve years moved to Little Rock, Ark., and then to Lonoke, Ark., where he was engaged in general practice at the time of his death. He had devoted forty years of his life to the practice of medicine.

Dr. Street was a man of splendid character, a devoted member of the Presbyterian Church and an elder in the church for a number of years. At the time of his death he was teacher of the Men's Bible Class in Lonoke. Although Dr. Street had not lived here for a number of years, he visited us regularly and we sincerely mourn the death of this beloved physician.

He is survived by his wife and two children, Mr. T. N. Street of Centreville, and Mrs. John S. Land of New Orleans, La. He also leaves a number of brothers and sisters of our community to whom we extend our heartfelt sympathy.

DR. J. C. ROBERT

Dr. J. C. Robert of Mars Hill, N. C. was brought to Centreville for interment having passed away on Monday, Oct. 2. He had been making his home there for about ten years. The services were conducted by the pastor, Rev. S. G. Pope, who paid a fine tribute to the memory of the deceased, and was followed by Dr. J. C. Robert, Jr., who spoke in a most touching and beautiful manner of the life that his father had spent and of what that life has meant to his family and to the communities in which he has lived. The remains were then interred in the Centreville Cemetery under a lovely display of gorgeous flowers, which were the expression of the affection in which he was held in his old home town.

Dr. Robert, who was 89 years of age, was born in South Carolina on May 4, 1844. He enlisted in the Confederate service at the beginning of the war between the states as a member of the 4th Georgia Infantry and was promoted to a lieutenantcy. After the war he graduated from the Medical Department of the University of Nashville and after practicing for several years in Arkansas, in 1874 he moved to Centreville and continued the practice of his profession.

Blessed with a longer span of days than is usually given to mortal man his extended life was filled with usefulness, and the good that he was able to do will stand as a monument to his memory in the lives of future generations. We can say without equivocation that there have been few men, if any, whom we have known, who have given more generously and cheerfully of their time and ability to help others. He was enthusiastic and untiring in his work for his community and his God, and those who knew him best know only too well how great were his accomplishments. Wilkinson County owes him much; our people should feel grateful for the great services which he has rendered and for the benediction of his life.

He is survived by his wife, four sons and one daughter, Dr. J. C. Robert of Poplarville; Col. W. P. Robert of Washington, D. C.; Mr. S. A. Robert of Jackson; Dr. J. J. Robert of Baton Rouge, and Mrs. Fannie R. White of Norwood, La.

On October 5, Mr. L. C. Field, age 75 years, of

Centreville, died suddenly with heart trouble at his home here. Mr. Field was a man of sterling character and was loved by all who knew him. We wish to extend our sympathy to his family and to his nephews, Drs. R. J. and S. E. Field of Centreville, and Dr. L. C. Field of Shaw. The death of Mr. Field is indeed sad as he was the last member of this family

The Centreville nurses were hosts for the Five County Nurses Association which was held on the lawn of Field Memorial Hospital, September 15. The meeting was well attended and the annual election of officers was held. Miss Syd Vaughn of Brookhaven was elected president; Miss Inez Driskell of McComb, vice-president, and Mrs. Connie Peak Higdon of Hazlehurst, secretary and treasurer.

S. E. Field,
County Editor.

Centreville,
October 9, 1933.

WINSTON COUNTY

Dr. E. L. Richardson, our county health officer, attended the fair at Chicago this month.

Mr. W. G. Wilson, Louisville, announced the marriage of his daughter, Mrs. Homer Coldwell, to Dr. S. W. Pearson of our city last week. Many happy days and prosperity for them.

Dr. W. A. Young, Boon, spent a day or two in the city shopping last week.

We noticed Dr. L. T. Parks from the Fearn Springs neighborhood in the city this week.

It is now, the purpose of the writer to attend the meeting of the Southern Medical Association at Richmond, Va., next month, if not providentially prevented.

M. L. Montgomery,
County Editor.

Louisville,
October 1, 1933.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson.

President-Elect, Mrs. Henry Boswell, Sanitorium.

Secretary—Mrs. Adna Wilde, Jackson.

Press and Publicity, Chairman—Mrs. Leon S. Lippincott, Vicksburg.

FROM OUR STATE PRESIDENT

After a most restful and enjoyable vacation, including a short trip to the Century of Progress and visiting with friends and relatives in Canada and the mountains of North Carolina and Tennessee, we turn our thoughts toward the Auxiliary and the work to be done, the many pleasures to be anticipated, and the friendships to be enjoyed.

There is no radical change in any department of work. Mrs. Pool has prepared a suggestive program, and we wish to stress the Preventorium,

that we may do educational work as to its purpose and accomplishments, and contribute to our fund for its use.

May I ask, especially, for your cooperation in the department of Press and Publicity. We all enjoy the news items for they seem to be a little personal visit with each other every month and it is through knowing each other that our friendships are formed and strengthened and I feel that this department is very helpful and very necessary to the progress of the Auxiliary.

Another reason for using this department for the exchange of thoughts and a source of information is the fact that the Medical Association has seen the place our Auxiliary can take in the promotion of the welfare of the medical profession and has given us space in its Journal to use as we wish, and it is not just fair to them to fall down on our job. So let Mrs. Lippincott have your items of interest either personal mention or auxiliary activities that she may face the editor of the Journal with a smile and full pages on the tenth each month.

Mrs. Frank L. Van Alstine.

Jackson,
September 28, 1933.

FROM THE NATIONAL PRESS AND PUBLICITY CHAIRMAN

We are going to try out a new plan this year. Instead of sending out a news-letter each month the material which would reach you through this means will be published in the American Medical Association Bulletin. The news-letter of the past has been most valuable. Reading the splendid ones written by Mrs. Overholser, I have always felt it was a great pity that they could not be placed in the hands of every member of the auxiliary. Through the efforts of Mrs. Freeman and the generosity of the American Medical Association the Auxiliary was given space in the Bulletin. Unlike the news-letter the Bulletin is accessible to every doctor's wife, while the mailing list for the news-letter was necessarily limited to a few names.

In order to make the material in the Bulletin of widespread interest I shall need the cooperation of every state chairman of press and publicity. To that end may I ask that each of you mail me a brief report of the outstanding activities in your state groups by the tenth of each month beginning with October. Certain items from these reports will be incorporated in the Bulletin articles each month. The knowledge thus obtained of the diversified interests and activities of other state and county auxiliaries will spur us on to greater effort and greater accomplishment.

Mrs. Robert E. Fitzgerald.

Wauwatosa, Wisconsin,
September 12, 1933.

HISTORY OF THE WOMAN'S AUXILIARY
TO THE

MISSISSIPPI STATE MEDICAL ASSOCIATION

As the Woman's Auxiliary to the Mississippi State Medical Association has just passed its tenth birthday it seems appropriate that we review a little of its history and some of its achievements; keeping in mind that the spirit of fellowship which prompts the continuation and growth of this organization cannot be reduced to words on a printed page, but is stamped upon the heart of every doctor's wife who has become an active member of the Auxiliary. So, from time to time we will have a short sketch of our history and a word about the presidents who have helped bring the organization to its present development.

On May 9, 1932, the wives of the doctors attending the meeting of the Mississippi State Medical Association in Vicksburg, met at the Elks Club for the purpose of organizing a Woman's Auxiliary to the State Medical Association.

Mrs. Dan J. Williams of Gulfport called the meeting to order, she having been appointed state chairman of organization. Mrs. T. E. Ross, Jr., of Hattiesburg was appointed temporary secretary. Mrs. Ross read letters received by Mrs. Williams from Dr. T. M. Dye, Secretary of the Mississippi State Medical Association, and from Mrs. H. L. D. Kirkham of Houston, Texas, corresponding secretary of the Woman's Auxiliary to the American Medical Association, in regard to the organization of a Woman's Auxiliary in Mississippi.

The motion was made and carried that such an organization be organized, and the following officers were elected.

President, Mrs. Dan J. Williams, Gulfport.

1st Vice-President, Mrs. H. S. Hairston, Meridian.

2nd Vice-President, Mrs. S. W. Johnston, Vicksburg.

Recording Secretary, Mrs. T. E. Ross, Jr., Hattiesburg.

Corresponding Secretary, Mrs. James M. Acker, Jr., Aberdeen.

Treasurer, Mrs. W. D. McCalip, Yazoo City.

Councilors for the nine districts corresponding to the districts of the medical association were elected as follows:

District 1. Mrs. A. G. Payne, Greenville.

District 2. Mrs. B. S. Guyton, Oxford.

District 3. Mrs. F. F. Elkin, Tupelo.

District 5. Mrs. Julius Crisler, Jackson.

District 8. Mrs. J. C. McNair, Fayette.

District 9. Mrs. S. C. Culpepper, Wiggins.

Councilor for the fourth, sixth and seventh districts were to be appointed.

Those present at the organization were Mrs. Dan J. Williams, Gulfport; Mrs. H. C. Denson, Mrs. W. H. Parsons, Mrs. M. H. Bell, Mrs. S. W.

Johnston, Mrs. L. S. Lippincott, Mrs. George Street, Mrs. Vincent Bonelli, Mrs. H. H. Haralson, Mrs. E. F. Howard, and Mrs. A. Street of Vicksburg; Mrs. H. McMullen and Mrs. J. M. Acker, Jr., of Aberdeen; Mrs. S. C. Culpepper and Mrs. S. E. Dunlap, Wiggins; Mrs. W. N. Blount, Mrs. R. H. Cranford and Mrs. J. S. Gatlin, Laurel; Mrs. T. E. Ross, Jr., Hattiesburg, and two members of the state medical association, Dr. T. M. Dye and Dr. Dan J. Williams.

The next meeting was held in Jackson in May, 1924, at which time Mrs. S. C. Red of Houston, Texas, President of the Auxiliary to the American Medical Association, and Mrs. Seale Harris of Birmingham, Alabama, Vice-President of the A. M. A. Auxiliary and President of the Woman's Auxiliary to the Alabama State Medical Association, were present. These ladies greatly assisted in bringing the Mississippi Auxiliary to conformity with the national organization.

The Jackson Auxiliary entertained with a tea in the home of Dr. and Mrs. Harley R. Shands.

Officers elected at this meeting were:

President, Mrs. Dan J. Williams, Gulfport.

1st Vice-President, Mrs. S. H. Hairston, Meridian.

2nd Vice-President, Mrs. S. W. Johnston, Vicksburg.

Recording Secretary, Mrs. J. M. Acker, Jr., Aberdeen.

Corresponding Secretary, Dr. Margaret Caraway, Gulfport.

Treasurer, Mrs. W. D. McCalip, Yazoo City.

COUNCILORS

District 1. Mrs. E. R. McLean, Cleveland.

District 2. Mrs. B. S. Guyton, Oxford.

District 4. Mrs. T. W. Holmes, Winona.

District 5. Mrs. H. F. Garrison, Jackson.

District 6. Mrs. W. G. Gill, Newton.

District 7. Mrs. R. H. Foster, Laurel.

District 8. Mrs. W. H. Frizell, Brookhaven.

District 9. Mrs. S. C. Culpepper, Wiggins.

Chairman of Public Health Committee, Mrs. Henry Boswell, Sanitorium.

Chairman of Program and Activities Committee, Mrs. R. C. Elmore, Durant,

Councilor for the third district was to be appointed.

Biloxi was the scene of the meeting in May 1925. Some necessary changes were made in the by-laws, and the office of president-elect was added to the list of offices.

From this meeting dates our active interest in the Preventorium, which at that time was a health camp for undernourished and underprivileged children situated on the coast. Mrs. Williams was made state chairman, with the councilors as members of her committee to supply necessary linens for this camp. The character of this work has changed with the establishment of the Preven-

torium by the state, but interest in the welfare of the children has never ceased under the guidance of Mrs. Williams and Mrs. Boswell who have been untiring in their work for this cause.

Five organized auxiliaries were reported: Harrison-Stone, Warren, Lauderdale, Hinds and Holmes Counties.

Officers were elected as follows:

President, Mrs. S. H. Hairston, Meridian.

President-Elect, Mrs. J. J. Haralson, Forest.

1st Vice-President, Mrs. Sidney W. Johnson, Vicksburg.

2nd Vice-President, Mrs. C. A. Sheely, Gulfport.

Recording Secretary, Mrs. S. C. Applewhite, Jackson.

Treasurer, Mrs. S. E. Dunlap, Wiggins.

Parliamentarian, Mrs. D. J. Williams, Gulfport.

COUNCILORS.

District 1. Mrs. Leroy Wilkins, Clarksdale.

District 2. Mrs. B. S. Guyton, Clarksdale.

District 3. Mrs. J. M. Acker, Jr., Aberdeen.

District 4. Mrs. T. W. Holmes, Winona.

District 5. Mrs. A. Street, Vicksburg.

District 6. Mrs. W. G. Gill, Newton.

District 7. Mrs. E. N. Blount, Bassfield.

District 8. Mrs. W. H. Frizell, Brookhaven.

District 9. Mrs. L. L. Polk, Purvis.

Mrs. J. W. D. Dicks,
Historian.

MRS. DAN J. WILLIAMS, Gulfport.

President, 1923-25

Maude Hepler Williams was born at Washington, Indiana. Her father, Samuel J. Hepler, and mother, Sara A. Hunt, were natives of North Carolina.

At the age of fifteen months she moved with the family to Winfield, Kansas. She grew up and received her education in this lovely little town of churches and college.

In 1907 she entered the nurses training school in Ensworth Hospital at St. Joseph, Missouri, graduating in 1910. Her southern blood called her South and the lovely Gulf Coast of Mississippi lured her to Pass Christian. There she met Dr. Dan J. Williams and was married November 30, 1918. They established their home on West Beach, Gulfport, where they have since resided.

Mrs. Williams was appointed in 1923 to organize the Woman's Auxiliary to the Mississippi State Medical Association, and was elected its first president, serving in that office for two years. Since that time she has served on various committees and has been a member of the executive board each year.

Her activities are not confined to Mississippi, but in Auxiliary circles throughout the South, the work of Mrs. Williams is known. Entering enthusiastically into the Auxiliary of the Southern

Medical Association immediately after it was founded, she served as the third president of the organization, and has remained active since that time.

Not alone in auxiliary work is Mrs. Williams interested, but any constructive program of women's clubs or civic affairs gain her active cooperation.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

A meeting of the Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society was held in the Monroe Room of the Hotel Vicksburg, September 19.

Judging from the good attendance and the interest and enthusiasm shown, our auxiliary promises a most successful year.

During the luncheon friends enjoyed a delightful social hour. After a short business session presided over by the president, Mrs. Sydney W. Johnston, the meeting was turned over to the leader for the program, Mrs. Augustus Street, who then read a very interesting and instructive paper on "Heroes of Medicine."

The meeting was adjourned until the third Tuesday in October when the usual luncheon meeting will be held.

Dr. and Mrs. Benson Martin have returned from a pleasant motor trip to Chicago.

Mrs. George Street is playing in the State Golf Tournament in Jackson.

Dr. and Mrs. Augustus Street are attending the meeting of the American College of Surgeons in Chicago.

Mrs. Charles J. Edwards and son, Franklin, spent a most interesting and happy vacation touring the west this summer.

Mesdames Sydney W. Johnston, Preston Her-ring, W. H. Parsons and Laurance J. Clark were among the many Vicksburg people who visited the Century of Progress.

Stanley Lippincott entertained his many little friends on his fourth birthday. This was a very joyous occasion for all the children with many attentions planned for their pleasure.

The many friends of Dr. and Mrs. Guy C. Jarratt are congratulating them upon the arrival of a fine young son, their second.

The little friends of Laurence J. Clark, Jr., en-

joyed celebrating his fifth birthday with him the first part of the month.

Mrs. Hugh Johnston is enjoying a visit in Rochester, Minnesota. She made the trip by motor with friends from the Mayo Clinic. En-route home she will stop in Chicago for a visit.

Dr. and Mrs. Edley Jones were among the visitors at the World's Fair.

Dr. and Mrs. H. H. Haralson spent a pleasant week-end in Forest where Dr. Haralson made his home for a number of years.

Mrs. Benson Martin, Jr., spent a month in New Orleans. Dr. Benson Martin, Jr., is an interne at the Baptist Hospital.

Dr. and Mrs. Ike Knox have a son attending Mississippi College in Clinton, and a daughter in college at Blue Mountain.

Mrs. Mace Bell has moved back to her home on Washington Street.

Mrs. Laurance J. Clark,
Vicksburg, Press and Publicity Chairman.
October 11, 1933.

WOMAN'S AUXILIARY TO THE HARRISON-STONE-HANCOCK MEDICAL SOCIETY

The Woman's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society plans pleasant and instructive meetings thru the coming season. We meet every two months and the next meeting will be in the home of the incoming president, Mrs. Dan Williams, at which time a bridge luncheon will precede the business meeting; bridge in the morning and business following the luncheon. Mrs. W. A. Dearman, Mrs. Elmer Gay and Dr. Emma Gay will be co-hostesses.

Health Education, Hygeia and hospital service will control the activities and we might add Hand shake to tell the world we are a Four H Organization, too.

With summer a memory of a well earned "rest period" for most people, the doctors' wives have had to carry on thru these uncertain days. There is only one certain for most of us, that the bills rendered November 1, will bring almost nothing, but Oh, Boy, how good it will be when "Happy Days" are here again!

President-elect to the Mississippi State Medical Association, Dr. E. C. Parker, Mrs. Parker and young son, Ed, are in Chicago attending the World's Fair.
Gulfport, Mrs. D. J. Williams.
October 10, 1933.

WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY HINDS COUNTY UNIT

Mr. John D. Noblin, son of Dr. and Mrs. W. E. Noblin, and Ben F. Johnson, son of Dr. and Mrs. B. F. Johnson, are among the young Jacksonians to enter Ole Miss this season. Among other young folks who will be greatly missed this winter are Fred Rehfelds, who is attending Southwestern University, Miss Lucy Rembert, who is attending M. S. C. W., and Nugent Shands, who has entered Vanderbilt University.

Harley Shands, son of Dr. and Mrs. Harley Shands, has won a scholarship at Tulane, and will spend the winter in New Orleans.

The Harley Shands family, all of whom have been greatly missed of late, will return to their home on North State street in November.

The Woman's Auxiliary to the Central Medical Society, Hinds County Unit, has resumed its activities. An interesting meeting of the executive committee was held in the home of the president, Mrs. Harvey F. Garrison, recently. This meeting was followed a few days later by a luncheon at the Edwards Hotel.

Mrs. B. F. Johnson,
Jackson, Press and Publicity.
October 6, 1933.

YEAR BOOK

Due to unavoidable delay we are now getting the program book out to each Auxiliary. This booklet is dedicated to our great friend and advisor, Dr. Ewing Fox Howard of Vicksburg who passed away recently. On the first page is a picture of our able president, Mrs. Frank L. Van Alstine of Jackson. Then follows a list of the officers, national southern and state, charter members and ex-presidents. A picture of Mrs. Dan J. Williams, Gulfport, who organized our Auxiliary and was first president, serving two years. The next page is a sketch of the history, telling where organized and date, state work, membership campaign, number of members and number of auxiliaries. The subjects which are offered are as follows:

- I. Social.
- II. Preventorium
 - (a) History
 - (b) Benefit to Children
 - (c) Auxiliary work pertaining to the Preventorium
- III. Hygeia
 - (a) Value as a magazine on the home
 - (b) Value in the school
 - (c) General discussion

IV. Public Relations

V. Jane Todd Crawford

VI. Public Health

Discussion of Quix Compend

VII. Life of Joseph Lister

VIII. Animal Experimentation

"The Dog's Gift to the Relief of Human Suffering."

IX. Social

The last few pages contain a copy of the constitution and by-laws.

I want to call your attention to the programs as the committee suggests that they should be given. The first is social.

As we are having a membership campaign each member should take or most cordially invite as many non-members to this meeting as possible. Make this a delightful social and discuss your programs for following meetings. In this way you learn of the interests of the ones present and enables you to follow up with programs which are of interest locally and approved by your local medical society. We find that auxiliaries which have a few minutes instructive program followed by a social have splendid attendance and good fellowship.

Program II.—Preventorium. We have all data for this program which we will be glad to send to you.

Program III.—Hygeia. Mississippi has not been successful in getting as many magazine subscriptions as we wish. Your state chairman, Mrs. C. E. Mullins, Bude, can supply you with sample copies and the rate of subscriptions. Mrs. Mullens will be glad to hear from you and help any way she can.

Program IV.—Public Relations. The object of this program is to bring about a better understanding between the profession and the public. It is recommended that the leaders of important organizations in the county be invited to this meeting. Entertain them as well as instruct them along lines on the aims of the medical profession in the advancement of health education. We suggest a talk on medical economics as our doctors are now experiencing it and what we can do in our small way to awaken the public to the fact not to forget the family physician who is always ready and willing to more than do his part for patients, friends and community. A talk by a member of the auxiliary and a practicing physician from the medical society would make a fine program.

Program V.—Jane Todd Crawford. This needs no explanation. Many used this program last year and found it most interesting.

Program VI.—Public Health. This discussion of the quiz compend would be most instructive.

Program VII.—Life of Joseph Lister. This is written by Claude Lillingston and will be found most interesting and instructive.

Program VIII.—Animal Experimentation. "The Dog's Gift to the Relief of Human Suffering" was prepared by Walter B. Cannon, M.D. and Cecil K. Drinker, M. D., and is a reprint from the New England Journal of Medicine, September 15, 1932. We all know that the devotion of a dog to a man is very great and after reading this article we are sure we will all feel that the dog is really a friend to man.

Bring your doctor as your guest and let good fellowship be the key of the evening or whatever time you may select as your "party time."

We have a good many topics on hand and would be glad to help you arrange whatever program you think best suited to your group.

Please write me how you like the booklet. The printing was made possible by a physician who is a great friend of the auxiliary. I feel that each of you join with me in thanking him for his thoughtfulness and generosity.

Again I ask you to let me hear from you in regard to your programs.

Best wishes to all.

Mrs. W. C. Pool,
Program Chairman.

Cary,

October 7, 1933.

HONOR ROLL

The following have helped to make this number of our Journal:

COUNTY EDITORS: L. S. Gaudet; W. L. Little; L. L. Minor; D. H. Ward; W. F. Hand; W. H. Scudder; R. B. Caldwell; W. B. Dickins; G. S. Bryan; G. E. Godman; T. E. Hewitt; R. P. Donaldson; T. P. Haney; H. T. Ims; J. G. Archer; S. E. Field; M. L. Montgomery.—17.

SOCIETIES: Central, Robin Harris; Clarksdale and Six Counties, V. B. Harrison; Delta, F. M. Acree; East Mississippi, T. L. Bennett; Harrison-Stone-Hancock Counties, Riley W. Burnett; Issaquena-Sharkey-Warren Counties.—6.

HOSPITALS: Anderson Infirmary; King's Daughters Hospital, John A. Beals; Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium.—4.

WOMAN'S AUXILIARY: Mrs. Leon S. Lippincott; Mrs. Frank L. Van Alstine; Mrs. J. W. D. Dicks; Mrs. L. J. Clark; Mrs. D. J. Williams; Mrs. B. F. Johnson; Mrs. W. C. Pool.—7.

OTHERS: J. W. D. Dicks; C. C. Hightower; J. S. Ullman; F. J. Underwood; Riley Burnett; J. A. K. Birchett, Jr.; G. M. Street; R. A. Street, Jr.—8.

GRAND TOTAL: 42.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

The Physiological Effects of Radiant Energy: By Henry Laurens, Ph. D. New York City, Chemical Catalog Company, Inc., 1933. pp. 610. Price, \$6.00.

This is one of a series of interesting monographs sponsored by the American Chemical Society, and is considered a most valuable addition to those already published.

For many years the author has been recognized as an outstanding investigator and research worker in radiant energy. His great knowledge and experience, recognized universally, render this book an authoritative source of valuable information.

Since the early beginning of the use of radiant energy for therapeutic purposes, in certain instances, it has been exploited commercially, based on the fortuitous belief that sunlight and artificially produced rays of radiant energy can do no harm. This book so clearly explains the effect of radiant energy on tissue that any intelligent reader will immediately dissipate any such notion. The author has broadened our knowledge of the effects of radiant energy, and his book is considered one of the most comprehensive of its kind printed in any language.

There are seventeen chapters in the book, which clearly and adequately explain the physics of radiant energy, its effects on the skin, wounds, and some skin diseases; also the effects of radiant energy on the eye, on the circulatory system, on the blood, on metabolism, on body temperature, respiration, optical sensitization and many other conditions.

This book will prove of great educational value to all interested in the different forms of radiant energy, but should be of particular interest to physiologists, radiologists, physiotherapists, and the medical profession in general.

LEON J. MENVILLE, M. D.

California's Medical Story: By Henry Harris, M. D.; Introduction by Charles Singer, M. D., D. Litt. San Francisco, J. W. Stacey, Incorporated, 1932. pp. 421, illus. Price, \$7.00.

"For the study of medical history, California geographic presents quite exceptional advantages. The geographical isolation of its population makes a true local study more valid than would be the case for most states. The earlier records have been better and more lovingly preserved in California than in any other civilization that has developed so recently and so rapidly. The presence of first-class library facilities is unique for so youthful an aggregate. The very rapid evolution of Californian civilization has carried with it a no less rapid

evolution of medicine from the primitive and magical to the highly scientific, though no less human, discipline which is enabling the medical schools of the State to provide as well equipped medical men as are to be found anywhere in the world. Thus California Medicine is an almost ideal field for the student of local history. The broad conception, the painstaking and thorough investigation, and the attractive presentation of the work of Dr. Harris do justice to his theme. He has prepared a model local history. When more such works become available a true inductive history of modern medicine will become possible."

The above quotation is taken from Dr. Charles Singer's thought provoking and beautifully written introduction to Dr. Harris' book. The introduction also touches in a provocative fashion upon the bearing of our present Industrial Revolution upon Learning and upon the part which the science of Medical History may play in the revolution.

Dr. Harris deals with the medical history of California broadly according to four periods in the history of the state: Indian, Spanish, Mexican, American. Information about the state of medicine in the earlier periods is necessarily meager. The story of the personalities is well told, and California has had some exceedingly colorful ones, good and bad. He even tells the story of the various medical organizations without inducing boredom. The medical story of the gold rush holds the greatest interest for the average reader. Some physicians in the mad scramble for wealth deserted their profession to dig gold, while other individuals without medical training set themselves up as practitioners of the healing art and often became rich. Epidemics of plague and dysentery ended the careers of thousands of adventurers. Physicians who built a hospital as a business as well as a professional venture were soon bankrupt caring for the indigent victims of some epidemic.

The book is beautifully printed on fine paper and attractively bound; the illustrations are of high order.

R. H. Turner, M. D.

Reflex Action, A Study in the History of Physiological Psychiatry: By Franklin Fearing, Ph. D. Northwestern University. The Williams & Wilkins Company, Baltimore, 1930. pp. 315.

All animal behavior is to be understood in terms of concatenated reflexes. Since the animal organism is a definite circumscribed material system, "it can only continue as long as it is in continuous equilibrium with the forces external to it; so soon

as this equilibrium is seriously disturbed the organism will cease to exist as the entity it was. Reflexes are the elemental units in the mechanism of perpetual equilibration, etc." The above is a quotation from Pavlov, and is used in the introduction of Reflex Action.

One can not fail to be impressed with the exhaustive research that was undertaken to gather the material for this book. In the bibliography there are 554 specific references, and it is gratifying to find most of these authors liberally quoted. There is also a general index and a list of authors.

While there is little contained in this book that has to do directly with the practice of medicine, there is much that will give a better understanding of the function of glands and other organs, and of conduct in general. This book, including the bibliography, comprises 350 pages and is written in a very interesting manner. Reflex Action makes fascinating reading and holds the interest and scientific curiosity to the very last page.

C. S. HOLBROOK, M. D.

Medical Relations Under Workmen's Compensation:

A Report Prepared by the Bureau of Medical Economics, American Medical Association. Chicago, A. M. A. 1933 pp. 157.

This is a report consisting of introduction and nine chapters, each very much in detail explaining the evolution of the system—prevention of accidents — administration — insurance carriers — growth of provisions for medical care—choice of physicians—payment for medical services under compensation—professional relations in compensation—compensation as origin and fosterer of contract practice—suggested conclusions and recommendations.

It is well written, of especial interest to those interested in industrial compensation, especially that part involving the medico-legal consideration and benefits. Much explanation is given to choice of physicians with Doctor groups who benefit therefrom. Some criticism is leveled at the definition of anatomical boundaries which is not at all in keeping with the rules of the Association of Anatomists, inasmuch as each State defines or attempts to define his own anatomical boundaries in designating and in evaluating amount of damage done with comparable compensation.

The book is well printed with groupings accordingly, added to which is an index, instructive in character.

WALTER J. OTIS, M. D.

International Clinics: June, 1933. Philadelphia. J. B. Lippincott, 1933. pp. 314.

This quarterly, in the reviewer's opinion, grows progressively more and more indispensable to the practitioner of medicine. The subject matter com-

bines a splendid grasp of the content dealt with in both its scientific and clinical aspects. This issue is replete with matter of much importance. Edema, cyanosis, menstrual bleeding and a clinico-pathological conference devoted to subacute bacterial endocarditis are only a few of many important inclusions of the book. A good index concludes the volume.

I. L. ROBBINS, M. D.

A Text-Book of Physiology: Twelfth Edition. By William H. Howell, Ph. D., M. D., Sc. D., LL. D. Philadelphia and London, W. B. Saunders Co., 1933. pp. 1132. figs. 308.

The appearance of a new edition of Howell is an event of importance. For more than a quarter of a century Professor Howell has periodically revised what seems to be at the time the fundamental conception of how the body works, citing the new evidence briefly and clearly. In this edition more alterations than usual have been called for, particularly in the discussion of the vitamins, the hormones and the chemistry of muscular contractin, "in which contributions are so numerous and changes in point of view so rapid that any general summary is quickly in need of revision. That prevalent theories are frequently only stages in the gradual growth of knowledge" is evident as in all, or nearly all, other sub-divisions of medicine.

The only criticism, but one applicable to most of the text-books of so-called Human Physiology, is that not sufficient emphasis is laid on the all important fact that "the modern practice of medicine is largely applied physiology". This is of course more evident in certain organ systems than in others, but where it is outstandingly evident, as in circulation, respiration, etc., it should be impressed, not only upon the beginning student, but upon the practitioner desirous of becoming acquainted with modern physiology.

HENRY LAURENS, Ph. D.

Les Sequelles De L'Encephalite Epidemique: By Drs. Georges Guillain & Pierre Mollaret, Paris. G. Doin & Cie, 1932. pp. 103.

This is one of several monographs appearing at irregular intervals forming a part of "La Pratique Medical Illustrée" which is under the Directorship of Professor E. Sergent, R. Mignot and R. Turpin.

The authors of this monograph, both members of the Faculte de Medecin de Paris and la Salpetriere, are extensive contributors to the French literature in neurology, and are thoroughly qualified to handle the difficult and intricate subject forming the title of this monograph.

In the introductory chapter the reader is given an appreciation of the vast extent of these complications which have at times revolutionized our conception of Neurology. Psychiatry, General Pathology

and even the legal aspect of Medicine. Then follow clinical studies which form the bulk of the work and are divided into various groups, the most important of which are: The post-encephalitic parkinsonian syndrome, post-encephalitic disturbances of motion and disturbances of Sensation Vegetative and endocrine disturbances and mental disorders of infantile and adult types. The last two chapters are devoted to the important elements in diagnosis and the most approved therapeutic methods.

Throughout the work, attention is called to the frequency, the date of onset and the manifestations of each of the sequellae. The volume is embellished by twenty-one illustrations, most of which are taken from the world famous clinic of la Salpêtrière.

The whole forms a most concise and complete expose of the sequels of epidemic encephalitis. It should, therefore, form a part of the library of every general practitioner, and neuro-psychiatrist.

L. L. CAZENAVETTE, M. D.

Surgery of the Stomach and Duodenum: By J. Shelton Horsley, M. D., F. A. C. S., LL. D. St. Louis, C. V. Mosby Co., 1933. pp. 260. Illus.

This beautifully illustrated monograph comes from the pen of a master surgeon, well qualified to write on this subject. The author's particular interest in gastro-intestinal surgery extends back over many years, during which time his extensive material has been carefully studied before and after operation. Then, too, there has been no one more ready and eager to apply the discoveries of experimental physiology to his clinical problems. The book under discussion reflects this healthy attitude throughout.

The opening chapters deal with the embryology and physiology of the upper digestive tract. Subsequent chapters describe the various operative procedures in detail and give excellent discussions on the choice of operation best fitted to relieve the different pathological conditions encountered. Uncommon lesions, as well as little used operations, are kept in the proper prospective,—the result being a well balanced, readable work.

It is interesting that the author advocates excision in certain cases of carcinoma of the stomach which involve the transverse colon. These resections must, of course, include a portion of the colon. This in itself cannot be criticized but it is apt to tempt the unwary surgeon in cases where undetected metastases make such a formidable procedure futile at the outset.

It is safe to say that his book can be read with pleasure by any one interested in surgical problems of the stomach or duodenum; and, although not intended to be an exhaustive treatise, it will prove a valuable source for reference.

R. M. PENICK, JR., M. D.

The Technique of Local Anaesthesia: By Arthur E. Hertzler, A. M., Ph. D., LL. D., F. A. C. S. 5th ed. St. Louis, C. V. Mosby Co., 1933. pp. 292. Illus.

The author expresses his intention to describe only those methods of local anaesthesia which have proved useful in his hands, therefore it is not surprising that some useful procedures are omitted. Apparently, this plan has been adhered to, and results in a practical work simply and clearly expressed.

There is a tendency throughout to make use of infiltration rather than distant nerve blocking. This will be welcomed by those who are not expert with the latter method, for it indicates how much can be done with a simplified technique. The author is also to be commended for relegating to the background accurate measurements to obtain injection points because these are rarely satisfactorily owing to individual variations in the patient. On the other hand an interested reader cannot but regret that the section on the use of local anaesthesia in the presence of infection is not more thorough; and the reviewer also feels that the discussion of local anaesthesia in fracture work should be given more emphasis.

There is every reason to expect the fifth edition to maintain the justly deserved popularity of this book.

R. M. PENICK, JR., M. D.

PUBLICATIONS RECEIVED

W. B. Saunders Company, Philadelphia: *Obstetrics and Gynecology*, by Arthur Hale Curtis, M. D. Volume III. General Index to Volumes I to III of Curtis's *Obstetrics and Gynecology*. *Diseases of the Chest and the Principles of Physical Diagnosis*, by George W. Norris, A. B., M. D., and Henry R. M. Landis, A. B., M. D., Sc. D.

Lea & Febiger, Philadelphia: *Surgical Anatomy*, by Grant Massie, M. B. M. S., F. R. C. S. *Infections of the Hand*, by Allen B. Kanel, M. D. Sc. D.

William Wood & Company, Baltimore: *Manual of Urology*, by R. M. LeComte, M. D., F. A. C. S.

Charles C. Thomas, Springfield: *The Science of Radiology*, by Otto Glasser.

The Macmillan Company, New York: *Obstetrical Nursing*, by Carolyn Contant Van Blarcom, R. N.

E. V. McCollum and J. Ernestine Becker, Inc., Baltimore: *Food, Nutrition and Health*, by E. V. McCollum, Ph. D., Sc. D., and J. Ernestine Becker, M. A.

Farrar & Rinehart, Inc., New York: *Nervous Breakdown; Its Cause and Cure*, by W. Beran Wolfe, M. D.

Alfred A. Knopf, Inc., New York: *Behind the Doctor*, by Logan Clendening, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

DECEMBER, 1933

No. 6

HEART DISEASE—INCIDENCE, CAUSE AND TREATMENT OF SOME OF THE COMMON TYPES*

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INCIDENCE

Over two per cent of persons examined by insurance companies are rejected because of organic heart disease. From two to five per cent of industrial workers are found on careful examination to be subjects of organic heart disease. Nearly five per cent of two and one-half million men examined in the draft in 1918 by army and medical examiners were found to have some form of organic disease. On the basis of present statistics both in this country and abroad it is impossible to estimate the morbidity of heart disease in school children. In New York City figures were obtained in routine examination of two hundred and fifty thousand children by the medical school inspectors. On re-examination of some of these children under more favorable conditions and with the clothing removed from the chest the figures were found to be seven per thousand. From the data available it is fair to assume that at least two per cent of the population, or in the United States over two million persons, suffer from organic heart disease. For the past few years, in the registration area organic heart disease has caused more deaths than tuberculosis. The death rate from organic heart disease has been increasing gradually through a long series of years. If present conditions con-

tinue, one in every five of population living at age of ten will die of heart disease.

CAUSES

The causes of heart disease are numerous, but the principal ones are:

(1) Acute and chronic infectious diseases, particularly rheumatic fever and syphilis.

(2) Arteriosclerosis.

(3) Hypertension.

Contributory factors are:

(1) Intoxications and poisons of various sorts.

(2) Bad personal hygiene and improper methods of living.

TREATMENT

The chief requirement in the treatment of heart disease is an accurate diagnosis. This diagnosis should consist of: first, the etiology of the pathology of the heart; second, the nature of the cardiac lesion; and, lastly, the type of disturbance of cardiac function. A second requirement is that the prescriber should have a thorough knowledge of the action, limitations and toxic effects of the drug employed.

Myocardial failure is the initial cause of edema in decompensation but the secondary effect of this fluid in the tissues becomes temporarily more important than the pathology of the heart. Drugs which rid of the edema are very often spectacular in effect, whereas the effect of drugs on the heart are often disappointing. Fluid may be present in the lungs without any visible edema. In such cases the only manifestation is dyspnea. By producing diuresis with salyrgan, the dyspnea will be improved remarkably.

Congestive failure with regular rhythm is treated very effectively with the mercurial and acid producing salts. Digitalis in proper dosage

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, May 9, 1933.

should be given the patient with the hope that its tonic effect may postpone a recurrence. Statistics are not available to show whether patients taking digitalis maintain compensation longer than they would if they were taking only the restricted measures usually prescribed. If one is sure that his patient does not suffer from the toxic effects of digitalis, as a result of cumulative action, he is justified in giving a maintenance dose.

In angina pectoris, if one of the derivatives of xanthine does not give relief, or is not well tolerated, one may get results by resorting to the use of other drugs of that series. Improvement has been obtained from the use of theophyllin, the mixture of theobromine and phenobarbital known as theominal, theocalcin and ephyllin. General measures restricting mental, physical and metabolic stress are of paramount importance.

In the treatment of acute coronary occlusion, the chief indications are rest, control of pain by morphine and confinement in bed, until the danger of embolism and myocardial rupture is past. Oxygen has been advocated for the control of pain and to combat cyanosis when present. If complicated by auricular fibrillation or auricular flutter, digitalis or possibly quinidine is indicated. If complicated by congestive heart failure, give salyrgan and ammonium nitrate.

Spectacular results follow administration of compound solution of iodine in cardiac disorders associated with exophthalmic goiter. Failure to recognize the presence of exophthalmic goiter, or loss of valuable time in treating congestive failure and fibrillation in this condition, without the use of compound solution of iodine, may result disastrously for the patient. If compensation is not restored by this solution, the mercurial and acid-producing salts usually are successful in doing so. Digitalis is used as a last resort in such a case, and great care should be exercised not to produce toxic symptoms.

Cardiac compensation may be restored and marked reduction in the size of the heart brought about in a case of myxedema by the administration of desiccated thyroid gland. Epinephrine has definite, temporary value in preventing attacks of syncope, apparently by abolishing periods of ventricular standstill. In emergency

conditions of cardiac standstill of Adams-Stokes syndrome, injection of epinephrine into the heart is justifiable.

SOME CONSIDERATIONS OF THE SEVERAL IMPORTANT ETIOLOGIC TYPES OF HEART DISEASE†

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Considering heart disease from the etiologic point of view there are, numerically speaking, three important causes for heart disorders; namely, rheumatism, syphilis and arteriosclerosis. Under the arteriosclerotic type of heart disease there are included those cases which depend primarily upon hypertension and those which depend upon coronary sclerosis. My discussion today will largely evolve about these three fundamentally important types of heart disease. I will speak briefly on subacute bacterial endocarditis and congenital heart disease but will omit entirely other etiologic types which are relatively rare and which may be listed under such explanatory terms as the hyperthyroid heart, the diphtheritic heart, neuroses of the heart, cardiac tumors, and so on.

THE RELATIVE FREQUENCY IN THE SEVERAL TYPES

Rheumatic heart disease, in incidence, varies considerably in different sections of the country. It undoubtedly makes up the bulk of the cases of heart disease in young individuals with the number of cases becoming increasingly smaller as age periods are passed. By and large it makes up, according to statistics,¹ around 7.5 to 54 per cent of the total number of cases of organic heart disease reported by various authors, the figures being for most of the observers nearer the high, rather than the low percentage. The thyroid heart in incidence ranges from 1 to 11 per cent, the figures being very much higher in the report of one observer than from the remainder of the group. The

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson May 9, 1933.

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average might be said to be about $1\frac{1}{2}$ to 2 per cent. Congenital heart lesions are responsible for approximately 1 per cent of all organic heart disease. Syphilitic heart disease varies from $3\frac{1}{2}$ per cent in the New England states² to $19\frac{1}{2}$ per cent in Texas.³ Subacute bacterial endocarditis probably represents about $\frac{1}{2}$ to 2 per cent of all organic heart disease and the senescent heart, or arteriosclerotic heart, under which heading is also included hypertensive heart disease, makes the remainder. Here again the figures vary, according to Smith,⁴ who states that 60 per cent of all deaths from heart disease, occurring after the age of 45, are due to the arteriosclerotic type and that 40 per cent of all age groups die as a result of this type of heart disease.

For the purposes of this paper I have reviewed the histories of the patients who have been seen in the past five years on the wards assigned to Tulane University at the Charity Hospital who have had heart disease. It must be emphasized that these patients comprised almost entirely white males over 12 years of age and cannot be said in any way, form or manner to represent an accurate cross section of the total hospital population, nor can it be said that the hospital population represents entirely a true picture of the population as a whole. There is always a tendency to send to the hospital the old worn arteriosclerotic individual, rather than the younger type of patient. In the five year period we have seen 113 arteriosclerotic heart disease cases, representing 58.5 per cent of the whole series; 32 cases of syphilitic heart disease, or 16.5 per cent; 34 of rheumatic heart disease, or 17.6 per cent; 12 of subacute bacterial endocarditis, or 6.6 per cent and 2 of congenital heart disease, or 1.003 per cent. On account of the type of services, diphtheritic, thyroid and other types of heart disease have been seen only extremely rarely.

Several interesting observations may be made in comparing the figures in the incidence of heart disease in our group, as contrasted with those obtained from other observers. The arteriosclerotic group, representing as they do nearly 60 per cent of our cases, approximates closely the figures of Smith for patients above the age of 45 but are decidedly higher than for

all age groups. The explanation of this lies in the fact that children are excluded from our group and there are only a very few females, although men die earlier in life than do women of degenerative cardiovascular disease. Women are more prone to have thyroid heart disease than men. Furthermore, the arteriosclerotic type of patient is more likely to enter the hospital than the younger group.

In regard to syphilitic heart disease; this group would present a reasonably accurate and typical series of cases, were it not for the fact that the negro race is represented by only three cases. The incidence of syphilitic heart disease is considerably higher than the figures for this form of heart disease in other sections of the country, except the South. A possible explanation for the frequency of the cardiovascular changes in this group is that it is the result of incomplete treatment of the poor and often uneducated syphilitic. The small per cent, 17.6, of cases of rheumatic heart disease can be explained in the first place by the fact that no children are included in our series, and in the second place by the fact that rheumatic fever is less frequent in the South than it is in the North.⁵

The incidence of congenital heart disease is approximately that elsewhere throughout the country, as would be expected, but it is really quite remarkable that subacute bacterial endocarditis, according to most observers, in incidence only 1 per cent or under, should be as high as it is in our series, almost six times more frequent than elsewhere. This is the more remarkable, in that the instances of rheumatic heart disease, upon the valvular lesions of which bacterial endocarditis is likely to be engrafted, is considerably less than it is in northern communities.

ARTERIOSCLEROTIC HEART DISEASE

In this group of patients the average age in the white males was slightly over 63 years. The accompanying chart gives most of the details of the grosser features of chief complaint, of the physical diagnosis, as well as the blood pressure in this group. Several comments might be appropriate concerning this chart. The listed complications are the outstanding ones which were of sufficient importance to warrant a primary diagnosis. Cardiac failure occurred in the bulk

of these patients and was the immediate cause for their admission to the hospital. In many instances the failure was slight and in other instances there was no evidence of heart failure. Outstanding hypertension warranted such a primary diagnosis in 18 instances. Under blood pressure is listed all pressures above 200. There were six cases, however, which were called hypertension in which the blood pressures were between 180-200. Coronary thrombosis was present in only four of the patients, and cardiac hypertrophy, according to physical diagnosis, was observed in 88 of the 113 patients, but in only three instances did it seem of sufficient importance to be a primary diagnosis. Aortitis was undoubtedly present in very many of the cases, yet only 16 times was there very definite evidence of this complication and complement of arteriosclerotic heart disease. In only one instance was there aortic insufficiency producing symptoms, and in one patient aneurysm was present.

Chief Complaint: Nearly two-thirds of the patients complained of dyspnea. Edema was noted by others as the trouble which brought them to the hospital. Undoubtedly most of these patients with dyspnea and edema were suffering from congestive failure. Of the 16 patients who had cardiac pain a certain number of them had anginal failure, a smaller number, however, than one would expect or anticipate in view of the usual etiology of cardiac pain. It is also very interesting to note that weakness, a symptom which Christian⁶ lays so much stress upon as an important early sign of cardiac failure, did not occur more frequently than it did. The symptom of palpitation which occurred in seven cases as the chief complaint, might possibly be merely another expression for dyspnea, although it may also be interpreted as a subjective symptom which is occasioned by extra-systolic arrhythmias. Cough is part of the picture of congestive failure, whereas syncope and leg pains are indications of sclerotic processes in the brain or in the peripheral arteries.

The physical examination of these patients showed cardiac enlargement in 88 of them. The occurrence of 25 patients in this group with no cardiac enlargement illustrates that without any associated hypertension there is no reason to

anticipate or expect any cardiac enlargement. Interference with the circulation through sclerotic changes in the large and small vessels of the coronary system does not produce cardiac hypertrophy. Murmurs are by no means positive criteria for the diagnosis of heart disease. As a matter of fact, diastolic murmurs alone are considered to be produced essentially by valvular lesions. The apical systolic murmur in 40 of the patients is to be anticipated but it is surprising that a greater number do not have aortic systolic murmur, which is so common when there is roughening of the aorta. The diastolic murmur in the mitral area in one patient probably indicated a previous rheumatic infection. A diastolic aortic murmur represents the presence of a leaking aortic valve. The irregularities in rhythm showed that auricular fibrillation was the commonest type of irregularity. Somewhat over one-fifth of the patients had this particular type of mechanistic disturbance. Auricular fibrillation in old people is common. Often it is a slow fibrillation, an absolutely irregular heart action, which may persist for years without any gross or obvious disturbance of cardiac efficiency. In 16 instances ectopics were heard; in one instance there was heart block, a small number considering again the usual etiologic cause of heart block, namely sclerotic heart changes. Auricular flutter was present in one instance.

The patient with senescent heart disease has a low blood pressure. Fifty-three of our cases were under a systolic pressure of 150, and 48 were between 150-200, whereas 12 had pressures of over 200. The blood pressure observations make a rather distinct separation of the senescent from the hypertensive heart. One rather interesting feature in the patients whose blood pressure was 200 or over, is that the diastolic pressure was in none of them unduly accentuated. Of our 113 patients, 106 lived pure lives, their Wassermann reactions were negative. Seven of them had the good fortune to escape having their arterial system attacked by the spirochetes, despite the fact that they had serologic evidence of a previous syphilitic infection. Seventeen of these people died during their admission to the hospital, whereas 96 of them were able to leave the hospital.

RHEUMATIC HEART DISEASE

The chart on rheumatic heart disease presents some rather interesting data. The average age of the group is greater than most figures for the incidence of this disease, again explained on the basis that there are no young children to lower the age group. Twenty-one of these patients had mitral stenosis and 15 had mitral regurgitation with or without stenosis; 4 had aortic regurgitation, one had aortic stenosis alone, and one had double aortic involvement. The very great incidence of mitral disease is common to the findings of most observers, though our figures are considerably higher than most of them indicate. Conner⁷ gives the impression that aortic rheumatic valvular disease is relatively common. This is not apparently the experience of others and most certainly it cannot be substantiated in our small series.

White,⁸ in a group of 933 cases of heart disease of a rheumatic nature, states that mitral involvement alone occurred in 62 per cent; aortic involvement alone in 15 per cent; with both mitral and aortic involvement in the remaining 23 per cent. The latter figure of combined involvement is approximately the same as in our series.

Dyspnea again is the chief complaint in most of these people. Edema is another evidence of the cardiac failure which brought many of the patients to the hospital, while hemoptysis in only five instances as the chief complaint is somewhat unusual, inasmuch as this is a frequent symptom of obstructive mitral disease. The chief complaint of arthritis (joint pains) in nine instances is merely an evidence that quite a considerable number of these patients entered the hospital not because of heart failure or heart symptoms but also because they had had a recurrence or exacerbation of their rheumatic syndrome. Weakness as the chief complaint could be interpreted in most instances as another expression of a rheumatic condition. Joint pains, with chills and fever, both of these showed that rheumatism was still active. In practically every one of all these 32 patients, from their past history some evidence of rheumatism could be elicited. Seventeen of them gave a definite story of having had rheumatic fever; eighteen of the patients had a positive history of repeated sore throats and in

three of them there was an account of growing pains, though never a frank rheumatism.

The duration of the illness varied from as short a period as one week to as long as eight years, quite a contrast to the patients with syphilitic heart disease. Ten of the patients had been sick for a period of under three months, most of them were individuals who had rheumatic fever when they were admitted to the hospital and might possibly be excluded from our list in the sense that they were not the victims of chronic valvular heart disease. Seven of the patients had had cardiac symptoms for over five years; three of them for eight years. These seven patients illustrate the known fact that even relatively severe rheumatic heart disease with mitral stenosis may, with proper care and attention, produce prolonged chronic invalidism without actually causing the death of the patient.

The physical examination of the heart showed this organ to be enlarged in 24 instances. Apical murmurs were the most common type of adventitious sounds heard over the heart but basal murmurs were heard in 10 instances. Considering the irregularities; definite auricular fibrillation was present in only four; auricular flutter in one and the unspecified irregularities elicited in seven cases were undoubtedly due to fibrillation, although this was not checked by an electrocardiogram.

Two of these patients had positive Wassermann reactions. A figure of slightly over 6 per cent as the incidence of a positive Wassermann reaction is considerably lower than that of a general hospital population, but again a considerable number of these patients were young individuals below the age that would be likely to develop syphilis and many of them had been sick from relatively early youth. In 27 instances the cardiac condition was alleviated by rest in bed, the administration of digitalis, and the patients were able to be discharged from the hospital. Five of them, however, died as a result of their cardiac lesion.

SYPHILITIC HEART DISEASE

The average age of this group, 34 cases, is higher than the usual figures, which are considered to run from the age of 35 to 50 years. This, however, is not a very great discrepancy but is above the upper age limit. The figures

for the sex and race are of interest but of no statistical importance because of the group of patients from which the patients were selected.

In every instance in the series, the primary diagnosis was syphilitic heart disease, qualified in 16 instances with the diagnosis of aortic regurgitation and by the term aortitis in 8 cases. Three of the patients had as well arteriosclerosis and 13 of them had the secondary diagnosis of congestive failure. Insomuch as 9 of them had heart pain as their chief complaint it might well have been that these particular patients also had anginal failure, although it is not so specified in the final diagnosis. The chief complaint, other than pain, was in nearly 80 per cent of the cases dyspnea, an excellent illustration of the fact that dyspnea may be associated with both congestive failure and anginal heart failure.

The figures for the duration of illness are quite interesting. It can be seen in the great majority of instances the cardiac complaints had existed for only a short time; in 17 of the patients less than a year; in 13 from 1 to 4 years, and in 4 of them their complaints dated from over 4 to 25 years. One of the most interesting features of syphilitic heart disease is the entire freedom of the patients from heart symptoms until they have their primary failure. Succeeding this the usual story is a relatively rapid descent with the time period of compensation diminishing and the intervals of failure becoming more and more prolonged until in one to three years death takes place, despite all treatment directed to the heart or the underlying syphilitic process.

In 18 instances it was possible to determine the interval of time from the date of the primary lesion to the onset of the cardiac symptoms. The average number of years was slightly under 30, with extremes of 42 and 6 years respectively. These figures differ considerably from those of Reid⁹ who, in a series of cases studied in the Massachusetts General Hospital, found 16 years was the average period elapsing from the primary lesion to the appearance of circulatory symptoms; the shortest time being 6 months and the longest 33 years. The figures given by White, higher than those of Reid, imply that from 20 to 25 years elapse on the average between the

onset of infection and involvement of the cardiovascular system.

The physical examination of the heart showed enlargement in all except two cases. This, of course, is one of the characteristic features of syphilitic heart disease associated with aortic regurgitation. An aneurysm further complicated matters in six cases. Involvement of the aorta and aortic valve was definitely present in 23 patients. An apical murmur, systolic in time, was present in 15. Another interesting note: auricular fibrillation occurred in one patient. This is a very rare complication of cardiovascular syphilis and it might possibly be that the cardiovascular degenerative processes in this case were largely arteriosclerotic.

Twenty-three of the patients had a positive Wassermann reaction and eight of them had negative serologic reactions. It is needless to state that the negative Wassermann reaction is not definite evidence that cardiovascular syphilis is not present.

The proportion of the number of patients who died is very much higher than in the arteriosclerotic and rheumatic heart disease group. Again further evidence of the grave prognosis of cardiovascular syphilis when once failure ensues in this type of heart disease.

SUBACUTE BACTERIAL ENDOCARDITIS

In this group the age incidence is lower than in our three main etiologic types. This is to be expected as the disease occurs most frequently in young people at or about the time of puberty, or the early years of young adult life. In this collection of 12 cases there were only two patients above the age of 28, one who was 37 years old and the other 57, raising the average age of the group considerably.

The ratio between the sexes was two to one, likewise a rather common observation, the disease being, in most statistics, more frequent in the male than in the female. Blumer¹⁰ gives the ratio of six to four. In only six of these patients, or one-half, was the chief complaint that of dyspnea, a much lower percentage than in the three large groups. Dyspnea indicates cardiac failure and was associated in three instances with a chief complaint of fever. This latter symptom complex was the complaint that brought the majority of the patients into the

hospital, illustrating that the condition really is primarily a severe and long maintained infection in which heart failure is of minor importance. The weakness and arthritis are likewise symptoms of the febrile infection.

Seven of these 12 patients had a previous arthritis. Every one of them while in the hospital had anemia which, in most instances, was quite severe. Six of them had nephritis and three of them had pulmonary complications. By the time these patients had entered the hospital cardiac dilatation already had occurred. The heart was always regular and the valve lesion was in the majority of instances mitral. There was not proportionately the common involvement of the mitral valve that occurs in rheumatic fever in general statistics, nor in our rheumatic fever cases. In one instance there was no murmur and in this particular case at autopsy the vegetations were found on the auricular wall around the papillary muscles, explaining the absence of any adventitious sound.

All of these patients showed the important diagnostic phenomena of emboli. Particularly interesting were the splenic infarctions which were definitely present in five cases, and which occasioned in three of them extremely severe symptoms. The finger phenomena are interesting. Tender finger tips and clubbing of the fingers are symptoms which are not uncommon but are usually not found with the frequency that we found them in our small series. White says that clubbing of the fingers is present in about one-half of the cases, but being well marked in only one-fourth or less, and links them up with those patients who have also enlargement of the spleen.

The figures for the duration of the illness represents the time the patients had been sick when they were admitted to the hospital. Many of them, after admission, lingered on for weeks and months before eventually succumbing.

The blood cultures that were positive showed a hemolytic streptococcus. This is not necessarily a *sine qua non* for diagnosis but is certainly a most helpful finding. Hematuria is a laboratory observation which is sometimes neglected in the study of this disease but really is one of the most definite evidences of emboli that can be found. The general concept is that

a leukocytosis occurs in this disease but actually a count of only 12,000 or under, is a more frequent finding than a higher leukocyte count. The anemia is a very much more important diagnostic criterion than is the leukocyte count.

The almost invariable fatality of the disease is well exemplified on our chart. Three patients who left the hospital still alive were practically *in extremis* and only survived a short time after leaving for their home.

One of the interesting features of this disease is the difficulty in making a diagnosis early in the course of the patient's sickness. Ultimately and eventually the development of anemia, the intermittent hematuria and other embolic phenomena, as well as the heart findings, make possible a diagnosis which is accurate in the great majority of cases. The final diagnosis is practically always correct but the provisional diagnosis may be any one of a number of conditions and is generally incorrect.

CONGENITAL HEART DISEASE

During this same period of time there were two patients with congenital heart disease admitted to the wards. One of them was a man who had a patent intraventricular septum. He was 39 years of age and apparently had no disturbance referable directly to his heart. He was admitted with a diagnosis of renal colic. The other patient had heart failure at the age of 31. His lesion consisted of pulmonary stenosis, patent intraventricular septum with active congestive symptoms due apparently to failure of the right heart. This man was admitted to the ward on three different occasions. Each time he rapidly recovered from the congestion brought on by minor infections. It is interesting to note that besides marked cyanosis and clubbing of fingers, there was also a well developed polycythemia. It is quite possible that the first patient also had pulmonary stenosis as he likewise had clubbed fingers with some slight cyanosis, although there was no polycythemia.

SUMMARY

The histories of a group of 193 patients who were seen in the Charity Hospital within a period of five years have been reviewed. By far the most common type of heart disease in the hospital was that due to arteriosclerosis. Syphilitic and rheumatic heart disease occurred with

approximately equal frequency. Subacute bacterial endocarditis was present proportionately in a much larger number of cases than has been found in other institutions. The average ages of the patients with the several types of heart disease were higher than the usual figures given for age incidence of these types of heart disease but the age of the several groups differs about the same number of years as has occurred in reports of very large series of such cases. The syphilitic heart disease patients were notable for the comparatively short interval that elapsed from the time symptoms occurred until cardiac failure ensued. The rheumatic cases illustrate the essential chronicity of this disorder in a goodly number of instances. Dyspnea is by far the most important main complaint in nearly 70 per cent of all the cases. Weakness was a symptom that brought 13 per cent of the patients to the hospital. Anginal failure was present in only a small proportion of the arteriosclerotic cases but in a somewhat larger proportion of the syphilitic patients. Congestive failure was by far the most frequent type of heart failure,

anginal failure occurring only in about 13 per cent. Four-fifths of the patients had enlargement of the heart, taking the groups as a whole. Apical murmurs were considerably more common than basal murmurs. The death rate for the arteriosclerotic group was 15 per cent; of the syphilitic 26 per cent; of the rheumatic 15 per cent, and of the subacute bacterial endocarditis 75 per cent.

REFERENCES

1. White, Paul D.: Heart Disease, N. Y. Macmillan Co., p. 302, 1931.
2. White, Paul D.: loc. cit. p. 302.
3. Stone, C. T., and Vauzant, F. R.: Heart disease as seen in a Southern clinic. A clinical and pathological survey, J. A. M. A., 89:1473, 1927.
4. Smith, Fred: Textbook of Medicine, edited by J. H. Musser, p. 374, 1932.
5. Houston, A. N.: Analysis of 88 cases of rheumatic fever; comparison with other analyses and discussion. Med. Clin. N. A., 11:1339, 1928.
6. Christian, Henry A.: Speculations on some problems of cardiac failure, South. Med. J., 20:28, 1927.
7. Conner, Lewis A.: Discussion of heart disease and disorders in New England, by T. D. Jones and Paul D. White, Tr. Assn. Am. Phys., p. 14, 1926.
8. White, Paul D.: loc. cit., p. 330.
9. Reid, W. D.: Prognosis of specific aortitis, J. A. M. A., 73:1832, 1919.
10. Blumer, George: Subacute bacterial endocarditis, Medicine, 2:119, 1923.

RHEUMATIC HEART DISEASE—32 CASES

Average Age	Sex		Race		
	Male	Female	White	Colored	
30.53	29	3	31	1	
DIAGNOSIS	Mitral Stenosis	Mitral Regurg.	Aortic Regurg.	Aortic Stenosis	Cardiac Hypertrophy
	21	15	4	2	6
CHIEF COMPLAINT	Dyspnea	Joint Pains	Edema	Weakness	Hemoptysis
	18	9	7	6	5
	Cardiac Pain	Chills & Fever	Pain Abdomen	Ascites	
	5	5	3	2	
RHEUMATIC HISTORY	Sore Throat	Rheumatism	Growing Pains		
	18	17	3		
DURATION OF ILLNESS	Under 3 mo.	3-12 mo.	1-3 yr.	3-5 yr.	5-8 yr.
	10	2	6	6	7
HEART	Enlargement	Murmur-Base	Murmur-Apical	Irregularities	
	24	10	29	Aur. Flutter	1
				Aur. Fibrillation	4
				Irreg. (Unspecified)	7
WASSERMANN	Positive	Negative	Not Reported		
	2	22	8		
DISCHARGED	Living	Dead			
	27	5			

SUBACUTE BACTERIAL ENDOCARDITIS—12 CASES

SEX		Case	1	2	3	4	5	6	7	8	9	10	11	12	
WM—8		Age	19	19	20	19	57	27	25	24	37	19	28	23	
WF—2															
CF—2															
CHIEF COMPLAINT	Dyspnea 6	Weakness 3	Arthritis 1			Fever 9			Cough 2						
COMPLICATIONS	Nephritis 6	Anemia 12	Splénomegaly 11			Pulmonary 3			Previous Arthritis 7						
HEART	Enlargement 11		Murmurs			Irregularity 0									
	Diast. Aort. Diast. Mitral Syst. Aortic		3 4 1		Syst. Mitral Pulmonic None		7 1 1								
EMBOLIC PHENOMENA	Petechiae 7	Tender Fingers 2	Clubbing 8			Other Embolic Phenomena 4			Spleen 5						
DURATION OF ILLNESS	1-3 mo. 8	3-9 mo. 4													
LABORATORY STUDIES	Positive Blood Culture 7	Hematuria 6	Leukocytosis 4												
DISCHARGED	Living 3	Dead 9													

SYPHILITIC HEART DISEASE—34 CASES

	Average Age	Sex		Race	
	52.76	Male	Female	White	Colored
DIAGNOSIS	Aort. Regurg. 16	Aortitis 8		A-S 3	Cong. Failure 13
CHIEF COMPLAINT	Dyspnea 26	Edema 12		Pain 9	
DURATION OF ILLNESS	Under 3 mo. 8	3-12 mo. 9		1-4 yr. 13	4-25 yr. 4
TIME INTERVENING FROM CHANCRE TO PRESENT ILLNESS (18 cases)	Average yrs. 29.6	Upper Extreme 42		Lower Extreme 6	
HEART	Enlargement 32	Aneurysm 6		Murmurs Base 23 Apical 15	Aur. Fib. 1
WASSERMANN	Positive 23	Negative 8		Not Reported 3	
DISCHARGED	Living 25	Dead 9			

ARTERIOSCLEROTIC HEART DISEASE—113 CASES

Average Age		Under 60 yrs.		Over 60 yrs.	
WM	63.35	Male	36	Male	74
CF	57.60	Female	1	Female	2
COMPLICATIONS	Card. Failure	Hypertension	Myocarditis	Coron. Thromb.	
	44	18	5	4	
COMPLICATIONS	Card. Hypertrophy	Aortitis	Aort. Insuff.	Aneurysm	
	3	4	1	1	
CHIEF COMPLAINT	Dyspnea	Edema	Cardiac Pain	Weakness	
	80	26	16	16	
CHIEF COMPLAINT	Palpitation	Syncope	Cough	Leg Pain	
	7	5	5	3	
HEART	Enlargement	Irregularities		Murmurs	
		Aur. Fib.	24	Diastolic Aortic	5
		Ectopics	16	Diastolic Mitral	1
		Heart Block	1	Systolic Apical	40
		Aur. Flutter	1	Systolic Aortic	12
BLOOD PRESSURE	100	Under 150	Over 150	200 & over	
	10	43	48	220/110	
WASSERMANN	Positive	Negative		220/100	
	7	106		200/110	
DISCHARGED	Living	Dead		244/90	
	96	17		200/120	
				210/120	
				200/80	
				220/110	
				230/110	
				210/120	
				200/130	
				210/110	

COMPOSITE CHART

	RHEUMATIC	SYPHILITIC	ARTERIOSCLEROTIC	SUBACUTE BACTERIAL
	32 Cases	34 Cases	113 Cases	12 Cases
Average Age	30.53	52.76	61.3	26.4
DURATION OF ILLNESS				
Under 3 mo.	10-31%	8-23%		8-66%
3-12 mo.	2-6%	9-26%		4-33%
1-3 yr.	6-18%	13-35%		
3-8 yr. (+)	13-4%	4-11%		
HEART—				
Enlargement	24-73%	32-94%	88-77%	11-91%
MURMURS				
Apical	29-90%	15-44%	41-36%	11-91%
Base	24-73%	23-67%	17-15%	5-41%
Irregularities	12-37%	1-3%	42-37%	
CHIEF COMPLAINT				
Dyspnea	18-56%	26-76%	80-70%	6-50%
Edema	7-21%	12-35%	26-23%	
Weakness	6-18%		16-14%	3
Pain	5-15%		16-14%	3-25%
WASSERMANN				
Positive	2-6%	23-67%	7-7%	
Negative	22-68%	8-23%	106-93%	
DISCHARGED				
Living	27-84%	25-73%	96-84%	3-25%
Dead	5-15%	9-26%	17-15%	9-75%

PROGNOSIS IN CORONARY DISEASE

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The problem in coronary disease is one of much importance to patients and their families, and often involves great responsibility on the part of the doctor. Undoubtedly there is always a certain amount of uncertainty in all of these cases. However, we have some very valuable signs, symptoms, and findings that properly elicited and interpreted, have proven to be of considerable prognostic value.

It is of particular interest to notice the blood supply of the heart, an accurate description of which becomes extremely difficult on account of the variation in circulation not only in different hearts, but in the same heart at different age periods. The circulation of the heart is divided into a superficial circulation, consisting of the right and left coronaries and their various branches to various portions of the heart and principally the heart muscle and the deep vessels which are branches from the superficial passing through the muscles until they reach the subendocardium, where they form a fine network. The ultimate distribution is that of a fine capillary network about the individual muscle fibers. Considerable variations occur in both origins and distribution of the coronaries. Marked variations in number and distribution are normally found. The sino-auricular node has never more than one artery arising usually from the right coronary artery. The veins of the heart serve much in furnishing anastomosis to various neighboring arterioles thereby furnishing nutrition. The existence of anastomosis between coronary arteries is now definitely settled. The increase in growth of coronary arteries with age is pronounced in the sixth and seventh decades, producing an abundance of collateral circulation.

Pathologic changes in the coronary arteries are closely associated with resulting changes in cardiac tissue. There is some difference of opinion as to the beginning of this

pathologic process. The general opinion, however, is that the majority of muscle damage to the heart results from disease of the coronary arteries. This occurs in two ways. First, there may be a gradual narrowing of the arterial lumen as a result of sclerosis and diminishing circulation. This process can go on gradually to complete occlusion. During this process there is a tendency to establishment of collateral circulation. Second, there may be sudden, rapid occlusion of smaller arteries by thrombosis or embolism with resulting infarction and degeneration, later followed by scar formation.

The causes of coronary artery disease, or chronic myocarditis, which terms are used synonymously, not infrequently have a definite bearing on the prognosis. Heredity, age, and sex seem to play a large part in the predisposing causes of coronary disease. Infectious diseases such as rheumatism, typhoid fever, influenza, diphtheria, septic infections including the various neglected foci, and syphilis undoubtedly are important factors in producing this trouble in early life in some cases, and manifesting symptoms later. Occupations, especially those that have a great deal of mental and physical straining, producing overwork and fatigue, precipitate trouble. Conditions that produce economic stress, as has been experienced lately, have an influence. Certain classes of temperamentally emotional individuals appear to have an increased susceptibility to coronary accidents, especially when other causes are present. General arteriosclerosis, faulty metabolism, dietary indiscretion and dissipation play their part.

The symptoms and findings in cases of coronary disease vary a great deal, due to a great many factors: first, the severity of the condition; second, the presence or absence of infarcts; third, the occurrence of complications; fourth, presence of co-existing disease. Pain and dyspnea have been the outstanding symptoms. Pain varies from sensation of oppression to sharp and lancinating character, radiating to arms or neck and the usual distribution. The continuation of this pain in spite of proper treatment is not encourag-

ing. The blood pressure is not always high in uncomplicated coronary disease; the general tendency is to moderate elevation. However, in the presence of an attack of coronary thrombosis we usually expect a drop in blood pressure, systolic, and pulse pressure. Return of this blood pressure to higher levels is evidence of improvement. Cyanosis may exist even in the absence of dyspnea or other signs and usually indicates poor compensation: its continuance is not favorable. The heart sounds are frequently weakened in coronary heart disease, especially the first sound at the apex after coronary thrombosis. Auricular fibrillation, paroxysmal or continued, reduplication or gallop rhythms are seen with the presence of intraventricular and auriculoventricular block and left ventricular dilatation and weakness. Auriculoventricular block and paroxysmal ventricular tachycardia are more serious disorders of mechanism. In the presence of cardiac failure a proto-diastolic gallop rhythm is common. Functional murmurs are often heard denoting dilatation of the heart, these are usually systolic apical murmurs. The change in the size of the heart, shifting position, is noticed especially following coronary thrombosis. Fever and leukocytosis occurring after thrombosis is of some prognostic value, the continuation of these over longer periods is not a good sign. The continuation of a pericardial friction rub over a longer period of time is not encouraging. The roentgen ray study may show no evidence except a tortuous and elongated aorta. The electrocardiogram is of great value at times. It is possible that it may be normal with coronary disease. However, the common findings are the presence of intraventricular block of low voltage or auriculoventricular block. Abnormal left axis deviation is not commonly found unless associated with hypertension; it may follow coronary thrombosis. Changes in the T wave, especially leads 1 and 2, afford a great deal of information about the state of the heart in coronary diseases. With lesser grade of cardiac damage the T wave may be deformed, low, inverted or of special shape. A few hours

after infarction there may be noted a high origin of T of the ST interval from a descending limb of R in leads 1 and 3 with the corresponding depression of this T or ST in the opposite leads of 3 or 1. Later the T tends to flatten out. The flattening or inversion of the T wave may gradually become normal again after weeks depending on the ability to recovery and repair of the infarct. Recently evidence has been presented to indicate that thrombosis of the descending branch of the left coronary is apt to be attended by high origin and later inversion of T1 while thrombosis of the right coronary is apt to be followed by high origin and later inversion of T3. The T2 change is usually less characteristic though the deflection may be considerably deformed also. The occurrence of general weakness, particularly in the senile type, with mental disturbances, dizziness, even coma and convulsions, may occur with the more serious mentioned coronary disturbances.

In order to arrive at a basis for prognosis it seems advisable to classify all of our coronary disease cases into groups, varying according to severity of their condition and other common findings, as follows:

Group 1. These are the cases without symptoms, or with only slight symptoms and changes, or the mild cases, possibly without history of positive infarcts. They may present slight retinal arteriosclerosis and slight elevation in blood pressure. There may be a rather forceful apex beat, with slight displacement. Peripheral arteriosclerosis is sometimes evident. Systolic murmurs are frequently heard at the base or apex, not the murmur of mitral insufficiency. It is this type of case in which we should expect our most favorable prognosis.

Group 2. This group is subdivided into two classes: Class 1 includes the cases showing evidence of myocardial failure which might be considered the persistent discomfort type, possibly with history and evidence of previous infarct. These cases have obvious physical findings varying with the degree of cardiac failure. Cyanosis varies in intensity from that of the ashy dull complexion to that of definite bluish discoloration. Dyspnea varies in degree and char-

acter. There is moderate to marked arteriosclerosis of peripheral vessels. Edema varies from dependent to generalized with hydrothorax and ascites in the severe cases. The cardiac impulse displacement varies and is usually diffuse. Pulse rate is usually accelerated and often irregular. There is accentuation of the heart tones from hypertrophy or weakened heart tones from myocardial damage. Functional systolic murmurs are almost constant findings. The blood pressure may be elevated, but more frequently is low from weakened myocardium. A failing blood pressure is often the index of increasing myocardial damage. This group of cases carries a serious prognosis and not infrequently in spite of proper cooperation our treatment is of no avail. Class 2 includes those cases that we might call the "sudden attack" cases. The affected individual may be ushered in with an acute and severe coronary thrombosis with a history of perfect health up to this event, possibly never consulting a doctor, and if he should be under the care of a doctor it is possible that his physician would not be aware of any evidence of coronary disease. These might be called the silent case. They are very impressive, often times causing a great deal of uneasiness as to the exact diagnosis. This undoubtedly is due to the protean manifestations of coronary disease. A large percentage of these cases die in their initial attack. The remaining portion will linger on, some getting relief and others falling into Class 1, Group 2. Often these cases will be found to have an exciting factor of a physical or mental nature that will be the main cause of the accident.

In reviewing heart cases, observed over a period of the past six years, at the Vicksburg Sanitarium and Clinic, I find that records complete with electrocardiograms are available in 630 cases. Electrocardiograms were taken on all cases presenting any evidence of cardio-vascular disease, provided the case will permit, and repeated over a period of varying lengths of time, as often as daily, and from two weeks to four years. No cases will be presented without electrocardiograms.

A careful study of these electrocardiograms with all clinical data shows that there were 212 cases that presented evidence of coronary dis-

ease of varying degree. Of the 212 cases with coronary disease it was noticed that 70 were females and 142 males, a proportion of 1 to 2. The ages of these cases varied from 22 to 86 years, by far the greater percentage being between 60 and 70 years of age. No attempt is made to classify the other types of cardio-vascular diseases noted. I have grouped these 212 cases according to the grouping mentioned previously, and I find that a study of this grouping has proven very interesting from a prognostic point of view.

In Group 1, which is the class of cases without symptoms or with only slight symptoms and changes that we called the mild cases; there were 56. Two of these cases have died of deaths not related to their cardiac condition, one of pneumonia and one from accident. A careful check up on practically all of these patients shows that they were doing well, some better than others, particularly those who are carrying out instructions and reporting regularly for check-ups. This group of cases presents a generally good prognosis. They were subjected to regular observation and usually followed instructions as to routine treatment rather faithfully.

In Group 2, the first class of cases, those presenting evidence of myocardial failure (the persistent discomfort type), there were 59 with 10 deaths, seven cardiac, three from other causes, up to date, a mortality of 17 per cent. Of the 49 living in this group there are some 10 cases who persist in considerable stages of decompensation. The remaining 39 are comfortable to a certain extent and are able to attend to a certain amount of their duties, especially when they observe strict precautions. In the second class of cases of Group 2 called the "sudden attack" cases, there were 19. Nine of these are dead either from their initial attack or very shortly afterwards, a mortality of 47.6 per cent. The remaining 10 patients are under observation. Some are perfectly free of symptoms at present and performing their usual duties. There are a few that are not so comfortable and we might class these in the first class of Group 2.

In Group 3, or the group that we might call the complicated cases, there were 74, 36 dead and 38 living, a mortality of 49 per cent. The associated diseases of those dead were chronic

nephritis, 11; pulmonary empysema, 6; syphilis, 5; arteriosclerosis, general, 5; thyroid complications, 2; alcoholic, 2; carcinoma of stomach, 2; pneumonia, 2. Of the 38 living, diseases complicating their coronary disease are nephritis, 16; pulmonary empysema, 4; syphilis, 6; thyroid complications, 3; diabetes mellitus, 4; alcoholism, 3; colitis, chronic ulcerative, 2; carcinoma of prostate, 1. The living patients are all existing fairly comfortably, attending to a certain amount of their duties, occasionally having to undergo rather cautious treatment with particular reference to their complications.

In Group 4, the exaggerated symptom type, or the neurocirculatory asthenia type, there were 7. It is of particular interest to notice here that there were 6 females. All of these cases are doing well and have a good prognosis. We might say that this type of case is particularly prone to occur in women and that although they are to a certain extent alarming at times, the general outlook is favorable.

In summarizing it is interesting to note that the mortality rate as seen in my cases is about the same in the Group 3 cases as that of the type 2, Group 2 cases, both of which are very high. There is no doubt a very definite clinical difference in these two classes of cases. There are a great many other cases that could be included in the "sudden attack" cases, but on account of not being able to get complete records of them they are not mentioned. The majority of these cases died in their initial attack at their residences and other places. In the first group of cases we have our best prognosis. It is here that we have to remember that careful observation over a long period of time is necessary before we can form any definite statistics. In general, the prognosis of all cases of coronary diseases, is the one feature that we always have to consider, and one that always involves a great deal of caution, bearing in mind all factors mentioned.

REFERENCES

- Sutton, Don C. and Lueth, Harold: *Diseases of the Coronary Arteries*: C. V. Mosby Co.
- White, Paul Dudley: *Heart Disease*: The MacMillan Company.
- Pardee, H. E. B.: Significance of electrocardiogram with large "Q" in lead III Arch. Int. Med. 46:470-481, 1930
- Scott, R. W.: Clinical aspects of Arteriosclerosis, Am. Heart Jr. 7:292-304, 1932.

DISCUSSION

Dr. G. W. F. Rembert, (Jackson): The matter of statistics by no means is very satisfactory although in a way it gives some assistance in arriving at conclusions as to the influence of any condition. The local conditions serve to vary the final conclusions because of such conditions, as of rheumatic heart disease in the New England states, and the rarity of that so to speak in this part of the country. The increase of heart diseases has been thought to be due to probably three causes, the first, poor diagnosis, second, a decrease in the death rate of the acute infectious diseases which relatively gives you an increase in the heart disease, and the third is the fact that the longer life of the average individual now takes him into the time when heart disease is more likely to take place.

As to other causes possibly in addition to those that Dr. Brock so well gave in his brief though very inclusive paper, it might be well to mention those of matter of habits which attention is being directed more now than ever before, and that is the dangerous and harmful effects of tobacco, and secondly, the fact that conditions as they are now, with more work and more worry and less play and less relaxation have been in the last few years increased.

I was struck yesterday in reading through the May Journal a list of deaths of physicians in the United States and Canada and I thought I would look and see what proportion there were from heart disease, and there were 79 deaths reported and 32 were from heart disease, 13 arteriosclerosis, but they gave 32 cases of heart disease, which was 40 per cent of the total death rate. Against that there were eight cases of cancer and six of rheumatism, so you can readily see how heart disease among the physicians is really quite a factor. Then I commenced wondering as to the age limit and the proportion of those 32 between the ages of 40 and 60, and it was 31 per cent, and between 60 and 80 it was 67 per cent. That brings up the question as to why heart disease between those ages of 60 and 80 particularly is so frequent, and it makes us stop to wonder if some of the things we are doing might not be such factors as we are able to control in a measure.

Now as to the matter of treatment. Of course we are always speaking of digitalis in heart failing conditions and myocardial degenerations, etc. Much has been said—much can be said of digitalis, and I think in the way of suggestions there are a few things that may be considered though. First, select a potent remedy; second, give sufficient amount to get the digitalis effect, and third, continue to give the dose as long as necessary and do not discontinue until you feel it is safe to do so. Of course, we think the matter of digitalis and

rest, theophyllin and extracts of Lugol's solution should be given in conjunction with the rest. The best thing is watching the heart most carefully and always being ready to have surgical intervention before damage is really done to the heart. Now angina pectoris particularly calls itself to your attention because of the fact of the growing instances of coronary thrombosis, so have this thing in mind, first be sure of your diagnosis. It is rarely ever difficult to differentiate between angina pectoris and coronary thrombosis, but in case of doubt treat it as coronary thrombosis. Don't accept it as angina pectoris and treat it with opiates. Use digitalis slightly and long rest and the results will justify such treatment.

Dr. T. E. Wilson, (Jackson): Dr. Clark read a most excellent paper on coronary disease considered from the standpoint of prognosis. When one speaks of coronary disease, of course, practically the whole group of heart disease past middle life—the ages between 40 and 50 are included. At least 60 or 75 per cent of them in this group is angina pectoris, coronary thrombosis or mild cardiac trouble on down to the senile heart. Certain types of hypertensive heart disease are included in this group. To properly forecast the outcome of one suffering with this type of heart disease, it is necessary to a certain degree to have an understanding of the pathological changes which have taken place. Gross in his beautiful work in which he examined specimens of different age groups from early life on to the ninth decade has clearly shown a constant shifting in the blood supply from the right coronary circuit towards the left—at least there is a diminution in the blood supply of the right heart while there is a relative increase in the blood supply to the left heart. This explains why to a certain extent some patients die suddenly and others carry their heart disease over a long period of time. Individuals with acute coronary thrombosis are usually, when they have this condition either in their forties, fifties or sixties, and by this time the circulation has already shifted to the left heart—at least there is a change most marked during that age period in the circulation taking place in all the heart sub-cutaneous tissue and sub-pericardial tissue, and consequently they are not able to weather the storm. Those who do not succumb to angina pectoris or coronary thrombosis fall into a group in which there is a gradual destruction of the coronary function. The prognosis of this group of cases depends upon two main factors, one the avoidance of infection, particularly respiratory, pneumonia, influenza, etc., and the second important factor is over exertion by great physical effort of those who have acute coronary occlusion. Approximately 50 per cent die of the first attack, most of the remaining die within two years' time. In the other group they fre-

quently live ten or fifteen or twenty years. Death usually comes in the first week after complete occlusion, and the severe arrhythmia from acute heart failure well on to the 5th or 6th week, while healing is taking place. From observation, the electrocardiograph and blood pressure estimates are perhaps two most important factors in determining the prognosis in these cases.

Dr. John G. Archer, (Greenville): When one speaks of coronary disease the most usual form immediately thought of is coronary thrombosis or occlusion. It is this phase of coronary disease that I wish to confine my remarks to.

It has been wisely said that the prognosis of coronary thrombosis should not be attempted at the onset of the condition. We have learned that the prognosis depends mainly upon the size of the resulting infarcted area, also on the early diagnosis with the proper handling of the case.

More thorough study of heart diseases aided materially by the electrocardiogram has shown that a good percentage of coronary thrombosis cases have lived six to fifteen years after the onset, and a fair percentage have had more than one attack.

Herrick was the first in this country to publish an article on coronary occlusion. He arranged these cases into the following arbitrary groups as to prognosis:

1. Those cases in which death is sudden, seemingly instantaneous, probably painless.
2. Those with severe anginal pain and profound shock with death in a few minutes to several hours.
3. Mild, nonfatal cases, with slight anginal attacks without the ordinary causes, e. g., walking against a head wind, and which probably depends upon the obstruction of minute coronary twigs.
4. Those with severe symptoms that are usually fatal, but not immediately so, lasting for days or weeks and eventuating in recovery with impaired myocardial function, or in death from congestive heart failure.

I believe the most important features in a favorable prognosis in coronary occlusion are the early correct diagnosis and proper treatment.

The essayist, Dr. Clark, has given us statistics of his cases showing that those patients who report for check-ups and who follow instructions as to routine treatment as a rule get along very nicely. I would like to emphasize a very valuable point—that of gaining the co-operation of the patient, not making a neurotic out of the individual, but impressing the point that it is the person who knows he has a heart condition, and learns to take care of it, that is the one whose life is prolonged.

Dr. P. W. Rowland, (University): I am going to address myself directly to Doctor Musser's paper. I was interested in the table he presented, particularly with reference to the incidence of valvular

lesions accompanying arteriosclerosis and coronary thrombosis of heart disease.

I have long had the idea that the particular type of valvular lesion does have a direct bearing on the prognosis, and that, in certain types of valvular lesion, fatality is very much more rapid, and more acute than in other types of lesion.

I want to ask Doctor Musser whether or not he has observed that the type of heart disease, which we are pleased to call coronary thrombosis, when complicated with aortic regurgitation, is not more rapidly fatal than when accompanied by mitral regurgitation.

I am basing the question on the anatomical and physiological features involved in the circulation of the heart.

The manner in which the heart receives its blood supply is different from that of the systemic circulation.

The systemic circulation gets its blood supply during cardiac systole, whereas, the heart gets its supply at the beginning of cardiac relaxation. The aortic systole forces the blood back against the closed aortic valve into the coronary arteries, whence the cardiac muscle receives its nutrition. Now suppose you have a diseased aortic valve, a regurgitation; when, at the moment of relaxation, in the beginning of aortic systole, the blood should be forced into the coronary arteries, a considerable part of it is forced back into the left ventricle, thus the heart muscle is deprived of sufficient blood to maintain nutrition. Now, if, in addition there is a coronary occlusion, you have an intensification of the process, hence my conclusion is, that the prognosis in these cases is very much more grave than in other types of valvular lesion. You are going to have more severe attacks of angina, the blood pressure will be generally low, the symptoms of anoxemia and malnutrition more marked.

Dr. Musser, (Closing): In answer to Dr. Rowland's question, I agree with him heartily in that I feel that in the type of case he has outlined the prognosis is so bad that the patient cannot survive. When all is said and done in discussing heart disease sooner or later it should evolve around the prevention of the disease itself. Of course this is an extremely difficult problem. Just how are we going to prevent any of these common types of heart disease? A great deal of work has been done in regard to the prevention of rheumatic heart disease. It is not based entirely on the removal of the tonsils. As a matter of fact there is much doubt whether the removal of tonsils has very much effect on the incidence of rheumatic heart disease. The Research Council of Great Britain several years ago studied the school children throughout England to see whether or not if the tonsils were removed rheumatic heart disease would be eliminated. The incidence of the disease was

about the same in the control group as it was in the test group. Many thousands of children made up the two groups. I think that the type of patient who is likely to have syphilitic heart disease illustrates very well why the disease is not more frequently prevented by the complete treatment, and eradication, of syphilis in its early stages. After syphilitic heart disease has developed there is about as much hope of curing the patient as there is of putting out a fire of gasoline by pouring water on it. Dr. Rowland brought out the fact that coronary disease is likely to occur in the person who is subject to the stress and strain of modern life and particularly so in that individual whose strain is very largely or in good part mental. I think that the figures I showed you today will strengthen this opinion and the figures that he brought out show that it is a common disease of the doctor and a quite uncommon disease of the type of patient you see in the large charity hospitals substantiates this. Most cases of coronary disease are observed in private practice and among intellectual people. It makes me wonder therefore whether possibly if doctors were to carry out President Roosevelt's 30-hour a week plan—working on Monday and Tuesday and resting the remainder of the week—whether they would develop coronary diseases quite as frequently as they do now. These problems of heart disease are most interesting. Undoubtedly the greatest problem is the question of prevention because after all, I do not think that many heart lesions are missed by faulty diagnosis. As a matter of fact, I think that the diagnosis of heart disease is often erroneously made. This great organ is singled out because it is so obviously easy to diagnose abnormal physical signs. Also, frequently we do not know what else is the matter with the patient when they die suddenly and we say the death is due to heart disease, but we cannot always prove it by any means.

CONTAGION IN HEART DISEASE*

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The two terms, contagion, and heart disease, as joined in the title of this paper appear at first to be strange associates. Contagion conjures up pictures of diseases readily transmissible from patient to patient, and capable of reaching epidemic proportions; heart disease is looked upon as a

*Read before the Section on Hygiene and Public Health at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 11, 1933.

strictly private affair of the individual who harbors the damaged heart. But it is our purpose here to reaffirm what has been pointed out by others, that within the concept contagion, are elements which are of profound importance in the production of some of the forms and types into which the term heart disease can be divided.

Contagion means transmission by contact, but no longer is its interpretation as literal as formerly when, by its derivation it meant the passage of some harmful substance from one body to another by direct physical approximation. Its usage is widening out in an approach toward "communicability" but is limited by time and space. The word was first applied before there was any knowledge of the existence of bacteria.

Today contagion implies the transmission of an infectious agent from one person to another through a relatively short distance and with a lapse of time not great enough seriously to effect the virulence of the organism.

Contagion therefore must consider not only actual direct physical contact but all other opportunities and conditions which permit the infective agent to be carried with speed and efficiency from the "source" to the "exposed person." Among the opportunities can be mentioned; overcrowding in public places, family associations, movements of populations, social and industrial groupings, intimacy between individuals, unhygienic habits, such as sneezing and coughing, uncleanliness and carelessness about the person, and occasionally the presence of a direct intermediate agent such as common drinking cups and towels. The conditions under which transmission takes place include the virulence of the organism and its ability to survive the transmission, atmospheric and seasonal factors influencing the infective agent, moisture and dryness of the environment, the availability of the proper atriia through which it can gain entry to the exposed individual, and the susceptibility of the contacting person. Such are the elements which are to be considered as playing a part in the production of heart disease.

It would be better always to use the term diseases of the heart and in doing so to keep upper-most in mind the categorical division of these diseases according to their causes. Thus we would think, not of valvular, endocardial, myocardial, coronary artery or conduction system disease of the heart, but of congenital, rheumatic, acute infectious, syphilitic, degenerative and sclerotic heart disease. In each of these there is direct reference to a known, suspected, or unknown cause. To know or not to know the actual cause or causes of any type of heart disease is a direct approach to its prevention for when known we can attack the cause at its most vulnerable point and when we admit that the cause is unknown we are well on our way to knowledge and the same end. In some of the above etiological types, contagion plays a great part but is often hidden by ignorance of its presence or unrecognized through dilution by time.

Congenital heart disease in the restricted use of the term to congenital defects and anomalies bears no known trace of contagion in its cause.

Rheumatic heart disease is today suspected of being highly dependent upon contagion. St. Lawrence¹ in 1922 and Faulkner and White² in 1924 revealed that there was an unsuspected high family association of rheumatic heart disease, acute rheumatic fever, and chorea. St. Lawrence traced the family incidence of rheumatic heart disease, acute rheumatic fever and chorea in the families of 100 children with rheumatic heart disease selected from a cardiac clinic. He found that in 50 of these families there were two or more members of the family who exhibited or gave the history of definite rheumatic heart, acute rheumatic fever, or chorea. For comparison, he investigated the incidence of tuberculosis in the families of 100 children in a tuberculosis clinic. Here 48 families exhibited two or more affected members in the same family. St. Lawrence says, "Here it will be seen that in families having one member the subject of the disease, rheumatic infection exceeds tuberculosis in family incidence and in frequency among exposed per-

sons." His use of the term "exposed persons" reflects his suspicion of the transmissibility within families of the infection resulting in rheumatic heart disease.

Faulkner and White investigated the families of 200 cases with rheumatic infections and found that in 35.57 per cent of these more than one member was affected with rheumatic infection. Seventy-five families of cases showing no evidence of past or present rheumatic infection showed in comparison only 16 per cent with positive evidence of rheumatic infection in any of its members. Faulkner and White state, therefore, "Families of rheumatic patients are more than twice as apt to have another member with a rheumatic infection as families of non-rheumatic persons." These latter authors ascribe three main factors as the direct or predisposing causes of the increased liability of members of rheumatic families to rheumatic infections: (1) hereditary pre-disposition; (2) environmental conditions, particularly cold, dampness and poor hygiene; and (3) direct contagion.

Interest in the possible infective agent is now turned most critically toward the *Streptococcus haemolyticus*. Coburn and Pauli³ in their intensive studies on the relationship of *Streptococcus haemolyticus* to the rheumatic process have brought out most enlightening evidence in favor of *Streptococcus haemolyticus* as being specific infectious agent in rheumatic fevers. They state in conclusion of their work that their evidence indicates that the infectious agent initiating the rheumatic process is *Streptococcus haemolyticus*. An analysis of their contribution reveals that the occurrence of rheumatic fever and the presence of *Streptococcus haemolyticus* in the upper respiratory tract follow the same geographical distribution; that there is an equal incidence of both of these conditions in each of the different social strata, both being more common in the lower classes where filth and over crowding prevail; and that there is a high incidence of both in members of the same family. These all point toward contagion, and the possible contagious element is still further

indicated by the close relationship between the streptococci found by them and the specific agents of erysipelas and scarlet fever, both admittedly highly contagious.

Much remains to be done however to determine the remaining factors in its contagion, if proven. We know little of the methods by which it is transmitted from individual to individual, whether a single exposure or multiple exposures are sufficient or necessary; whether it is by close droplet infection or by fomites; or even whether or not direct contact is essential.

Within the meaning of the term, a wealth of evidence is at hand to make us turn our thoughts seriously toward contagiousness. The various forms of acute endocarditis, depending as they do on specific organisms, are to be considered contagious in origin only so far as there is a contagious element in the diseases of which they are so generally a part. If we admit that lobar pneumonia is directly transmissible and therefore contagious the prevention of pneumococcic endocarditis developing from this source shares with the prevention of pneumonia by minimizing contagion. The same may be said of complicating endocarditis of erysipelas, streptococcic sore throat, measles, typhoid fever, diphtheria and scarlet fever.

The two main venereal diseases responsible for subsequent damage to the heart are directly contactual in origin. Gonococcal endocarditis results only from remote infection with gonococci and these come only by their immediate transmission from individual to individual. Every consideration for the prevention of this disease is directed toward prohibiting the direct carriage of the gonococcus from the infected patient to the exposed person. Whatever measures are used to lessen the chances of success of this transfer remove the possibilities for a potential gonococcal infection of the heart.

Syphilis is the great ravager of the heart of the young and middle aged adult. Its appearance later in life and some time after the primary infection has still as much to do with contagion as its cause as though it occurred immediately after exposure. It is im-

possible to think of syphilis of any organ in any stage without calling to mind that it began with the direct contact in which the spirochete was passed over to the new patient. This is just as true of the congenital syphilitic heart as the acquired, only we are forced to think further back. Contagion in syphilis is the sine qua non of its existence and on this point alone is as preventable as the burn from putting the finger on a hot stove.

At the opposite end of the life scale from congenital heart disease is the group commonly designated as degenerative and sclerotic. It is not known how much importance infection plays in these types of heart disease and therefore we are still entirely ignorant as to their etiology. And when infection is suspected its incidence is so clouded with time that the circumstances surrounding its origin are largely lost to us. That some may be accounted for by previous acute infections is possible and in these the element of contagion may show through dimly.

Considering heart disease therefore as composed of many forms of diseases of the heart we find that a large proportion of them are infectious in nature and that the infection was originally obtained through contact. Before the age of 45 years, by far the greater amount of cases of heart disease are infectious and acquired by contact. When we recall our original definition of contagion it becomes evident that the contagious nature of much of our diseased hearts must be given serious consideration. This point of view becomes much more prominent to the man who asks himself "What can be done to check the increasing death rate from heart disease?" As long as the diseases of the heart are seen only as complications of other diseases the conception of their etiology is fogged by the cloud of considerations given to the diseases of which they are a part. When the attention is turned to diseases of the heart as a group, heterogeneous as it is in types, the most common single factor accounting for it is to be found in contagion.

There should be a considerable measure of hope aroused by the increasing knowledge in the etiology of our heart cases. While we may not yet be able to apply direct measures in our attack on the transmission of the infectious agent our knowledge that the infectious agent is there and therefore subject to all of the conditions which limit its transference and contagiousness places in our hands a powerful weapon for its control.

To prevent a formidable amount of heart disease we need only to know the natural history of each type that makes it up and when contagion is recognized to attack it at its weakest point.

DISCUSSION

Dr. D. V. Galloway (Meridian): I want to thank you, Dr. Terrell, for this splendid paper on the relation of contagious diseases to heart conditions. I enjoyed reading the paper when you sent it to me for inspection, and I have enjoyed it more hearing you read it here. I wish you had covered the practical details of the prevention of heart disease in the same thorough way. Heart disease must be considered in the control of all infectious diseases, but it seems to me our activities may be divided into two sections. First is the general public health control of the infectious diseases, such as diphtheria, scarlet fever, typhoid fever, the focal infections, such as infected teeth, tonsils or sinuses. The second is the hand of the family physician who sees these cases at the time when they are most likely to develop a damaged condition of the heart. He is the one to continue these examinations until the patient is out of danger. Not only that, but he must examine these patients annually in order to keep himself informed of the conditions of the patient's heart at all times. We must have regular health examinations that are begun early in infancy and carried throughout life by the patient's own physician. By educational methods the public may be acquainted with the dangers of heart disease, but only regular physical examinations will result in real prevention of heart disease.

Dr. D. J. Williams (Gulfport): This paper is of too great importance to go by with so little discussion. To my mind it is one of the most important papers that has been before us. A good many were surprised that measles created quite the discussion that it did. If doctors and people generally would realize the dangers, immediate and remote, from measles, whooping cough, chicken-pox, to say nothing of diphtheria and scarlet fever, we would not only have far less heart disease in after life, but would have also far less trouble with the kidneys. People would live to grow older and live

more comfortable lives while they were growing older. For ten years or more I have not attempted to address the people of our country but in some part of my talk I have tried to emphasize the importance of the dangers of these so-called innocent infectious diseases of childhood. It is there that we have most of our trouble. All of us know about rheumatism; that has been ground into us for forty-five years. I know because I have been hearing it that long, but we have not been taught the importance of controlling measles, whooping cough and some of the other so-called innocent, contagious or infectious diseases. The people have been taught the contrary, and we should reverse ourselves and know that these diseases kill. I was interested principally in this measles discussion because of its bearing on this subject. In January we had three deaths, one 51, one a school girl of 16, and a child of three, and if we had the proper statistics on these diseases, and we were made to realize that they not only kill in the acute infectious stage, but that many die thirty years later of this disease after the acute stage, then we would have less trouble.

Dr. Dudley Stennis (Newton): One reason that we have greater mortalities of heart disease for the last two years is due to the fact that people are living longer now than they did 25 years ago, and they have reached the age when heart disease kills them. People rarely die of heart disease before 40 years of age.

Another thing that has not been mentioned I believe—about 20 years ago the State of Mississippi gave all the school children in the state free treatment for hook worm disease—perhaps all those children have had bad effects from the effects of whooping cough. They are now reaching the age when their hearts are giving away, due to the disease of hook worm for which they were treated, but from which their hearts never fully recovered. The incidence of heart disease is not any greater in proportion to age than it was 50 years before, but more people are living to the age when heart disease kills than they did 50 years ago. You can go to the tomb-stones in the cemeteries all over Mississippi and you will find people who died at 40, 50 and 60 years of age, which was considered old at that time. Now you find their ages have raised over 10 years and they die now from heart disease and cancer. This is one reason statistics show we have so much more cancer and heart disease now, but it is because people are living to an age when they have these diseases.

Dr. W. A. Dearman (Gulfport): I hope I do not appear to be reticent or subject to draft in discussing this interesting paper of Dr. Terrell's. The ravages of heart disease are, of course, a serious situation. I have never made an original state-

ment in my life, but I thought it would be well to offset the oft repeated statement that, "a man is as old as his arteries," by saying that, "a man is as old as his myocardium".

A study of the causes of heart conditions as well as the diagnosis of heart diseases comes within the province of the public health officer as well as the general practitioner. In my opinion it doesn't do any individual any good to have disease of any sort, for as far as we know he may make a permanent recovery, only to have had the disease stamp itself indelibly upon his economy. The so-called diseases of childhood, mumps, measles and whooping cough are serious factors in many instances in child life. In adults we often discount a heart murmur if the patient's heart is well compensated, but in children a heart murmur must be taken under serious consideration.

In my opinion the myocardium should always be the chief concern, no matter what the heart condition. Very often in many cases of valvular defects in adults as well as children the compensation is excellent, but if the myocardium fails we are greatly concerned.

It has often been said that we probably overlook a good many cases of pericardial effusion confusing them with massive hypertrophy and should we do a pericardial tap we should in many instances recover an exudate. It is surprising how long an adult can carry on with what seems to be a very bad heart. I have a patient at this time who has had a massive heart with arrhythmia for possibly twenty years.

Dr. John B. Howell (Canton): There are a few things that I wish to stress, for heart disease is the most important question that comes to the medical profession today.

Why is it that heart affections have taken prestige over every other disease as the major cause of death? It is because we have neglected to evaluate the causes as they exist in the infectious diseases, especially in childhood and youth. Every growing pain, each case of arthritis, chorea, erythema nodosum,—every bad tonsil and, in fact, every infectious disease should be considered as a potential cause of blood stream infection which eventually may damage the heart.

There is a practice which I am confident works a hardship on the heart. That is we are getting our patients out too quickly after prolonged infectious diseases, such as pneumonia and typhoid and we feel that after the fever has gone that the patient is all right. They are left with few definite instructions and usually no examination, without careful watching as to the heart's behavior to the new strain of exercise, and increased and unrestricted diet.

The reaction of the heart should be taken frequently to determine the rate and rhythm, looking

for irregularities in the pulse and signs of excessive strain on the weakened myocardium such as dyspnea and precordial distress. Definite instructions as to the amount of exercise each day, its amount and duration should be carefully outlined.

When we come to the realization that the heart should always be guarded and watched in convalescence as well as in the height of our infectious diseases, then we will be called upon to treat fewer damaged hearts and have fewer deaths from this cause.

Dr. T. Paul Haney, Jr. (McComb): I want to take this opportunity to emphasize what Dr. Howell has stated. In my experience examining school children I have noticed a seemingly unusually large number of children with heart murmur. It is sometimes stated that a heart murmur does not mean anything unless it is of a certain type, unless it is transmitted, unless there is myocardial enlargement, etc.; but I am wondering if these murmurs should not have attention. I am wondering if the child's parent should not know that a murmur exists and if something should not be done, if no more than regulation of habits and periodical observation by a physician. As stated by one of the physicians here, I, too, have noticed an appreciable percentage of heart murmurs accompanied by hookworm disease. Of course, we realize that in such cases it is very probably a hemic murmur resulting from the ravages of hookworm, but I notice also there are many of these children with diseased tonsils, a history of diphtheria, typhoid fever, scarlet fever, pneumonia, or influenza. I would like to emphasize this one thing—we should begin in early childhood our control of heart disease.

Dr. Harvey F. Garrison, Sr. (Jackson): I do not care to take up the time of this meeting with a lengthy discussion of this paper, but do desire to call the attention to one or two things brought to mind in connection with this paper.

You heard the State Board of Health criticized for doing some things through their full time health units. Dr. Haney has emphasized the importance of certain types of this health work to which I heartily agree. Here in Hinds County the health department inaugurated a system of health examinations of pre-school children several years ago, and if this is properly done, there is certainly not a more important piece of work in a campaign of this kind, because in these examinations, many of the things discussed in Dr. Terrell's paper, or at least the causes of such things, may be discovered and corrected.

The pediatricians in Jackson are called in to do these examinations for the health department. The dentists are called on to examine the teeth, and in this way many of the defects are discovered

and corrected. Just yesterday I had a little boy in my office with six or seven cavities in his teeth, a thing we rarely see in the city of Jackson.

It is my desire at this time to stress the importance of these physical examinations being done by competent doctors, and in this way the defects may be corrected.

Dr. G. W. F. Rembert (Jackson): I had not expected to say anything. I listened to the doctor's paper with much enjoyment, and much appreciation for his effort, but not expecting to say anything at all, because he covered his point so well. Several years ago, working out this propaganda in New York, attention was called to the fact that it occurred often following rheumatism and tuberculosis. It was felt that every case of rheumatism was a potential cause of heart disease. What is rheumatism? I do not know. It is due to a streptococcus. To reach heart disease from a contagious standpoint it will probably be reached by getting rid of conditions to bring about heart disease, and that it is merely one of the phases of those conditions which may be prevented, and after being prevented then the heart disease can be prevented. As to whether it is rheumatic or gonorrhoeal or syphilitic, those conditions represent different conditions that are preventable, in whole or in part. Might I discuss just a bit the matter of the seriousness of heart disease in the matter of murmurs. I do not wish to discuss the discussion, but I think it is rather timely to regard all murmurs of the heart—to consider them serious only in so far as to whether they are truly functional, or whether they are organic. If a murmur is functional in that case the heart will stand watching only so as to see if at any time it should become organic. If it is organic it is serious. We must know whether that murmur is systolic or diastolic. Systolic murmurs are serious—diastolic are more serious, and if one will watch conditions of the heart in which there is a definite proven murmur that is organic, the expectancy of that case is not as good, and taking 1000 cases and watching them over their hazard of life, they do not stand a chance of attaining the age they would if they had no murmur.

Dr. C. C. Terrell (Closing): I have nothing further to say only that I hope this paper will give us something to think about as to the contagious aspect of heart disease, and that perhaps in some future time it may be brought more clearly to our minds.

REFERENCES

1. St. Lawrence, Wm.: *J. Amer. Med. Assn.*, 79:2051-2055, 1922.
2. Faulkner, J. M. and White, P. D.: *J. Amer. Med. Assn.*, 83:425, 1924.
3. Coburn, A. F., and Pauli, Ruth H.: *J. Exper. Med.*, 56:609-676, 1932.

STAB WOUND OF THE HEART

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Perhaps no branch of surgery is exactly comparable to that of the heart. Though the actual approach to this vital organ is but a scant two inches, it took more than 2000 years for even the most daring of surgeons to traverse this distance. More mysticism has surrounded surgery of the heart than perhaps that of any other organ. As Lockwood¹, in an excellent monograph on the subject, has pointed out, the ancient Greek physicians Aristotle, Hippocrates, Pliny the Elder, Ovid and others, pronounced many implications against even *contemplating* surgery of the human heart—"seat of the soul." It was considered impossible, almost inconceivable, that the heart could even be touched without a fatality, let alone actually operating upon it.

Such abhorrence or reticence in considering cardiac surgery was by no means confined to these ancient days. Billroth, in 1883, said, "Let no man who hopes to retain the respect of his medical brethren dare to operate on the human heart." The daring surgeon Nicholas Senn once said, "Surgical interference with the heart was impracticable", and as recent as 1896 Stephen Paget stated, "Surgery of the heart has probably reached the limits set by nature to all surgery....." At that time, pericardotomy, or drainage of the pericardial cavity, constituted practically the entirety of cardiac surgery. Yet that same year—1896—marked the dawn of our modern cardiac surgery. On September 9, 1896, Rehn of Frankfort successfully sutured the human heart for the first time. This date is an epoch in surgery of the heart.

It is true that other factors than the difficulties of pre-anesthetic and pre-aseptic days have served to make the development of this branch of surgery a slow one. The technical difficulties in entering the bony thoracic cage are considerably more baffling than those encountered in laparotomy. The

heart and big vessels do not permit even the relatively rough handling that the abdominal viscera will stand, and the presence of a negative pressure in the pleural cavity, interference with which may be most embarrassing to an already very ill patient, has certainly to be reckoned with. All these factors tend to surround heart surgery with difficult obstacles.

As Cutler² has pointed out, at present, cardiac surgery may be divided into: (1) the treatment of injuries of the heart and pericardium; (2) the surgical treatment of acute and chronic pericarditis; (3) the surgical treatment of angina pectoris and (4) the surgical treatment of mitral stenosis. He has very properly placed them purposefully in this order, signifying their present importance, practicability and frequency of performance.

Cutler has aptly said, "Surgery is the child of trauma." The very nature of things has, perforce, caused the more rapid development of the surgical treatment of cardiac injuries than of the other phases of heart surgery. While the natural difficulties have long deterred even the most courageous of surgeons from the performance of elective surgical procedures on the heart, the surgical treatment of heart injuries, as Cutler² says, needs no defense; it is the only therapy. And it is by no means a futile one: the mortality has gradually improved from one approaching 90 per cent to one a little more than 25 per cent. Fischer, in 1868, collected 452 untreated cases of heart wound and found that only 10 per cent recovered. In 1909, Peck³ collected 160 cases, with a mortality of approximately 62 per cent. In 1923, Smith⁴ reported 49 cases collected between the years 1912 and 1923, with a mortality of about 29 per cent. Cutler² collected 28 cases, from 1920 to 1926, reporting a 21.4 per cent mortality. Bigger⁵ collected 53 cases, from 1926 to 1932, with a mortality of 26.5 per cent.

Bigger⁵ has divided wounds of the heart and pericardium into three groups: (1) the non-surgical cases, (2) those of a more advanced grade, requiring surgical interven-

tion and (3) those which are practically immediately fatal. This is a purely clinical classification. There have always been, and will always be, injuries of such a severe grade that death almost immediately intervenes, certainly too quickly for any therapy to be instituted. Many such cases are perhaps never recognized. Death may result from rupture of the heart, with intrathoracic hemorrhage; more frequently, such an immediately fatal termination results from injury to one of the so-called "vital zones." There are five of these zones: they are large points where even a relatively small injury may serve to disrupt the conductive system. Thus there is one in the right auricle at the junction of the caval system; here lies the sino-auricular node. Another vital point is in the interauricular septum, where is located the Bundle of His. Still another lies in the auriculoventricular wall— injury here will disorganize the auriculoventricular node. Injury to a larger subdivision of the coronary system may likewise be immediately fatal, as is injury to a point in the anterior longitudinal sinus at the junction of the upper and middle thirds, irritation of which will stop the cardiac impulse. This group of immediately fatal cases is of little practical importance.

It is in the handling of cases which live long enough to permit surgical intervention that the improvement in mortality has occurred. No one surgeon is privileged to see any large number of cardiac injuries, but the collective cases reported adequately demonstrate what can be accomplished in saving otherwise doomed individuals. No real progress could be made in the treatment of these cases until it was realized that death was often the result of, not hemorrhage itself, but rather the collection of blood in the somewhat non-distensible pericardial sac, with compression of the heart. Riolan, in 1649, Morgagni, in 1761, and Jobert, in 1839 had made some mention of this phenomenon of intra-pericardial pressure, but not until Rose's studies, in 1884⁶, was the real signi-

ficance of this condition realized. This knowledge, plus Rehn's demonstration a few years later of the practicability of the successful repair of human heart wounds, have paved the way for the increasing number of successful cardiorrhaphies.

There is still that third group, the non-surgical cases, so-called because they are of such a mild grade that they frequently recover spontaneously. Often they go unrecognized. Usually the result of minor injury to the pericardium, or superficial layers of cardiac musculature, they, nevertheless, frequently produce the classical phenomena attributable to cardiac compression, though of a relatively mild grade. The severer types of cardiac injury are acute emergencies; they require drastic and rapid steps if aught is to be accomplished. No time is at hand to leisurely observe the effects of "herz tamponade."* Cases of this milder group, however, do not require such urgent measures for their relief, and they may permit of the more casual study of the effects of cardiac compression. Recently, we have had the opportunity to observe a case which would be classified in this non-surgical group, one which, though presenting some of the classical signs of cardiac compression, was of sufficiently mild grade that it was possible to observe, not only the effects of cardiac compression, but to study some of the effects of pericardial aspiration for the relief of this tamponade.

CASE REPORT

O. D., a colored male, aged 40 years, was first seen early one night (May 24, 1933) about two hours after having been stabbed in the left chest with a knife. He had, after the injury, received no first aid treatment, but had been transported, via automobile, to the hospital. On admission he was in

*In this connection, Dr. Hugh Trout has pointed out that proper credit is not usually afforded Baron D. J. Larrey for his rather remarkable observations on cardiac injuries which he had the opportunity to study during his military campaigns. In his "Clinique Chirurgicale", published in 1829, Larrey does record some unusually keen observations "des plaies du péricarde et du coeur", evidencing a rather full understanding of the causes and effects of cardiac tamponade.

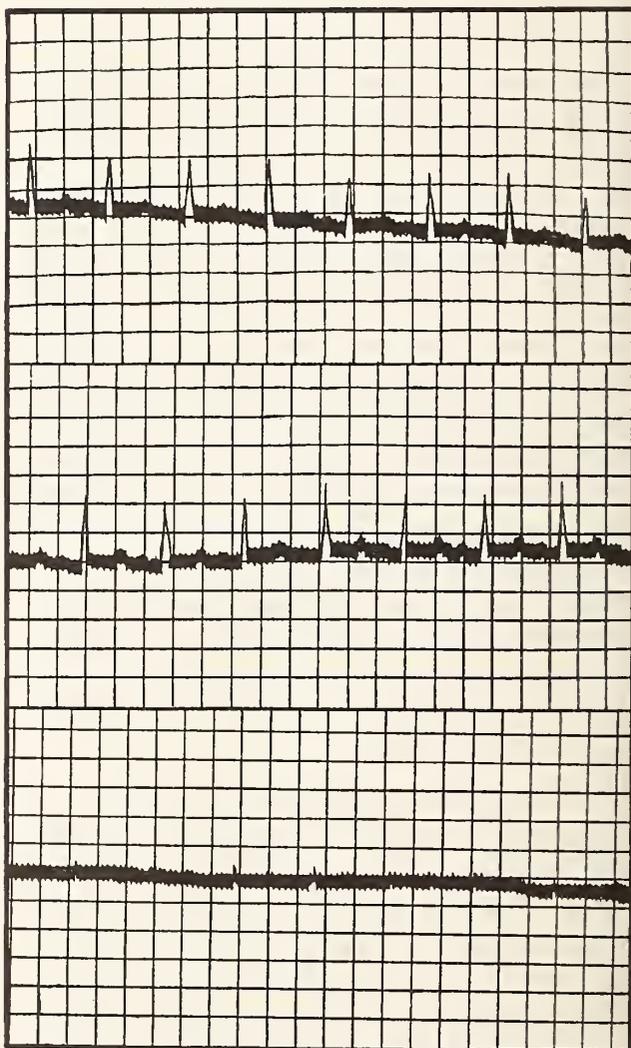
a semistuporous condition (due apparently largely to alcoholism). He had a subnormal temperature, his systolic blood pressure was 70 mm. mercury, his pulse rapid, slightly irregular and of low tension. Examination revealed a stab wound in the 5th interspace, 3/4 inch from the left sternal border. Minor injuries of the right shoulder and scalp were observed. There was a noticeable *fullness of the superficial veins of the neck*. There was no appreciable widening of the area of cardiac dullness nor were the heart sounds appreciably diminished in intensity. No physical findings suggestive of pleural or pulmonary damage were elicited.

The condition was erroneously interpreted as one of "shock", and the usual methods of treatment instituted: the head was lowered, external heat applied, caffeine was administered by needle and a venoclysis of 1000 c. c. normal saline given. This required about 30 or 40 minutes. At the end of this time it was noticed that *his condition remained absolutely unchanged*. He was neither better nor worse. His systolic blood pressure was still 70 mm. mercury.

Since he was not appreciably worse, his chest was immobilized with adhesive straps and he was administered usual supportive measures. The next morning he was apparently slightly improved, the systolic blood pressure now being 90 mm. mercury. It was decided that conservatism was indicated and then followed a week of symptomatic and supportive treatment, during which he seemed to be gradually improving, though his *blood pressure remained unchanged*.

One week after admission (May 31, 1933) his temperature, pulse and respirations began to mount with obvious dyspnea being present. A careful examination of the chest at this time revealed evident fluid in the left pleural cavity and increased cardiac dullness, with a slight decrease in intensity of the heart sounds. A roentgenogram taken at this time revealed an evident distention of the pericardial sac in addition to fluid in the left pleural cavity. Because of the elevation in temperature, it was considered imperative to determine whether or not there was present a pyopericardium or any empyema. Aspiration was therefore attempted. To quote from our notes: "Under local analgesia the pericardium was aspirated today, the needle being introduced in the 4th interspace one inch from the left sternal border. 175 c. c. of sero-hemorrhagic fluid was removed, being all that could be obtained with the needle in this position. Immediately prior to aspiration the patient's blood pressure was 96/58, though an *occasional* beat would come through around 120. Pulse 90 per minute. Immediately after aspiration, *all* sounds came through at 134 mm. Pressure, the diastolic remaining 58. Pulse 90 per minute. The left pleural

cavity was aspirated in the 6th interspace anterior axillary line and 60 c. c. hemorrhagic fluid was removed, no more being obtainable with the needle in this position. Specimens to laboratory for smear and culture. Immediate improvement in subjective symptoms noted; patient feels more comfortable, his dyspnea disappeared almost immediately." There was no appreciable narrowing of the area of cardiac dullness, however, and the heart sounds remained unchanged in intensity. The temperature approached normal after aspiration, though fluid from both pericardial and pleural cavities was found to be sterile. The next day his condition was about



ELECTROCARDIOGRAM BEFORE ASPIRATION

RESISTANCE: 200 OHMS
 AURICULAR RATE: 100
 VENTRICULAR RATE: 100
 RHYTHM: N. S. R.
 P-R Interval: 0.29
 Q-R-S Interval: 0.06

Electrical Axis: Normal

SUMMARY: ST₁ and ST₂: Above iso-electric lines—
 Q-R-S₃: Low and notched—T₁₋₂₋₃: Low.

REMARKS: Tracing made before aspiration following stab wound with hemo-pericardium. There is some evidence of moderate myocardial damage as evidenced by ST segments and T which is probably a result of the injury and hemo-pericardium.

the same—blood pressure 112/58 (right arm) and 114/58 (left arm).

Two days later (June 2, 1933) there was again evidence of cardiac compression, with embarrassed respirations, occasional sounds heard at 108, all coming through at 94. The diastolic was 60. Pericardial paracentesis was done in the left 4th interspace 1½ inches from the left sternal border. 100 c. c. fluid was removed, more serous than that previously obtained. Immediately after aspiration all beats came through at 120 mm. mercury, though of unequal intensity. The diastolic was 58 mm. mercury. Electrocardiographic tracings taken before and after aspiration (Dr. Hargrove) showed no appreciable differences, as was anticipated. The patient was again subjectively improved, though there was no apparent change in the area of cardiac dullness and the intensity of the heart sounds remained diminished.

Following this second aspiration the patient continued to improve. Five days later (June 7, 1933) it was noted that: "There are definite physical findings of pericardial effusion, but the pulse is regular and the blood pressure is 110/74 (both arms). The heart sounds appear to be somewhat more distant than yesterday. Subjectively the patient is much improved, his dyspnea has largely disappeared and there is no clinical evidence of cardiac decompensation."

A few days later the patient was permitted to leave the hospital, his condition about the same. When last observed in the out-patient clinic he remained free of subjective evidence of cardiac embarrassment. Cardiac examination revealed: "P. M. I. not visible or palpable; definite increased cardiac dullness (same as on discharge) as follows:

Interspace	Left	Midline	Right	Midline
2	11½ cm from	"	7 cm from	"
3	12½ cm from	"	7 cm from	"
4	13½ cm from	"	7 cm from	"
5	14 cm from	"	7 cm from	"

Second sounds accentuated at all areas; heart rate rapid (90 per minute) but regular; intensity diminished. Blood pressure: 110/72. No murmurs. Fluoroscopic examination today reveals heart shadow enlarged same as previously. His condition continues improved."

COMMENT

The case is illustrative of several interesting points regarding cardiac injury. The diagnosis of injuries of the heart is based mainly on two factors: (1) the location of the injury and the probability from this location and the character of the injury, of the heart being injured; (2) evidence of circulatory embarrassment. These were both pres-

ent from the onset in the case reported and should have clearly indicated the cause of the clinical symptoms. Fortunately, cardiac compression was of a mild grade, and relatively non-progressive, else conservatism would have been most ill-advised. It is probable that only the pericardium or perhaps the superficial layer of the cardiac musculature was injured. The third significant observation, which should be practically pathognomonic, was the failure of the administration of the usual treatment for "shock" to raise the systolic pressure. Blalock⁷ has reported a case which likewise illustrates the "impossibility of raising the arterial blood pressure when the heart is compressed by a large amount of blood in the pericardium."

The effects of "herz tamponade", as previously mentioned, have been well appreciated since the studies of Rose⁶. The effects of cardiac compression are two fold: the heart's diastole is embarrassed, resulting in incomplete filling of the heart and a consequent decrease in the cardiac output; this is reflected in the fall in systolic blood pressure and acceleration of the heart rate, a reflex phenomena by which the heart attempts to maintain an effective circulatory flow. The diastolic pressure, being of peripheral origin, remains unchanged by the cardiac embarrassment. The second effect of filling of the pericardial sac is stasis in the caval system, partly due to failure of the heart to dilate and fill fully, partly to direct pressure on the superior and inferior venae cavae. This results in a rise in venous pressure. While no actual measurements of venous pressure were made in the reported case, this was evidenced, clinically, by the fullness of the neck veins. (As a matter of fact, we know of no reliable or accurate clinical method of recording venous pressure. The Gaertner method, which was first described in 1903, has been, perhaps, the most popular method, but little reliance can be placed upon it.)

The observations of Allen and Graham⁸, Graham⁹, Claude and Beck¹⁰, and others point out not only the effect of pressure on the heart, but likewise indicate how well the heart re-adjusts itself to added handicaps

and maintains, in many instances, an effective function. In the case herein reported, the cardiac function markedly improved, although as determined by clinical and roentgen ray evidence there still remained a not inconsiderable amount of fluid in the pericardial sac.

The treatment by aspiration seems such an obvious one that it is somewhat surprising it is not more frequently used in the milder cases and that it is, moreover, severely criticized. Billroth, years ago, characterized pericardial paracentesis as "a surgical frivolity and a prostitution of surgical skill," and many excellent surgeons continue to condemn the procedure in less picturesque, but no less emphatic terms.

In 1932, Singleton and Williams¹² reported a case of hemopericardium relieved by pericardial aspiration and stated that other than a case reported by Cox¹³, they had been unable to find any reports in the literature of similar therapy for "herz tamponade." They, moreover, do not agree "that aspiration of the pericardium is always unwise." The dangers of pericardial puncture are mainly two-fold: first, one of the so-called "vital zones" may be penetrated; or secondly, a large subdivision of the coronary system may be ruptured with intrapericardial hemorrhage. Indiscriminate pericardial paracentesis is, undoubtedly, to be discounted, but if the pericardial sac is obviously distended, particularly if there is skiagraphic evidence of such a condition, this procedure, carefully done, can hardly be a dangerous one. Furthermore, the possibility of infecting the pleura is negligible if one recalls and utilizes the Voynstsch-Sionojentsky "triangle of safety."¹⁴

We cannot help but feel that this procedure is used infrequently in mild grades of cardiac compression not because of its supposed dangers, but rather because, in most instances, the condition is either undiagnosed, as almost occurred in our case, or because of the fact that life is not endangered, paracentesis is not deemed necessary.

SUMMARY

A case of stab wound of the heart is re-

ported, which presented classical evidence of cardiac compression, though of mild grade, and the effects of pericardial paracentesis for relief of the tamponade are discussed.

BIBLIOGRAPHY

1. Lockwood, A. L.: "Surgery of the pericardium and heart." *Arch. Surg.*, 18:417, 1929.
2. Cutler, E. C.: "The present status of cardiac surgery." *S. G. O.* 54:274, 1932.
3. Peck, C. H.: "The operative treatment of heart wounds." *Ann. Surg.*, 50:101, 1909.
4. Smith, W. R.: "Cardiorrhaphy in acute injuries." *Ann. Surg.*, 78:696, 1923.
5. Bigger, I. A.: "Wounds of the heart and pericardium." *South. Med. Journ.*, 25:785, 1932.
6. Rose, E.: "Herztomponade; Ein Beitrag Zur Herzchirurgie." *Deutsche Ztschr. f. Chir.*, 20:329, 1884.
7. Blalock, A.: "Stab wound of heart." *Ann. Surg.*, 53:1278, 1931.
8. Allen, D. S. & Graham, E. A.: "The effects of pressure on the heart with reference to the advisability of decompression of greatly enlarged hearts: an experimental study." *Arch. Surg.*, 19:1663, 1929.
9. Graham, E. A.: "Decompression of the heart." *Ann. Surg.*, 90:817, 1929.
10. Beck, C. S. & Cox, W. V.: "The effect of pericardostomy on the mechanics of the circulation." *Arch. Surg.*, 21:1023, 1930.
11. Blalock, A.: "Exposure of the heart to atmospheric pressure: effects on the cardiac output and blood pressure." *Arch. Surg.*, 26:516, 1933.
12. Singleton, A. O. and Williams, H.: "Injuries to the heart resulting in "Herz Tamponade" and foreign bodies in the heart." *Int. Surg. Dig.*, 13:259, 1932.
13. Cox: *Arch. Surg.*, 17:485, 1928, quoted by Singleton & Williams.
14. Shipley, A. M.: "The operative approach to the heart and pericardium." *S. G. O.*, 54:280, 1932.

EVALUATION OF THE SYMPTOMS OF CHRONIC AURAL SUPPURATION*

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In our otologic literature, voluminous and satisfactory as it is, I have often tried to find an article that would outline, if only in a routine way, a course of procedure that would aid in the institution of treatment that seems to best meet the needs of the individual case at hand. I have not been able to find such a classification, so am presenting for your consideration such an outline for case study as I have found helpful. You must understand, that it is not my purpose to affirm the infallibility of this course of

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

procedure, but to recommend it as a method, if carefully followed, that will assure you of a better knowledge of the requirements of the case, than you would have, should you approach the problem in a haphazard manner.

The diagnosis of chronic aural suppurations is not difficult. Their classifications as regards prognosis and treatment however, requires careful and painstaking study; every case of chronic aural suppuration that presents for treatment belongs in one of the following groups:

- I Cases that may be treated conservatively.
- II Cases that may be treated either conservatively or surgically.
- III Cases that demand radical mastoid surgery.
- IV Cases in which the radical mastoid operation without labyrinthian drainage is contra-indicated.

As helpful as the roentgen ray and pathological laboratory may be in some cases, we must depend more upon skillful examination and careful interpretation of the objective and subjective symptoms presented for comprehensive analysis of these conditions. Such an analysis of the following symptoms should in most instances enable us to determine to which of the above groups the case belongs. These symptoms are:

- I Presence and character of discharge.
- II Location and size of perforation in drum membrane.
- III Character of granulations and polypi, if present.
- IV Absence or presence of fistula symptom.
- V Amount of cochlear function loss.
- VI Pain.
- VII Vertigo and tinnitus.
- VIII Abnormalities in the function of the static labyrinth.

In these cases of chronic aural suppuration, the otologist's attention is first directed to the presence and character of the discharge. Our first observation is often misleading, and only after a few hours has intervened after careful cleansing, may the true state of af-

fairs be determined, since we are first observing the products of stagnation due to previous neglect; not until we are sure a sufficient time has elapsed to assure this thorough cleansing, should our observations for the purpose of classification begin.

In 95 per cent of these cases, we will observe either a muco-purulent discharge, cholesteatomateous discharge, or that of bony necrosis. The former type is usually profuse while the latter are scanty, except where complicated by mixed infection. The muco-purulent type belongs to group I, the cholesteatomateous and necrotic, to either groups II, III or IV.

For the purpose of our classification we may consider the following types of perforations of the membrana tympani:

- I Anterior.
- II Meso-Tympanic.
- III Posterior Superior or Antral.
- IV Perforations of Shrapnell's Membrane.

Here we are guided by Korner's law which states that all complications are in the neighborhood of the primary focus. The anterior and mesotympanic types being near the tympanic orifice of the Eustachian tube would not likely indicate the advent of serious complication, and in consequence, would be placed in group I. The posterior superior or antral and those occurring in Shrapnell's membrane, are usually marginal in character. This fact, combined with a region of difficult drainage, especially in Shrapnell's membrane, predisposes to the formation of cholesteatomateous masses and bony necrosis. The foci of infection in this instance occupy a region easily attended by serious complications and must be classed in either groups II, III or IV.

Granulations and polypi are always suggestive of bony necrosis. The soft and bleeding types are prone to recur upon removal and often do not respond in any way, to conservative treatment and none of the cases presenting these symptoms belong in group I.

The fistula symptom is not frequently elicited, its presence however, indicates a

necrosis of the bony wall of the semi-circular canal, through which necrotic route we are able to stimulate the endolymph by compressing the air in the external auditory canal; if present the case belongs in group III, if absent, in groups I, II or IV.

In this grouping, it is more important that we determine the presence or absence of hearing than to determine its acuity. If we have a function-cochlea, it belongs to groups I, II or III. If the hearing is absolutely lost, it belongs to group IV.

Few cases of aural suppuration fail to present the symptom of pain at some time during the course of the disease; a majority suffer pain during acute exacerbations; a few there are whose suffering is constant and unbearable. Intermittent pain would indicate such treatment accorded groups I, II; constant pain, that of groups III and IV.

Tinnitus and vertigo, when appearing simultaneously indicate progress of the diseased process sufficiently to menace the function of the cochlea and labyrinth; if occur-

ing only during an acute exacerbation may be classed in group I or II, but if constant and severe, belongs to group III.

When the pathology has involved the static labyrinth, we are no longer concerned with the therapy of group I or II but have recourse only to the procedures of groups III and IV. With a previous history of vestibular symptoms, if we find complete loss of hearing and a nonviable labyrinth by the caloric tests, our treatment must be that of group IV or none, as to perform a radical mastoid operation, without draining the static labyrinth in the presence of a manifest or latent labyrinthitis, would be folly and would only result shortly in a meningitis. If, however, our symptoms are those of irritation rather than destruction of the cochlea and labyrinth, a radical mastoidectomy alone may be attempted.

Based upon the evaluation of the symptoms as outlined above, the four groups furnish our data for prognosis and treatment would appear as follows:

Discharge	SYMPTOMS			
	Group I. Muco-Purulent	Group II. Cholesteatomatous and Necrotic	Group III. Same as II.	Group IV. Same as II.
Perforation	Anterior or Meso-tympanic	Superior-posterior or in Shrapnell's mem- brane	Same as II.	Same as II.
Granulations and Polypi	Absent	Present	Present	Present
Fistula Symptoms	Absent	Absent	Present	Absent
Function of Cochlea	Present	Present	Present	Lost
Pain	Intermittent if present	Intermittent	Constant	Constant
Vertigo and Tinnitus	Absent or occasional	Occasional	Constant and Severe	Absent
Function of Static Labyrinth	Normal	Normal	Abnormal	Lost

- I Cases that may be treated conservatively.
- II Cases that may be treated either conservatively or surgically.
- III Cases that demand radical mastoid surgery.
- IV Cases in which the radical mastoid operation without labyrinthian drainage is contra-indicated.

DISCUSSION

Dr. E. F. Howard (Vicksburg): I do not think I have ever heard an aurist give a classification of this sort that gave me quite as clear an idea and in as simple a way as this one here before us. I want to study it a little bit more than I have been able to do. Dr. Hume has given us a very splendid paper, and it has met with my hearty approval, especially his comment clinically of the essential points of the roentgen ray and labyrinth findings. I know I have in the past laid entirely too much stress on the roentgen ray. I am very grateful to Dr. Hume and I personally thank him for having brought this subject to us. It is going to help me a whole lot.

Dr. Norman E. Applewhite (New Orleans): The paper of the essayist is instructive and one that should be referred to frequently for in it we are shown the value first, of charting the eight important symptom findings, and second, of placing our cases of chronic suppurating ears into one of the four groups. If such routine practice is not followed assiduously then sooner or later some of these patients come to grief. Permit me to illustrate just such a case that was first seen by me three months ago. While I was preparing to examine the ear, this patient fell to the floor and was unconscious for one to two minutes. A careful history showed the discharging ear was of two years' duration and that the involved ear had been treated for many weeks, and at no time had a routine examination as outlined here been done by the first aurist. With a past and present history of repeated attacks of vertigo, the findings of nystagmus to the healthy side, complete loss of hearing, a positive caloric and fistula test, a diagnosis of diffuse serious secondary labyrinthitis was made. This case was immediately placed in Group III in which radical mastoid surgery alone is demanded. Had this case been diagnosed by the first aurist while the patient was in the midst of a circumscribed labyrinthitis and a radical mastoidectomy then done, this patient would today have some remnant of hearing. Not only has this patient lost her hearing because of an improper examination, but she was exposed to the possibility of developing a diffuse purulent manifest labyrinthitis and meningitis.

Of the eight important symptoms mentioned and discussed there are three outstanding ones I should like to emphasize; namely, the functioning or nonfunctioning of the cochlea, the viability or nonviability of the static labyrinth, and the presence or absence of the fistula symptom. It is our knowledge of these three symptoms that practically gives us a complete differentiation between the dangerous and nondangerous cases.

One other point I should like to stress, and that is the presence of the fistula symptom in circumscribed labyrinthitis when all of the other symptoms have long since subsided. Only a careful history and a routine method of examination such as presented to us will show this important finding.

Dr. Hume (closing): I want to thank Dr. Harris, Dr. Howard and Dr. Applewhite for being willing to discuss this paper. I know it is difficult to follow the groupings and classifications.

ACUTE SINUSITIS*

LUCIEN S. GAUDET, M. D.

NATCHEZ, MISS.

A general discussion of acute sinusitis with our present knowledge covers an extensive field.

To embrace embryology, anatomy, etiology, pathology, diagnosis, prognosis, treatment and end results covers too large a symposium, to take up in the allotted time.

We must therefore confine ourselves to etiology, diagnosis and treatment in a moderate way.

It is my desire to tread away from the usual paths, not quote from text books or journals, which at best is not of much interest to those present, but give you more of my personal experiences which may be more to your liking.

Considering the severe and prolonged winter the subject is a timely one, considering the large occurrence of coryza and influenza, and consequent sinus complications.

Acute coryza, in spite of the advances in the science of modern medicine, still plays a very

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 19, 1933.

large part in the more prevalent infectious diseases of every day life.

Influenza and influenzal complications also come in very largely for its proportion, we having no less than three distinct epidemics last winter.

Especial stress is laid on these two, because they are by far the greater precursors of sinus disease.

Other conditions, such as measles, diphtheria, scarlet fever, pneumonia, bronchitis are at times followed by sinus disease as well as trauma due to fractures in the frontal and maxillary regions even extending into the ethmoid and sphenoid portions and recurrent attacks of chronic sinusitis.

Acute sinus disease differs in our southern climate in severity and frequency, as compared to rigid north winters, not being as severe and of shorter duration with quite a more complete recovery and fewer cases extending into chronic stages when properly treated.

This past winter in Natchez and its surroundings we had three distinct epidemics of influenza. One occurred in October, another in December, around the holidays and extended into January. Another started about February 20 and ran into March and part of April, which gave me a good opportunity of fresh observation.

In a tabulation of 62 cases taken from my records, the following present themselves:

N'm'b'r of Cases	Age	Sex		Coryza	In- fluenzal	Re- current
		Male	Female			
9	1-5	3	6	4	5	
16	5-10	7	9	4	12	
17	10-18	10	7	3	14	
20	Adult	11	9	2	13	5
62		31	31	14	44	5

In the last five cases mentioned as recurrent there was a history and evidence of previous sinus involvement.

Of the 62 cases, three showed frontal sinus involvement, 39 showed ethmoid and sphenoid involvement, and 62 showed some involvement of maxillary antrums, with 38 involvement of one antrum.

There is reason to believe that more ethmoid and sphenoid involvement was present, but could

not be confirmed for various reasons, some being in children, nasal passageways blocked, septal deflections, patients not returning for further observation, etc.

History and Symptoms:—

The average history and symptoms, both in coryza and influenza cases, were as follows: Several days previous, from one to three weeks, patient had either a cold or influenza, which improved and the patient feeling better, when they would develop some headache, malaise, mild temperature, loss of energy and just did not feel well. Some would complain of neuralgic pains in temples and facial bones, some would have sneezing attacks with the nose usually stopped up, from which some secretion formed, which was a clear hot fluid, causing excoriation in many cases at the marginal nasal openings. Most patients complained of perverted taste, lessened or no appetite, disturbance of smell, sore throat and some constipation.

Examination revealed some tonsillitis where tonsils had not been removed, frequent pharyngitis, with the pharyngeal walls covered with a mucoid secretion in more cases than usual. Nasal passages showed considerable enlargement of turbinates, congestion of mucous membranes covered with a mucoid secretion in many cases and difficulty of sending air through the nose. Marked lividity of all membranes, which had a tendency to bleed on probing.

Transillumination as a rule gave little information except in recurring chronic cases.

I have found skiagraphs to be of little help in acute cases of sinus disease, except in recurring cases of chronic conditions or where the case had advanced to a purulent stage.

Washing of sinuses in acute stages have given little results, and I am adverse to doing so, believing that is not the proper procedure in the very acute conditions.

After many years of observation, confining my remarks to acute sinus disease, the sedative and depleting methods of treatment I find gives best and quickest results.

In a case of acute sinusitis presenting itself, I find that proper elimination, rest in bed as much as possible is predominately the first thing necessary. Reliance is placed on a mixture

of Dover's powders, phenacetine and acetylsalicylic acid in various combinations for internal treatment, with liquids freely, especially hot lemon- and orangeades and large intake of water. This controls fever, aching and gives plenty of elimination.

The local treatment is divided into two stages. In the very acute conditions, I believe the greatest respect should be shown to the mucous membranes, and the one important problem is to restore ventilation and drainage of the nasal passages.

This is best accomplished by adrenalin and small amounts of cocaine in normal saline or Dobell solution used frequently with an atomizer. Suction is out of place in acute conditions, producing trauma frequently. Infra-red applications to the sinus regions at frequent intervals, I have found a very valuable adjunct.

In the second stages hot mild soda and adrenalin irrigations give relief, especially when followed with a few drops of Benzoin in each nostril. If there is an evidence of pus formation, mild suction is here indicated, after shrinking and followed by the irrigations.

Many remedies that are advocated, I find of little value in local treatment. I mention one which is now riding on a wave of popularity and that is ephedrin and its preparations. In my opinion it is an over-rated drug for nasal use.

When we come to the stage of purulent infection, this is where skiagraphy has a place, and also individual irrigation of sinuses where they contain pus, especially the antrum infections.

For diagnostic purposes in referring to the antrum I always endeavor to investigate through the natural opening, which is done in most cases, and for further drainage at the next irrigation if necessary, use either a Douglass or Coakley trocar, puncturing in the region of the interior meatus, as with two openings we always get better drainage and quicker recovery.

In frontal sinus and sphenoid irrigations it is my endeavor to enlarge the openings to get better and freer drainage.

I have purposely failed to cover many phases, as it is my desire to have a short paper, so to allow more time for discussions on this important subject.

DISCUSSION

Dr. Ross E. Anderson (Jackson): Mr. Chairman, I missed part of this paper and I wish to apologize for being late, however, Dr. Gaudet was kind enough to send me an advance copy of his paper. I studied it very carefully. I enjoyed the paper. I think Dr. Gaudet covered his subject very thoroughly and I do not know of anything that I might add that would be of any particular value. I will mention one or two points that I wish to stress in the treatment of an acute sinus. Two things must be accomplished—ventilation and drainage. This can be accomplished by means of either medical or surgical treatment or a combination of the two. I think most men are too prone to be hasty to operate on any sinus condition. I believe that except in the very urgent cases we should try medical treatment first and see what can be accomplished before operating on a sinus. We do not want an acute sinus to become chronic. Many of these acute cases are chronic to begin with. The acute condition is superimposed on the chronic. Oftentimes after we have cleared up an acute condition we still have the chronic condition to deal with. To cure an acute sinus and keep it from becoming chronic is one of the things we should strive to accomplish. If a chronic condition existed to begin with, of course we should try to cure this condition also.

I wish to thank Dr. Gaudet for presenting such a splendid paper. I appreciate the opportunity of discussing it and I thank you for your very kind attention.

Dr. J. C. Adams (Greenwood): A history of persistent rhinitis or a recent attack of one of the acute exanthemata, which is accompanied by a nasal discharge of abundant pus or mucopus from one or both nostrils, is significant of sinus complications. Except as a result of the presence in the nose of a foreign body, a gumma which is breaking down, or some severe injury to the nasal interior, discharge of pus from the nasal fossa is pathognomonic of accessory nasal sinus suppuration.

Positive diagnosis as to which sinus is diseased in a given case cannot be made with certainty, if based solely on the history and symptoms. Both history and symptoms may be very similar for all. To make certain, as one must, before intelligent treatment is possible, painstaking examination of the nasal fossa by anterior and posterior rhinoscopy is necessary. Even then, there may be doubt, which often times can be cleared up with transillumination and roentgen ray.

The rhinoscopic view of the affected nasal fossa may present nothing more than nasal deformities and swollen mucous membranes, for the reason that the patient may have blown all the pus from the nose immediately before the examination, or the examination may be made at an hour of the day when the discharge has temporarily subsided.

If pus is present in the nasal fossa its location is diagnostic of the group of sinuses which is diseased, but does not indicate which cell of the group is involved. If pus is discovered under the middle turbinated body, but nowhere else in the nose, it is reasonably certain that its origin is from one of the anterior group, namely the frontal sinus, anterior ethmoid cells and maxillary sinus. If the discharge comes from any point above the middle turbinate, and is seen upon the septal surface of this turbinate, the location of the pus would indicate that the posterior group is at fault and that either the posterior ethmoidal cells or the sphenoidal sinuses is the source.

It is very important to determine the situation in the nose from which the pus comes. To do this it is often necessary to shrink the nasal membranes and to defer examination for a few minutes. During this period the patient can often help by tilting the head so as to place the suspected sinus uppermost, to favor drainage and should not blow the nose, and then on examination of the nose the location or the source of the pus is more easily determined.

When the anterior group is strongly suspected the need is to determine which one is involved, or if all are diseased. This may be done with reasonable certainty by irrigating the antrum with warm normal salt solution. If after thorough cleansing the antrum, no discharge is visible in the nose for a considerable period, it may be assumed that the pus previously noted came from the maxillary sinuses, and that the other sinuses of the anterior group are not affected. However, if after antral irrigations pus immediately appears again under the middle turbinate, it is reasonable to conclude that the discharge comes from cells other than the antrum.

Transillumination of maxillary and frontal sinuses should be made in every suspected frontal and maxillary sinus disease. Diagnosis should never be based wholly on the finding of such an examination until confirmed by other means of investigation. Transillumination is of no value in examination of ethmoidal cells or sphenoidal sinuses. Its value is less in double frontal sinuses disease or in bilateral maxillary affections than when the disease is on one side only.

It is my opinion that the roentgen ray is an aid in making a diagnosis of an acute condition of the frontal and maxillary sinuses. It is not as valuable, however, in determining disease in other nasal sinuses.

In the treatment of acute sinus infections the patient when possible should be confined to his room with proper diet and free elimination. The nasal mucous membranes should receive frequent attention to maintain proper aeration and drainage.

Dr. W. L. Hughes (Jackson): I want to say a few words on the line of treatment. From my experience, I find in these cases before the formation of pus we have more or less a congested condition. In these cases we give them ventilation and drainage. I find a great many of us forget our patient's elimination. Salines should be used freely. So many of them take a laxative such as milk of magnesia, which is not sufficient. A saline laxative will often relieve pain more than anything else. An aqueous solution used in the nose reaches the area much better. Another useful means around the ostium is the application of some silver preparation. A 2 to 4 per cent silver nitrate solution is a beneficial treatment. I have found that a preparation of silver argyrol or silvol helps to give us better drainage also.

Dr. Edley H. Jones, (Vicksburg): Dr. Gaudet has presented an excellent paper which we have all enjoyed. During the past year I have noted a large percentage of streptococcic sinus infections. These cases were usually complicated with a streptococcic pharyngitis.

Regarding the use of puncture and irrigation in the case of acute purulent maxillary sinusitis, I think we should be very careful. I cut my eye-teeth on that practice some seven years ago. A young white girl came into my office with an acute purulent maxillary sinusitis, left. Her temperature was approximately 100 degrees. I punctured and irrigated the antrum and injected an antiseptic solution. The next day her temperature was 102. Thinking perhaps drainage was blocked, I decided to make a large naso-antral opening thru the inferior meatus and did so. For convenience in future irrigations, I inserted a small rubber tube. The next day her temperature reached 105. I moved her into a hospital and had the antrum irrigated every four hours with warm saline followed by one per cent mercurochrome. She had the most profuse purulent discharge I have ever seen. Culture revealed a pure streptococcic infection. In spite of the most energetic treatment her temperature rose to 106 the following day and to 107 the next. Of course, I had called in a physician as a consultant and in desperation we injected 7 cc. of one per cent mercurochrome solution intravenously. I am happy to state that we had most excellent results. The temperature dropped and never rose again to 100 degrees. Incidentally, the blood culture was negative. The Doctors Daly of Houston, Texas have also reported similar severe reactions as the result of puncture and irrigation.

As a result of this experience, I have since approached these conditions more cautiously. If a patient has an acute maxillary sinusitis with temperature over 99, it is my practice to confine them to bed, use shrinking solutions in the nose and an ice-bag over the antrum, together with indicated

systemic measures, such as free purgation and forcing of fluids. The following day the antrum can usually be irrigated without reaction. At times the patient responds so quickly to this method of treatment that irrigation is not necessary. In those conditions where the temperature is not materially increased and I think it safe to irrigate them on first examination, I always send them home to keep an ice-bag over the antrum for 24 hours. Since adopting these measures, I have had no serious reactions.

Dr. Hughes mentioned the application of 10 per cent silver nitrate solution to the middle meatus, in cases of acute ethmoiditis. Sluder mentioned the use of topical applications of silver nitrate in 1912; and the method had probably been in general use for many years previously. However, Sluder only advocated the use of a two per cent solution; I use it frequently and with excellent results but would hesitate to use a solution as strong as 10 per cent.

Dr. E. LeRoy Wilkins (Clarksdale): Dr. Gaudet uses Dobell's solution with an atomizer. I have not prescribed an atomizer for two or three years. I use a dropper, with head well back over edge of bed. I order 6 or 8 drops and wait five minutes and use 6 or 8 drops again. I find this method much more effective than the atomizer. I could not help but think that Dr. Hughes' solution of 10 per cent silver nitrate just a little bit strong. I often use a combination of ephedrine and adrenalin, which is quite effective.

Dr. Robin Harris, (Jackson): I agree with Dr. Gaudet, that he wait until the infection is more or less localized. I agree with him thoroughly. I would wash out the antrum until it is localized. In the more acute stages I would do just as I would with the mastoid cases.

Dr. C. A. McWilliams, (Gulfport): I want to mention a form of treatment for sinusitis that I have been using for the past three years with good results. It is the "displacement method" as suggested by Proze. The solution used is 0.5 per cent ephedrine in normal saline. I use gentle suction so as not to cause any trauma.

I do not use the suction on old people, as they do not stand this treatment very well, nor do I use it on cases with hypertension as the ephedrine has a tendency to give an elevation of blood pressure in these cases.

Dr. Gaudet, (Closing): My paper brought out the very thing I wanted, plenty of discussion. I did not speak of the surgical part of the treatment because we were dealing with very acute conditions. As far as the x-ray treatment of sinuses, I have never found that of very great benefit. The discussion has been just as I would have liked for it to be because it brought out a great many points. I wish to thank you all for the discussion.

SPONTANEOUS EPISTAXIS.*

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In presenting this subject to you gentlemen for your consideration and criticism I wish to make it clear in the beginning that I am not considering the usual type of nose bleed so commonly met with in our every day practice, nor the occasional serious one with which we have to contend due to some malignant condition of the nose, post nasal, face, or some blood disease. In order to make this clear I will enumerate the various causes given in the usual paper on epistaxis. This will in a measure serve to clarify the subject, and impress upon you the fact that this paper does not deal with any of these forms of epistaxis. J. V. Barries of England in an article of some length, and thoroughly covering the etiology of nasal hemorrhage, lists the causes as follows:—

- A. 1. Traumatic lesions. Accidental or post-operative.
- 2. Foreign bodies.
- 3. Inflammations such as ulcers, infections of sinuses.
- 4. Tumors, especially sarcomas, etc.
- B. Internal diseases.
 - 1. Acute infections—typhoid, influenza.
 - 2. High blood pressure and arteriosclerosis.
 - 3. Blood diseases, hemophilia and purpuras.
- C. Telangiectases.
- D. Vicarious menstruation.

I wish to mention here the blood supply of the ethmoid labyrinth in so far as it has to do with this type of nasal hemorrhage, for it apparently was from the posterior ethmoid artery that these hemorrhages had their origin.

1. The sphenopalatine branch springs from the termination of the internal maxil-

*Read before the section on Eye, Ear, Nose and Throat, at the Sixty-sixth annual session of the Mississippi State Medical Association, Jackson, May 10, 1933.

lary artery. It passes inwards through the sphenopalatine foramen into the nasal cavity where it divides into many branches. The external nasal branches supply the greater part of the outer wall of the nasal fossa, cavity of the antrum, anastomosing with branches of the ethmoidal and lateral nasal arteries. Branches are distributed to the ethmoidal cells, sphenoidal sinus and upper part of the pharynx (Cunningham).

2. Ethmoidal branches, anterior and posterior, arise from the ophthalmic, a branch of the internal carotid.

The posterior traverses the posterior ethmoidal canal and supplies the posterior ethmoidal cells, and the upper part of the outer wall of the nasal cavity. The anterior passes through the anterior ethmoidal canal and enters the nasal cavity through the nasal notch and supplies branches to the anterior ethmoidal cells, the membranes of the brain, the frontal sinus, the anterior and upper part of the nasal mucous membrane and skin on the dorsum of the nose.

I have made a rather careful search of the literature for the past five years with the help of the library of the American Medical Association and the American College of Surgeons, and there has been but one case report of the type of epistaxis to which I refer, and that by A. B. Kelly, in 1900, referring briefly to a spontaneous epistaxis from the ethmoidal veins. There have been many excellent papers on the subject but all case reports are based on a definite pathological condition, either injury, post-operative or disease.

There have been some case reports of a rather interesting type of nose bleed, the familial epistaxis. Legg in 1876, Chiare in 1887, Reeder in 1906, Osler in 1901 reported early cases of familial epistaxis associated with telangiectases. Lane in 1917 reported 13 members of a family in three generations with epistaxis during adolescence. Familial epistaxis without telangiectases is evidently very rare and unique.

There is probably some familial abnormality of the blood platelets to explain the

clinical facts, and investigation of this has been lately undertaken.

All of the above facts are no doubt as familiar to you as the oft discussed methods of tonsillectomy, which never fail to bring out a heated discussion, and upon which volumes have been written, perhaps more so than any other subject in medicine or surgery.

The type of spontaneous epistaxis I wish to discuss today is perhaps familiar to you all; cases no doubt you deem unworthy of presentation to this body but of very great personal interest to me, and if this be true I beg your indulgence for the presentation of these seven cases.

I am prepared for criticism as to my method of examination of these cases and the deductions drawn. Perhaps some of my colleagues will feel some hesitancy in accepting the facts as presented here. I wish to assure you that each of the patients were very carefully examined and re-examined many times, and I feel I am capable of fairly accurate analysis of the pathology present in the nose and throat.

The examinations were made during the hemorrhage when practicable, of course not very accurate or complete, and during intermissions of bleeding very thoroughly, and after the patient was well.

At no time was any definite pathology found either locally or generally, and all of these patients had most thorough physical examinations.

It is rather interesting to speculate upon the etiology of this type of epistaxis.

You no doubt are familiar with the work of Carroll Birch of Chicago, on hemophilia and the female sex hormone. Based on the fact that the female transmits hemophilia to her sons, she shows no manifestation of the disease herself. This being true she must potentially have the disease and there must be something in the female organism which holds the disease in abeyance; that something can only be the internal secretion of the ovary.

It has been proven by several investigators that the normal male is part female. It has

also been definitely established that the female sex hormone can be isolated from the urine of the male.

Birch conducted a series of experiments on female rats, the details of which are too complicated to incorporate in this paper, and although few in number they have proven that the urine of patients with hemophilia is deficient in the female sex hormone. Two hemophiliacs treated with ovarian extract and later transfused gave excellent results.

In April 1932 Ford and Dysart of California, following the suggestion laid down by Birch, reported a case of hemophilia operated upon for tonsils with subsequent severe bleeding treated with one injection of ovarian extract with prompt arrest of the bleeding. They give a rather complete and comprehensive report in detail of their case.

It is possible that there may be some relationship between this type of epistaxis and the absence of the female sex hormone, to a moderate degree, in these patients.

I have seen and handled seven of these cases, three of which I present here for your consideration.

REPORT OF CASES

C. J., aged 21 years, white; had always been well except for ordinary diseases of childhood. Family history—Mother and father, two brothers and one sister living and well. Present illness began two days ago without any assignable reason. When stooping over tying his shoe lace there was a sudden gush of blood from the left nostril, about one tablespoonful according to his estimate. Bleeding lasted about two or three minutes and then stopped. That afternoon the same thing happened on blowing the nose but stopped again. That night had another bleeding spell which lasted about five minutes. The following morning had a rather severe hemorrhage and came to my office for examination. However, the hemorrhage had stopped at that time.

Examination of the nose did not disclose any bleeding point. There was no telangiectases of the septum, no erosions or ulcerations. I was not impressed by his story of the amount of blood he lost and suggested that probably the bleeding had stopped for good. He left the office but had just left the elevator on the ground floor when bleeding began again. He immediately returned. He was bleeding severely this time and it was im-

possible to see where the bleeding point was except that it was not from the septum.

Nasal packing did not control the bleeding so a post-nasal plug was introduced and the nasal passage packed again. This controlled to a certain extent the bleeding and the patient was sent to the hospital. Shortly after admittance about 3 p. m. bleeding stopped. About 12:00 midnight it began again and in spite of the adequate post-nasal plug and nasal packing the blood would seep through the packing and was only partially controlled by holding the alae pinched tightly together and pulling strongly on the tape holding the postnasal plug in place. Various hemostatic agents were given him such as fibrogen, calcium lactate, horse serum, etc., without any favorable result. He was typed and twenty cubic centimeters of the same type blood was injected subcutaneously without appreciable result. After oozing continuously for about two hours he finally checked up. About ten o'clock the following morning the bleeding began again.

At this time his hemoglobin was 50 per cent; red cells 3,150,000; leukocytes 10,500; differential, small lymphocytes 30 per cent, large lymphocytes 4 per cent; polynuclears 66 per cent; coagulation time 5 minutes; bleeding time slightly prolonged; clot retraction normal. Transfusion was then resorted to and 500 c.c. of citrated blood were given him using a male donor. Shortly after bleeding ceased and no more occurred. The packing was removed the following morning and no bleeding occurred. The nose was carefully examined for the source of the bleeding. Anterior and posterior rhinoscopy, the naso-pharyngoscope, in fact every means at my command but no pathology was found anywhere. Roentgenograms of the sinuses were negative. A thorough physical examination was given by my associate, but no organic condition was found anywhere. Blood pressure was 122/70. The blood picture was practically normal except for the anemia and low platelet count around 175,000. That afternoon while making another examination of the nose, bleeding began again, and I was fortunate in being able to see that it came from under the middle turbinate apparently about one third the distance from the posterior tip. Bleeding began to be severe again and again it was necessary to use postnasal and nasal packing and a second transfusion was given of 300 c.c. from a woman donor. This time the bleeding stopped quickly and the patient made an uneventful recovery.

During the following three weeks he was given two more thorough physical examinations including the various tests, blood, urine, metabolism, etc., but nothing out of the ordinary was discovered. No special significance was attached to the

fact that the last transfusion was from a female member of the family but this was considered in the treatment of some future cases.

This, my first case, occurred seven years ago, and epistaxis has never been repeated. He is the picture of health today, married and has two children.

Case II. R. H., white, aged 36 years, a rather heavy set man of good habits and health. Previous history was negative except that three years previously I had operated upon him doing an antrotomy on the right antrum because of subacute empyema of the antrum from which he made a complete recovery. There was no bleeding out of the ordinary at the time nor subsequently during his convalescence. I also had performed a tonsillectomy during the year previous to this with normal bleeding and good recovery. He also showed hypersensitiveness to eggs which he could not eat at all without swelling of the eyelids and face. Otherwise a perfectly healthy male. Family history negative, especially as the bleeders. He is married and has one daughter in good health. Present illness began one day ago while riding in his car inspecting his cotton crop. He felt a sudden rush of blood from the right nostril. He states that bleeding was rather severe but he was not alarmed considering that he had a simple nose bleed. After a few minutes the bleeding stopped. That afternoon he had another rather severe hemorrhage but it stopped after bleeding about five minutes not to recur until the following morning when according to his statement he thought he would bleed to death. His local physician packed his nose anteriorly and bleeding was fairly well controlled, but he was advised to report to me for examination. That afternoon while on his way to see me, the nasal packing still in place, he had another severe hemorrhage in his car and was bleeding severely on admission to my office, so much so that an examination of his nose was an impossibility. As rapidly as possible a postnasal plug was introduced and his right nasal passage repacked, but only by holding his nose tightly and making tight traction on the tape was it possible to control the bleeding. With any loosening up of the tape or the nose the blood would seep through the packing rapidly. He was given a hypodermic of ovarian extract the reason for which I will explain later, and sent to the hospital to be prepared for a blood transfusion.

While typing the donors and getting ready for the transfusion, the usual hemostatics were given him, including calcium lactate intravenously, without any result. During this time a nurse was holding his nose and making traction on the tape. A rapid physical examination revealed nothing of importance. Blood pressure 132/72. Blood examina-

tion as follows: Hb. 62 per cent; red cells 3,241,000; differential, S. M. 28 per cent, L. M. 6 per cent; Polynuclears 65 per cent; leukocytes 9,500; coagulation complete in six minutes; blood platelets 180,000; clot retraction O. K.; bleeding time normal; calcium time not made.

As the patient was continuing to bleed he was now transfused with 500 c.c. of blood. During the transfusion bleeding became more severe but in spite of this operation was completed. Another ampoule of ovarian extract was given and the patient sent back to his room.

Shortly afterward bleeding stopped and did not recur during the evening or the rest of the night. The following morning the packing was removed with no untoward event until about one hour later when it recommenced. This hemorrhage was severe and the patient lost a great deal of blood before packing could be re-introduced. He was pallid, cold, clammy, with a very rapid pulse. Feels that another transfusion was immediately necessary another male donor was used and 500 c.c. of blood given by direct method supplemented by another dose of ovarian extract. Bleeding this time stopped immediately and never recurred. The patient made an uneventful recovery without any further set backs. Packing was removed the following morning and complete and thorough examination of the nose was made. No pathology was found and no further treatment instituted except rest, feeding and general tonics.

This patient had never had since childhood any evidence of nose bleed, nor any previous trouble of this kind.

Examination by roentgen ray showed sinuses negative. The previous antrotomy was patulous and there was no evidence of disease of the lining mucosa of the antrum. A thorough physical examination during the convalescent period about three weeks later failed to discover any pathology local or general.

This occurred in July, 1931. There had been no further treatment, the patient has had no recurrence and is in perfect health today. Whenever he is in the vicinity he drops in for examination being extremely fearful of a recurrence of the epistaxis, but no pathology has ever been found.

Case III. R. P., aged 29 years, white, weight 140 pounds, bank clerk by occupation; recreation golf and swimming. Previous history negative. Has always been well though never robust or especially strong physically. Usual diseases of childhood as pertussis, measles, chicken pox. Had the usual accidents of childhood without any history of excessive bleeding. Family history negative especially as to bleeders. Mother and father living and well. One brother died of pneumonia. Present illness began three days before. While sitting in the

theater at the movies his nose began to bleed from the left side. He states that it was necessary to leave the theater and while he was not alarmed it was necessary to use cold compresses and other home remedies before controlling the hemorrhage. The following afternoon he had a second hemorrhage severe enough to cause him to consult his physician who controlled it after some difficulty with adrenalin. That night he was awakened by the blood running into his throat. The bleeding was so severe that he summoned his physician who with a great deal of difficulty finally controlled the bleeding with nasal packing. The following morning bleeding began again in spite of nasal packs. He was then referred to me. He was still bleeding upon admission to the hospital. Blood examination at this time was: Hb. 75; R.B.C. 4,300,000; differential, S.M. 27, L.M. 4, polynuclears 69; coagulation time 4 minutes; blood platelets 240,000; leukocytes 8,500; bleeding time 45 seconds. Finding the patient in pretty good shape I decided to test out the sex hormone therapy and gave him one ampoule of ovarian extract. As there was no result from this in an hour's time and as he was still bleeding I introduced a postnasal pack and repacked the left nasal passage. This controlled the bleeding so long as traction was made on the tape and the nostrils firmly held together.

Bleeding finally checked up for about three hours, but about twelve o'clock midnight the patient started to bleed again only controlled by the nurse as above mentioned. This was necessary most of the night. The following morning another severe hemorrhage occurred and now the blood examination showed the patient was losing considerable blood and I decided a transfusion was necessary. Hb. 65; reds 3,800,000; whites 9,700; differential, about the same; bleeding time 47 minutes; blood platelets 180,000; clot retraction time normal.

His brother who typed the same was used as the donor and 500 c.c. of blood were given by direct method. Apparently this seemed to make things worse for bleeding continued at an alarming rate and was only controlled in the manner described.

Ovarian extract was given again and shortly afterward bleeding stopped. There was no recurrence during the evening or night, and the following morning the packing was removed. No bleeding followed this, and after cleansing the nasal passage freely and shrinking the tissues a careful search was made for the bleeding point using all the means at my command. With the naso-pharyngoscope I found under the middle turbinate in the same position a rather large vessel superficially placed which I took to be the site of the bleeding though there was no ulceration or other pathology found. An attempt was made to cauterize this

area but with rather indifferent results as was shown later. For the next twenty-four hours the patient seemed to be doing nicely and there was no recurrence of bleeding. Having been called out of the city and feeling that my patient was not apt to repeat the hemorrhage because my previous experience seemed to teach me that after the hemorrhage was once controlled by transfusion for as long as twenty-four hours there would not be a recurrence. I left town placing my patient in the hands of my associate.

That night, however, he had another severe hemorrhage worse than the previous ones which necessitated postnasal packing and nasal packs. I was called on long distance and immediately returned, and found him again bleeding as before. However, a second transfusion had been given him and 20 c.c. of whole blood intramuscularly. Calcium lactate and thromboplastic fibrogen had been given at intervals while I was away without any result. No ovarian extract was used though instructions had been left to that effect. The bleeding was controlled as above but as he would continue to bleed on release of the pressure a third transfusion was given twenty-four hours later. I determined to use a woman donor this time if possible to find one, but not being so fortunate I resorted to the donor with whom I had been successful before. I used 300 c.c. of blood again with ovarian extract and bleeding stopped shortly thereafter and there was no further trouble. This patient remained a week longer in the hospital and no further bleeding occurred. The nose was examined carefully on two or three occasions and no pathology found, but it was determined definitely during one of his remissions that the bleeding was coming from under the middle turbinate at the posterior part. He had never had epistaxis before that he could remember.

A thorough and exhaustive examination by my colleagues shortly before he left the hospital, and again three weeks later did not reveal any pathological condition present. He regained his health rapidly and reported back for examination repeatedly during the following six months.

On November 27, 1932, about a year and one-half after his first hemorrhage, he came into my office stating that he had had a slight nose bleed that morning and being very nervous he thought he had better be near at hand in case he had a recurrence of the severe hemorrhage of a year ago. I could find no evidence of trouble on examination except a very large vein under the middle turbinate, about the posterior one-third. Neither my associate nor myself could find any pathology present to account for the bleeding. He preferred to go to the hospital for a day or two for observation and that night about 1 a. m. I was called there to see him. He

was having a severe hemorrhage and required nasal and postnasal packing and as before there was marked difficulty in controlling the bleeding.

He was given as before the usual hemostatics and ovarian extract without any particular hope of doing much good. The hemorrhage checked up in about two hours and did not recur again until ten o'clock the next morning when he had a second severe hemorrhage.

A transfusion was given from a male donor shortly afterwards with ovarian extract. Hemorrhage stopped immediately and did not recur. The patient remained in the hospital for one week and had no further trouble. He was again given a thorough physical examination but no pathology was found, and has since remained in excellent health. His blood examination at the time of his second hemorrhage was as follows: Hb. 70; reds 4,000,000; differential, S.M. 22, L.M. 4, Polys, 74 per cent; coagulation time 6 minutes; bleeding time 50 seconds; clot retraction normal; Blood platelets 162,500, still low. This remained low for two or three weeks but gradually returned to normal.

This was the only case that has had a recurrence of the epistaxis, and I do not expect him to have a repetition of the condition. At the present time five months later he is perfectly well and has had no further trouble.

In the treatment of these cases nothing was done locally except nasal and postnasal packing. No other treatment was instituted during the attack or after the patient was well, nor was any constitutional treatment given other than blood transfusions and ovarian extract in some.

The fact that these hemorrhages occurred only once in six cases, and twice in one case, covering periods varying from one to seven years without a history of previous epistaxis or subsequent ones seems to me to negative the presence of pathological lesions such as telangiectases, ulcerations, malignant tumors, foreign bodies, etc., and the inability of competent colleagues to discover any constitutional conditions such as the purpuras, high blood pressure, arteriosclerosis or the acute infectious diseases, gives me the opportunity to offer this paper under the subject title of spontaneous or perhaps a better name idiopathic epistaxis.

In conclusion, might I call to your attention again the work of Birch of the University of Chicago, and suggest a relationship be-

tween the type of epistaxis and absence of the female sex hormone in these patients which probably is temporary. I am inclined to believe that milder degrees of hemophilia are much more frequent than we suppose.

Ford's report of the complete control of hemorrhage in a tonsillectomized hemophiliac by the use of ovarian extract alone is certainly very interesting.

The blood from a female donor in two of these cases gave complete relief after one transfusion whereas the blood from male donors had to be repeated two or three times to control the condition.

Where donors in the family were used the results were disappointing, and it was necessary to use other donors not related to the patients to get relief. Ovarian extract was used in three patients with the transfusion and apparently was of decided benefit. I wish to say here that whereas the use of ovarian extract gave apparently good results when combined with transfusions, the material and the data obtained is not sufficient to draw any definite conclusions but is sufficiently interesting to suggest further study along these lines.

I repeat, it is interesting to speculate on the etiology of these cases. "In the silent hours of isolation one may for a time fly on the wings of memory, and fancy through an ampler Heaven than that in which the nations sun themselves."

THE TREATMENT OF CHRONIC OSTEOMYELITIS WITH LIVE MAGGOTS*

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and

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The pathology, symptoms and the treatment of chronic osteomyelitis can be found in every medical library, and the literature is overflowing with admirable descriptions of the disease. In spite of this fact, however, the high mortality continues, and those fortunate enough to

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

survive the first few weeks of the acute stage drag along through years of affliction, punctuated frequently by repeated operations, real live human beings robbed of livelihood by unhealed wounds and deformity, partially or completely dependent upon the community for existence. I have heard Dr. Maes remark that at one time he had four patients in a ward whose aggregate disability represented a period well over one hundred years. Realizing these facts and other horrible sequelae, and the fact that our results have been far from 100 per cent we do not offer any apology for presenting the well worn subject.

Dean Lewis in a recent study of 229 cases found that 50 per cent of the total were discharged as improved, but with sinuses and unhealed wounds, which required multiple operations for abscesses or recurrent attacks. Forty-nine cases were cured, six not improved, twelve died and 64.5 per cent were complicated with one or more joints involved.

All authorities are fairly well agreed as to how the patient should be treated, but there is not a single accepted technic of treatment of chronic osteomyelitis following the surgical removal of dead bone. All of the accepted methods are good and the aim is to cause obliteration of the bone cavity and establish epithelialization without recurrence of the disease process. The treatments as recommended by Dr. Orr and others are productive of better results in their hands than in the general run and report of cases everywhere. This, however, is rather expected for no clinic or individual can pass over to another its refinements of technic and personality, yet these may be the very factors which determine success or failure.

The treatment of already infected wounds with chemical antiseptics has been more or less disappointing. Various formulae have been tried but most of them have a tendency to precipitate with the albuminous material always present with tissues devitalized by infection, and do no good. Others have a destructive effect on tissues and granulations, and inhibit the action of both anti-bodies and phagocytes.

Maggot or larval therapy of acute and chronic surgical infections is still in its infancy

but it will be hard to get away from its general principle, that of assisting nature in her efforts to rid the member of bacteria, necrotic tissue and dead and dying bone. All the methods probably have this idea but we believe by the implantation of maggots we have the added factor that expedites just the thing that nature is trying to do.

We are not over enthusiastic over the "horrible" method, as some express it, and we expect criticism and probably ridicule but our results have been most gratifying and far more successful in securing permanent healing than with any other method tried by us. We have found it economical, greatly shortening the period of hospitalization, and the end results more satisfactory due to the least retraction of scar. To those who advocate the Orr treatment we would recommend in addition the use of live maggots. In his method he advises the avoidance of any antiseptic or chemical irritants, and recommends adequate drainage, immobilization and rest in correct anatomical positions. This idea is splendid and if the viable antiseptic properties of maggots were added, which function without irritation, nature's healing process will make more rapid strides and the healing will be produced without draining sinuses.

We have been sincere in our efforts to give the method a fair trial, and we have been conscientious in our endeavors to make careful observations so as to establish a practical working basis and to determine the true efficacy of the theory. In the beginning of our experience the one discouraging feature was the problem of keeping the maggots in the wound, but this was easily corrected by using a more sensible well fitting cage

In our work we have used larvae produced by the Petrolagar Service and their delivery has been most satisfactory. They advertise each lot to be bacteria free, including of course aerobes and anaerobes. Forty-eight hour old maggots have proven the most efficient.

All wounds are treated openly to allow light and air and we realize the impossibility of maintaining strict asepsis throughout the treatment, nevertheless we make every effort to standardize

a careful surgical technic to prevent any foreign contamination.

In each case a preliminary smear was taken for bacterial count before the implantation of the larvae, and after each dressing a check was made to show the changes of the bacterial flora in the wound. There is from day to day a marked diminution of the number of bacteria, and within a very short time the maggots themselves live but a few hours in contact with the wound. The wound secretions which were in every case of acid reaction hurriedly became alkaline and the purulent foul discharges soon became non-irritating and without odor. Just the exact factors responsible for these changes are not known, but from our observations we are satisfied that both the mechanical action of the maggots and some bio-chemical process exists. It has been suggested that some enzymic-like product, or bacteriophage, is produced by the presence of maggots which acts both as a digestant and antiseptic. Some insist that no mechanical effect is evident and if the action is purely bio-chemical why not use an emulsion or paste from the maggots instead of the live "creeping things". Further research will prove or disprove this theory.

To accomplish the greatest degree of maggot activity the diseased area must be well exposed, and this is the most essential factor of the entire treatment. Little can be expected from the implanted larvae where the wound walls are allowed to fall together or deep sinus tracts remain within the deeper areas. Small self-retaining retractors are ideal for the purpose and the entire circumference of the diseased bone can be exposed if necessary.

Continuous draining is likewise very important to prevent drowning of the maggots. This is best accomplished by placing the wound in such a position that the secretions are removed by gravity, through the screen cage. By thorough drainage the maggots will extend their activity over the entire wound area, and under such conditions very few are found dead when the dressings are changed on the third or fourth day. Practicing this principle we have not had an elevation of temperature beyond 99 degrees.

Within several days most of the devitalized

soft structures are removed and the wound changes completely. Fine, firm and highly vascular granulations rapidly appear and fill the wound from the bottom up. These new areas are never touched by the larvae and bleeding has never been observed.

We have observed that the maggots attack and cause to be destroyed any type of abnormal tissue, and it is really amazing to note the changes from one dressing to another. In the observation of our work we have not noticed the liquefaction or disappearance of devitalized bone, but the manner in which the sequestrum is attacked at its junction with the live bone tissue is miraculous. It is quite common to find the detachment of sequestra measuring several centimeters in length with only two or three implantations, leaving a clean healthy granulating surface.

In our series we have had no complications, and contrary to the experience of others we have had no reactions. To hasten the healing process, and to allow the maximum activity of the maggots, we follow the rule of changing the dressings and implantation every third day. In so doing the escape of the larvae by undermining the soiled dressing is lessened, and more comfort is experienced by the patient. We have found it unnecessary to irrigate the wound previous to the implantation of larvae and feel that this is undesirable. We think that if the maggots do produce some favorable substance it would be unwise to remove or disturb it by washing. We simply mop the wound clean with gauze and remove the remains of dead maggots which is done very easily and effectively.

OPERATION

The preparation of the wound is simply a soap and water bath followed by sponging with ether. This procedure is practiced the night before and also the morning of the operation. If much pus exists the wound is flooded with saline and mopped dry with sterile gauze. A tourniquet is always used to prevent as much blood waste as possible, for the blood picture as a rule is far below par.

The length of the incision depends upon the extent of bone involvement, and the location is as nearly over the involved area as possible. The possibility of keeping the cage in position

may in some cases influence the type of incision. After deepening the incision, which is always parallel to the long axis of bone, through the periosteum the diseased area is brought into view. The thickened periosteum is gently pushed away from the bone and the loosened sequestra are gently removed. Unquestionably it is a conservative measure to take away all definitely recognized dead structures regardless of the amount. We have not, however, found it necessary, in fact we discourage the saucerization of bone or even to remove the overhanging ledges. It is far better to leave some non-viable bone than to disturb any of the viable structure. The larvae will remove in a most amazing way any devitalized bone left, if allowed proper contact. If no sequestrum is present an opening is made into the necrotic area and care exercised to expose all hidden foci. A curette is never used and the periosteum and endosteum are respected to the utmost. After cleaning the wound a firm pack of vaseline gauze is introduced from the bottom to the very top holding the flesh wound well apart, and the periosteum away from the diseased area of bone. The tourniquet is removed and the part well inclosed in sheet wadding. A moulded plaster splint is applied if fracture is feared and a position of physiological rest is obtained in bed.

IMPLANTATION OF MAGGOTS

Three to four days following the surgery the gauze pack is removed and the entire area around the wound is cleansed with alcohol and ether. To prevent a possible dermatitis mercurochrome is applied, and then a liberal coat of collodion is spread to include the skin edges. The self retaining retractors are now carefully applied and the maggots introduced. The simplest method of transferring the maggots from their food media is to add saline for suspension and pass this through a small piece of fine sterile gauze. This small section of the gauze containing the larvae is dropped into the deepest section of the wound, and a 70 to 80 mesh copper wire screen applied.

As previously mentioned the implantation is repeated at three day intervals. Usually after four to six applications the maggots die within a few hours after being placed in the wound, and as a rule the cavity has been filled with

firm healthy granulations. The maggot treatment is then discontinued, but it has been found effective to continue using the cage or some method to allow light and air. At this stage the infra-red or ultra violet lamp will prove beneficial. The epithelium covers the granulations rapidly and the wound heals with surprisingly little scarring. If after discontinuing the use of maggots pus reappears in the wound and the secretions become acid, several implantations are again made until they die quickly in contact with the wound.

CONCLUSIONS

In closing we wish to briefly present our impressions of this new and promising method of treating chronic osteomyelitis. We have not observed any harmful effect of the maggots upon normal tissue and have encountered no opposition from the patient. We believe it to be perfectly safe and productive of good results, which in most instances were far superior to any of the other methods. The rapidity in which the wound cavity is filled from the bottom up with healthy granulations, and the final results with a minimum scarring are the most commendable points. One will but watch daily change of the wound to be convinced that maggots do produce a superior process of healing. We believe that now the difficulty of propagation has been overcome the method can easily be placed upon a sound economical basis.

They are "horrible creeping things", as so many speak of the maggots, but we have always felt that any adjunct to any treatment which will increase the patients recuperative powers, increase the local wound healing, or in any way hasten the recovery should be used freely, for the patients good transcends any other consideration.

REFERENCES

1. Baer, William S.: Testimony before the Committee on War Veteran's Legislation, Washington, D. C., April 17, 1930.
2. Lewis, Dean: Acute osteomyelitis, *J. A. M. A.* 92:783-786, 1929.
3. Myers, J. & Czoja, L. M.: Maggot treatment of osteomyelitis. *Illinois M. J.*, 60:124-133, 1931.
4. Weil, G. C., Simon, R. J. & Sweadner, W. R.: *The American Journal of Surgery*, 19:36-48, 1933.

DISCUSSION

Dr. Leslie V. Rush (Meridian): I appreciate, very much, the privilege of discussing this paper of Dr. Field's. He impresses me, particularly, by

his conservatism in trying to save every particle of normal healthy bone that can be saved. He made mention there of using dead maggots and of the possible research that could be done in that line. There is a recent report in *The Journal of Bone and Joint Surgery* of research with dead maggots by Robinson of Washington D. C. In his work a paste was made by grinding maggots. The application of this maggot paste to the wound did not, in the least, stimulate healing and Dr. Robinson concluded his paper by stating that the maggots themselves caused healing by destroying the already devitalized tissue. I think the cases of Dr. Field have demonstrated splendid examples for the indication for maggots. However, I am not so enthusiastic over the "maggot treatment" to feel that it is the only treatment that is indicated in osteomyelitis. Many cases, I believe, can be adequately cared for by the Orr treatment or a modification of the Orr treatment and, in this instance, prolonged hospitalization can often be avoided.

I have enjoyed Dr. Field's paper, very much indeed, and appreciate the privilege of discussing it.

Dr. S. A. Hill (Shreveport, La.): The treatment of osteomyelitis with maggots is a useful aid to the older methods and I appreciate Dr. Field approaching it from that angle. It can only be considered a palliative method and an adjunct to the more standardized method of free incision, saucerization of the bone, and adequate rest by splinting. The reason I make this point is that the maggots will not live without an adequate source of light. Considering osteomyelitis as a pyogenic infection caused from one of the pyogenic organisms, the germs will hide in the minutest place in the bone or the medullary canal. If the case be one in which the shaft of the femur is involved the process may extend down into the condyles and oft-times the light supply will be inadequate to allow the maggots to get at the source of infection. They are useful scavengers and will remove dead tissue, exudates, and pus but I am afraid Dr. Field is a little bit misleading in the way they lift out the sequestrum. My observation has been that the sequestrum has to be removed at operation before the application of maggots. I think the doctor meant to make that clear, but there is one place in the paper where he said that they remove all

devitalized tissue. The treatment by this method must be adequately performed by the use of a screen. The best way to do this is with the use of a rubber sponge around the margin of the wound. Wire gauze is attached to the rubber sponge and sealed off with adhesive tape. The maggots can in this way be prevented from getting out on the skin. Dr. Field made this point very clear, and it is highly important because oft-times the patients allow their psychic selves to get the best of them. They will complain of pain if the maggots get out on the skin; and will complain of pain when you can see no reason for it, if the wound has been fairly well cleaned out by previous applications and there is not much devitalized tissue left. This occurs after the maggots have been applied several times and oft-times one will be called in the middle of the night to administer a narcotic or to provide in some way for rest.

I appreciate Dr. Fields' angle in approaching this method as an adjunct and not as a cure-all, because I feel that light is necessary for the life of the maggot, and if it can't get at the place the bug is hiding then there is likely to be a recurrence in later years. The type of case that has reached 60 or even 40 years having had the infection in early childhood to involve other bones than the initial one, and having had many intermittent periods of exacerbation and arrest, will be very difficult to clear up with the treatment of maggots. We do not use the maggot treatment on the orthopedic service at the Shreveport Charity Hospital, but do use it in private practice as a palliative measure in chronic cases.

Dr. R. J. Field (closing): Recently we have been swamped with a number of the most severe types of chronic osteomyelitis, cases with extensive bone and tissue destruction as illustrated by the lantern slides. In this series all of the patients had been operated upon a number of times, and their case supervised by our best surgeons. The periods of disability ranged from three to twenty years, and you can appreciate our attitude toward the outlook in such a situation. It appeared that some different method was indicated and we decided to try the maggots. In our series we have been convinced that the method is productive of good results, and we would advocate its use in, of course, selected cases.

NEW ORLEANS Medical and Surgical Journal

Established 1844

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News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

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THE PROPOSED NEW CHARITY HOSPITAL

The appeal of the Administrators of the Charity Hospital to the Louisiana Advisory Board of the Federal Public Works Administration for a loan and grant of \$9,850,000, to replace the old buildings that have been in use for over one hundred years, met with very vigorous and unanimous opposition from the medical profes-

sion in New Orleans and throughout the State. Opposition also came from private hospitals located in the City of New Orleans. The Board of Administrators of Charity Hospital are actuated solely by unselfish motives in order to have the old buildings replaced by new and modern ones. It undoubtedly would be a desirable thing to have these improvements in the Hospital so that modern buildings could take care of the poor of the State. Unfortunately the grants from the Federal Public Works Administration require that seventy per cent be repaid with interest and that an amortization of the debt should be satisfactorily arranged. Active hostility was expressed at a public meeting held November 7 to the plan of the Charity Hospital Administration to raise money sufficient to pay for the interest and repayment of the debt by having a large group of private beds placed in the proposed building. The medical profession of this City almost to a man feels very definitely and positively that if these beds are put into the hospital it will render extremely difficult the practice of medicine, and that it will be for the profession almost economic homicide. Hence, very strong feeling against this proposal has been expressed by physicians, not only in the City but also throughout the State of Louisiana. It would undoubtedly be a civic and state improvement to have these new hospital buildings, but if their cost represents the disruption of the medical profession in New Orleans and Southern Louisiana, then it would be too high a price to pay for its advantages.

MEDICAL ECONOMIES

In the present parlous times when a physician's economic condition is imperiled by failure to collect moneys that are due him when people can pay, as well as having his whole future existence possibly endangered by the inability of people to pay, certainly it behooves him to use measures to make the first group pay their just debts. In ordinary times there is not nearly as great an effort made to deadbeat bills as there is in times of depression, when a poor excuse can be made by him who is not anxious to pay his bill by claiming an unjustifiable penury.

The establishment of a Collection Bureau by the Orleans Parish Medical Society a few weeks ago was for the purpose of doing away with this form of medical graft. The report of the first few weeks of the activity of this service has been sufficiently encouraging to believe that it is going to be a tremendous help to the practitioners in this City. Likewise, the collections have warranted and justified establishment of this Bureau. It might be of interest to the Parish and County Medical Societies of Louisiana and Mississippi to call attention to one of the important features of this service. To each delinquent bill a yellow slip is attached. This slip states "The enclosed bill for professional services rendered is past due. The Orleans Parish Medical Society requires its members to report delinquent accounts to them, that they may publish these names for the benefit of the members of the Society. Before complying with this requirement and thus placing your name on the Society's delinquent list, I am giving you an opportunity to avoid this unpleasant experience. I trust that you will call upon me at your earliest convenience, to discuss the settlement of this bill."

It appears that there are a good many delinquent debtors who wish "to avoid this unpleasant experience"; maybe there are others throughout the State who may feel the same way.

APPENDICITIS RECORD FOR 1932

Under this title Professor Frederick L. Hoffman, the well known Consulting Statistician, presents figures for the death rate from appendicitis in American cities for 1932. These statistics have been collected for some years. They represent a sincere and real endeavor to

call attention to an extremely important subject. It may be recalled that in the year 1910 the death rate for 100,000 population from appendicitis was 13.3, whereas in 1929 and 1930 it was 18.0, in 1931, 17.4, and in 1932, 15.7. The appendicitis death rate has varied remarkably in different cities. In 1932 the rate in Salt Lake City was 46.9, in Nashville, Tennessee, 39.0, in Memphis, 37.4, whereas in Akron it was 3.0, and Topeka had the same figure. The explanation for this discrepancy is not available. It seems to be a condition of affairs which exists; but just why one group of cities should have an extremely high death rate and one group an extremely low one is not known, but it is known that experienced operators will have a death rate of only two to three per cent. Dr. Hoffman's figures would substantiate his contention that appendicitis is an extremely serious problem, and that the operation of removing the appendix should not be looked upon as one of minor concern to the physician. It takes a skilled surgeon to handle many cases of appendicitis, and complications, when they occur, may require the keenest surgical judgment. Here it need not require comment upon faulty diagnosis. It is now being said that in the present day the stress seems to be upon operating upon the appendix too early rather than too late. The medical profession has been reasonably well instructed about the danger of giving purgatives, of feeding, and drugging those that have abdominal pain. It would seem that it would be more fitting at the present moment to call their attention to these figures of Hoffman's and to stress that every irregular and vague and indefinite pain in the abdomen is not appendicitis, and that the appendix should be removed only upon very definite indications, and then taken out by a skilled surgeon.

HOSPITAL STAFF TRANSACTIONS

CLINICAL STAFF MEETING SOUTHERN BAPTIST HOSPITAL

The regular monthly meeting of the Clinical Staff of the Southern Baptist Hospital was held on Tuesday, October 24, at 8 o'clock, with Dr. H. W. E. Walther, Chairman, presiding.

Dr. Waldemar Metz presented a case demonstrating the results of a cartilagenous rib graft for the correction of a deformity of the nose.

Dr. R. H. Potts presented a case of adenocarcinoma occurring in a white female 15 years of age. At the time of her admission to the hospital (Sept. 24, 1933), the chief complaint was fever, septic sweats, stabbing pains in the left side and a diarrhea of 10 years' duration. Ten days previous to this time, patient had continued to go to school. The past history shows that in 1923 patient developed a diarrhea which could not be controlled. After being studied by several pediatricians, gastroenterologists and bacteriologists, ulcerative colitis was settled upon as a provisional diagnosis. During the last 6 years, Dr. Potts had treated patient on several occasions for influenzal broncho-pneumonia. Roentgen-ray findings were negative and showed the diaphragms in place; laboratory findings negative with the exception of 25 per cent moist albumen in the ascitic fluid removed at paracentesis. Physical examination was negative except for moderate distention of the abdomen and on palpation, a fluid level and a board-like rigidity in the right upper quadrant of the abdomen with enlargement of the liver and spleen. Proctoscopic examination revealed small ulcerated areas of the rectal musoca which bled easily.

Autopsy showed adenocarcinoma of the transverse colon with marked metastasis to the liver.

Following the presentation of cases there was a discussion of the deaths of the month by J. G. Lilly, Jr., House Officer.

The meeting adjourned to meet again on Tuesday, November 28.

ANDERSON INFIRMARY STAFF MEETING

The Staff of Anderson Infirmary met in regular session, Friday, November 3, with the following members present: Drs. H. L. Arnold, W. Jeff Anderson, G. L. Arrington, James Bennett, T. L. Bennett, G. W. Bounds, T. D. Bourdeaux, T. G. Cleveland, R. L. Donald, H. S. Gully, E. B. Key, William Krauss, R. M. Leigh, W. W. Reynolds, F. G. Riley, T. A. Strain, Carl Stingily, H. F. Tatum, and D. L. Walker.

The meeting was called to order at 7:00 P. M., after which the minutes of last meeting were read

and approved. Reports from the Records Department and analysis of the work of the Hospital for the month of October were given by the secretary, Dr. T. L. Bennett.

An interesting clinic, a case of recurring attacks of empyema with chronic bronchial fistula, was presented by Dr. T. L. Bennett; followed by round table discussion.

Dr. W. Jeff Anderson reported a death following an operation for double inguinal hernia and appendicitis, death occurring seventeen days after operation. The history of the case, as presented by Dr. Anderson, was one of acute upper abdominal pain developing on the twelfth day after operation. Large doses of opiates were required for relief. It was the opinion of Drs. H. S. Gully and T. D. Bourdeaux, who discussed the case freely, that this patient's death was due possibly to a rupture of a gastric ulcer.

Election of officers for the coming year was held; Drs. T. G. Cleveland and T. L. Bennett being re-elected as president and secretary, respectively; Dr. T. A. Strain, vice-president.

A motion was made and carried that the president and secretary prepare the program and notify the members concerning same several days before the meeting.

Following adjournment the Staff retired to the dining room for dinner.

Meridian,

November 10, 1933.

HOUSTON HOSPITAL STAFF MEETING Houston, Miss.

The regular monthly staff meeting of the Houston Hospital was held in the hospital building Thursday night, October 26, with Dr. W. P. Webster, Vardaman, presiding, and Dr. J. M. Hood, Houlika, as essayist. Dr. Hood gave a very interesting paper on "Diarrheas in Children", which was freely discussed by Drs. Watkins of Abbott, Baugh of Houston, Young of Vardaman, Walker of Houlika, Armstrong of Houston, Williams of Houston, Shaw of Slate Springs, Philpot of Houston, and Webster of Vardaman.

The staff was fortunate to have as its entertainers at this meeting Misses Mabel Wessels and Alda Marie Turner of Houlika, who gave a number of piano and vocal solos.

At the close of the meeting refreshments were served.

VICKSBURG HOSPITAL STAFF MEETING

At the regular staff meeting of the Vicksburg

Hospital on October 26, the following program was presented:

1. Report of Recent Meeting of the American College of Surgeons, Chicago, Illinois.—Dr. I. C. Knox.
2. Headache Due to Food Allergy.—Dr. E. H. Jones.
3. Some Remarks Concerning Peripheral Vascular Disease.—Dr. W. H. Parsons.
4. Review of Current Literature.—Staff.

W. H. Parsons.

Vicksburg,
November 6, 1933.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on Friday, November 10, with 10 members of the staff and three guests present. After reports from the records department and analysis of the work of the hospital, and report of vital statistics from the Warren County Health Department special case reports were presented as follows:

1. Transurethral Prostatic Resection.—Dr. A. Street.
2. Malaria Complicated by Acute Appendicitis.—Dr. J. A. K. Birchett, Jr.
3. Treatment of Fractures of the Mandible.—Dr. A. G. Tillman, Jr.

From the cancer clinic, the following cases were presented:

1. Papillary Carcinoma of Bladder.—Dr. A. Street.
2. Melanoblastoma of Femoral Lymph Node.—Dr. A. Street.
3. Squamous Cell Carcinoma of Floor of Mouth (Grade IV.).—Dr. G. M. Street.

Dr. J. A. K. Birchett, Jr., reported on the recent meeting of the Interstate Post-Graduate Assembly at Cleveland, Ohio.

Three-minute reports of the literature of the month were presented as follows:

- Dr. L. S. Lippincott.—Bacteriophage.
- Dr. J. A. K. Birchett, Jr.—Indications for Caesarian Section.
- Dr. L. J. Clark.—Liver Extract; Types of Arthritis.
- Dr. G. C. Jarratt.—Scarlet Fever Streptococcus Antitoxin; Immunization Against Pertussis.
- Dr. R. A. Street, Jr.—Differential Diagnosis of Atelectasis.

Selected radiographic studies were presented and discussed as follows: Fracture of Thoracic Spine (2 cases); Fracture of Humerus with Delayed Union; Congenital Syphilis of the Long Bones; Atelectasis; Pulmonary Tuberculosis.

In connection with the reporting of malaria to the Public Health Department, the question was raised as to whether in a patient who had shown

tertian parasites in the blood on July 11, 1933 and who had been thoroughly treated, the demonstration of tertian parasites in the blood again on October 11, 1933 constituted a fresh infection. In view of the thorough treatment with disappearance of parasites in July, it was decided that the October findings probably represented a fresh infection.

The meeting closed with a lunch.

The next meeting of the staff will be held at the Sanitarium on Monday, December 11, 1933.

VICKSBURG SANITARIUM STAFF MEETING

Abstract: Malaria Complicated By Acute Appendicitis.—Dr. J. A. K. Birchett, Jr.

Patient—White female, aged 38 years. Present Complaint—Pain in abdomen. History of Present Complaint—October 29, 1933, after breakfast felt severe pain in abdomen. During the preceding night had felt very uncomfortable with some abdominal cramps but not severe until this morning. She did not think these pains were of any special significance as she had been confined to her bed for the past five days because of an acute attack of malaria which was accompanied at the onset with nausea and abdominal pain and pain in the upper left abdomen in the region of the spleen. However, the pain which began last night was of such marked severity that she called me to come and see if she didn't need a purgative as she thought her liver was swollen because of the malaria. Past History—Recovering from an acute malarial infection, blood smears being loaded with tertian rings. Initial chill one week ago. Has been free of temperature for three days and general malarial symptoms were rapidly clearing up. One normal delivery. No previous operations except tonsillectomy for rheumatic disturbances six years ago. Family History—Not remarkable; father dead, age 65; mother living, confined in bed at this time with malaria; one brother living and well. No tuberculosis, no cancer.

Physical Examination—Well developed and nourished white female complaining of pain generally over abdomen and of being weak and run down from a recent attack of malaria. Tonsils out; teeth negative; tongue coated. Heart rapid, 100, no murmur. Lungs negative. Abdomen: Spleen palpable, tender; complains of pain over upper right quadrant of abdomen; pain elicited over right lower quadrant more marked although palpation of all quadrants elicits pain. There was no rigidity but a positive peritoneal release sign was noted. No pain on deep pressure but rather quick stabbing pain on release, rather suspicious of a pelvic type of appendicitis as pain was elicited mostly over pelvis. Pelvic examination showed normal uterus and adnexa. Urine was clear. Laboratory—Wassermann, Kline and Young and Kahn tests negative; blood picture: red cells 4,000,000; hemog-

lobin 72 per cent; leukocytes 16,200; differential leukocyte count, small lymphocytes 11 per cent; large lymphocytes 10 per cent; monocytes 5 per cent; polymorph. neutrophils, mature 33 per cent; band forms 41 per cent. Urine negative except for rare coarsely granular casts.

Procedure—When I was again called to see this patient after having seen her several times the week before the onset of the abdominal pain I felt that we were dealing with an appendiceal irritation, but not of marked intensity and in view of the fact that she had just begun to recover from a severe attack of tertian malaria and she would not consent to surgery, I thought it best to observe her for a while as her temperature was normal, pulse 88 and the blood count 12,000 total with 70 per cent polymorph. count with no abdominal rigidity or localized pain. I therefore applied ice bag, gave her $\frac{1}{8}$ grain of morphine and stopped all food, giving her only water and coca-cola; to have another observation in six hours. At my next examination I did not note any abdominal rigidity but with a marked positive release sign and pain deep in the pelvis and with increase of total count to 16,200 with polymorph. 72 per cent. I finally prevailed on this patient that she had an acutely inflamed appendix that would rapidly be getting gangrenous if she did not have an operation although she continued to contend that the pain was due to malaria and to the fact that she had not had a satisfactory elimination for 24 hours prior to the onset of the pain and that a good dose of calomel would have relieved her.

Appendectomy was done through McBurney incision and an acute purulent appendix was located hanging over brim of pelvis. Convalescence was uneventful. Quinine, gr. xx, was given in the muscle every day for five days postoperative.

Abstract: Treatment of Fractures of the Mandible.—Dr. A. C. Tillman, Jr.

We must admit that fractures of the mandible are becoming more frequent, due in part to the increased use of the automobile with its attendant accidents, resulting in injuries to the maxillary and facial bones. Not infrequently these injuries occur in connection with injuries to the extremities, spine, cranium and internal organs necessitating extended hospitalization of the patient. In such cases the application of a four tail bandage to support the fractured mandible until reduction and fixation is accomplished is an aid and comfort to the patient.

Treatment of fractures of the mandible are governed by the same principles as fractures in general,—apposition of fragments and immobilization of the parts with a view to the proper functioning of the member after recovery.

Since probably 90 per cent of fractures of the

mandible are compound due to the thinness of the overlying structures, measures should be taken to lessen the possibility of infection in the line of fracture. All loose spicula of bone and loose teeth should be removed, provided such a tooth is not the only one in one of the fragments and would be an aid in retaining the fragment in position; in which case it may be retained at the discretion of the surgeon.

There are a number of appliances available for fixation in mandible fractures, vulcanite splints, metal splints (either banded, cast or wedged), intermaxillary wiring, fracture bands, orthodontic bands, heavy arch wires, all of which are attached to the teeth; also, silver plates, bone sutures and bone grafts which are attached to the mandible by open reduction.

Thomas L. Gilmer of Chicago first recognized the fact that the upper jaw, being immovable, was ideally suited for use as a splint to immobilize the fractured mandible. Utilizing this principle he immobilized the mandible by ligating the teeth of the mandible to the teeth of the maxilla, by twisting wires around certain teeth in each arch upper and lower, then twisting these wires together. In this early system, the disadvantage lay in the fact that were one wire to break the whole system of wires had to be removed to replace the broken one. Utilizing this principle, Ely Oliver and Ivy gradually modified and improved the method until today the wiring system in general use consists of a series of small eyelets in the wires of both upper and lower arches, these eyelets being engaged with a tie wire from the mandibular eyelet to the corresponding maxillary eyelet when the fracture is reduced, thus immobilizing the mandible by securely anchoring it to the maxilla by these tie wires. Should necessity require opening the mouth for any reason during the period of fixation, simply cutting the tie wires will allow the mouth to be opened; it can then be closed again by replacing the tie wires. This procedure does in no way disturb the eyelet or anchorage wires, and is an ideal form of fixation. Fully 80 per cent of the cases of fractures of the mandible can be successfully treated with this type of wiring, either alone, or in combination with other forms of attachment on single isolated teeth by use of bands with suitable attachments secured to the teeth standing alone.

In using the wiring method care must be taken to inspect the wires frequently to see that all slack is taken up in the tie wires, as some stretch will develop in the wire and this must be taken up to hold the fracture immovable until union takes place, which generally occurs in from five to seven weeks.

It is seldom necessary to do an open reduction when there are enough teeth present in each arch

to afford sufficient anchorage for inter-maxillary wiring.

Post-operative care of these cases consists of proper mouth hygiene, and an adequate liquid diet high in bone building material and occasionally supplemented by viosterol or cod liver oil as an activator.

Reduction and fixation of these fractures can usually be accomplished with the aid of premedication, whether by mouth or subcutaneously, without resorting to a general anesthetic, which should be avoided if possible because of the danger of misplacement of the parts during post-operative struggling, strangulation due to inability to readily expel vomitus from the mouth and the attendant risk of pulmonary complications.

Models were displayed showing various types of splints, wiring, arches, bands, etc.

CHARITY HOSPITAL STAFF MEETING

The regular monthly meeting of the Charity Hospital Medical Staff was held Tuesday, November 21, 1933, with Dr. W. A. Love presiding.

The program consisted of a presentation of a series of autopsy records preceded by brief summaries of the clinical findings by Dr. Von Haam. These cases were exceedingly well presented, and were sufficiently unusual to be very interesting. The first case was one of atrophic cirrhosis with an acute peritonitis, which was apparently the result of frequent abdominal taps. Another case showed nothing at autopsy except marked arteriosclerosis of the mesenteric vessels and the abdominal aorta. This second case had been operated upon for what was apparently an acute ileus. The other cases were varied; tuberculosis of the vertebrae with tuberculous and purulent peritonitis; sporstrichosis of the liver with large abscess formation; tuberculosis of both adrenal glands, Addison's disease; and phlegmonous embolic myocarditis in a young boy the result of a diphtheritic septicemia.

Following the scientific presentation the annual election of officers resulted in the unanimous election of the following: Dr. P. H. Jones, Chairman; Dr. Willard R. Wirth, ice-Chairman; and Dr. B. J. DeLaureal, Secretary.

Willard R. Wirth, M. D.

HOTEL DIEU

The first regular monthly meeting of Hotel Dieu staff for the 1933-34 term, was held October 16, 1933, at Hotel Dieu at 8 'clock P. M. Dr. P. B. Salatic, presided at the meeting, with Dr. Ruth Aleman, Secretary, at the desk.

Dr. Theodore J. Dimitry presented a paper on "The Nature of the Nasal Mucosa and the Effect that It Could Have upon an Organ in Juxtaposition

such as the Eye". Having for many years used proteins as therapeutic agents, and recognizing their value in provoking non-specific immunity, Dr. Dimitry classifies them among the agents known as irritants. He says: "The nasal organ responds to such irritation of its loose connective tissue by producing anti-bodies ;and because of the neurological and vascular continuity existing between the two, the eye is influenced by the nasal stimulation. It has been found that the lumen of a vessel can be reduced by nervous stimulation even though there are no muscle walls. For the cilia to function, however, the mucas must be damp and warm; hence the petroleum products so universally used are harmful because they inhibit, by their blandness, the action of the muco-serous glands and goblet cells from which the mucus flows."

Dr. Dimitry recommended rather the adoption of a principle of nasal titillazation for the improvement of eye conditions. He suggested that since we have found such applications of irritants beneficial to the eye, this principle may be used in the case of other organs.

Dr. A. L. Levin: There is no doubt that the use of non-specific proteins, in certain diseases, is of value in modern medicine. We do not know as yet how the non-specific proteins act—whether they produce new antibodies or mobilize those that exist in the body into the general circulation.

Dr. Beryl I. Burns, in a recent discussion on the mechanism of capillary contraction, whether it is due to a nervous influence or some other factor, declared that only in the femoral vessels do the sympathetic fibers penetrate the walls of the capillaries. Whether this applies to capillaries in other parts of the body is still an unanswered problem.

Dr. Dimitry, in closing summed up the whole subject in saying that non-specific proteins, whether they disturb immobilized cells or create antibodies, are irritants, either physical or chemical. As concerns capillaries, it seems to be an accepted condition today, in line with Clark's plan, that the capillaries will contract independently of the muscular tissue. The protoplasm definitely contract in sympathetic nerve stimulation.

Dr. L. L. Cazenavette, speaking on "Progressive Muscular Atrophy", said: "This condition is met with frequently in diseases of the nervous system. It may result from diseases affecting certain parts of the spinal cord or be of a progressive type, affecting the peripheral nerves. Another type, called "Muscular Dystrophy" does not affect the nervous system proper, but is limited in its pathology to muscular tissue."

Screen slides showed four children of a family of seven (aged 4 to 16) who were affected by this disease, muscular dystrophy. It is possible, however, for the onset to occur in adult life. A moving pic-

ture showed a man in whom the condition began at age 25.

Dr. Cazenavette continued: "In late years there have been researches made with regard to certain medications known as aminoacids, or as glycin, or glutanic acid; these, when ingested, have the tendency to increase the amount of creatinine. For without creatinine there can be no contraction of muscles. Dr. Beard of L. S. U. and Dr. Tripoli made many researches and treated a number of patients; some have been benefited by the treatment. The group of children shown have been given this glutanic acid, but have not so far shown improvement; they may not have taken the drug regularly."

Dr. G. Anderson: The only ray of hope for this type of case has come within recent years through the use of these aminoacids, and even this is still in the experimental stage.

Cases have been reported who were unable to walk and were subsequently able to do so. In one case, the disappearance of musculature and the loss of tone are so great that the head of the humerus can be dislocated and slipped back into place with ease. After six months of treatment his muscular condition has not improved, but he is feeling better, gaining weight, and his morale is improving. However, the majority of cases showing improvement are those not so far advanced.

Dr. Frank Loria: Recently I have had a great interest in bi-chemistry, particularly protein metabolism. I understand that no matter which aminoacids are given, and there are about 20, the creatinine output of any particular individual cannot be increased. This output is constant with each individual and is the only nitrogenous product eliminated by the kidneys which is not variable, except under certain conditions.

That metabolism of creatinine goes on in muscular tissue is undoubted. But the theory of feeding aminoacids to these people with the idea that there will be an increase, has not been proven; as a matter of fact, all the proof is to the contrary, I believe.

Dr. A. L. Levin: In the recent reports from the Mayo Clinics, some favorable results have been cited in cases of progressive muscular atrophy by the use of "glycin". If this be true, gelatin which has been considered up to the present an incomplete proten, can be made an important factor in diet, for it contains among other aminoacids about 30 per cent glysin.

Dr. R. H. Unsworth: It is a proven fact that muscular dystrophy will be benefited by aminoacids, whether given by mouth or subcutaneously. Dystrophy is a wasting of muscle due to some form of metabolism; atrophy is a wasting due to the conditions of the central nervous system. Clinically it has been shown that when aminoacids are given to these patients, there is an increase in

their creatinine output and an increase in muscular activity. But after a certain period of time, something happens and the aminoacids cease to have the activity they did in the beginning.

Dr. Walter J. Otis: I have in mind one of these cases where the patient had to crawl around on the floor; but following successive treatments with glycine she was able to feed herself and is now riding a bicycle. Such situations are not psychic. Anything we can do or try to do to help these patients should be embraced religiously. However, I have yet to see one case completely recovered.

Dr. Frank Loria, third speaker on the program, covered briefly the subject of "Lung Abscess", which he defined as "a destructive process within the parenchyma of the lung caused by pyogenic micro-organisms and associated with perhaps other types of changes in the lung." He summarized the history of treatment of lung abscesses from Hippocrates to the present time.

Etiology: Among the clinical factors responsible for pulmonary abscess, one of the most important is the aspiratory factor coincident with the removal of tonsils and adenoids. Clinically this seems to be a fact. Whipple of New York and Lambert and Weeks of Cleveland have produced abscesses by this method experimentally. On the other hand, Cutler, because of his experimental work, insists that these abscesses result from some embolism which arises in a field of operation or in some area of infection. He tried to produce abscesses by aspiration and succeeded only in one case, when he placed a foreign body into and blocked up the bronchus.

Pneumonia and other respiratory infections, even actinomycotic and amebic infections, may lead to pulmonary suppuration. Abscesses may also result from trauma, gunshot and stab wounds, and sometimes from blows. In tuberculosis the solitary pulmonary abscess is rare, but it is possible.

In addition to the clinical findings, diagnosis is established by (a) roentgenograms taken in three positions, antero-posterior, diagonal, and lateral views, (b) lipiodal is especially good when we do not know whether or not the abscess communicates with a bronchus, (c) fluoroscopic study will determine the position of the abscess. Localization with respect to the surface of the body is important, for if one is going to operate, he can avail himself of that area closest to the surface of the body. In this way the necessity for a two-stage operation may be obviated.

Treatment may be medical, (by supportive measures, vaccine therapy and intravenous medications such as arsenicals; emetin hydrochloride is also being used), or surgical, by (a) Phrenicotomy or avulsion of the phrenic nerve, (b) Lobectomy, (c) Lobectomy with use of the cautery, (d) Thoroplasty, (e) Bronchoscopy, which is of unquestion-

able value especially where the drainage is poor, and (f) Artificial pneumothorax. If the abscess is medially located and of recent origin and is draining into the bronchus, there is no doubt that artificial pneumothorax will help. If it is centrally placed (with respect to the lung), it is often necessary to resort to a two-stage operation. If it is peripherally located, the one-stage operation, after having localized the abscess with respect to the surface of the body, will suffice.

Roentgenograms were exhibited showing results from the three types of procedure, namely by use of (a) artificial pneumothorax, (b) the two-stage operation, and (c) the one-stage operation.

Dr. Homer Dupuy: Some years ago Dr. Jules Dupuy and myself bronchoscoped a series of 25 cases following T&A; in every case blood was found in the lower air tract. Now certainly if blood was there it may have carried with it infectious material from the tonsillar area. Therefore I really believe that this is an important factor in the study of pulmonary suppuration. As a preventative measure I recommend an operative technique as speedy as possible. Again, aspiration through properly used suction apparatus and control of hemorrhage by ligations, will help to minimize, certainly, this tragic event.

Dr. Val H. Fuchs: Drs. Daly of Houston made experiments some four years ago, in which blood was found in the trachea following tonsillectomy in every case which was completely anesthetized so as to abolish the throat reflex, but not when the patient was under just enough anesthesia not to abolish the cough reflex.

Executive session followed, and the meeting adjourned at ten o'clock P. M.

TOURO INFIRMARY

On Wednesday, November 8, 1933, at 8:00 P. M., Dr. I. I. Lemann presided at the regular monthly meeting of the medical staff of Touro Infirmary.

There were three presentations made. Dr. B. R. Heninger presented and discussed three cases of spontaneous pneumothorax; Dr. Dudley M. Stewart summarized, discussed and presented the roentgenograms of a case of hyperparathyroidism; and Dr. W. A. Reed gave the case report of a case of bilateral carbuncle of the kidney.

The three cases of spontaneous pneumothorax offered for discussion by Dr. Heninger were all of the idiopathic type, that is, no pathology were demonstrable in the lungs of these patients that might have been thought responsible for the occurrence of this acute emergency. All occurred in apparently normal healthy individuals. The cases were discussed by Drs. Rives, Copland, Sullivan, Matas, and Lemann.

The roentgenograms of the patient whose case record was summarized by Dr. Stewart were of unusual interest, as was also the report itself. These showed the typical decalcification of the bones, and spontaneous fractures. Discussions by Drs. Maes, Hatch, Lanford, Matas, Womack, Lemann and Rodick followed.

Dr. W. A. Reed's presentation was of an unusual and genito-urinary condition. Carbuncle of the kidney rarely occurs, and a bilateral occurrence is extremely infrequent. The value of the summary was enhanced by the discussions by Drs. Heninger, Rodick, Wolf and Matas.

Dr. G. C. Anderson spoke briefly on a case of cerebral abscess in a child following an acute mastoid. Autopsy findings were added.

Willard R. Wirth, M. D.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

DECEMBER 1. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 4. Eighth Stanford E. Chaille Memorial Oration, Orleans Parish Medical Society, 8 P. M.

DECEMBER 4. Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

DECEMBER 6. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 6. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

DECEMBER 8. Pathological Conference, Hotel Dieu 11:00 A. M. to 12 noon.

DECEMBER 8. French Hospital Staff, 8 P. M.

DECEMBER 11. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

DECEMBER 12. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 13. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

DECEMBER 13. Touro Infirmary Staff, 8 P. M.

DECEMBER 15. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 15. I. C. R. R. Hospital Staff, 12 Noon.

DECEMBER 15. Mercy Hospital Staff, 8 P. M.

DECEMBER 18. Hotel Dieu Staff, 8 P. M.

DECEMBER 19. Charity Hospital Medical Staff, 8 P. M.

DECEMBER 20. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 20. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

DECEMBER 21. Eye, Ear, Nose and Throat Club, 8 P. M.

DECEMBER 22. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

DECEMBER 26. Baptist Hospital Staff, 8 P. M.

DECEMBER 27. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

DECEMBER 27. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

DECEMBER 29. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

During the month of November, besides the regular meeting of the Board of Directors, the Society held two scientific meetings:

November 13

The Use of Emetine Hydrochloride in the Treatment of Infectious Diseases. A Picture.

By:.....Dr. D. L. Watson

Discussed by Dr. E. A. Bertucci.

Oxygen Therapy. Ey:.....Dr. Ansel Caine

Hyperinsulinism with Report of a Case
By:.....Dr. Sydney Jacobs

Discussed by Dr. Chaille Jamison.

November 27

SYMPOSIUM ON DYSENTERY

Dr. Chas. W. Duval—The Etiology and Pathology of Bacillary Dysentery.

Dr. Daniel N. Silverman—Clinical Features of Bacillary Dysentery.

Dr. Ernest Carroll Faust—The Distribution and Diagnosis of Amebic Enteritis in the Southern United States.

Dr. Chas. F. Craig—Clinical Aspects of Amebiasis.
There was no discussion of these papers.

At this meeting Delegates to the Louisiana State Medical Society were elected for a term of two years.

Nominations for Officers for the year 1934 were handed in to the Secretary before 9:00 P. M. in accordance with the By-Laws.

The annual election of Officers will be held Saturday, December 9, 1933. Balloting shall take place between 10:00 A. M. and 12 Noon; 2:00 and 5:00 P. M. and 7:00 and 8:30 P. M.

As the Tulane Physiological Seminar has been discontinued, some of those formerly attending this may be interested in coming to the Physiology-Pharmacology Journal Club which meets every Wednesday in the Richardson Memorial Building on the uptown campus at 4 P. M.

During the month the Board of Directors, assisted by the Judiciary and Hospital Abuse Committees, has been quite active in continuing the opposition to the proposed increase in the capacity of the

Charity Hospital. A Committee consisting of Drs. Edward L. King, Emmett Irwin, A. E. Fossier and F. L. Fenno have worked with Mr. Azzo Plough, Legal Advisor of the Orleans Parish Medical Society in formulating the written brief to be submitted to the Public Works Advisory Committee, and it is planned to distribute copies of this material to every member of the local Society and to each of the components of the Louisiana State Medical Society.

The Judiciary Committee of the Orleans Parish Medical Society has been exceptionally active in the recent past submitting to the Society recommendation that Dr. Charles E. Verdier be expelled from the Society because of unethical practice, in that he had associated himself with the Public Health Institute of New Orleans, an unethical institution. This recommendation was sustained by a vote of the Society.

The Judiciary Committee also reported Dr. J. T. Gailmard, D. D. S., not a member of the Orleans Parish Medical Society; Dr. T. A. Maxwell, not a member of the Orleans Parish Medical Society; Dr. E. H. Kent, not a member of the Orleans Parish Medical Society, as also engaging in unethical practice because of their association with the same Institution.

Dr. Irwin read a report from the Judiciary Committee informing the Society that physicians associating themselves with pre-school round-ups permitting their names to be broadcast on dodgers or other forms of advertisements, that such a practice was frowned upon by the Society and regarded as unethical.

The Judiciary Committee reported that its investigation determined the action of Dr. Eugene M. Warner, not a member of this Society, as having engaged in unethical practice through solicitation by means of reduced fees.

The Judiciary Committee reported that Dr. Clarence P. May, not a member of this Society, was guilty of unethical practice, and also Dr. Henry Leidenheimer not a member of the Society, had appeared before the Judiciary Committee and after being informed that the Louisiana General Clinic with which he was associated was regarded by the Judiciary Committee as being an unethical organization had immediately severed his connections with the said clinic.

In all instances where the Judiciary Committee has reported on the ethics of doctors not members of the Orleans Parish Medical Society, this information is filed with the Society for use in the event these doctors should make application for membership at some future date.

The Woman's Auxiliary of the Orleans Parish Medical Society is collecting discarded clothing to be distributed to needy medical students. It is

requested that anyone having such material to dispose of will phone WALnut 5355 leaving a message to that effect. This organization is also collecting samples left in physicians' offices for distribution to the various free clinics. Doctors are requested to phone UPtown 5231 when quantities of such material are available and a member of the Auxiliary will call to collect same.

During the month of November, Drs. Ernest Celli and H. C. Magee were elected to Active Membership and Dr. Herbert H. Meyer elected to Associate Membership.

The following New Orleans doctors attended the recent meeting of the Southern Medical Association held in Louisville:

Drs. Elizabeth Bass, James A. Bradley, M. Earle Brown, W. R. Buffington, Chas. F. Craig, Ernest Carroll Faust, I. M. Gage, E. H. Hinman, Roy E. de la Houssaye, Homer Dupuy, Edward L. King, W. A. Knolle, John A. Lanford, Edwin H. Lawson, F. E. LeJeune, I. I. Lemann, Louis Levy, Howard R. Mahorner, Alton Ochsner, John G. Pratt, James W. Reddoch, J. N. Roussel, Thos. B. Sellers, Daniel N. Silverman, M. T. Van Studdiford and Wm. A. Wagner.

TREASURER'S REPORT

ACTUAL BOOK BALANCE 9/30/33.....	\$ 882.16
Credits	\$ 566.94
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TOTAL CREDITS.	\$1449.10
October expenditures:	\$ 562.54
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ACTUAL BOOK BALANCE 10/31/33.....	\$ 886.56

LIBRARIAN'S REPORT

There have been 177 volumes added to the Library during November. Of these 15 were received by purchase, 16 from the New Orleans Medical and Surgical Journal, 36 by gift, and 110 by binding. New titles of recent date are listed below.

It is gratifying to note that the members of the Society are availing themselves of the evening hours in the Library more and more. A telephone call to Miss Marshall during the day will result in material being placed ready for a doctor, for use in the evening at any time.

References have been collected on the following subjects during November:

Tumors of pericardium.

Formula for preparation "Udga."

Sister Maria Therese.

Florence Nightingale.

Personal bibliography of Dr. Homer Dupuy.

Personal bibliography of Dr. John Signorelli.

Personal bibliography of Dr. Henry Blum.

Intracranial Hemorrhage.

Appendix as a focus of parasitic infection.

Luetic infection resulting from blood transfusion.

The furnishing of several names of local men who are members of the American Association for the Advancement of Science.

Harvard oarsmen.

Hypernephroma.

Hereditary glandular disease.

Hemorrhage in pelvic inflammatory disease.

Cerebrospinal rhinorrhea.

Hemoptysis.

Elliott method of treatment in pelvic diseases.

Names and addresses of American foundations furnishing foreign fellowships.

NEW BOOKS

Lewis—Practice of Surgery. 12 v. 1932.

A. M. A.—Directory.—Supplement to 12th ed. 1932.

Jarcho—Gynecological Roentgenology. 1931.

Van de Velde—Ideal Marriage. 1932.

Wells—Chemistry of Tuberculosis. 1932.

Dickinson—Control of Conception. 1932.

Newsholme—Medicine and the State. 1932.

Musser—Internal Medicine. 1932.

Lattes—Individuality of the Blood. 1932.

Crile—Diagnosis and Treatment of Diseases of the Thyroid Gland. 1932.

Peters and Van Slyke—Quantitative Clinical Chemistry. v. 2 1932.

Surgeon-General's Office—Index-Catalog v. 10 Series 3. 1932.

Milbank Memorial Fund—Report. 1931.

Rockefeller Foundation—Annual Report. 1931.

Fried—Primary Carcinoma of the Lung. 1932.

Kelly—Electrosurgery. 1932.

Schnek—Technique of the Non-padded Plaster Cast. 1932.

White House Conference—Hospitals and Child Health. 1932.

Hyman—Failing Heart in Middle Life. 1932.

Engelbach—Endocrine Medicine. 3 v. 1932.

Schamberg—Treatment of Syphilis. 1932.

New York City Cancer Commission—Cancer Then and Now. 1932.

Frederick L. Fenno, M. D.

Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

FOURTH DISTRICT MEDICAL SOCIETY

The Fourth District Medical Society held a meeting in the Court House, Shreveport, on Tuesday, November 7, 1933, at 7:00 p. m. The meeting was attended by a large crowd of doctors in the Fourth District. The subject was "Medical Economics". Dr. C. A. Weiss, Baton Rouge, President of the Louisiana State Medical Society, read a splendid paper, and Dr. J. G. Yearwood, Gayle, made a wonderful talk on Medical Economics. These papers were discussed by many members of the Society. After the discussion of these papers election of officers was held as follows: Dr. J. G. Yearwood, Gayle, President; Dr. Wilkins McDade, Minden, Vice-President; Dr. Paul D. Abramson, Shreveport, Secretary-Treasurer; and Dr. L. T. Baker, Dixie, Delegate.

RESOLUTIONS CONCERNING THE PROPOSED NEW CHARITY HOSPITAL

Many resolutions were presented and read at the recent meeting of the Federal Public Works Committee when an application was made for an allotment of \$9,600,000 from the National Government to construct a new twenty-six story hospital building. The resolutions from the medical societies, many in number, all were strongly against this proposal. The following resolutions have been received at the Journal office.

From The Calcasieu Parish Medical Society.

Whereas, application has been made by the Board of Administrators of Charity Hospital to the Federal Public Works Committee of Louisiana for an allotment of \$9,600,000 of federal funds to be devoted to the erection on the Charity Hospital grounds of a new 26-story hospital building, and

Whereas, we approve the replacing of any present building which may be antiquated or unfit for use by reason of age or physical condition, provided there is no increase made in the number of patients' beds; but

Whereas, it has been stated that the plans for the proposed new hospital include provision for treatment of pay or part-pay patients, other than patients suffering from contagious diseases, and

Whereas, the independent hospitals of New Orleans are charitable in their purpose and not operated for profit, and

Whereas, the inclusion of such pay or part-pay service would be an invasion of the province of such independent non-profit association hospitals and an unprecedented departure from the recognized functions of a State charity hospital, and

Whereas, this would place the Charity Hospital

of New Orleans in direct competition with and would ultimately result in the collapse of such eleemosynary institutions, and

Whereas, no survey of the hospital facilities and needs of the State of Louisiana by recognized hospital consultants has been made as a basis for the application for an increase in the capacity of Charity Hospital of New Orleans, and

Whereas, it is believed that the Charity Hospital of New Orleans is at present adequate for the needs of the indigent patients who are eligible for treatment there, and

Whereas, decentralization of hospital care of indigent patients and provision for their care in smaller hospitals at focal points in the State of Louisiana is believed to be more desirable and more economical, and, if carried out, would permit a decrease in the capacity of the present Charity Hospital of New Orleans, and

Whereas, the independent, non-profit association hospitals of New Orleans have facilities and accommodation for at least 400 more indigent patients at a moderate per capita per diem rate and could thus assist in carrying the burden if subsidized for this purpose as is done elsewhere (e.g. Pennsylvania), and

Whereas, the proposed enlargement of the Charity Hospital of New Orleans will impose an additional tax burden on the citizens of this State.

Therefore, Be it resolved, That we, the undersigned representatives of the independent, non-profit hospitals of New Orleans, do hereby object to the proposal of the Board of Administrators of Charity Hospital to negotiate the financing of the said hospital building; and for the reasons hereinabove assigned, we do respectfully file this our protest with the Federal Public Works Board, with the request that the petition of said board of administrators of Charity Hospital be denied; and

Be it further resolved, That a copy of these resolutions be forwarded to the Federal Public Works Board of Louisiana, Board of Administrators of Charity Hospital, to the proper departments at Washington, to the Orleans Parish Medical Society, Louisiana State Medical Society, to daily press, Louisiana Hospital Association, American Hospital Association, and the New Orleans Medical and Surgical Journal.

BAPTIST HOSPITAL

O. B. Webb, Chairman.

FRENCH HOSPITAL

Octave Garsaud, President.

FLINT GOODRICH HOSPITAL OF DILLARD UNIVERSITY

Edgar B. Stern, President, Board of Trustees.

HOTEL DIEU

J. E. Landry, M. D., Chairman.

MERCY HOSPITAL-SONIAT MEMORIAL

J. K. Byrne, Chairman.

TOURO INFIRMARY

Charles Rosen, President.

From the Fourth District and the Shreveport
Medical Societies.

Shreveport, Louisiana.

Nov. 10, 1933.

Hon. Edward Righter, Chairman,
Federal Public Works Board of La.
New Orleans, La.
Dear Sir:

At a joint meeting, in Shreveport, Louisiana of The Shreveport Medical Society and The Fourth District Medical Society which was held on the evening of Nov. 7, 1933, it was announced that application had been made by The Board of Administrators of The Charity Hospital of Shreveport, Louisiana to The Federal Public Works Committee of Louisiana for an allotment of \$150,000.00 of Federal funds to be used in the erection of an addition to the above named Charity Hospital.

It was also announced that in case this allotment should be granted, the new addition would not be used for the care and treatment of the indigent sick and injured without charge, but the management contemplates the establishment of pay wards and rooms.

At the above named joint meeting, a motion was introduced and passed, almost unanimously, placing these two medical organizations on record as opposing the above named use of Federal funds, for the purposes set forth in the application for above stated allotment, and also opposing other applications for other allotments for funds to be used for similar purposes in connection with The Charity Hospital at New Orleans.

Our reasons for opposing the establishment of a revenue producing addition to The Shreveport Charity Hospital may be set forth as follows:

I. There is no necessity for additional private hospital beds in Shreveport, as there are at present four splendidly equipped and efficiently conducted privately owned hospitals in Shreveport with a combined capacity of above four hundred beds.

II. The establishment of pay beds in The Charity Hospital would place this state institution in direct competition with the privately owned hospitals, each of which has dedicated a number of beds for the use of charity patients and are thereby relieving the state to that extent in caring for the indigent sick. This competition would ultimately and inevitably result in the dissolution and closing of the private hospitals. This would be manifestly unfair to the members of the medical profession and their friends among the laymen who have in-

vested large sums of money in order to provide ample hospital facilities.

III. The provision of employment for the required number of laborers in the construction of the proposed new building which would require only about one hundred days would be much more than offset by the large number of people who would be permanently thrown out of employment in case the private hospitals should be forced to close their doors. The number of employees in the four hospitals of Shreveport who would be effected by this procedure, is approximately three hundred, and their status of employment is not temporary but permanent if the private hospitals are permitted to continue to operate without having to compete with state hospitals.

IV. It is an inescapable conclusion that the proposed project would finally become an additional tax burden on the people of the state.

Finally, we would respectfully request that, when this matter is to come before your committee for consideration, we may have the privilege of appearing personally and presenting more fully the fact and arguments which we believe justify our position relative to the whole matter.

Very respectfully,

B. C. Garrett, Chairman

J. A. Hendrick,

J. M. Gorton

A. A. Herold

J. E. Knighton

J. G. Yearwood, Committee.

From The Calcasieu Parish Medical Society.

WHEREAS, it has come to the knowledge of the membership of the Calcasieu Parish Medical Society that application has been made by the Board of Administrators of Charity Hospital to the Federal Public Works Committee of Louisiana for an allotment of \$9,600,000.00 of Federal Funds to be devoted to the erection on the Charity Hospital grounds of a new 26-story hospital building, and,

WHEREAS, in certain public appearance of the representatives of the Board of Administrators for the obtaining of and the repayment of said \$9,600,000.00 contemplates the establishment in said new building of Pay Wards; and,

WHEREAS, the inclusion of such revenue producing pay wards would be a radical departure from the character and standard of non-pay public service, and it would necessarily follow that the State institution, known as Charity Hospital at New Orleans, would thereby be placed in competition with the several splendidly conducted and privately operated pay institutions, resulting ultimately in the closing and dissolution of such institutions as Hotel Dieu, Mercy Hospital, Baptist Hospital, Touro Infirmary, French Hospital and Eye, Ear, Nose and Throat Hospital; and,

WHEREAS, the Charity Hospital is one of the largest of its kind in the United States and offers

a higher percentage of free beds to the population than any other community, and,

WHEREAS, the new Hospital building is unnecessary at this time, the present accommodations being ample, providing admissions and treatment be confined to indigent patients exclusively; and,

WHEREAS, the proposed enlargement of that institution will impose an additional tax burden on this State because of the fact that a large portion of the funds provided for this expansion must be reimbursed and the interest thereon must be paid plus the great expense of maintenance which must be borne by the tax payers of this state.

THEREFORE BE IT RESOLVED, that we, the members of the Calcasieu Parish Medical Society, in called meeting assembled at St. Patrick's sanitarium, Lake Charles, Louisiana on Wednesday, October 25, 1933, do hereby object to the proposal of the Board of Administrators of Charity Hospital to negotiate the financing of said new hospital Building; and for the reasons hereinabove assigned, we do respectfully file this our protest with the Federal Public Works Board, with the request that the petition of said Board of Administrators of Charity Hospital be denied; and,

BE IT FURTHER RESOLVED, that a copy of these resolutions, duly certified, be forwarded to the Federal Public Works Board of Louisiana and to the proper departments at Washington, and to such other public boards or bodies of interest in the premises, and to Louisiana State Medical Society, and to New Orleans Medical and Surgical Journal, and the Journal of the American Medical Association.

Eleanor Cook, M. D., Secretary,
Calcasieu Parish Medical Society.

NEWS ITEMS

Dr. Isidore Cohn, Professor of Surgery and Head of the Department of Surgery in the Graduate School of Medicine of The Tulane University of Louisiana, addressed the Annual Clinical Congress held in Oklahoma City, Okla., the week beginning October 30, 1933.

On Tuesday, November 7, 1933, Prof. Charles J. Bloom, of the faculty of the Graduate School of Medicine of the Tulane University of Louisiana, addressed the meeting of the Eighth Councilor District of the Mississippi State Medical Association at Brookhaven, Miss., on "Infants Food and Feeding Problems".

The following members of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana attended the meeting of the Southern Medical Association held at Richmond, Va., November 13-18, 1933: Prof. F. E. LeJeune, who appeared on the program November 16 and presented moving pictures of normal and pathological lesions of the larynx; Prof. R. E. de la

Houssaye, who delivered an address on "Thymic Dangers"; Prof. Elizabeth Bass, who following the meeting of the Southern Medical Association attended a meeting of the Board of Directors of the Women's National Medical Association at Washington, D. C.; Prof. M. Earle Browne, who also attended the post convention meeting at Washington, D. C., and visited Dr. Wilmer's Clinic; Prof. Wm. A. Wagner.

SOUTHERN MEDICAL ASSOCIATION

The following doctors from Louisiana attended the meeting of the Southern Medical Association in Richmond, Virginia, on November 14-16, 1933: Doctors Guy A. Caldwell, Shreveport; P. R. Gilmer, Shreveport; A. A. Herold, Shreveport; R. Kapsinow, Lafayette; Joseph E. Knighton, Shreveport; W. J. Sandidge, Shreveport; C. H. Webb, Shreveport.

ABLATION OF THE THYROID IN HEART CONDITIONS

Last month an editorial was published in the Journal concerning the removal of thyroids in heart conditions when the thyroid was apparently normal. Additional reports have come in concerning this operation and the magnificent results achieved by it in heart conditions. At the Beth Israel Hospital in Boston some 40 cases have now been operated upon, and in Massachusetts General eight patients with congestive failure have had their thyroid removed with marked beneficial effects. The letter which is given below from Dr. Arthur E. Hertzler hardly needs comment. Dr. Hertzler has been getting the same type of results with those chronic goiters which under ordinary circumstances would not be operated upon. His letter is an interesting confirmation of Blumgart's work, although not exactly in the same type of case.

November 5, 1933.

Dr. John H. Musser,
New Orleans, La.

Dear Doctor Musser:

I just note in your journal an editorial on total thyroidectomies for heart conditions.

I have been doing these for three years in certain chronic goiters of little toxicity. I am surprised that these patients do not become myxedemic. Their rapid heart lessens, they take on weight and feel fine. I have a short paper in press on this subject.

It would be very interesting to know what the histologic findings of the glands the authors of the paper mentioned. Perhaps they are led astray because of the low BMR readings.

The interesting thing to me is why do such patients not get myxedemic.

Yours very truly,

Arthur E. Hertzler.

INFECTIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information:

For the forty-second week ending October 21, there were reported 181 cases of malaria, figures comparable to the last few weeks. There was a rather sharp rise in the instance of diphtheria, 51 cases being listed. Other diseases which occurred in double figures include 41 cases of pulmonary tuberculosis, 38 of pneumonia, 36 of cancer, 28 of typhoid fever, 19 each of scarlet fever, and syphilis, and 10 of influenza. The largest number of typhoid fever cases were in Franklin and Lafayette Parishes, 7 cases in the former and 6 in the latter. There was also reported 1 case of undulant fever and 1 of epidemic cerebro-spinal meningitis. The next week, which ended October 28, saw a sharp fall in the cases of malaria, only 100 being reported. Other diseases in double figures include 71 cases of syphilis, 47 of diphtheria, 30 of tuberculosis, 34 of gonorrhoea, 24 of scarlet fever, 20 of pneumonia, and 26 cases of typhoid fever, of which 13 were reported from Orleans Parish. The cases of diphtheria seem to be confined very largely to the two parishes with the largest cities in the State, Orleans Parish reporting 14 and Caddo 12. For the next week, ending November 4, it is noted that there was a slight increase in malaria, 116 cases being listed. Diphtheria was still prevalent with 50 cases reported, as well as the following diseases in double figures: Twenty-nine cases of syphilis, 28 of scarlet fever, 23 of tuberculosis, 26 of gonorrhoea, 13 each of cancer and typhoid fever, 17 of pneumonia, and 11 of whooping cough. Orleans Parish reported 18 cases of diphtheria and Caddo 10. For the forty-fifth week of the year, ending November 11, there was a very marked shootup in the malaria cases, 217 being reported, five times the normal five year average for this week. There were also listed 41 cases of cancer, 36 of pulmonary tuberculosis, 31 of syphilis, 29 of pneumonia, 27 of diphtheria, and 14 each of septicemia and typhoid fever, with 11 cases each of hookworm and influenza. Typhoid fever cases came from all over the State, Morehouse Parish with two cases being the only Parish with more than one case. A case of smallpox was reported in Tangipahoa Parish, and a case of encephalitis in Calcasieu and Orleans Parish.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending October 14, there were 163 deaths in the City of New Orleans, divided 107 white and 61 colored. The death rate for the group as a whole was 18.2,

for the white population 16.3, and for the colored 22.8. The infant mortality this week was 84. There were 28 less deaths in New Orleans for the week ending October 21. The 140 deaths were divided 88 white, 52 colored, and the death rates for the three groups were 15.2, 13.4, and 19.4. The mortality rate among infants was 78, 44 in white children and 138 in the negro race. For the week ending October 28, there was a slight increase in the number of deaths in the City, there being 145 deaths reported, divided 91 white and 54 colored. The death rate in the group as a whole was 15.7. The white rate was 13.9 and the colored 20.2. The infant mortality figures were not changed. For the week ending November 4, there were 148 deaths, 86 taking place in the white section of the population, and 62 in the negro. The total death rate was 16.0, the white rate was 13.1, and the colored 23.2. The infant mortality rate was 67. The death rate for 1933 is slightly under that of 1932. For the first 44 weeks of last year the rate was 15.5, whereas in 1933 in a like time the rate was 15.4.

TUBERCULOSIS AND PUBLIC HEALTH ASSOCIATION OF LOUISIANA

In considering the tuberculin testing and x-raying service which the Tuberculosis and Public Health Association of Louisiana is endeavoring to put into effect in New Orleans with funds raised through their annual sale of Christmas seals, the last word comes fittingly from Dr. Kendall Emerson, Managing director of the National Tuberculosis Association. In a recent publication entitled "Procedure for the Discovery and Care of Tuberculous Children," Dr. Emerson includes this foreword:

"In the fifty years since Koch discovered the tubercle bacillus methods for combating tuberculosis have crystallized into a fairly well standardized program, the basic elements of which are control of the carrier and education of the public. Control of the carrier has always been difficult because the disease is of long standing and often not manifest, and also because case reporting and follow-up have never been fully achieved.

"Laws requiring the reporting of tuberculous cases are premised on the assumption that the tuberculous individual sooner or later consults a physician. But early cases of tuberculosis do not often come to the attention of the doctor. However, our more recent knowledge of early tuberculosis in children opens up a new approach to the problem, and at least suggests means of supplementing the accepted measures which have been employed in the past.

"Searching for tuberculosis among apparently healthy children is valuable from two standpoints (a) the individual welfare of the child and (b) the protection of the public health.

"Obviously, when a child is found to be infected a careful investigation of his environment is indicated in order to discover if he is living in contact with an open or a suspicious case. By breaking that contact a great service is rendered the child. Furthermore, much can be done to build up his resistance and to train him in proper health habits.

"Quite as important is the utilization of a case of first infection or of childhood type tuberculosis as a clue by means of which we may trace the whereabouts of active cases of adult type or reinfection tuberculosis. In the control of tuberculosis the household and not the individual patient is the unit. Having knowledge of a case of infection of tuberculosis, it becomes our obligation to search the immediate surroundings of the child for the source of infection. The search often leads to an obvious open case which menaces the entire community. Sometimes the search reveals a case of tuberculosis disguised as bronchitis, heart disease or asthma. A systematic search for tuberculosis is therefore, valuable as a comprehensive case-finding measure. The case finding plan must be one which will sift from the entire population those children who require attention and whose surroundings demand investigation. Furthermore, this must be done with a minimum of effort and expense and consistently with other expenditures for health protection. Many communities have already begun work of this kind."

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about Three Hundred Dollars, will be made on July 14, 1934, provided that an essay deemed by the Committee of Award to be worthy of the Prize shall have been offered.

An essay intended for competition may be upon any subject in Medicine, but must be accompanied by a written assurance from the author that it has not appeared previously in print, either in whole or in part, in any form, and has not been presented elsewhere in competition for a prize. Any illustrations should be appropriate and correctly annotated with the text. Essays must be received by the Secretary of the College on or before May 1, 1934.

The Alvarenga Prize for 1933 has been awarded to Drs. Harry Shay and J. Gershon Cohen of Phila. for their Essay entitled: "Experimental Studies in Gastric Physiology in Man".

AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

The American Association for the Study of Goiter, for the fifth time, offers Three Hundred Dollars (\$300.00) as a first award, and two honorable mentions for the best essays based upon original research work on any phase of goiter presented at their annual meeting in Cleveland, Ohio, June 7th, 8th, and 9th, 1934. It is hoped this will stimulate valuable research work, especially in regard to the basic cause of goiter.

Competing manuscripts must be in English, and submitted to the Corresponding Secretary, J. R. Yung, M. D., 670 Cherry St., Terre Haute, Ind., U. S. A., not later than April 1, 1934. Manuscripts received after this date will be held for the next year or returned at the author's request.

The First Award of the Memphis, Tenn., 1933 meeting was given Anne B. Heyman, A. B., M. S., University of Michigan, Ann Arbor, Mich., "The Bacteriology of Goiter and the Production of Thyroid Hyperplasia in Rabbits on a Special Diet."

WOMAN'S AUXILIARY NEWS

The Woman's Auxiliary to the Orleans Parish Medical Society held its first meeting of the fiscal year, 1933-1934, at the Orleans Club, on October 11, 1933, with an attendance of about two hundred members and guests.

A very interesting talk was made in behalf of the Community Chest drive by one of its members.

The minutes of the May meeting were read and approved. The reports from the various chairmen of Committees were heard, of which an interesting one was that of the treasurer who reported a nice balance in bank and that to date one hundred fourteen members had paid their dues.

Mrs. Francis E. LeJeune gave an instructive and inspiring address and explained again the purpose of the organization as stated in the constitution, outlining the work for the coming year. In order to familiarize the members with the officers and the committee chairman Mrs. LeJeune had prepared a very clever chart which was displayed. Each officer, and chairman along with the members of the committees were introduced to the other members of the Auxiliary, and the work of all committees brought out most forcibly. A very business-like meeting was conducted and the outlook for a year full of constructive work seems to be the object of this efficient president.

The principal work to be undertaken by the Auxiliary this year is the building up of the fund for our Indigent Physicians. In order to raise money for this worthy cause, the Auxiliary has been given permission to sponsor several entertainments. Mrs. Isidore Cohn is State Chairman of this fund and hopes that all the Auxiliaries

throughout the State will give her their whole-hearted support. Mrs. John H. Musser, our State President will co-operate with Mrs. Cohn in making this noble undertaking grow to such proportions this year that the following leaders will be encouraged to continue to make this the outstanding work of the State Auxiliaries.

The Ouachita Parish Auxiliary held its first meeting on October 18, at the Lotus Club, with about twenty-five members present. During the luncheon hour the business meeting and the program were carried on. The interesting program included two musical numbers, a talk on "Preparing the Child for School", by Mrs. P. L. Perot, and "Cur-

rent Events on Some of the Phases of Medicine", by Mrs. J. B. Vaughn.

The president, Mrs. J. E. Walsworth, is full of enthusiasm and under her leadership the good work of the Auxiliary is expected to go forward with a new momentum. Several subscriptions to *Ilygiea* have already been given.

The Auxiliary will entertain the local doctors at a banquet sometime in the near future.

The two Auxiliaries above named are the only ones who have reported thus far to me. Let me again urge the Auxiliaries to send in Auxiliary news items so that they can appear in this Journal.

Mrs. Wiley R. Buffington, State Chairman,
Press and Publicity Committee

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

HOLIDAY GREETINGS

IT CAN BE DONE

As appears in the following pages, organized medicine can accomplish recognition when its members work as a unit. Many of us are all too given to individual grumbling without being willing to actually get into harness and work. Many of us perhaps have known what could and should be done but have made no serious effort to do it. Now comes our officers and council of the Mississippi State Medical Association and in one day with a little advance preparation, is presented a plan, which will no doubt be adopted, that will continue the old ideals of service to the suffering indigent and at the same time provide partial compensation to the doctor in line with that always offered to other professions and to business. Every member of our Association will recognize and rejoice and congratulate our officers and council on the fact above all others that in the action taken the medical profession without lowering its ideals of unselfish service to those in need has at last been given recognition as an organization in the state. That recognition must be maintained by the Association and that Association must represent all of the reputable doctors of medicine in the state. We may now "point with pride" to a concrete and important accomplishment of organized medicine. December is the time to enroll. Our president should be presented on January 1 with a membership roster that will show the appreciation of the component societies for what has been done. **ONE THOUSAND MEMBERS BEFORE JANUARY FIRST!**

A MERRY CHRISTMAS TO YOU AND YOURS.

MEDICAL ECONOMICS IN MISSISSIPPI

Natchez, Nov. 5, 1933.

The following correspondence is self explanatory. This subject should interest every physician in the state. President Dicks has appointed the Council to act as a committee to advise with the State Director of Federal Relief Administration, with the first meeting set for November 9, 1933.

J. S. Ullman.

Laurel, Mississippi,
October 27, 1933.

Dr. Dan J. Williams,
Chairman of Council
Gulfport, Miss.

Dear Dan:

The physicians of Jones County were requested to meet with Relief Workers of Jones County for the purpose of receiving information regarding our part of the relief program for the winter. Last night some twenty-five physicians met with Mrs. Corsey and her helpers at the City Hall. The following was given us by the workers as a fee schedule:

1. Office call, 50 cents.
2. Out Calls (in City or within two miles of Doctor's office), \$1.00.
3. Out Calls (outside of city or in excess of two miles), \$1.00 plus 15 cents per mile, one way from doctor's office to home of patient. Entire amount of call shall not exceed \$3.00. More than one call on the same trip shall carry only one allowance for mileage.
4. Maternity Cases. The amount that may be paid for maternity cases is \$10.00. This shall include post and prenatal care.

After a brief discussion the following facts were brought out: This committee, meeting with the grocerymen, dry goods men, druggists, etc., said

to them, "We expect you to furnish us a good grade of supplies and you are expected to make a reasonable profit on same." To me this is a gross reflection on the medical profession and an insult to the memory of medical heroes of Mississippi and other States, some of whom have sacrificed their lives to give the world the true cause of malaria, typhoid, yellow fever, etc.; various others who have filled and are filling early graves because of their overwork helping suffering humanity, much of which was and is now charity work.

So far as I can learn the doctors of the State were not consulted when these unjust fees were set. The members of the Southeast Mississippi Medical Society are ready to do our part as we have always done, but when a committee says to the merchants, druggists, etc., "You stay in your steam heated building, work the short hours you have adopted, and make a fair profit on your goods," then say to the medical profession who have and are giving more to charity than all of them, that we are asked to go day or night into homes where there are infectious diseases, and risk our lives and the lives of our families, and then receive \$2.50 for a ten mile call, I again say it is an insult to the medical profession.

Therefore, I have been instructed as Councilor for the 7th District to urge you to call a meeting of the Council at the earliest date possible to meet in Jackson, and at this meeting Dr. J. W. D. Dicks and Dr. T. M. Dye, President and Secretary of Mississippi Medical Association be asked to attend. Also that you arrange with Dr. Felix Underwood a meeting with the Executive Committee, so that we can attend to the whole affair in one day.

In conclusion permit me to say that we pledged the relief committee here our cooperation and in no way hold them responsible for this unfair attack on our profession. We also feel that the dry goods men, grocerymen, druggists, etc., should receive what they are, but we are asking for a fair deal as well as them.

(Signed) Jos. E. Green,
Councilor 7th District
Mississippi Medical Association.

Natchez, Miss.
November 2, 1933.

Dr. Joseph Green,
Laurel, Mississippi.

Dear Dr. Green:

I have just received a copy of your letter to Dr. Dan Williams. I heartily agree with you in regard to the matter of compensation offered the medical profession for services to the indigent sick. In all of my official visits to medical societies this year I have called the attention of the profession to the injustice that is being accorded the doctor by organized charity, both lay and political. I

have urged organized medicine to take steps to stop it.

I have had correspondence with the state director of welfare work on the subject and was told that the regulations were made in headquarters in Washington and that we, the State Medical Association in Mississippi, could do nothing to change them. This correspondence was in August of this year. I suggested to the director that I would appoint a committee from the State Association to confer with him in regard to the matter and he replied that such a move would not affect the ruling at all.

Just two weeks ago I received from the Bureau of Legal Medicine and Legislation of the A. M. A. a new bulletin from the Federal Emergency Relief Administration in Washington. It is called "Rules and Regulations, No. 7, Governing Medical Care" for indigent sick. Judging from the changes noted in this bulletin the A. M. A. has been at work on the subject.

Section Two, Paragraph (g) of this bulletin states that the Federal Relief organization in each state shall ask organized medicine in each county to submit a fee schedule for the care of the indigent sick to the Federal Relief Administration in each state for approval by the Administration.

Section One of these rules states as follows: "A uniform policy with regard to the provision of medical, nursing, and dental care for indigent persons in their homes, shall be made the basis of an agreement between the relief administration and the organized medical, nursing, and dental professions, State and local."

As you will see Section Two provides for a fee schedule to be submitted by organized medicine, this schedule to be the basis for an agreement by organized medicine to care for the indigent sick. There is nothing in this bulletin that states that the welfare administration will make their own schedule and offer it to the profession.

I also notice in Section Three of these rules and regulations that the state and local welfare administrators shall request the president of the State Medical Association and the presidents of the county or component medical societies to appoint an advisory committee to act with the state and local relief administrations in all matters pertaining to the program for the care of the indigent sick.

Up to this date no request has come to me from the state administrator for relief for the appointment of such a committee from the Mississippi State Medical Association. I am writing Dr. Underwood in regard to the matter. He is a member of the State Relief Administration and I am sure he will take up the matter of the appointment of a committee with the state director at once. Just as soon as I receive the request to appoint this committee I will do so. This committee can then get to work at once to secure compliance by

the relief administration authorities with the sections of this bulletin, covering a schedule of fees.

When this committee is appointed there is one member whose name I can give at this time; the name of the member is Dr. Joe Green. I want a committee who will fight for the doctor right down to the last ditch. I know you will and I think you can put some ginger in the other members of the committee.

I think it is high time that the doctor receive just remuneration for his work. You will see an article I wrote on this very subject in the November issue of the New Orleans Medical and Surgical Journal, also an article in the October issue of the Mississippi Doctor.

In order that we may solve questions of this character satisfactorily I have urged an organization campaign in this state. At this time we only represent about 55 per cent of the medical profession of our state. This makes it hard to accomplish the desired end in matters pertaining to the welfare of our profession. We must increase our membership up to at least 90 or 95 per cent. When we do we will have less difficulty in making our voice heard in all matters pertaining to the medical profession.

I am with you all the way in this matter and anything that I can do to further the interest of the profession, I stand ready to serve.

With best wishes and kind regards, I remain,

(Signed) J. W. D. Dicks,
Natchez, Miss.
November 2, 1933.

Dr. Dan J. Williams,
Gulfport, Mississippi.

Dear Dr. Williams:

I am writing you in regard to the letter of Dr. Joe Green, suggesting a meeting of the Council to discuss the subject of the schedule of fees offered by the Federal Emergency Relief Administration for the care of indigent sick.

I heartily endorse Dr. Green's conclusions in regard to the fee schedule. I believe the physician is entitled to a fair fee for his services. He is as much entitled to it as the druggist, the grocer, or any other class of our citizens. In traveling over the state, visiting the different medical societies, I find that there is wide-spread dissatisfaction with the fee schedule offered by the Emergency Relief Administration.

Only recently I received a copy of the Rules and Regulations, Number 7, compiled by the Federal Emergency Relief Administration in Washington. This copy was sent to me by the Bureau of Legal, Medical and Legislation of the A. M. A. I note in these rules that the state administrator of relief

in each state shall deal only with organized medicine in the preparation of a fee schedule for the care of the indigent sick. It states that organized medicine in each county or in the state as a whole shall submit to the relief administration a fee schedule, covering the care of the indigent sick, for approval by the Federal Emergency Relief Administration.

Paragraph three of the same regulations also states that the State Administrator of Relief shall request the President of the State Medical Association to name a committee from the State Medical Association to act as an advisory committee in all matters pertaining to the program relating to the care of the indigent sick. It also states that the presidents of the county or component Medical Societies shall be requested to appoint a committee to serve in their respective localities to advise with local agents of the relief administration in matters pertaining to the care of the indigent sick in their respective localities.

Up to this date I have not been requested to appoint a committee from the State Medical Association. I have enlisted Dr. Underwood's aid in the matter and I feel sure if any man can get results, he can. I believe the appointment of a committee from the State Medical Association with Dr. Underwood on it can clarify the situation better than having a meeting of the Council. This committee would have an official status with the relief administrator, whereas the Council would not have this status. What do you think of the matter?

Organized charity, be it political or lay, should not impose on the doctor as it has in the past. I believe that organized medicine owes a duty to the profession to take this firm stand against the continuation of this injustice. I stand ready to help in any way that I can to bring about a satisfactory solution of the problem.

With kind regards,

(Signed) J. W. Dicks,
Pres., M. S. M. A.

This step of the President's in establishing contact between the Federal Relief Organization and the profession of Mississippi is a big forward step. BUT there is more to medical economics than merely getting the public to realize that doctors should be paid for their services to the indigent as well as grocers, druggists, and others are paid for what they supply to organized charity.

There is so much medical economics that the editors of this column shall welcome and encourage discussion of any phase of this subject. Put a little

ink in your fountain pen, Doctor, and let us have your views.

TELEGRAM

October 28, 1933.

Dr. J. S. Ullman,
Natchez, Mississippi.

You recall my wiring you from Washington two weeks ago. Following this appeal to the Federal Emergency Administrator I had communication from Harry Hopkins today announcing policy that more nearly adequate medical care for those on the relief rolls be given. stop I understand this to mean that physicians will be used more and paid more stop I immediately took up with Power the matter of increasing the physicians' work and compensation among the relief cases.

Felix J. Underwood.

MISSISSIPPI

DEATHS WITHOUT MEDICAL ATTENTION

	Total No. of Deaths	Deaths Without Medical Attention	
1932			
December	2069	493	—or 23.8 per cent of all
1933			
January	1748	360	—or 20.6 per cent of all
February	1498	279	—or 18.6 per cent of all
March	1780	366	—or 20.6 per cent of all
April	1547	261	—or 16.9 per cent of all
May	1466	288	—or 19.6 per cent of all
June	1757	280	—or 15.9 per cent of all
July	1643	289	—or 17.6 per cent of all
August	1607	297	—or 18.5 per cent of all

TREASURY DEPARTMENT

Public Health Service
Washington

October 20, 1933.

Dr. Felix J. Underwood,
State Health Officer,
Jackson, Mississippi.

Dear Doctor Underwood:

I am enclosing a copy of the stenographic report of your remarks at the Conference of State and Territorial Health Officers on June 7 and 8, 1933.

Kindly make the necessary corrections and return in the enclosed envelope as soon as possible.

Very truly yours,

C. E. Waller,
Assistant Surgeon General
Domestic Quarantine Division.

IGW/W

Dr. Underwood (of Mississippi):

Personally, I feel that there is no question but that adequate medical relief should be given. In

my own State, of the 2069 deaths reported to the Bureau of Vital Statistics during December, 1932, 23.8 per cent of them occurred without medical attention. About that time the State began to spend some of the Reconstruction Finance Corporation funds for medical care. During January of this year, 20.6 per cent of the people who died had no medical attention, and during February 18.6 per cent died without medical attention. The gradual reduction in the number of deaths without medical attention may be attributed to the Reconstruction Finance Corporation activities and to the provision of a small amount of medical relief. Speaking for Mississippi, I may say that the Federal Government has spent very little more for strictly medical relief than it has for garden seed. The medical profession must be given proper consideration in order to get the best results. If the medical men of the Nation could be brought to an enthusiastic state of feeling with reference to doing this work, rather than treated in such a way as to make them suspicious, we would perhaps have very few, if any, of the people dying without medical attention. Proper recognition will come, but I am afraid that as usual it will be delayed for such a long time that multiplied thousands of people in the country will pay for the delay with their lives.

In regard to the county health departments taking over welfare work: It could not be done in Mississippi under the present set-up because it would take all of the time of the public health worker. There is but one nurse in most of the counties with populations of from twenty to forty thousand people. If she had to administer relief, she would have no time for other work. We should cooperate in the closest sort of way, but I doubt if the plan outlined could be put into effect in Mississippi. Anyway, public health work is, and will continue to be, limited strictly to preventive measures.

Mr. Hopkins:

Are you getting any money for public health work now from the Reconstruction Finance Corporation, Dr. Underwood?

Dr. Underwood: None.

MEETING OF COUNCIL

Pursuant to a call by President J. W. D. Dicks through Chairman of Council Dr. D. J. Williams, the Council with President-Elect Parker and Secretary Dye met in the R. E. Lee Hotel, Jackson, at 10 o'clock, November 9, to consider plans for the operation of Federal Emergency Relief among the indigent unemployed of the state.

Under Rules and Regulations of Bulletin No. 7, of the Federal Relief a new set-up was advisable and so ordered. This is the first time in our history that the medical profession has been recognized in this way and it is the dawning of a new

day for organized medicine in that we have earned recognition in governmental matters, thus putting a damper on any fear of "State Medicine."

The Council, mindful of its relation to the Association and the profession in general, kept ever before it the duty of the profession to itself, the indigent sick and its worthy traditions, and pledged the profession to uphold its honorable name in giving the best that lies within us to these unfortunate sufferers from the world wide depression. The entire Council with one exception, Dr. L. L. Minor, who was in court, attended this meeting and the most liberal and cooperative spirit was shown in the discussion of all matters coming before it for action.

The following resolution was adopted by the Council and a certified copy sent to the Hon. George Power, Director of Relief in the State of Mississippi:

"Resolved, That we recommend to the State Board of Public Welfare that the following medical fees for services to be rendered by physicians of the State Medical Association under Rules and Regulations of Bulletin No. 7 of the Federal Relief Administration, be adopted: viz, A uniform fee of fifty (50) per cent of the usual prevailing fees obtaining in each individual community in the state, provided that in no instance shall the minimum fee be less than one (1 dollar for office calls, one dollar and fifty cents for visits in town or within a reasonable distance of the physician's office when same is in the country, and fifteen (\$15) dollars for obstetrical attention."

The Council further instructed the physicians to organize in their respective counties for the operation of this relief as all matters of difference must be adjusted by this medical set-up in each county in which medical relief is given.

All physicians are urged to get and read and study the recent Bulletin No. 7 of the F. E. R. and cooperate with those in authority and make the best of this measure for efficient relief to the indigent unemployed for the period of this emergency and when the further need of such relief is no longer required this scale of fees will automatically end and former fees will obtain.

W. H. Frizell,
Secretary, Council

Mississippi State Medical Association.

November 10, 1933

MEMBERSHIP

Even late in the year, the membership campaign under the direction of our vice-president is bringing results. The following is the gain in membership of the County Societies as of November 1:

GAIN IN MEMBERSHIP

Society	No. of Members		Gain	Per Cent Gain
	May	Nov. 1		
1. Issaquena-Sharkey Warren	40	45	5	12.50
2. East Mississippi	76	85	9	11.84
2. Winona District	36	40	4	11.11
4. Central	106	116	10	9.43
5. Homochitto Valley	32	35	3	9.38
6. Harrison-Stone-Hancock	34	37	3	8.82
7. Tri-County	23	25	2	8.70
8. South Mississippi	70	76	6	8.57
9. Northeast Mississippi	107	115	8	7.48
10. Delta	83	87	4	4.82
11. Claiborne County	6	6	0	0.00
12. Clarksdale & Six Counties	44	44	0	0.00
13. DeSoto County	8	8	0	0.00
14. Jackson County	11	11	0	0.00
15. Pike County	28	28	0	0.00
16. Tate County	9	9	0	0.00
17. North Mississippi	44	41	0	0.00
TOTALS	757	808	54	7.13

PRESENT MEMBERSHIP OF TOTAL PHYSICIANS IN JURISDICTIONS

Society	Number of		Per Cent Members
	Physicians	Members	
1. Pike County	30	28	93.33
2. Jackson County	14	11	78.57
3. Homochitto Valley	45	35	77.78
4. Issaquena-Sharkey-Warren	58	45	77.59
5. Tate County	13	9	69.23
6. Claiborne County	9	6	66.67
7. Central	178	116	65.17
8. East Mississippi	139	85	61.15
9. Tri-County	43	25	58.14
10. Harrison-Stone-Hancock	64	37	57.81
11. Clarksdale & Six Counties	77	44	57.14
12. DeSoto County	14	8	57.14
13. Northeast Mississippi	212	115	57.23
14. Delta	169	87	51.54
15. North Mississippi	89	41	46.07
16. South Mississippi	165	76	46.05
17. Winona District	88	40	45.45
TOTALS	1,407	808	57.42

STANDING BY DISTRICTS

District and Councilor	Number of		Per Cent Members
	Physicians	Members	
1. Eighth—W. H. Frizell	118	88	74.58
2. Fifth—W. H. Watson	245	167	68.16
3. Ninth—D. J. Williams	78	48	61.54
4. Sixth—H. L. Rush	139	85	61.15
5. Third—M. W. Robertson	212	115	54.23
6. First—J. W. Lucas	246	131	52.44
7. Second—L. L. Minor	116	58	50.00
8. Seventh—J. E. Green	165	76	46.05
9. Fourth—T. J. Brown	88	40	45.45
TOTALS	1,407	808	57.42

Watch for your standing next month!

CALENDAR

SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CLAIBORNE COUNTY MEDICAL SOCIETY:

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Alcazar Hotel, Clarksdale.

DELTA MEDICAL SOCIETY: April, Cleveland.

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July, and October, Hernando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December, Meridian, 3 P. M.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY: First Wednesday of each month, Bay St. Louis, Pass Christian, Gulfport or Biloxi, 7:30 P. M.

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July and October, Natchez, 2 P. M.

ISSAQUENA - SHARKEY - WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, Pascagoula, 7:30 P. M.

NORTH MISSISSIPPI MEDICAL SOCIETY: December, Batesville.

NORTHEAST MISSISSIPPI MEDICAL SOCIETY: December 19, Tupelo.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June; alternates between Hattiesburg and Laurel (December meeting in Hattiesburg), 3 P. M.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 P. M. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, at Wesson, Tylertown, Monticello or Brookhaven, 12:30 P. M.

WINONA DISTRICT MEDICAL SOCIETY:

MISSISSIPPI STATE MEDICAL ASSOCIATION: May 8, 9 and 10, 1934, Natchez.

MISSISSIPPI STATE PEDIATRIC SOCIETY

The Mississippi State Pediatric Society was organized in Jackson, on November 8, 1933. The following were elected charter members: N. C. Womack, Guy Verner, J. K. Bullock, Harvey Garrison, Jr., Harvey Garrison, Sr., of Jackson; R. E. Wilson, of Greenville; George L. Arrington, F. C. Riley, of Meridian; Joe Green of Laurel; Guy C. Jarratt, W. P. Robert, of Vicksburg. N. C. Womack was elected president; F. G. Riley vice-president, and Guy C. Jarratt secretary and treasurer for the ensuing year.

The main objects for the organization of the Society are: (1) Self information in all matters pertaining to pediatrics; (2) Passing on this information to the medical profession of the state so that it will become more interested in pediatrics and help us to. (3) Educate the laity along lines which will lead to the prevention and lowering of infant morbidity and mortality.

Members of this Society shall be designated (1) Active, (2) Associate.

(1) Active—Any physicians in good standing in the Mississippi State Medical Association who limits his practice to pediatrics, shall be eligible.

(2) Associate—Any physician in good standing in the Mississippi State Medical Association who is interested in pediatrics shall be eligible. Associate members shall enjoy all the privileges of the Society except voting and holding office.

Guy C. Jarratt,
Secretary.

Vicksburg,

November 13, 1933.

MISSISSIPPI STATE BOARD OF HEALTH

Recent out-of-town visitors to the Mississippi State Board of Health: Mrs. R. J. Cutter, Columbia University, New York City; Dr. W. T. Harrison, U. S. Public Health Service, Washington, D. C.; Dr. R. A. Vonderlehr, U. S. Public Health Service, Washington, D. C.; Dr. W. T. Fales, Vital Statistics Director, State Board of Health, Montgomery, Alabama.

Dr. Harry Handley and Miss Caroline Randolph of the Commonwealth Fund are spending two or three weeks in Mississippi. Miss Randolph has made advisory visits to the counties the Commonwealth Fund is assisting in—Pike and Lauderdale—and will spend some time in the central office of the State Board of Health. Dr. Handley has interviewed a number of physicians who are applicants for Commonwealth Fund fellowships for the 1934 class.

From all indications the birth rate in Mississippi will be lower this year than in recent years. The Bureau of Vital Statistics is very eager to have every physician in Mississippi who attends births to check back and make sure he has registered each birth he attended. This will insure that the birth rate is really lower and not seemingly so because physicians failed to register all births.

Dr. M. A. Sanchez-Vigil, Inspector-General of Sanitation in Nicaragua, Central America, who has been in Mississippi studying public health activities, especially laboratory procedures, since August 8, leaves on November 15 to enter Johns Hopkins School of Hygiene and Public Health. After he finishes a several months' course at Johns Hopkins, he and his wife will spend some time in

France and Switzerland before returning to Central America.

A portable roentgen ray machine has been purchased and will be sent out from time to time from the Sanatorium to counties in which there are no roentgen ray machines. Only those who are sent to the chest clinics by physicians or accompanied by physicians will be examined and x-rayed. This machine was purchased for the Mississippi State Board of Health by an outside philanthropic agency.

The results of the encephalitis experiment conducted at the Mississippi Penitentiary were entirely negative. The prisoners who volunteered for the tests and who were bitten by mosquitoes who had previously fed on bodies of persons having epidemic encephalitis suffered no ill effects. Governor Conner very promptly released these prisoner-participants from the State Penitentiary.

A similar experiment conducted in the Virginia State Penitentiary has just been concluded with negative results.

The studies in Mississippi and Virginia, in addition to the one in St. Louis and surrounding vicinity, greatly weaken, if they do not entirely disprove, the theory of mosquito transmission of encephalitis.

Felix J. Underwood,
Executive Officer.

Jackson,
November 13, 1933.

EIGHTH COUNCILOR'S DISTRICT

The Eighth Councilor's District held its annual medical program in Brookhaven in the substory of the Methodist Church, November 7, at 2 P. M., with a large and representative attendance.

At 12:30 P. M. the ladies of the Methodist Church served a most delicious and delightful banquet to the physicians and the Eighth District Women's Auxiliary which met at the same hour.

The ladies after lunch held their meeting after which they were shown courtesies by the lady hosts and were given a tea at Whitworth College by the home science class to which all daughters of physicians attending the college were invited.

At promptly 2 P. M. the program was entered into as follows:

Infant Foods and Feeding Problems—Dr. Charles J. Bloom, New Orleans, La.

Sphenoiditis—An Obscure Focus of Infection.—Dr. W. A. Wagner, New Orleans, La.

Some Diagnostic Problems of Hyperthyroidism.—Dr. J. A. Crisler, Jr., Memphis, Tenn.

The Early Diagnosis of Cancer.—Dr. C. Jeff Miller, New Orleans, Louisiana.

This proved to be one of the best and most informative programs ever offered by the district

organization. And this means that it was good, for the record of former meetings was a high target to shoot at.

The fellowship was fine and the essayists were most earnest in their presentation and readily explained any matter brought to their attention.

The Eighth District is justly proud of the history it is making in this mode of organization. Composed as it is of three component societies it holds this annual meeting usually in October. The executive and program committee is composed of the councilor, the presidents and secretaries of the respective societies. The councilor is chairman, the host society's secretary is ex-officio secretary of the meeting. This proves to be ideal as each year we meet with a sister society in rotation. Our programs are always open to any physician in the district.

We are of the opinion that the Council of the State Medical Association will do well to revert to the original idea of individual county societies with monthly or bi-monthly meetings and programs and organizations so necessary to control all things coming up for adjustment in many ways, *vide*, the Federal Emergency Relief, fee regulations, misunderstandings, etc; then have an annual meeting with an unusually strong scientific program. Large societies are very fine but we see very clearly the need of closer and stronger organization if we carry out the will and purpose of organized medicine.

We hope that the membership in general and the delegates in particular will study the above suggestion intelligently and dispassionately before we meet in the historic city of Natchez next May with our most active and earnest president, J. W. D. Dicks, who is laboring assiduously for the betterment of the profession and upbuilding of the State Medical Association.

W. H. Frizell,
Council of Eighth District.

Brookhaven,
November 13, 1933.

CENTRAL MEDICAL SOCIETY

At the November meeting of the Central Medical Society, Dr. A. G. Wilde presented a patient who was suffering from pemphigus of the eye. This is a rare condition which usually results in blindness. The patient had been partially operated on by Dr. Sims several years ago but never would finish. Dr. Sims said that operation frequently improved the condition. Discussion also by Dr. Batson and others.

Dr. Noel C. Womack dealt with current literature on tuberculosis in childhood. Dr. Womack's presentation of this abstract was most interesting.

Dr. L. Berry Neal read a paper on "Differential Diagnosis of Malignancy of the Stomach." Free discussion.

A talk by Dr. M. A. Sanchez-Vigil of Managua, Nicaragua, on "Conditions Pertaining to the Practice of Medicine in Nicaragua," was entertaining and gave the audience an insight into conditions found in a neighbor country.

Dr. Frank Hagaman's paper on "Resection of Sympathetic Nerves For Relief of Pelvic Pain" was discussed by Dr. J. A. Crisler, Jr., of Memphis and others. This proved a most interesting subject.

Resolutions pertaining to the death of our late member, Dr. W. L. Britt, were presented, adopted, and ordered spread upon the minutes.

Dr. H. F. Garrison reported a case of a boy inhaling thistle grass. Dr. L. B. Neal mentioned a similar case where a spike traveled through the lung and pleura and was removed from an abscess on the posterior chest wall. A year ago, Dr. J. C. Walker reported a similar case from the removal of abscess on the posterior chest wall. This grass seems to be peculiar to Mississippi as we find no reports of foreign bodies of this material from other parts of the country. These spikes of grass have a crawling movement. Fortunately, the spikes were pointed downward in Dr. Garrison's case, and the grass crawled out at the trachea.

Robin Harris,
Secretary.

Jackson,
November 12, 1933.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

The sixty-third semi-annual session of the Clarksdale and Six Counties Medical Society was called to order on November 8, at 7:30 P. M. in the Alcazar Hotel dining room by Dr. J. W. Moody, president, presiding. After the banquet, which was attended by 45 members and guests, the president retary, V. B. Harrison, read the minutes of the previous session and gave the financial report of the fiscal year.

Dr. T. M. Dye introduced a resolution and moved its adoption for the appointment of a joint committee to make arrangements for the amalgamation of the Clarksdale and Six Counties Medical Society and the Delta Medical Society. The privileges of the floor were extended to the visitors. The resolution was discussed by Drs. T. M. Dye, L. H. Brevard, H. L. Cockerham, F. M. Acree, R. C. Smith, and Hugh Gamble. The president selected Drs. T. H. Dye and L. H. Brevard as committee men to meet with the like committee from the Delta Society and Councilor of the First District.

Dr. E. L. Wilkins introduced a resolution and

moved its adoption for the Clarksdale and Six Counties Medical Society to accept and indorse a schedule of fees representing 50 per cent of its regular fees for the practice of medicine in the interest of the Federal Emergency Relief program.

Application for admission to membership was made by Dr. G. L. Biles, approved by the Board of Censors and admitted to the membership by vote of the Society.

The next order of business was the election of officers for the ensuing year with the following results: President, L. H. Brevard, Dundee; Vice-President for Bolivar County, J. L. Nicholas, Alligator; Coahoma County, I. P. Carr, Clarksdale; Quitman County, E. C. Gillespie, Lambert; Tallahatchie County, J. A. Harris, Webb; Tunica County, H. L. Johnson, Dundee.

Secretary and Treasurer.—V. B. Barrison, Clarksdale.

Member of Board of Censors.—T. G. Hughes, Clarksdale.

Member of Medico-Legal Defense Committee.—J. W. Gray, Clarksdale.

There being no further business before the Society, the scientific session was considered.

The Honorable Edward W. Smith gave an interesting address on "Physicians in the Law Courts." He discussed the technical set-up of courts at law and drew an analogy between the lawyer's procedure and the doctor's treatment. The discrepancies between conflicting testimonies of physicians, and the conduct of medical witnesses on the stand was considered. Being a guest speaker, his paper was not opened for discussion.

Dr. Conley H. Sanford, Memphis, gave a lantern slide address on "Classification and Treatment of Anemia." He particularly stressed the advantage of the newer classification over the older type of classification and emphasized the necessity for correctly diagnosing the type of anemia from the standpoint of therapy. The paper was discussed by Drs. F. M. Acree, Hugh Gamble and G. W. Owen.

The next on the program was "Cancer of the Larynx" by W. Likely Simpson of Memphis. Dr. Simpson particularly stressed the importance of hoarseness as a symptom as well as a good prognosis from early treatment of cancer of the larynx. The address was illustrated by lantern slides showing the technic of operative removal of the larynx. The paper was discussed by Drs. E. L. Wilkins, Hugh Gamble, and J. A. Beals. Dr. Beals emphasized the importance of radium and deep ray therapy on cancer.

Dr. I. W. Barrett of Clarksdale read a paper on "Some New Aspects of the Treatment of Hay Fever." He stressed the advantage of extract prepared with five per cent dextrose and preserved with cresolin over that of the older method of gly-

cerine. He reports results just as good, if not better, and this method less painful on administration.

Dr. W. H. Brandon, Clarksdale, read a paper on "Sterility," which was illustrated with lantern slides. The factor of tubal patency was emphasized and its recognition by the use of lipiodol instillations and roentgenograms.

V. B. Harrison, M. D.,
Secretary.

Clarksdale,
November 10, 1933.

DELTA MEDICAL SOCIETY

The Delta Medical Society was convened in its annual fall session at the court house in Belzoni, at 2 P. M., October 11.

The meeting was called to order by the president, Dr. J. C. Higdon of Belzoni.

The invocation was said by the Rev. A. T. Pope of Belzoni and the address of welcome by Mr. R. H. Nason of Belzoni. Response was by Dr. O. H. Beck of Greenville.

The minutes of the previous meeting in Greenville, April 12, 1933, were read by the secretary and stood approved as read. The treasurer's report was read and stood approved as read.

It was moved and seconded and duly passed that the privileges of the floor be extended to the visitors present.

A letter from Dr. J. W. D. Dicks, President of the State Medical Association, was read, expressing his regrets at being unable to attend the meeting as planned, and expressing the hope that the Delta Society would take a definite stand against the unjust practice of denying the doctors a proper remuneration for their "organized charity" work.

A telegram from Dr. P. W. Rowland was read, in which he expressed regret at not being able to attend the meeting, and sent best wishes for a successful meeting.

A resolution, adopted by the House of Delegates of the State Medical Association in annual session assembled in Jackson, May 11, 1933, was read, and unanimously adopted.

Applications for membership in the Delta Medical Society by Dr. I. B. Bright of Greenwood, and Dr. H. B. Cottrell of Indianola, were read, and it was voted that these doctors be admitted to membership.

On motion of Dr. G. M. Barnes, Belzoni, seconded by Dr. D. C. Montgomery, Greenville, the society instructed the president to appoint a committee of three to draw up resolutions on the death of two members of the Society, that is, Dr. J. P. Kennedy of Greenwood and Dr. T. E. Wilson of Arcola; a copy of the resolutions to be spread on the minutes of the Society, and a copy to be mailed to the family of the deceased. On the committee,

the president appointed Dr. D. C. Montgomery as chairman, Dr. L. B. Otken of Greenwood and Dr. G. M. Barnes.

A paper, "Glandular Extracts in the Treatment of Functional Menstrual Disorders," was read by Dr. J. E. Wadlington, Belzoni, and was discussed by Drs. C. P. Thomson, Greenville, and G. Y. Gillespie, Greenwood. Discussion was closed by Dr. Wadlington.

A paper, "Acute Osteomyelitis," was read by Dr. John A. Crawford, Greenwood.

A paper, "Spinal Anesthesia," was read by Dr. G. W. Eubanks, Greenville; discussed by Drs. Otkins, Colquitt, and Darrington.

A paper, "Atebrine and Plasmochin in the Treatment of Malaria," was read by Dr. A. M. Wynn, Merigold; discussed by Drs. White, Thompson and Patterson.

A paper, "Programs for Medical Meetings," was read by Dr. R. C. Smith, Drew.

A discussion of "The Neurotic Patient" was given by Dr. Jas. S. McLester, Birmingham, Ala.

Following the completion of the program of papers, officers for the society were elected as follows:

President—Dr. R. C. Smith, Drew.

Vice-Presidents—Volivar County, Dr. J. D. Simons, Gunnison; Leflore County, Dr. A. M. Gill, Sidon; Humphrey County, Dr. J. W. Jackson, Belzoni; Sunflower County, Dr. B. H. Higdon, Sunflower; Washington County, Dr. D. C. Montgomery, Greenville.

Secretary and Treasurer—Dr. F. M. Acree, Greenville.

Delegates to the Mississippi State Medical Association—Bolivar County, Dr. S. W. Colquitt, Beulah; Alternate, Dr. W. F. Carpenter, Cleveland.

Leflore County—Dr. L. B. Otkin, Greenwood; Alternate Dr. F. M. Holloman, Morgan City.

Humphrey County—Dr. G. M. Barnes, Belzoni; Alternate, Dr. J. R. Jackson, Belzoni.

Sunflower County—Dr. U. S. Wasson, Moorhead; Alternate, Dr. W. R. Weeks, Doddsville.

Washington County—Dr. P. G. Gamble, Greenville; Alternate, Dr. L. C. Davis, Greenville.

On invitation of Dr. Carpenter, it was voted that the Society would hold its next meeting in Cleveland in April. The Society then adjourned and went to Four-Mile Lake, where a barbecue supper was held for the members of the Society and of the Auxiliary.

F. M. Acree,
Secretary.

Greenville,
October 30, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

On the afternoon of Thursday, October 19, East Mississippi Medical Society met in the Lamar

Hotel, Meridian. Dr. Dudley Stennis presided. Forty-Six members were present.

Dr. William Krauss, now heading the Stingily Laboratories, Meridian, was elected to membership in the society. There was quite a lengthy discussion as to some method of getting antitoxins and vaccines for the treatment of diphtheria, tetanus and rabies in indigent patients. No conclusion was reached.

A discussion was then led off by Dr. C. T. Burt in regard to physicians working for the R. F. C. with the final result that a committee composed of Drs. C. T. Burt, W. H. Banks and W. J. Pennington was appointed to study this phase of work and report at the next regular meeting.

The following program was presented:

Discussion of Some Heart Disorders.—Dr. Leonard Hart, Meridian.

Discussed by Drs. I. W. Cooper, W. H. Banks and M. J. Lowry.

Fractures of the Elbow Joint.—Dr. J. S. Speed, Memphis, Discussion opened by Dr. L. V. Rush.

Next meeting will be held in Meridian on Thursday, December 21. Officers for 1934 will be elected at this meeting.

T. L. Bennett,
Secretary.

Meridian,
November 9, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

Call to order.—Pres. Joe Evans.

Roll Call.—Wolfe, Ward, Welch, Burnett, McCall, Hollis, Dearman, McDevitt, Parker, Caraway, C. A. and E. E. Sheely, Rouse, Shipp, Stevens, Carroll, McWilliams, Williams, Evans, Trudeau, Smith, Van Ness, Fahnstalk, Laird, Beckett. Visitors.—J. G. Gardner, Columbia; A. C. Hewes, Gulfport; Felix J. Underwood, and R. H. Ricks, both of Jackson.

Minutes of October meeting.—Read, corrected and accepted.

Paper.—“A Discussion on Community Hospitals,” Dr. J. G. Gardner of Columbia.

In his paper Dr. Gardner mentioned the well known fact that the present state charity hospitals were of benefit only to those communities immediately adjacent to them. Because of delay and long transportation, acute cases cannot be sent to the present charity hospitals but have to be taken care of in their own community hospitals. Dr. Gardner advocates the discontinuance of the present state charity hospitals so that the funds allotted for charity work may be given to community hospitals. A bill covering this matter has been prepared to be submitted to the legislature at its next meeting.

Paper discussed by Dearman, Underwood, C. A. Sheely and Carroll.

Committee on R. F. C. Medical Care.—Burnett, Nothing definite to report. Data being published.

Clinic.—Dr. Stevens presented a case of laceration of eye ball and outlined treatment.

Dr. F. J. Underwood.—Described the activities of the state headquarters of the R. F. C. in reference to medical relief. He compared the Mississippi fee schedule with that of other states. Said that a fairer fee schedule was a possibility. A meeting between the R. F. C. state headquarters and the council of the State Medical Association was planned.

Motion.—Van Ness, seconded, that this society go on record as being in favor of the chairman of the Council calling a meeting in Jackson to study and adopt fee schedule. Carried.

Councilor Williams asked for instructions. None given.

Adjourned.

E. A. Trudeau,
Secretary.

Biloxi,
November 9, 1933.

HOMOCHITTO VALLEY MEDICAL SOCIETY

At the October meeting of the Homochitto Valley Medical Society held at Natchez, the following officers were elected:

President: Dr. W. H. H. Lewis, Fayette.

Vice-Presidents: Adams County, Dr. J. D. Shields, Pine Ridge; Amite County, Dr. W. R. Brumfield, Gloster; Franklin County, Dr. L. Costley, Meadeville; Jefferson County, Dr. R. B. Harper, Fayette; Wilkerson County, Dr. J. W. Brandon, Jr., Woodville.

Secretary-Treasurer: Dr. W. K. Stowers, Natchez.

Delegates to Mississippi State Medical Association: Adams County, Dr. R. B. Sessions, Natchez, Alternate, Dr. F. Dixon, Natchez; Amite County Dr. P. Jackson, Liberty, Alternate, Dr. W. R. Brumfield, Gloster; Franklin County, Dr. C. E. Mullens, Bude, Alternate Dr. L. Costley, Meadville; Jefferson County, Dr. W. H. H. Lewis, Fayette, Alternate, Dr. B. R. Clark, Lorman; Wilkerson County, Dr. S. E. Field, Centreville, Alternate, Dr. C. E. Catchings, Woodville.

Board of Censors: Dr. J. C. Rice, Natchez; Dr. J. S. Ullman, Natchez; Dr. R. D. Sessions, Natchez.

Member of Committee on Medical Defense: Dr. J. C. Rice.

Committee on Arrangements for Meeting of Mississippi State Medical Association: Dr. L. S.

Gaudet, Natchez; Dr. R. D. Sessions, Natchez; Dr. R. T. Smith, Natchez.

Lucien S. Gaudet,
County Editor.

Natchez,
November 6, 1933.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

A regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, November 14, at 7 P. M. After supper and the reading of the minutes, Dr. W. H. Watson, Pelahatchie, Councilor, Fifth District, Mississippi State Medical Association, was introduced and explained the plans for the medical care of the indigent under the Federal Emergency Relief as outlined at the meeting of the Council on November 9 at Jackson. In accordance with these instructions of the Council, medical advisory committees were chosen for each of the three counties included in this Society as follows:

ISSAQUENA COUNTY: Drs. W. H. Scudder, Mayersville, Chairman; T. W. Huey, Grace, Secretary; J. B. Benton, Valley Park.

SHARKEY COUNTY: Drs. E. B. Stribling, Rolling Fork, Chairman; H. S. Goodman, Cary, Secretary; V. O. Stewart, Anguilla.

WARREN COUNTY: Drs. S. W. Johnston, Vicksburg, Chairman; N. B. Lewis, Vicksburg, Secretary; I. C. Knox, Vicksburg.

These committees represent and will act for all of the licensed physicians of their counties in order that the medical profession may uphold its fine traditions in the care of the indigent and at the same time receive equally distributed and fair partial compensation for services rendered to organized charity.

The scientific program included the following:

(1) The Importance of Full Mouth Roentgenograms.—Dr. Walton Shannon, Jackson.

Discussed by Drs. S. W. Johnston, H. H. Johnston, and P. S. Herring. Dr. Shannon closed.

(2) Leukorrhea.—Dr. I. C. Knox, Vicksburg.

Discussed by Drs. W. C. Pool, S. W. Johnston, A. Street and L. S. Lippincott. Dr. Knox closed.

(3) A Case Of Santonin Poisoning.—Dr. G. W. Gaines, Tallulah, Louisiana.

Discussed by Drs. P. S. Herring, W. C. Pool, W. H. Scudder, and A. Street. Dr. Gaines closed.

Dr. Nathan B. Lewis, Vicksburg, was Program Chairman.

In compliance with the action of the Society at its last meeting, the President has appointed as the malarial committee Drs. L. S. Lippincott, B. B. Martin and S. W. Johnston. At the invitation of this committee, other organizations of the community have appointed representatives to form a joint committee as follows:

Representing the Warren County Health Department,—Dr. F. M. Smith and Mr. John B. Grant; Representing the Vicksburg Chamber of Commerce, Mr. H. V. Cooper, and Mr. John Christian; Representing the Mayor and Commissioners of the City of Vicksburg, Hon. J. J. Williamson; Representing the Warren County Board of Supervisors,—Hon. J. W. Garratt, Hon. Hugh Calvin, and Hon. George E. Hogaboom; Representing the Mississippi River Commission,—Lieutenant Charles G. Holle; Representing the United States Engineer,—Dr. R. C. Kesler. The first meeting of the joint committee was held on November 7.

The next meeting of the Society will be held at the Hotel Vicksburg on Tuesday, December 12. This will be the annual meeting to which all members of the Mississippi State Medical Association and the Louisiana State Medical Society will be invited. Dr. J. W. D. Dicks, President of the Mississippi State Medical Association will be one of the principal speakers. Two other essayists will present papers. The meeting will be preceded by the annual banquet and officers for the year of 1934 will be elected.

NORTH MISSISSIPPI MEDICAL SOCIETY

I am sending you program of the meeting of the North Mississippi Medical Society at Oxford on October 25. There were 32 physicians in attendance and most of the medical students at the University. Everyone seemed to enjoy the meeting as well as the interesting papers read by the different essayists. Our next meeting will be sometime in December at Batesville. We are all invited on a deer and duck hunt at this meeting. The program of the October meeting was as follows:

Invocation—Rev. Frank Purser, Oxford.

Luncheon.

Business.

Reading of the minutes and election of officers.

Address.—Dr. J. W. D. Dicks, President, Mississippi State Medical Association.

Treatment of Malaria.—Dr. J. B. McElroy, Memphis.

Discussion opened by Drs. A. P. Alexander and H. R. Elliott.

Pneumothorax.—Dr. F. E. Rehfeldt, Jackson.

Discussion opened by Drs. C. M. Speck and C. R. Senter.

Diseases of the Thyroid Gland—A Discussion of Some Practical Points.—Dr. R. L. Sanders, Memphis.

Discussion opened by Drs. G. A. Brown and J. I. Mayfield.

Dr. George A. Brown, Water Valley, presided. Dr. A. H. Little, Oxford, is secretary.

E. S. Bramlett,
Oxford,
County Editor.
October 28, 1933.

NORTH MISSISSIPPI MEDICAL SOCIETY

The December meeting of the North Mississippi Medical Society will be held at Batesville; the exact date has not yet been set. We will probably meet during the open hunting season for deer which is December 27 to 29, inclusive. The Society was extended a special invitation by the Batesville doctors to meet in Batesville and enjoy a duck, deer and squirrel hunt on the same date as the regular Society meeting.

At the last meeting of this Society, officers for the year 1934 were elected as follows:

President—Frank Ferrell.

Vice-Presidents—Benton County, J. J. McGowan; Lafayette County, W. W. Phillips; Marshall County, Ira B. Seale; Panola County, G. H. Wood; Tippah County, C. M. Murry; Union County, H. N. Mayes; Yalobusha County, R. J. Criss.

Delegates to the Mississippi State Medical Association: Benton County, Frank Ferrell, Alternate, J. J. McGowan; Lafayette County, B. S. Guyton, Alternate, J. C. Culley; Marshall County, D. E. Moore, Alternate, C. R. Senter; Panola County, G. H. Wood, Alternate, H. R. Elliott; Tippah County, R. M. Adams, Alternate, C. M. Murry; Union County, C. M. Speck, Alternate, S. E. Eason; Yalobusha County, G. A. Brown, Alternate, J. S. Donaldson.

Secretary—A. H. Little, Oxford.

A. H. Little,
Secretary.

Oxford,
November 11, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

At the September meeting of the South Mississippi Medical Society the resignation of Dr. C. C. Buchanan, Hattiesburg as reporter for Forest County, was presented and Dr. L. B. Hudson, Hattiesburg, was elected in his place.

Our program committee is working on a very elaborate program for our December Meeting which is to be held in Hattiesburg. I will give you the details of this within the next month.

J. P. Culpepper, Jr.,
Secretary.

Hattiesburg,
November 8, 1933.

CHICKASAW COUNTY

Dr. W. P. Webster, who has been located at Big Creek, for the past three years, has moved to Vardaman, where he will continue his practice.

Dr. W. J. Aycock, Derma, was operated on for appendicitis at the Houston Hospital, October 10. He had the operation done with local anaesthetic and complained as if it hurt a little, but of course it didn't. He recovered very promptly and is about to resume his usual practice of medicine.

Miss Jeanette Hood, daughter of Dr. and Mrs. J. M. Hood, Houlka, was recently elected "Miss Houlka" at a beauty contest held at the school building.

Mrs. W. O. Roberts, Sturgis, is being treated at the local hospital this week. Mrs. Roberts is the daughter of Dr. and Mrs. W. D. Arnold, Ackerman.

Miss Anna Belle Darracott, attractive daughter of Dr. and Mrs. G. F. Darracott, Houston, is spending the winter in Hartford, Conn. and New York City.

Mrs. Seale Harris, Houlka, sister of Dr. E. G. Abernethy, Algoma, is in the Houston Hospital for treatment.

Dr. S. L. Taylor, Hohenlinden, as well as his son, Lloyd, are quite sick with flu at this time.

Mr. J. R. Priest, Jr., son of Dr. and Mrs. J. R. Priest, Houston, and Miss Rebecca Rinehart, Oktaha, Oklahoma, were married September 16. Mrs. Priest is a graduate of Northeastern State Teachers College, Tahlequah, Oklahoma. Mr. Priest is studying first year medicine at the University of Mississippi.

W. C. Walker,
County Editor.

Houlka,
November 6, 1933.

DESOTO COUNTY

The DeSoto County Medical Society is squarely behind the able president of the Mississippi State Medical Association, Dr. J. W. D. Dicks, in promoting all the interests of organized medicine in this state.

This county has 75 per cent of the doctors in the county members of the local medical unit. This percentage will be increased before the fiscal year is closed. The doctors are more cheerful and busy and look forward to better times. Let every member put his shoulder to the wheel and exert every effort to make this the banner year of our Association.

L. L. Minor,
County Editor.

Memphis, Tenn.
Route 4,
November 10, 1933.

FRANKLIN COUNTY

Dr. and Mrs. A. C. Loftin, of Lucien, have both been afflicted with furunculosis for the past several months, but report no new crop for the past month. The doctor is past-master at Lucien and has given up active practice except for a few intimate friends. He also "pinch hits" for your correspondent when the latter gets behind with his goose hunting.

Mrs. Hattie Ross Towns, mother of Dr. S. R.

Towns, of Quentin, expects to celebrate her 95th birthday on December 19 next. Her health is good for one of her age.

Dr. S. R. Townes attended a meeting of the doctors of the Eighth Councilor's District in Brookhaven, on November 7. This meeting was well attended by the doctors of this district.

S. R. Towns,
County Editor.

Quentin,
November 8, 1933.

HARRISON COUNTY

Dr. E. C. Parker of Gulfport and Dr. G. W. Wallace of Biloxi, attended the Clinical Congress of the American College of Surgeons recently held in Chicago.

Dr. C. H. McCall attended the meeting of the American Urological Society which was held in Chicago during the summer.

Dr. E. B. Van Ness attended the meeting of the American Roentgen Ray Society. This too was held in Chicago.

Dr. E. A. Trudeau spent a month at the Mayo Clinic studying proctology. He admits that a popular complaint brought on by hard times prompted his selecting this work.

Dr. Joe Evans, president of our medical society, was introduced as a visitor when he attended a recent meeting of the society.

Dr. Ira L. Parsons is gradually filling his new Veterans Hospital. Nothing was left undone to make this hospital one of the most complete and modern in the country.

George F. Carroll,
County Editor.

Biloxi,
November 8, 1933.

HINDS COUNTY

The staff of the Baptist Hospital met the last Tuesday evening in October. A good crowd was present, a splendid dinner served and a most enjoyable program rendered.

The Medical and Surgical Forum held its monthly meeting the last Thursday evening in October. Election of officers resulted in the election of Dr. L. B. Moseley, president, replacing Dr. L. W. Long; Dr. Temple Ainsworth, secretary, replacing Dr. Wm. F. Hand. The Forum is a very much awake organization of the doctors under the age of 35 years in Jackson and the surrounding towns. Any regular practicing physician is cordially invited to the meetings at any time.

Dr. Rehfeldt of Jackson recently spent two weeks in Chicago where he visited the various clinics there. He reports a mighty good trip.

Dr. R. B. McClain, recently finishing work in New

York, has just opened offices in Jackson for the practice of his profession.

Dr. D. T. Brock, formerly of McComb and known to practically every practitioner of medicine in these parts, has recently opened offices in Jackson. Dr. Brock and Dr. McClain are both welcomed additions to our ranks.

The staff of the Jackson Infirmary met the evening of October 31. A splendid oyster dinner was served, with all the extras, after which the members retired to the library where an interesting program was enjoyed.

Jackson, Hinds County, Mississippi, and the entire medical profession lost a most valuable and beloved soul in the person of Dr. W. L. Britt, who was killed here in an automobile accident, October 19.

Dr. Gus Crisler, Jr., of Memphis, was a most welcomed guest at the last meeting of the Central Medical Society which met at the Robert E. Lee Hotel, November 2. This was one of the best meetings we have had in a long time. Let's make the next one better still. Come out!

Wm. F. Hand,
County Editor.

Jackson,
November 9, 1933.

KEMPER COUNTY

Dr. P. C. Overstree, Shaw, who has been visiting in DeKalb during the past few weeks, announces that he may change his residence to DeKalb and practice there.

The many friends of Dr. J. M. Cook, Preston, are happy to learn that he is slowly recovering from the effects of a cerebral hemorrhage suffered about six weeks ago. We hope that his recovery will soon be complete and that his community will regain his benevolent service in the near future.

Dr. C. M. Gully, DeKalb, has been taking a little pleasure jaunt through the Delta.

Dr. C. V. Creekmore, our county health officer, reports that all is quiet on the county front except for an occasional forage by the sarcoptes scabien.

The writer had the good fortune of being able to attend the congress of the American College of Surgeons and the Century of Progress during the past month. It was a great combination, and if it repeats next year, don't miss it.

A. M. McCarthy,
County Editor.

Electric Mills,
November 7, 1933.

LEAKE COUNTY

Dr. Bryant Wilson formerly of Philadelphia, has recently located at Carthage and will do minor

surgery and general practice. Wish him success in his new location.

Dr. A. L. Thaggard of Madden is the proud father of a fine daughter arrived September 4.

Dr. F. L. Brantley and his friends, Mr. and Mrs. L. J. Sanders and son, attended the world exposition at Chicago from August 26 to September 3. Motored, had a fine trip, enjoyed by all of the party.

Leake County Medical Society has recently joined the East Mississippi Medical Society which is one of the best societies in the state. Leake County has sixteen active doctors. We hope to see all of them become members of our society in December when we have our next meeting at Meridian. Dr. I. A. Chadwick of Carthage has been elected vice-president for Leake County.

Dr. Sam Martin of Carthage has recently purchased a new V-8 Ford. Be careful, Doctor.

Dr. A. L. Thaggard and Dr. F. L. Brantley of Madden, attended the meeting of the East Mississippi Medical Society, Thursday afternoon, October 19, at Meridian, where we heard a very instructive paper read by Dr. Speed, of Memphis, Tenn., on fractures of the elbow and treatment of same, and also a paper on heart diseases by Dr. Hart of Meridian. Both papers were very highly enjoyed by the writer.

Dr. I. A. Chadwick, Carthage, our county health officer, informs me of several cases of diphtheria in the county. Doctors, get busy and vaccinate the babies and children from the dreadful disease of diphtheria.

It seems that malaria has had all of the doctors in our county on the go for the past month or so. I have not heard of only one or two cases of typhoid fever in light form being reported from our county.

F. L. Brantley,
County Editor.

Madden,
October 25, 1933.

LEFLORE COUNTY

Dr. T. R. Austin, member of surgical staff of Rochester General Hospital, Rochester, N. Y., spent several days in October with his mother, Mrs. Alice Austin.

Dr. J. A. Crawford visited Jackson on October 19. Drs. S. L. Brister, Sr. and S. L. Brister, Jr., attended the Southwestern-State College game at State College, October 27.

Dr. R. B. Yates attended the Columbus-Greenwood High School game at Columbus, October 28.

Dr. S. L. Brister, Jr., wife and baby have just returned from Tuscaloosa, Ala., where they have been visiting Mrs. Brister's father and mother.

On Sunday, October 29, at noon, at the First Methodist Church, Miss Josephine Luck, daughter

of Dr. Ben D. Luck of Pine Bluff, Ark., was married to Mr. Blackmon of Clarksdale. Dr. B. D. Luck and son of Pine Bluff attended the wedding.

Dr. Virgil Payne and wife of Greenville, attended the Luck-Blackmon wedding here on October 29.

We are glad to report that Dr. W. E. Denman, who has been ill at his home on River Road, is able to resume his practice.

W. B. Dickins,
County Editor.

Greenwood,
November 7, 1933.

MONROE COUNTY

Hallowe'en has come and gone again. The ghosts of our misdeeds and failures during the preceding year stalked abroad as usual. Let us hope they come no more to disturb and tantalize us. But I am wondering if the scratching of the "big bad wolf" of hard times and depression at our doors did not disturb our thoughts and slumbers more than did the unhallowed moans and groans of the aforementioned ghosts? I am, further, wondering if, when our government shall have bought up all the gold of all the world, we shall be freed from fear of these hideous ghosts and this hungry wolf? If not, let us try to work up an optimism equal to that of the Irishman, who thanked the Lord that the worst was yet to come. One very gratifying thought and fact is that we farmers (and doctors) can pay the poor down-trodden bankers twice as much on our debts of long ago, with ten cent cotton as we could have done with cotton selling at five cents or less. If it were my purpose to preach a sermon or deliver a lecture on the enigmatical problems of the present day financial situation, the above lines might be my text. But for the relief of your readers, I hasten to say that I have no such purpose.

How I wish all my friends might have gone to Calhoun City. It was a glorious day and a most happy occasion. It was a splendid program—the essayists listed were all there—the papers well prepared and delivered. The attendance was large—the interest keen as evidenced by the liberal discussion and praise of the papers presented. The dinner served (picnic fashion), was fine and abundant. But above all the hospitality of the Calhoun people was magnificent. All honor and praise to the gracious ladies who made the occasion so enjoyable.

The society voted to honor the Monroe County doctors by holding one of its quarterly meetings each year in the future at Greenwood Springs. This is an honor that every Monroe doctor should feel exceedingly proud of.

Our next and last meeting of the year will be held at Tupelo, on the 19th of December. "Meet me

there" and see a great society "in action". As is usual, we expect to have some out-of-state celebrity to present, as "sauce," a paper (not apple sauce), for the main course. Tupelo is a fine town—a wonderfully fine town, and her doctors are as fine a bunch as can be found anywhere. Most of them are young, or youngish—they are the up-and-coming type. The old non-progressing members of that group (if there are any of that kind there) might as well stand aside if they do not care to be trampled under foot by the others. I wonder why any doctor can ever lose step with his fellows? The older a man is, in years, the less excuse, it seems to me, he has for getting behind. Should he become physically disabled so that he can not do as much bedside work as formerly, the more time he will have for office work and study. Again, as I see it, there is no legitimate excuse for any doctor, either old or young, to fail to attend medical meetings REGULARLY. If he does he fails in his duty to his clientele and to himself. "Do your duty tho' the heavens fall."

None of my doctors have been sick—nor have they had serious sickness in their homes since my last communication. One of Amory's dentists (Dr. A. A. Allen), former president of the Mississippi State Dental Association and ex-service man, is in the Veteran's Hospital in Memphis. I am very sorry to have to say his condition is serious. He is suffering from a complete left sided hemiplegia. While I was in Memphis one day last week I visited him. He had regained, to a very limited extent, use of his foot and leg—but no motion was possible in hand or arm.

A letter from my good friend, Dr. W. A. Evans of Chicago, tells me I am to expect a brief visit from him on Armistice day. But as usual, he will be busy all the time since he wants to visit a few historic spots in my part of Monroe county during the day. Later he will most probably use some of the data assembled in a history of the early days of the state.

Until early in December, "so long".

G. S. Bryan,
County Editor.

Amory,
November 2, 1933.

PIKE COUNTY

Dr. R. M. Brunfield and family have just returned from Chicago where they attended the Century of Progress.

The regular monthly meeting of the Pike County Medical Society was held in the sub-story of the First Baptist Church in McComb on Nov. 2. The meeting was well attended. Dr. A. B. Harvey of Tylertown read a most interesting paper, subject:

"Prenatal Care." A most interesting discussion followed.

Dr. J. A. Milne of the State Board of Health spent several days in Pike County with the Public Health Department. He was present at the November meeting of the County Medical Society.

Dr. H. E. Handley of New York, representing the Commonwealth Fund, was a visitor in Pike County for several days. His was an official visit of inspection of the work and activities of the County Health Department. He, Handley attended the November meeting of the Medical Society. He expressed himself as well pleased with the progress of the work of the health department under the able and competent supervision of Dr. T. Paul Haney, Jr. Dr. Handley was pleased with the cooperation the doctors of the county have given Dr. Haney.

Dr. T. Paul Haney, Jr., is leaving November 11 for Richmond, Virginia, where he will attend the meeting of the Southern Medical Association and deliver a paper on "Health Centers in Rural Public Health Service."

Mr. Beverly Dickerson, son of the late Dr. L. D. Dickerson, is in a very serious condition in the McComb Hospital as a result of a car wreck. His host of friends sincerely hope he will soon recover.

Miss Ava Burton Hewitt, daughter of Dr. and Mrs. T. E. Hewitt, was married to Mr. Harold D. Alford of McComb in the Summit Baptist Church on October 19. They will be at home on New York Avenue, McComb, after the 1st of November.

Dr. Thomas Purser was on the sick list for several days. His many friends are glad he is able to be out again.

T. E. Hewitt,
County Editor.

Summit,
November 9, 1933.

PONTOTOC COUNTY

Dr. J. H. Windham and Dr. E. B. Burns of Ecu, Dr. J. M. Hood of Houlika, Dr. A. H. McGregor of Randolph and Dr. W. H. Reid of Toccopola attended the educational rally at Pontotoc on Friday, November 3.

Very little sickness reported in county at present.

Very few of our doctors expect to attend the Southern Medical Association meeting at Richmond, Va., next week.

Not any sickness, deaths or marriages in our doctors' families this month, so will ring off for this time.

R. P. Donaldson,
County Editor.

Pontotoc,
November 8, 1933.

QUITMAN COUNTY

We all sympathize with Dr. E. C. Gillespie in his recent bereavement, the loss of his father, Dr. Edwin A. Gillespie.

The Clarksdale and Six Counties Medical Society meets in Clarksdale on November 8.

Dr. and Mrs. H. C. Donaldson were guests in the home of Dr. and Mrs. E. A. McVey this week

Eric A. McVey,
County Editor.

Lambert,
November 7, 1933.

SHARKEY COUNTY

Dr. and Mrs. M. J. Few, Rolling Fork, spent several days in Memphis with friends.

Mrs. H. S. Goodman, Cary, is the county chairman of the tuberculosis seal stamp sale. She is planning a very intensive campaign and hopes to reach the county quota.

Dr. A. K. Barrier, Rolling Fork, our efficient county health officer, is very busy checking the school children and attending to the other duties of his office.

We are all looking forward to the visit of Dr. Felix J. Underwood to the Anguilla High School, December 5, when he will address the Parent-Teachers' meeting.

W. C. Pool,
County Editor.

Cary,
November 9, 1933.

SIMPSON COUNTY

The doctors over the entire county have been busy battling malaria for the past several months. A few fatalities have been reported which is a rare thing in this county. Quite a few of us have been using atabrine and like it very much. Really believe it cuts the cases shorter and I hope it is not attended with so much nervousness.

Central Medical Society met on the 7th inst., and a very fine program put over. These Jackson boys know their stuff when it comes their turn to do something great for the other fellow. We all like the good Samaritan. Some of our doctors are really doing something for humanity; the balance of us are just following along. Reminds me of a few good fox dogs in a chase followed by a big pack of just dogs. We all know what we are after because we hit the trail occasionally, but it's the few that follow closely.

Something really worthwhile going on at the state tubercular sanatorium all the time. Pay it a visit and see if I have erred. Dr. Burdine, from State Charity Hospital, Jackson, has recently been added to the Sanatorium staff. Dr. Burdine is

young, full of sense, pep and very good looking. We wish him well in his new work.

Hospital here is running full all the time and is being handled well by Dr. Diamond. Joined the boys in their annual fox hunt the other night. About four hundred of us topped the hills for three hours, and sly fox took a tree. If I were just young again.

Yours for better work,

E. L. Walker,
County Editor.

Magee,
November 8, 1933.

TIPPAH COUNTY

I am ashamed not to have sent you a line for sometime but have had but little of news.

Tippah County was well represented at the North Mississippi Society meeting at Oxford and all felt well paid for their going. We not only had a fine address from Dr. Dicks, but also a magnificent paper by our Dr. McElroy, who handled his subject in a truly masterly way. One was not surprised in this as he has long been an authority on malaria, to which he has given so much time and thought. Also the topic presented by Dr. Sanders was well presented and showed that he had profited much in the comparisons he had made, and he made his position so plain as to indications for treatment, medical as well as surgical, that those who followed his reasoning ought to have received much benefit.

Dr. A. V. Murry, who has been in Ripley with his father since he came from his internship at Shreveport, was elected to membership making the third generation in his family who have been members from his town, where there has been a Dr. Murry for the past 83 years.

Several of our doctors are contemplating going to Richmond next week to the Southern Meeting. One of our county had been a member since 1908.

There is one matter not of so much importance, yet the nature of which is so unjust that I think our State Association ought to try to have it rectified, that of having doctors submit bids for practice for those poor unfortunate inmates of our county homes. It seems to me that they are entitled to as good as can be had.

C. M. Murry,
County Editor.

Ripley,
November 10, 1933.

TISHOMINGO COUNTY

Dr. N. C. Waldrop of Tishomingo, one of our leading physicians, spent a short time on business in the thriving town of Iuka Monday.

We are having quite a lot more diphtheria in our county from some cause or other. I am in favor of Dr. Bryan's plan of employing a technician for the county. This would lessen the incidence a whole lot and save chill tonic and quinine by the hundreds every year in the cases of supposed malaria.

You have to stir early and late to beat Dr. Brown in obstetrics. He tells me that he answers two obstetric calls at same time and "catches them both."

The doctors and people we believe here in heart of the T. V. A. area will greatly profit thereby if we will be on the job and make all ample preparations therefor.

T. P. Haney,
County Editor.

Iuka,
November 9, 1933.

WARREN COUNTY

Dr. Green of Utica attended the October staff meeting of the Vicksburg Infirmary.

Dr. and Mrs. Augustus Street spent the first and part of the second week of October in Chicago. The high points of interest were the American College of Surgeons and the Century of Progress Exposition.

At the October staff meeting of the Vicksburg Hospital, the secretary announced the resignation of Dr. W. D. Anderson as member of the staff. Inasmuch as Dr. Anderson's resignation was tendered only after he had been offered and accepted the position as associate roentgenologist at the Baptist Hospital, Memphis, Tennessee, it was regretfully accepted by the staff. An expressive gift was then presented Dr. Anderson as a token of esteem from the entire staff.

There were eleven young ladies, coming from Mississippi, Louisiana and Arkansas, that composed the graduating class from the Vicksburg Sanitarium and Crawford Street Hospital Nurses' Training School. The graduating exercises were held October 8, 7:30 P. M. at Trinity Episcopal Church. Rev. Gordon Reese delivered the graduating sermon and Dr. George Street delivered the diplomas. This was a fine class of young ladies; everyone had a good foundation by virtue of having graduated from an accredited high school. Some had gone further in their studies. All had builded well on this foundation in their three years of nursing study and training. Ye Editor feels that he can speak with authority as it was his privilege and pleasure to give 128 teaching hours to this group of excellent students. May the spirit of Florence Nightingale abide with them in a service that can enrich their own lives and prove a blessing to many others.

Dr. I. C. Knox saw the ball game in Birmingham while en route to attend the meeting of the American College of Surgeons to see what I. C. could see at the Worlds Fair, Chicago.

Dr. Edley Jones, one of Vicksburg's famous sinus explorers, inveigled a few of the boys, including Louie Cashman, manager of the Evening Post, and "Doc" Chilton, to go on an unusual exploration tour. They followed into the land of the 'Cajans even to and beyond the city of Wyclosky, Edley claiming all the while that from these pristine waters that lay like "sinuses" in the body of lower Louisiana, he would draw forth piscatorial beauties that would rival and surpass in catch and size any of those that had been recorded in the many fish stories Louie had often carried in his paper. On their return the only visible evidence of such a notable outing was sunburned hands and arms, extremely red faces and noses as a result of ultra violet rays or ultra violent ways?

Dr. G. W. Gaines, our Louisiana neighbor and "confrere", attended the October staff meeting of the Vicksburg Hospital. Dr. Gaines lives and practices medicine in Tallulah, Louisiana, a beautiful little city twenty-five miles west of Vicksburg. He seldom misses or fails to attend all medical meetings held in Vicksburg where he is always welcome and his opinions on matters medical are most highly esteemed.

The call and irresistible desire to view again the scenes of our happy yesterday years possessed our beloved dean and nestor of medicine, Dr. H. H. Haralson, who, accompanied by his wife and daughter, Mrs. Sydney W. Johnston, spent a few days this month in Forest, and Harpersville. We rejoice with "Dad" in the happiness he must have experienced in walking again in the old familiar places and meeting some familiar faces that gladdened the halcyon days of his ambitious and eventful young manhood.

Who was it that said that Guy C. Jarratt was the embodiment of discontent and discouragement, that his spirits were as low as a "snake's vest pocket?" It is not true. He, on the contrary, is a living example of perfect realization, highest hopes *not* deferred, his spirit holds communion with the mountain peaks, his soul is high, "high in the clouds," and you ask, "what is it all about?" Why, it is the safe and timely arrival on October 4, 1933, of that wriggling, wiggling, mass of human protoplasm, of unlimited possibilities that he has seen fit to call Guy C. Jarratt, the Third, monarch of all he surveys and king of Babydom. We salute his Majesty, and hope that in the years to come he will grow up and make a baby doctor, "just like dear old Dad."

Dr. W. H. Parsons, Vicksburg, attended the meeting of the Southern Medical Association at Richmond, Va., and in collaboration with Dr. W. G.

Weston, read a paper on "Multiple Traumatic Arteriovenous Aneurism, with case report.

Dr. H. T. Ims,
County Editor.

Vicksburg,

November 4, 1933.

WASHINGTON COUNTY

The fall meeting of the Delta Medical Society was held in Belzoni, October 11. This proved to be one of the best meetings ever held by this Society. The program was excellent, the attendance large and the entertainment great. The following doctors and wives from Washington County attended: Drs. W. P. Shackelford and S. L. Lane and Mrs. S. M. Shankle, all of Hollandale; Dr. R. N. Crockett, Winterville; Drs. J. Shackelford, D. C. Montgomery, R. E. Wilson, E. T. White, E. W. Eubanks, Dr. and Mrs. O. H. Beck, Dr. and Mrs. T. B. Lewis, Dr. and Mrs. C. P. Thompson, Dr. and Mrs. J. A. Beals, and Mrs. J. C. Pegues, all of Greenville. Thus one-third of the Washington County doctors attended the Delta Medical Meeting, a very good showing, but let's do better next time and make it at least two-thirds.

Drs. A. G. Payne, H. A. Gamble, and J. F. Lucas of Greenville, attended the meeting of the American College of Surgeons in Chicago, Ill., October 9 to 14. Dr. J. F. Lucas was inducted into the College at this meeting. Dr. Lucas' friends and associates wish to congratulate him on this great achievement and wonderful honor.

The many friends of Dr. J. R. Baldwin, Greenville, are glad to see him out after being confined to his home for a week or so on account of a recent illness.

Dr. and Mrs. P. G. Gamble and children, Paul and Mary, of Greenville, spent two weeks in Chicago, Ill., attending the fair.

Dr. J. G. Archer, Greenville, was one of the few Legionnaires of Greenville who attended the National Convention of the American Legion in Chicago, Ill., Oct. 2 to 6. While there he also enjoyed the fair. Dr. Archer reports that 300,000 attended the Legion Convention and that 165,000 marched in the parade.

Dr. D. C. Montgomery, Greenville, attended the Vanderbilt-L. S. U. football game at Baton Rouge, La., October 28.

Drs. F. M. Acree and J. G. Archer, Greenville, were among those who went to Clarksdale, October 27 to the Clarksdale-Greenville football game.

Dr. T. C. Oliver, Leland, visited his son, Ferris, at Sanatorium, a few days this past month.

John G. Archer,
County Editor.

Greenville,

November 7, 1933.

RESOLUTIONS

Whereas, on the 22nd day of September, 1933, Dr. Thomas F. Willson was called by death in the prime of his strength and usefulness; and

Whereas, for many years Dr. Willson was an outstanding citizen of the county, a fighter for every good cause, a worker in every field of civic improvement, a supporter of every charitable undertaking, and in particular a tower of strength to the American Red Cross in administering to the needs of the county and in raising funds to carry on their work,

Now, therefore, be it resolved that in the death of Dr. Thomas F. Willson the Washington County Chapter of the American Red Cross has lost one of the most devoted and valuable members of its board of directors and one of the most efficient and high minded of its workers. His death deprives the Chapter and the county of a leader distinguished for integrity, kindness and courage.

Be it further resolved that these minutes be spread upon the minute book of the Chapter, and a copy of them be sent to his widow.

Rabbi S. A. Rabinowitz,
G. D. Stanley,
W. A. Percy.

For the Washington County Chapter of American Red Cross.

WINSTON COUNTY

Our doctors are all very busy trying to collect, but somewhat discouraged at our success.

Some of the doctors of our city are expecting to go to the meeting of the Southern Medical Association at Richmond, Va., next week.

Dr. C. A. Kirk was in the city this week, looking as pleasing as usual, he never seems pessimistic.

Dr. L. T. Parks was in the city, having some business in chancery court now in session.

Dr. T. C. Suttle seemed in good spirits when we met him on the streets this week.

We understand that our good friend, Dr. E. L. Richardson, had a great time in a fox race the other night.

We note with interest an effort to get a reasonable compensation from the R. F. C. for services rendered to those who are being cared for by this aid. The doctors have had no consideration whatever along this line, and will say the public demands too much of us in a charity way.

M. L. Montgomery,
County Editor.

Louisville,

November 9, 1933.

WOMAN'S AUXILIARY
TO THE
MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson.
President-Elect—Mrs. Henry Boswell Sanatorium.
Secretary—Mrs. Adna Wilde, Jackson.
Treasurer—Mrs. E. C. Parker, Gulfport.
Press and Publicity Chairman—Mrs. Leon S. Lipincott, Vicksburg

HISTORY OF THE WOMAN'S AUXILIARY
TO THE
MISSISSIPPI STATE MEDICAL ASSOCIATION
(Continued)



MRS. SYDNEY W. JOHNSTON
Vicksburg

President, 1926-1927

Mattie Haralson Johnston, born in Harpersville, Scott County, is the daughter of Dr. Hugh H. and Belle Lock Haralson. The family moved to Forest, in 1884.

Mrs. Johnston was educated in private and public schools of Forest, Blue Mountain College, Southwest Virginia Institute and the University of Mississippi.

Biloxi was her next place of residence, 1896 to 1898, when she moved to Vicksburg. From 1899 to 1900 Mrs. Johnston taught in Hillman College.

On November 7, 1900 she became the bride of Dr. Sydney William Johnston. They resided in Clinton for a period of two years, when they moved to Vicksburg, where they have since made their home.

Mrs. Johnston has always been very active in all civic, school and church clubs; having served as president of the Twentieth Century Club, Civic Club, Floral Club, Delphian Club, Matinee Musical Club, Parent-Teachers Association and the Woman's Auxiliary to the Mississippi State Medical Association.

Once more we are reminded that to the busy person responsibilities are given and honors come, for Mrs. Johnston has ever been a Doctor's Wife, with all the cares, responsibilities, and joys that such a position brings, and of her six children five are now living, two of them being doctors.

Jackson was the convention city for the Medical Society and the Auxiliary in May, 1926.

The President, Mrs. S. H. Hairston of Meridian, having resigned the first vice-president, Mrs. S. W. Johnston, Vicksburg, who had so successfully filled the unexpired term of office, presided at this meeting.

The outstanding activities reported was the educational and publicity work done for the Health Camp for Children at Biloxi. A large supply of linens and pillows were obtained from other clubs and organizations as well as from the various auxiliaries. The expenses of one child was paid by the Gulfport Auxiliary.

Other activities included beautifying hospital grounds, entertaining nurses in training, linens to charity hospital and layettes for charity wards.

The officers elected were:

President, Mrs. Sydney W. Johnston, Vicksburg.
President-Elect, Mrs. W. H. Frizell, Brookhaven.
1st Vice-President, Mrs. C. A. Sheely, Gulfport.
2nd Vice-President, Mrs. A. G. Payne, Greenville.
Recording Secretary, Mrs. Henry Boswell, Sanatorium.

Treasurer, Mrs. S. E. Dunlap, Wiggins.

Mrs. Sydney W. Johnston, after having served as president during the unexpired term of Mrs. S. H. Hairston, was regularly elected in May, 1926. The auxiliary, though still young, accomplished, during that term, a work that would have been a credit to a much older organization. The program planned for the year was:

Work for full time county health department through local organizations.

The study of health laws and work for their enforcement.

Study and work for control of communicable diseases through anti-tuberculosis societies and the state public health department.

Placing of hygiene in schools and libraries.

Early in 1927 this educational program was abandoned when it was found that the auxiliary

was in a position to be of untold service to destitute flood sufferers. Mrs. D. J. Williams of Gulfport was appointed flood relief chairman, and she, accompanied by the president, made a survey of refugee camps and charity hospitals and found there was great need for underclothing for women, all kinds of clothing for children and layettes for babies. In every community there were doctors' wives taking a leading part in this worthwhile movement. Letters were sent to women of that type throughout the state urging that they collect clothing for the destitute refugees. The response was most gratifying. Under the leadership of auxiliary members, women's clubs and church societies quickly collected tons of second hand clothing and made hundreds of new garments. Hugh boxes were shipped in from all parts of the state.

The Medical Association which was to have met in Vicksburg, was moved to Jackson on account of flood conditions in Vicksburg. The Woman's auxiliary held only a one-day business session on May 11, 1927, and all social functions were omitted. During that day the Medical Association, knowing there was still an urgent need for clothing, donated one thousand dollars to the auxiliary to be used for that purpose. Mrs. Williams was asked to continue her work as chairman and it was decided that she should buy material from mills and wholesale houses at very low prices and send it to her chairmen to be made into undergarments, layettes and hospital supplies. (Mrs. Williams made her marvelous report on this at the meeting of 1928).

Officers elected were as follows:

President, Mrs. W. H. Frizell, Brookhaven.
 President-Elect, Mrs. H. F. Garrison, Jackson.
 1st Vice-President, Mrs. S. E. Dunlap, Wiggins.
 2nd Vice-President, Mrs. T. E. Ross, Hattiesburg.
 Recording Secretary, Mrs. Henry Boswell, Sanitorium.

Treasurer, Mrs. E. M. Gavin, Richton.
 Parliamentarian, Mrs. D. J. Williams, Gulfport.
 Councilors:
 2nd District, Mrs. L. A. Barnett, Greenwood.
 3rd District, Mrs. J. M. Acker, Jr., Aberdeen.

FROM THE STATE PROGRAM CHAIRMAN

I regret not being able to tell you in detail of our plans for the Essay Contest, but there are so many details to be worked out yet that it is impossible to say just when I will be ready to give full particulars.

During these trying times of many calls for assistance from different sources it would be well to remember not to pledge the Auxiliary to any activity unless the Medical Society to which you are an Auxiliary approves.

The program committee is very grateful to every one for the many encouraging letters and messages

we have received not only from our own state but from other states.

Anyone wishing program material, please make your requisition as soon as possible as our supply is being used rapidly.

We all regret that our president, Mrs. Van Alstine, has had and is having so much illness in her family, and we sincerely hope all will soon be restored to the very best of health.

As Yuletide is near this is our last opportunity to wish for each doctor and his family a season filled with much happiness and that the coming year will bring abundant happiness, peace, contentment, security and prosperity.

Mrs. W. C. Pool,
 Program Chairman.

Cary,
 November 10, 1933.

WOMAN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY

The program of the semi-annual meeting of the Woman's Auxiliary to the Delta Medical Society is as follows:

Meeting held on October 11, 1933, Methodist Annex, Belzoni.

Invocation, Rev. Pope.

Welcome, Mrs. J. C. Bell.

Response, Mrs. F. M. Sandifer.

Address, Mrs. E. T. Brooks.

Business meeting; election of officers.

Bridge Tea at the Woman's Club tendered by the Humphrey County Unit.

Barbecue supper with the Delta Society at Four Mile Lake, tendered by the Humphrey County physicians and wives.

Officers elected for 1933-1934:

President, Mrs. T. J. Barkley, Isola.

Vice-President (Leflore Co.), Mrs. L. B. Otken, Greenwood.

Vice-President. (Sunflower Co.), Mrs. S. D. Newell, Inverness.

Vice-President (Humphrey Co.), Mrs. J. C. Higdon, Belzoni.

Vice-President (Washington Co.), Mrs. S. N. Shankle, Hollandale.

Vice-President (Bolivar Co.), Mrs. A. M. Wynne, Merigold.

Secretary-Treasurer, Mrs. T. J. Barkley, Isola.

Parliamentarian, Mrs. J. C. Pegues, Greenville.

Chairman of Starding Committees:

Publicity, Mrs. S. N. Shankle, Hollandale.

Program, Mrs. John A. Beals, Greenville.

Preventorium, Mrs. J. C. Higdon, Belzoni.

Hygeia, Mrs. F. M. Sandifer, Greenwood.

Attendance at the semi-annual meeting at Belzoni, 28 members and visitors. Paid membership of auxiliary for 1933-35. Four county units, namely Washington, Leflore, Sunflower, and Humphrey,

continue to meet at monthly luncheons with a good attendance and interest.

Mrs. John A. Beals.

Greenville,
October 17, 1933.

WOMAN'S AUXILIARY TO THE
CENTRAL MEDICAL SOCIETY

The Womans' Auxiliary to the Central Medical Society held a very interesting meeting Tuesday, Nov. 7, at the Edwards Hotel.

Mrs. Harvey F. Garrison presided and introduced new members and guests. Following a delightful luncheon, business was discussed and plans were made for a Christmas Party to which the doctors will be invited.

Mrs. H. C. Ricks was elected treasurer to succeed Mrs. L. B. McCarty.

Mrs. Robert McLean, who has recently moved to Jackson, was welcomed as a new member of the auxiliary.

JACKSON NEWS

Mrs. Guy Verner has just returned from a two weeks visit to her family in Michigan.

Miss Maude McLean, daughter of Dr. and Mrs. Sam McLean, has been elected president of the Girls Cotillion Club.

Miss Juanita Walker, daughter of Dr. and Mrs. John C. Walker, and Miss Elizabeth Warren, granddaughter of Dr. and Mrs. W. S. Sims, looked lovely as debutantes at the recent University Club ball.

Among those going to the Southern Medical Association meeting at Richmond, will be Dr. and Mrs. H. C. Ricks.

Mrs. Temple Ainsworth,
Press and Publicity Chairman.

Jackson,
November 9, 1933.

GULFPORT

President-Elect of the Mississippi State Medical Association, Dr. E. C. Parker, and Mrs. Parker attended the conference in Jackson on Thursday, November 9, at which time Mr. G. W. Powers was called to confer with the councilors, president and president-elect and secretary of the State Medical Association and Dr. Felix Underwood, to discuss compensation for our physicians through the F. E. R. A.

Dr. Dan Williams attended this conference and Mrs. Williams stopped over at Sanitorium as the guest of Mrs. Henry Boswell, president-elect of the Woman's auxiliary to the Mississippi State Medical Association.

Dr. Henry Boswell and Mrs. Boswell made a fly-

ing visit to the coast last week as the guests of Dr. and Mrs. D. J. Williams.

Mrs. M. M. Snelling is able to be out after several weeks of serious illness.

Mrs. D. J. Williams again heads the United Relief in Gulfport. The functions of this organization are to care for cases which do not come under the F. E. R. A.

Mrs. D. J. Williams.

Gulfport,
November 10, 1933.

THE WOMAN'S AUXILIARY TO THE
ISSAQUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The October meeting of the Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society was held in the Coral Room of the Hotel Vicksburg, Mrs. Sydney Johnston presiding.

A beautiful luncheon table was artistically arranged by Mrs. Charles J. Edwards, hostess for the meeting. A delicious four-course luncheon was served during which a social hour was enjoyed.

Mrs. Laurance J. Clark, leader for the program, made a short talk on the subject, "Our Public Relations with Local Organizations". She then introduced the first of the guests, Mrs. Robert Corneil, city president of the Parent Teachers' Association, who in turn told of the ways our auxiliary had co-operated with them and asked for a continuance of the same good will.

Mrs. Henry Sargent, president of the local chapter of the American Association of University Women, made a very interesting talk.

Mrs. W. L. Driver, of Los Angeles, California, sister of Mrs. Robert Corneil, who is visiting this part of the country with her small daughter, made a very interesting talk on the part the doctors' wives of that city take in the work of the parent teachers' association.

In the absence of the president of the Anti-Tuberculosis Association, Mr. Abe Myer, the first vice-president, Mrs. H. H. Haralson (a doctor's wife) gave an interesting report of the state meeting of the Anti-Tuberculosis Association, mentioning the fact that many members from over the state are doctors' wives. She also asked for the assistance of the local auxiliary in the Christmas seal sale.

Mrs. Mildred Herzog, executive secretary to the local Red Cross Chapter, thanked the Auxiliary for interest in her work and assured them of much need for help in the future.

This program was one of great interest to the local civic organizations, inasmuch as the doctors' wives play an important role in each and every one of the represented organizations. We feel that other auxiliaries would benefit by a similar program. Mrs. Arthur B. McGlothlan, past president

of the Woman's Auxiliary to the American Medical Association, suggested the above program while she was a visitor to this auxiliary last May.

VICKSBURG

Dr. and Mrs. John Birchett, Dr. and Mrs. Laurance J. Clark, and Dr. and Mrs. Willard Parsons are attending the meeting of the Southern Medical Association in Richmond, Va.

Mrs. L. J. Clark,
Press and Publicity Chairman.

Vicksburg,
November 11, 1933.

HONOR ROLL

The following contributed to Mississippi's part of the Journal this month:

COUNTY EDITORS: W. C. Walker, L. L. Minor, S. R. Townes, George F. Carroll, Wm. F. Hand, A. M. McCarthy, F. L. Brantley, W. B. Dickins, G. S. Bryan, T. E. Hewitt, P. P. Donaldson, Eric A. McVey, W. C. Pool, E. L. Walker, C. M. Murry; T. P. Haney, M. L. Montgomery, H. T. Ims, John G. Archer, W. H. Frizell, Lucien S. Gaudet, E. S. Bramlett.—22.

SOCIETIES: Eighth Councilor's District, W. H. Frizell; Central Medical Society, Robin Harris; Clarksdale and Six Counties Medical Society, V. B. Harrison; Delta Medical Society, F. M. Acree; East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Homochitto Valley Medical Society, L. S. Gaudet; Issaquena-Sharkey-Warren Counties Medical Society; North Mississippi Medical Society, E. S. Bramlett and A. H. Little; South Mississippi Medical Society, J. P. Culpepper, Jr.—10.

WOMAN'S AUXILIARY: Mrs. Leon S. Lippincott, Mrs. Sydney W. Johnston, Mrs. W. C. Pool, Mrs. F. L. Van Alstine, Mrs. John A. Beals, Mrs. Temple Ainsworth, Mrs. D. J. Williams, Mrs. L. J. Clark.—8.

HOSPITALS: Anderson Infirmary, Houston Hospital, Vicksburg Hospital, Vicksburg Sanitarium.—4.

OTHERS: J. S. Ullman, Joe E. Green, J. W. D. Dicks, Felix J. Underwood, W. H. Frizell, Guy C. Jarratt, J. A. K. Birchett, Jr., A. G. Tillman, Jr.—8.

GRAND TOTAL—52.

YOUR EDITORS THANK YOU.

TROUBLE ON THE GULF COAST

We are printing in part a sheet which has been received by Mississippi doctors in conjunction with some recent material printed in the New Orleans Medical and Surgical Journal. Under the section labelled "The Truth" following the four letters that are published there are thirteen additional letters,

which in content are practically the same as the letters that have been published. Lack of space prevents publishing of all these letters, the authors of whom are: Dr. C. L. Horton, Dr. M. J. Wolfe, Dr. Kotz Allen, Dr. F. Z. Goss, M. D. Parks, R. N., Mrs. C. E. Craft, Supt. Kings Daughters Hospital; Mrs. Esther Rhorer, Supt. Kings Daughters Hospital; C. W. Fountain, Fountain's Pharmacy; Edmond F. Fahey, Fahey Drug Company; F. P. Cassidy, Atlas Drug Store; C. K. Herlihy, Waveland Drug Company; Emilio Cue, Pres. Board of Supervisors, Hancock County, and Mrs. S. H. Anderson. They all vary in content and form, but the expressions of opinion are the same, to the effect that these individuals have no knowledge of Dr. Shipp ever treating patients.

MISSISSIPPI STATE BOARD OF HEALTH

Felix J. Underwood, M. D., Executive Officer
Jaskson, Mississippi

November 10, 1933

Subject: Attacks by the Hancock County Editor of the New Orleans Medical and Surgical Journal on the health officer of that county, and the truth of the matter in question.

Dear Doctor:

The October and November issues of the New Orleans Medical and Surgical Journal contain letters from its Hancock County Editor filled with insinuations to the effect that the health officer of that county is competing with the physicians there by engaging in the practice of curative medicine in consideration of the extension of political favor.

The Hancock County Health Officer is a member of the State's public health system and as such is under the writer's supervision; and as all physicians in the State are legitimately interested in the principles involved, it is thought best to inform you of the facts.

These facts are completely established by letters printed below which were received from every physician in Hancock County (with the exception of the Hancock County editor), from the three hospitals serving the people of the county, from the pharmacists of the county, from the President of the Hancock County Board of Supervisors, and from the mother of the only person that the editor specifically designates as treated by the county health officer.

In addition to this unanswerable refutation of the charges, I have officially investigated the situation and have found no foundation for the charge that the county health officer is practicing medicine.

For the information of those who may not have read the letters from the Hancock County Editor, I quote the last of them—the one from the November issue of the Journal—as affording the atmosphere of the accusation. It is not necessary to state that such publications do not reflect dignity

upon the profession; nor do they encourage and assist the work of public health.

Very truly yours,
Felix J. Underwood.

THE ACCUSATION

Made By One Hancock County Physician!

Mr. Editor, I am a little late this time but cannot help that either.

The Harrison-Stone-Hancock Medical Society met October 1 in Biloxi with the Biloxi City Hospital; meeting well attended and a good meeting; some very interesting cases brought before the meeting.

The doctors of our county who are doing general practice are not so busy as a few months ago. The county health officer seems quite busy, but his practice is so scattered over the county that he has long trips to make. We have five supervisors and each one has friends to do medical relief for, or he might let his political machine get weak some places. He is the man to control the county health officer, wheel in a wheel you see. I am informed that the writer lost a patient this month to the county health officer, at the request of the member of the board from that beat. I think this might be true as the patient has not shown up since that time to me for treatment, nor to pay his bill. Two birds at one shot, by the county health officer. Well, the game law is now open it seems. You see we have a good man for a county health officer. The board of supervisors appreciate his ability to do things. He now has full control of who is admitted to our little hospital for charity treatment. I think this is a very nice arrangement as he travels the county more than any other doctor in the county, therefore, knows the needs of the people better, etc. Really it might be a good idea to have only a county doctor to look after the entire county. Possibly some of us poor devils who try to make a living on our own merits get a salary too as an assistant to the county health doctor. His business is or will get to be very heavy under present conditions and arrangements. Well, there has been nothing put in force as yet to deprive the colored midwives of their jobs.

D. H. Ward.

Bay St. Louis,
October 11, 1933.

—Printed in October, 1933 Issue of New Orleans Medical and Surgical Journal.

The daughter of Mrs. S. H. Anderson, of Kiln, is sick this week with a cold. She is being treated by the county health doctor, Dr. Shipp. We hope she will soon be well again.

D. H. Ward, County Editor.

Bay St. Louis,
Sept. 7, 1933.

—Printed in the November, 1933 Issue of New Orleans Medical and Surgical Journal.

INQUIRY BY STATE BOARD OF HEALTH

Jackson, Miss.
October 5, 1933.

Dr. C. M. Shipp
Hancock County Health Officer
Bay St. Louis, Mississippi
Dear Dr. Shipp:

I have just read Dr. D. H. Wards criticism of you in the New Orleans Medical and Surgical Journal, October issue, on pages 251 and 258. He writes that you are practicing curative medicine in competition with him, and you can well imagine my surprise and embarrassment.

We have always trusted you to do the right thing. You know the policy of the State Board of Health as well as I do, and you know that the State Board of Health policy expressly forbids any full-time health officer during curative medicine.

Please let me have a statement of absolutely irrefutable facts about this matter at your earliest convenience.

Very truly yours,
Felix J. Underwood, M. D.

THE TRUTH

As Told by All Other Hancock County Physicians,
By Druggists, Hospital Officials, the President
of the Hancock County Board of Supervisors,
and the Mother of the Girl Whom Dr.
Shipp Was Accused of Treating!

Bay St. Louis, Miss.
October 20, 1933

Dr. F. J. Underwood,
Executive Officer,
Mississippi State Board of Health,
Jackson, Mississippi.

Dear Dr. Underwood:

In reply to your letter of October 5th, inquiring the basis of Dr. D. H. Wards criticisms of the writer, contained in the October issue of the New Orleans Medical and Surgical Journal, I am transmitting to you, herewith inclosed, the following original documents that conclusively demonstrate that Dr. Dr. D. H. Ward was laboring under a misapprehension of fact:

1. Certificates signed by every physician in Hancock County, with the exception of Dr. D. H. Ward, to the effect that I am not, and have not been practicing curative medicine, and am not now, nor have I been in the past, competing with them, or interfering with their practice; seven separate and individual certificates of the doctors being hereto attached.

2. Separate certificates of the superintendents of the three hospitals serving this county, to the effect that I am not practicing curative medicine.

3. Separate individual certificates of the pharmacists serving the county, to the effect that I am not practicing curative medicine.

4. Official certificate of the President of the Board of Supervisors of Hancock County, to the effect that I am not practicing curative medicine, but am confined in my efforts to the prevention of disease and am giving perfect satisfaction in that capacity.

5. Certificate from Mrs. S. H. Anderson, widow of the late Dr. S. H. Anderson, giving the specific facts that controvert Dr. D. H. Ward's statement that I professionally treated her daughter for a cold.

It is of course, impossible for me to practice curative medicine and Dr. D. H. Ward to be the only physician out of the eight in the county who would know it, or be competed with; or for none of the pharmacists and superintendents of the hospitals serving the county to know of it, and, naturally, Dr. D. H. Ward is not the only truthful physician in the county.

In view of this indisputable evidence, it is hoped and believed that Dr. D. H. Ward will discontinue these public criticisms that do not reflect credit upon the Public Health Service, or upon the profession. Such motivating personal considerations as may impel the attacks should be subordinated to an accomplishment of the general good.

Trusting that the inclosed certificates will completely allay any apprehension that you may have entertained in this matter, and that the matter will not cause you further concern, I am

Very truly yours,

C. M. Shipp,
County Health Officer.

Copy to:

Dr. D. H. Ward,
Bay St. Louis, Mississippi.

Bay St. Louis, Miss.
October 11, 1933.

Dr. F. J. Underwood,
Executive Officer,
State Board of Health,
Jackson, Miss.

Dear Doctor:

In the October, 1933 number of the New Orleans Medical and Surgical Journal there is an article for discussion by one of our local Doctors, about our County Health Officer practicing curative medicine.

I for one cannot agree with the writer. I have practiced medicine in this County for 18 years, I knew the health conditions here before, and I know them now after the years of service rendered by Dr. C. M. Shipp, our county health officer.

He has rendered a great service to the people of this county and a greater service to the doctors.

Insofar as my observation and knowledge extends Dr. Shipp is not engaged in the practice of

curative medicine; and I can truthfully say that he has not in any manner interfered with, or competed with my general practice in this county.

Yours respectfully,

A. P. Smith, M. D.

Bay St. Louis, Miss.

October 16, 1933.

Dr. W. A. Dearman,
Member, State Board of Health,
Gulfport, Miss.

Dear Doctor:

So far as I know from my personal knowledge, the County Health Officer, Dr. C. M. Shipp, does not practice curative medicine.

Yours truly,

Dr. J. C. Buckley.

Picayune, Mississippi

October 17, 1933.

Dr. Felix J. Underwood, Executive Officer,
Mississippi State Board of Health,
Jackson, Miss.

Dear Dr. Underwood:

It has come to my attention that Dr. C. M. Shipp, County Health Officer of Hancock County, has been accused of doing private practice, which I am sure is an erroneous impression. Dr. Shipp has been in Hancock County now about ten years as health officer and I have been associated with him during all this time and have never known him to attempt to practice medicine other than public health work.

While I am not living in Hancock County now, half of my practice extends back into his county as I was formerly located at Logtown and while in Logtown yesterday I asked my brother, who owns and operates a drug store there, if he had ever filled any prescriptions written by Dr. Shipp, and he replied in the negative. I have never worked with a more honorable man or more ethical man in medicine. In the past ten years I have never called Dr. Shipp when I would diagnose an infectious disease but one time that he did not come to my rescue immediately and on that occasion I did not blame him for he was engaged in the examination of school children at a school at Lakeshore, but came to me the next morning to see the case of diphtheria. There is evidently something wrong about this report and impression. Dr. Shipp has never practiced other than public health work since he has been in the county, and he is a good public health man, knows medicine and is very genial and accommodating in his work.

Please disregard any report you hear until you investigate. Thanking you, I am

Yours very truly,

N. W. Fountain, M. D.

BOOK REVIEWS

Arteriosclerosis: Edited by Edmund V. Cowdry. New York, The Macmillan Co. 1933; pp. 617. Price \$5.00.

The character of this book is such that it is very difficult to present a short review which is in any way critical. It might be said, however, that so excellent is the presentation that any reviewer would have difficulty in finding any faults to criticize. This statement can be well substantiated when the reputation of the contributors is borne in mind. Each one of them is a most outstanding man in his particular field of investigative, clinical, experimental or bed-side medicine. Their geographical distribution extends from Leningrad to St. Louis, from Munich to Philadelphia, from Freiburg to Boston, from Manchester, England to New York City.

This survey of the problems of arteriosclerosis is presented in a series of 21 chapters. The first chapter has to do with the development of the knowledge of arteriosclerosis and then follows chapters on the physics, the physiology, the chemistry and the statistical incidence of the disorder. Arteriosclerosis in the lower animals is considered and various etiologic facts are also presented and then the role in the production of arteriosclerosis developed. The expressions of arteriosclerosis whether in the eye, the central nervous system, the coronary arteries, the pulmonary arteries and the big vessels of the abdomen are extensively discussed. Likewise the hereditary aspects of the disease and the treatment are fully presented. The whole book is summarized by Cohn in a philosophic and erudite final chapter.

Cowdry, the editor of this splendid volume, made possible by the Macey Foundation, is to be congratulated upon a work well done. The authors of the different chapters have been selected critically and the work has been carefully edited by him. The format of the book is excellent and the illustrations well reproduced. Altogether this book represents one of the outstanding contributions of medicine in the last few years.

J. H. MUSSER.

Obstetrics and Gynecology: Edited by Arthur Hale Curtis, M. D. Vol. 2. Philadelphia, W. B. Saunders Co. 1933. pp. 1135.

This second volume in a series of three is equally divided between obstetrical and gynecological problems. It has twenty-five contributors out of a total of 80 essayists. There are six sections (VIII to XIII inclusive).

Section VIII. *Pathology Of Labor*—This section is concerned with dystocia, fetal anomalies

and hemorrhage. The chapter "Anomalies of the Passenger" brings out many practical points in handling these cases.

Section IX. *Pathology Of Puerperium*—Puerperal infections and thrombophlebitis is most thoroughly covered in an enlightening manner—it is exhaustive in its province.

Section X. *Operative Obstetrics*—Modes of induction of labor, forceps delivery, version caesarian section, etc., are considered. There is a brief outline on the "History of American Gynecology."

Section XI. *Infectious Processes* — Includes gonorrhoea, cellulitis group, genital tuberculosis, syphilis in women, etc. "Syphilis in Women" brings forth a subject long neglected; it deals with problems of diagnosis, sociological problems of syphilis and marriage which often confronts the gynecologist and prevention of congenital syphilis.

Section XII. *Tumors Of The Uterus* — All types of tumors are covered. The treatment of carcinoma of the cervix and fundus is thorough.

Section XIII. Tumors of the ovary, fallopian tubes and pelvic cellular tissues are dealt with.

As a whole this volume is not didactic but smacks of experience; it is not a rehash of earlier text books. The change of pace occasioned by the different authors enhances its readability. The bibliography at the end of each chapter is exhaustive.

Obscure points are mentioned but not emphasized, only the important things are stressed. There is some overlapping, especially in the chapters devoted to obstetrics. However, this does not distract but rather adds to the excellency.

Perhaps it is to be regretted that these volumes are not loose leaf so they could be added to from time to time as the occasion demanded.

M. LYON STADIEM, M. D.

PUBLICATIONS RECEIVED

Lea and Febiger, Philadelphia: *Metabolic Diseases and Their Treatment*, by Erich Grafe, M. D. *Pathogenic Microorganisms*, by William Hallock Park, M. D., and Anna Wessels Williams, M. D.

W. B. Saunders Company, Philadelphia: *A manual of Diseases of the Nose, Throat, and Ear*, by E. B. Gleason, M. D., LL. D.

The Year Book Publishers, Chicago: *The 1933 Year Book of General Medicine*, by George F. Dicks, M. D., Lawrason Brown, M. D., George R. Minot, M. D., William B. Castle, M. D., William D. Stroud, M. D., George B. Eusterman, M. D.

Paul B. Hoeber, Inc., New York: *Annals of Roentgenology, A Series of Monographic Atlases*, by James T. Case, M. D. Volume Fifteen. *Nasal Accessory sinuses*, by Frederick M. Law, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

JANUARY, 1934

No. 7

THE RELATION OF THE PRACTICING PHYSICIAN TO THE CONTROL OF TUBERCULOSIS*

A. E. KELLER, M. D.†
NASHVILLE, TENN.

In presenting a discussion of this subject an attempt has been made to point out certain basic facts concerning the problem of tuberculosis and to emphasize the opportunities which practitioners of medicine have to assist in the control of this disease.

It has been over half a century since the tubercle bacillus was demonstrated as the etiological agent of tuberculosis. During the past thirty years certain movements regarding tuberculosis control have occurred. They have been of marked educational value, and as a result renewed interest in this disease on the part of the public has been aroused. Investigations have been carried on from both the clinical and epidemiological points of view, so that we can now make certain observations regarding tuberculosis with a fair degree of accuracy. Hospital facilities have been increased greatly. State health departments have been stimulated to make special studies of tuberculosis. As a result of these investigations, administrative machinery has been set up in certain states whereby the state departments of health with the aid of the local health departments are attempting to carry on systematic control of this disease.

During the past three decades the mortality

rate from tuberculosis has declined greatly. In the year 1900 the mortality rate from all forms of tuberculosis in the United States Registration Area was 195.0 per 100,000 population. In 1929 the same rate was 76.0 per 100,000 population. During this period there has been a decline of more than 60 per cent in the mortality from tuberculosis. As a result of the efforts put forth and the measures instituted by various groups, a delay in the occurrence of death has been made possible, and a large number of people have had active tuberculous processes arrested. In spite of this remarkable reduction in mortality there still occurs in the United States an average of 100,000 deaths annually. It has been estimated that there are approximately one million persons in this country at all times with active tuberculosis. Opie has pointed out that the diminishing mortality from tuberculosis has to some extent produced the impression that the control of the disease is assured. Inferences from such data will do much harm if they suggest a relaxation of effort. The wide-spread prevalence of tuberculous infection as revealed by all methods of examination, including observations made post mortem, demands consideration in any attempt to estimate the significance of the diminishing death rate from tuberculosis.

During this period, however, there has not been a parallel reduction in the morbidity resulting from tuberculosis. Available evidence is in favor of the point of view that there has not been a decrease in the number of infected persons.

It has been shown by workers in the United States and abroad that in various communities from 11 to 95 per cent of the school children are infected with the tubercle bacillus as evidenced by positive tuberculin reactions. In a large Eastern city, for the period 1926-1929, a

*Read before the Section on Hygiene and Public Health at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 11, 1933.

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study of the tuberculosis infection rate was made in 4,000 school children by means of the intracutaneous tuberculin test. It was demonstrated that 37 per cent gave positive reactions at the age of five years. At ten years 71 per cent gave positive reactions, 80 per cent at fifteen years, and 90 per cent at eighteen years. These results, taken from a representative large urban area, indicate that in the cities at least there has been no notable decrease in the incidence of infection. Aronson, working in two rural counties in Tennessee and one in Mississippi, tested with tuberculin 1,175 white and 864 Negro children between the ages of 5 and 19 years. He demonstrated that 50.9 per cent of the white and 60.4 per cent of the Negro children gave positive reactions with 0.01 mg. of tuberculin intradermally. These observations indicate that the dissemination of tubercle bacilli is still sufficiently wide-spread to bring about infections in a large percentage of all children before they reach adult life.

There are two sources of infection with the tubercle bacillus, infected humans and infected cattle. The bovine tubercle bacillus produces in humans mainly the non-pulmonary forms of tuberculosis. The infant and child population groups are more likely to be attacked with the bovine tubercle bacillus through the ingestion of infected raw milk. In the United States the control of bovine tuberculosis has been carried on very successfully. This is evidenced by the marked decrease in morbidity and mortality from this type of infection. There has been a greater decline in the death rate from tuberculosis among infants and children than in the adult population. Drolet has shown that in New York City for the period 1898 to 1928 there has been a decrease of 66 per cent in the mortality rate from pulmonary tuberculosis in the whole population, while the decrease in the rate for the non-pulmonary forms, confined mostly to children, has been 78 per cent. Orthopedic clinics in the large cities report decreases ranging from 20 to 50 per cent in the incidence of bone tuberculosis. Landis also has commented recently on the marked decrease in the number of children in dispensaries and hospitals with cervical adenitis due to the bovine tubercle bacillus. These results have been brought about by

tuberculin testing of cattle, with the exclusion of foci of infection from herds, and the pasteurization of milk.

While it would not be wise to relax our efforts in the control of bovine tuberculosis in humans, it is well to exert a greater effort against the more important human source if further advances in the control of tuberculosis are to be made. We know that the tubercle bacillus is an ubiquitous organism. We know also that the disease, tuberculosis, is a "family disease". While the infection may be acquired from casual contact and from a large number of foci, by far the most important focus of infection is the active case of pulmonary tuberculosis. Opie and others have demonstrated that infection occurs before the fifth year of life in 80 per cent of the children of families having a member with open tuberculosis and in only 20 per cent of preschool children in families not harboring a source of infection. Therefore, the number of infected individuals increases with the opportunity for contact with active sputum-positive cases. Chronic forms of pulmonary tuberculosis expose and infect more individuals than the acute forms which cause death more rapidly than the chronic forms. The chronic fibroid case is being found and recognized more frequently as one of the great sources of danger. These facts should serve to emphasize the great importance of the human reservoir of infection.

Tuberculosis has many ramifications in the community. It is a disease which slowly creeps through the community and insidiously attacks all age groups. It does not cause, as a rule, very much disability in the early stages of the disease. As a result of the lack of early symptoms and clinical signs a great many people allow the infections to reach a stage in which it is difficult to help the patient. Therefore, with such a difficult problem, attention should be directed to the groups in the population which are likely to be attacked first by this infection. We know that infants and children are usually the ones in which the disease occurs as a primary infection. In these two groups tuberculosis spreads rapidly and causes certain types of disease according to circumstances of exposure, dosage and virulence of the organism and the resistance of the individual attacked.

In infants and children, tuberculosis is manifested in three forms. In infants who are constantly exposed to tuberculosis the various acute types of the disease occur. These acute types as a rule are fulminating infections, such as tuberculous meningitis and miliary tuberculosis which result in death of the patient in a majority of the cases.

In children there occurs a type of disease in which there is a diffuse or circumscribed lesion in the lung with involvement of the tracheobronchial lymph nodes that results from a first infection of the pulmonary tissue with the tubercle bacillus. This is the usual type of tuberculosis which is seen and recognized as the childhood type of the disease. It is thought that most adults who develop pulmonary tuberculosis acquire their infections sometime during childhood. It is also held that adult pulmonary tuberculosis is the result of a reinfection from an exogenous or endogenous source. Very few individuals are infected for the first time after they reach adult life. There is, however, some difference of opinion regarding this point of view.

Krause states that a great permanent effect could be exerted toward the eventual control of tuberculosis in later life if the disease in children could be thoroughly healed. The prognosis in childhood tuberculosis is usually good. The mortality rate in children with this type of tuberculosis is low as compared with the number of children infected. This means that in most cases there is an unusual ability on the part of the child to care for the infection. If infected children were placed under treatment, it seems reasonable to expect that the incidence of active pulmonary tuberculosis in adult life would be greatly decreased.

The other type of infection with the tubercle bacillus appears in children ranging in age from 10 through 17 years. In this group, usually spoken of as the high school group, parenchymatous involvement of the lungs is often present and represents in many instances a continuation of primary infections received earlier in life. Females of this age period are especially likely to be attacked and the disease is likely to reach an advanced stage before it is recognized. The prognosis of active pulmonary tuberculosis

in this age period is poor. In this adolescent group the disease is now assuming greater proportions.

There is an attitude on the part of some people to overlook the fact that tuberculosis may be best controlled by emphasizing the problem in children. It might be well at this point to review the measures which are available and useful to physicians in the diagnosis of childhood tuberculosis.

A careful history of exposure of a child to an active case of tuberculosis is of prime importance. A history of exposure cannot always be obtained, but when it is present it is of great value. Opie and McPhedran found seven times as many and Rathbun found nine times as many cases of tuberculosis in children who had a history of exposure to an active case of pulmonary tuberculosis as in children with no history of exposure.

Many children have the childhood type of tuberculosis without manifesting any symptoms. Those apparently in good general health may have a progressive focus of the disease. Either the childhood or the adult type of tuberculosis may be present in overweight, average weight, or underweight children. Hetherington compared the weight in relation to tuberculosis infection and came to the conclusion that weight cannot be used as an index of tuberculosis until the disease has undermined the health of the individual. The usual symptoms of tuberculosis, such as fatigue, cough and fever, may be present in children with the childhood type of the disease, but they are more likely to be absent in a large percentage of the cases. Involvement of the pleura may be present in children without producing symptoms. When the above symptoms are present they may be of great assistance in the diagnosis. The absence of symptoms, on the other hand, should not deter one from making a tentative diagnosis and instituting further examinations.

It is not possible, as a rule, to demonstrate physical signs in childhood tuberculosis. Numerous signs have been described but they are very rarely elicited. Even though lung findings are present infrequently, a careful examination should be made. If nothing is found on physical examination by which a diagnosis of tubercu-

losis can be made, other defects may be discovered which if remedied would assist greatly in the eventual recovery of the patient.

Tuberculin was first produced by Koch. In the beginning it was subjected to many abuses and there is still a great deal of confusion as to its value. The confusion which now exists probably arose as a result of its use in the treatment of tuberculosis soon after its discovery. At the present time the therapeutic use of tuberculin should be confined to only a few conditions which are considered to be associated with the tubercle bacillus as the etiological agent.

The most important use of tuberculin is in the detection of infected individuals. It may also be used to estimate the prognosis in cases of tuberculosis and to determine the distribution of tuberculosis infection in various population groups and communities. Positive tuberculin tests in school children will afford the physician an opportunity to trace and discover the sources of infection which are usually active cases of pulmonary disease in the home. It is possible by this measure to find and eliminate foci of infection in the community.

There are several methods by which tuberculin may be used for the purpose of detecting individuals infected with tubercle bacilli. The cutaneous test, first devised by Pirquet in which a small area of skin is scarified and a drop of old tuberculin applied to the abraded surface, is still used by some workers. The intracutaneous test of Mantoux is now accepted by most workers as being more accurate than the cutaneous method. The intracutaneous test is performed by injecting a solution of known strength of tuberculin intradermally. It is possible to standardize the technic and to inject definite amounts of tuberculin by this method. Aronson reports 25 per cent more positive reactions with the intracutaneous test than with the cutaneous test. According to Casparis, the Pirquet test will give only approximately 50 to 65 per cent of the positive reactions while the intracutaneous test, if given in sufficient strength, will give almost 100 per cent positive reactions in infected individuals.

In a recent study by Hart of 1,030 patients with tuberculosis, only 3.7 per cent failed to show positive reactions to tuberculin when in-

jected with 0.1 mg. (1-1000 dilution) intradermally. In the group of patients who failed to give a positive reaction to 0.1 mg. (1-1000 dilution) certain conditions were found to be present, (1) advanced pulmonary tuberculosis with toxemia, (2) a few cases of bone or joint tuberculosis and a few non-toxic cases of active tuberculosis with positive sputum, and (3) a few cases either quiescent or approaching quiescence. It should be added that during or following recovery from the acute infectious diseases and in any chronic debilitating condition an individual with a tuberculous focus may give a negative tuberculin reaction. Thus it can be seen that in only a few conditions in which tuberculosis is present does the tuberculin test fail to reveal those who are infected.

A positive tuberculin test means that the individual is harboring a tuberculous focus containing live bacilli. This does not mean that the lesion is progressive and producing symptoms. A positive tuberculin test in infants and children under five years of age indicates grave tuberculous infection resulting from recent persistent exposure. It should be a warning sign for immediate examination, supervision and treatment of the child. In children over five years of age a positive tuberculin test may or may not mean that the focus of infection is progressive. It does, however, call for careful observation of children in this age period. The prognostic significance of positive tuberculin reactions diminishes with increasing age. The intensity of the tuberculin reaction is in a general way a measure of the significance of the infection, but accurate deductions as to the extent or stage of the underlying lesion cannot be drawn from the tuberculin test.

It should be emphasized that while the tuberculin test is of great value in the diagnosis of tuberculosis in early life, this test can be of great importance when negative. A definitely negative reaction usually indicates that the individual does not at the time he is tested have a tuberculous focus containing live tubercle bacilli. The tuberculin test offers the practitioner of medicine a very important diagnostic aid as regards tuberculosis in children.

The use of roentgen ray examination in the diagnosis of tuberculosis is now recognized as

an almost routine procedure. Roentgenologic examination furnishes a measure of the severity of the tuberculous infection by revealing the extent and character of the lesion. Another advantage of the roentgen ray examination is that by this method it is possible, by taking serial pictures, to follow the progress of the pathological lesions of the patient and in this way to give a more intelligent prognosis.

All of the various procedures which have been enumerated should be employed in making a diagnosis as no one method is satisfactory when used alone. It should be remembered that in children with childhood tuberculosis there may be no history of exposure to, or symptoms of, tuberculosis and the physical examination may reveal nothing of significance. It should be emphasized that each patient represents a distinct problem. For this reason all available methods applicable in the diagnosis of the childhood type of tuberculosis should be used. Of the procedures available it will be found that the tuberculin test and roentgen examination are more helpful and reliable than any others in reaching a diagnosis. A great contribution to the control of tuberculosis could be made if those engaged in the practice of medicine would more universally accept this idea and apply the procedures which have been discussed.

It is well at this point to call attention to the procedures that may be instituted toward treatment and control of tuberculosis in children. One of the most important points to emphasize is to break the contact between the patient with active tuberculosis and those in close association with him. If exposure is allowed to go on, repeated reinfection may cause contacts to develop one of the fatal types of the disease. The source of infection should be removed when possible. When this is not possible, further contact with the patient in the home should be discontinued. The prevention of further infection should be the first step that one attempts in every case. If this is possible, a great many children who have been infected by contact are able to heal the lesions they have already acquired without the institution of any other procedure.

It is advisable to observe infected children as they should be considered potential cases of the

adult type of tuberculosis. Children with the adult type of parenchymal pulmonary involvement should be treated as any case of pulmonary tuberculosis. The treatment of most cases of the childhood type of tuberculosis is based on physiological principles which involve the supervision of physical activity, rest, and diet. Extra rest periods for children with this type of the disease are considered advisable. Inclusion of vitamins in addition to those present in a balanced diet is necessary. Physical defects which may prevent the growth and development of the child should be removed. In most cases of childhood tuberculosis, if these measures are carried out, a majority of children will be able to heal their lesions.

It is necessary to keep in touch with children presenting this type of tuberculosis so that other measures may be instituted in the occasional case that does not respond to the ordinary procedures. It should be emphasized that tuberculous foci in children are a constant source of danger not only in childhood, but also in adolescence and adult life. These foci may suddenly become active even though they may appear to be retrogressive. The amount of protection afforded the child depends upon the strength and integrity of the fibrous tissue enclosing the areas of the disease. We have no means of measuring this. Healing is a slow process and it may take a long time.

What are the advantages in the control of tuberculosis in children? The childhood type of tuberculosis presents what may be called the golden opportunity for preventive work in tuberculosis. Childhood is often spoken of as the "seed time of tuberculosis" and it is the period in life when the disease first attacks the individual. Therefore, it is the most important period in the history of tuberculous infection because it represents the true incipient stage of the disease. It is possible to effect a more rapid and permanent cure at this stage of the disease than at any other period of the infection.

It should also be emphasized that, fortunately, tracheo-bronchial tuberculosis is not only curable but also it is not communicable since the infecting bacilli are still enclosed within the gland capsules and have not spread to the parenchyma of the lungs. By curing patients before

the disease extends into the pulmonary tissue we not only offer the patient a better opportunity to remain free from disease in later life, but we also protect the public from potential foci of infection.

Casparis states that although a great deal of educational work has been done and much literature concerning prevention distributed, most of the efforts have produced only superficial results in that they rarely reach in an effective way those who need educating. For prevention to be effective, it is necessary to come into actual contact with the individual in whom tuberculosis is found. It is apparent that a great amount of effective educational work can be done by physicians in prevention and control with respect to tuberculosis in children since cooperation with parents and other members of the family is likely to be better when they are faced with a concrete example, especially in children. Instructions will be carried out more carefully under such circumstances. Therefore, it should always be kept in mind that when we institute control measures in children with tuberculosis we fail to complete the task if we neglect to give accurate information concerning tuberculosis and attempt to educate those concerned with the management of the particular case at the time it arises.

It should be emphasized, finally, that the measures for the control of tuberculosis in children can be instituted at a much lower cost than is the case with tuberculosis in adults. While it is necessary to have institutions for tuberculous children, it is possible to care for a great many of them at home more easily and with greater success than in the case of adults. The long period of hospitalization required for adults is not necessary in the average child with tuberculosis. The cost of cure in children is very small in comparison with the protracted, expensive treatment in adults with active pulmonary tuberculosis. Both the family and the community are benefited by instituting control measures against tuberculosis in children.

What most children with childhood tuberculosis need is an opportunity to allow their lesions to heal. The first problem that arises in affording this to children is the recognition of the disease. It is almost always true that the

practicing physician has the first opportunity not only to ascertain the presence of tuberculosis but to aid in its prevention. It is the physician in most instances who first sees the actual or suspected case of tuberculosis. If the problem of tuberculosis could always be kept in mind and this disease suspected or considered in making a diagnosis a great many more cases could be discovered by physicians in a stage when the prognosis is good. New knowledge with reference to childhood tuberculosis has brought to the physician greater responsibilities for the cure and prevention of this condition. In no instance is the obligation of the physician in the cure and prevention of disease more binding than in the prevention of tuberculosis. This obligation is not lessened because of the presence of agencies having for the purpose of their existence the eradication of this and other diseases. The physician represents the first line of defense against tuberculosis and no organized campaign against tuberculosis or any other disease can be carried to a successful conclusion without the assistance, vigilance and support of the practitioner.

Since a great responsibility for the control of tuberculosis rests with the practitioner of medicine, facilities for assisting him to become better acquainted with the problem should be made available. It is likely that physicians have depended in too great measure on public health agencies for the control of tuberculosis. The public health agency can make definitely greater contributions toward the control of this disease by assisting physicians to become more familiar with the problem. Local health departments should be used as centers where, with the aid of state health departments, diagnostic clinics could be held. Physicians could attend such clinics and participate in the examination of patients. On the other hand, physicians can render a great service to local health departments by reporting their cases of tuberculosis, in the examination of contacts, and in reenforcing the efforts which health departments are making in the supervision of tuberculosis patients in the home.

Another opportunity which may be presented to the medical profession in the control of tuberculosis is the use of sanatoria for tuberculosis as

centers of instruction, especially in diagnosis, for physicians. A great many institutions of this kind are affiliated with medical schools and furnish satisfactory instruction to students. This type of service should be extended to practicing physicians who are confronted daily with this problem.

State tuberculosis institutions could also be utilized for the purpose of offering instruction in the diagnosis and treatment of this disease. Courses of systematic instruction in such institutions would furnish to physicians of a state an opportunity to become more familiar with the problem of tuberculosis. Such a plan should be possible without any great change in the equipment or personnel of the institutions. By conducting such courses of study at definite intervals there would be distributed over a state a large number of physicians interested in tuberculosis. Such a plan would, in time, be of value in the control of this disease, and tuberculosis institutions, while they are at the present time rendering a great service, would make even a greater contribution in regard to the control of this disease.

In *summarizing* this discussion, certain points should be emphasized. While there has been a marked decline in the mortality rate from tuberculosis there has been no parallel decrease in the number of individuals infected with the tubercle bacillus. The human reservoir of infection at the present time is more important as a source of tuberculosis than cattle. Control measures against tuberculosis should be directed toward the disease in adults and emphasis should be placed on the problem in children. By doing this it will be possible to place under supervision those whom the disease first attacks and in whom the prognosis is good. It is also probable that, in placing infected children under observation and treatment, pulmonary tuberculosis may be prevented in adult life. In the diagnosis of the childhood type of tuberculosis the intracutaneous tuberculin test and roentgen ray examination are most valuable to the physician. The practitioners of medicine have a definite responsibility as regards the control of tuberculosis due to the fact that patients present themselves first to them for diagnosis. In assisting physicians with this problem, local and state health depart-

ments can be of service by providing clinics and consultation service. Tuberculosis institutions, both private and tax supported, may also render a greater service by extending to physicians facilities of the institutions, whereby physicians may be able to obtain instruction as to the diagnosis, treatment and prevention of this disease.

REFERENCES

- Aronson, J. D.: Incidence of tuberculosis infection in some communities. *Amer. Jour. Hyg.* 14:374-393, 1931.
- Casparis, Horton: Tuberculosis in children, a plan for prevention and control. *J. A. M. A.* 93:1639-1641, 1929.
- Casparis, Horton: The prevention of tuberculosis. *Journal Lancet*, Oct. 15, 1932.
- Chadwick, H. D.: Tuberculosis in children. *New Eng. Jour. Med.* 202:1044-1047, 1930.
- Chadwick, H. D. and Daniel Zacks: Incidence of tuberculous infection in school children. *Amer. Rev. Tuberc.* 22:626-635, 1930.
- Drolet, G. J.: Epidemiology of tuberculosis in New York City. *Jour. Prev. Med.* 4:115-138, 1930.
- Kerr, R. B.: Childhood tuberculosis and its relation to the campaign for the prevention of the disease. *New Eng. Jour. Med.* 199:669-674, 1928.
- Kerr, R. B.: The responsibility of the general practitioner of medicine for the cure and prevention of tuberculosis. *New Eng. Jour. Med.* 200:1201-1208, 1929.
- Landis, H. R. M.: The disappearance of scrofula. *Amer. Rev. Tuberc.* 21:195-201, 1930.
- McCain, P. P.: A report of the study of 25,048 school children for tuberculosis. *Sou. Med. Jour.* 22:310-320, 1929.
- McPhedran, F. M.: Tuberculosis in childhood as a problem in preventive medicine. *Canadian Public Health Journal*, 21:475-490, 1930.
- Myers, J. A.: Tuberculosis in infants and children. *Amer. Rev. Tuberc.*, 21:479-508, 1930.
- Myers, J. A.: Tuberculosis among children. Charles C. Thomas, Baltimore, 1930.
- Opie, E. L.: The epidemiology of tuberculosis. *Amer. Rev. Tuberc.* 20:141-149, 1929.
- Opie, E. L.: The significance of advanced tuberculous infection of school children. *J. A. M. A.* 95:1151-1158, 1930.
- Opie, E. L.: Tuberculosis of childhood. *Amer. Jour. Public Health.* 22:305-315, 1932.
- Opie, E. L. and F. M. McPhedran: The contagion of tuberculosis. *Amer. Rev. Tuberc.* 14:347-419, 1926.
- Schlesinger, Bernard and P. D'Arcy Hart: Human contagion and tuberculous infection in childhood. *Archives of Disease of Children.* 5:191-205, 1930.
- Editorial: The significance of tuberculin tests. *J. A. M. A.* 98:2212-2213, 1932.

DISCUSSION

T. Paul Haney, Jr (McComb): As stated by Dr. Keller in his splendid paper, renewed interest in tuberculosis on the part of the public has been aroused and is due to the great accomplishments that have been effected in the control of this disease. This interest must be guided by the physician into intelligent channels, if future control is to be effective. It is the physician's responsibility to assure the patient that tuberculosis can be effectively treated and cured, if found in time. If

the public has this assurance, I feel that it will remove the fear of tuberculosis that still exists in the minds of the public.

Although hospital facilities for the care and treatment of tuberculosis cases have been greatly increased, such facilities are still far inadequate to take care of the total cases; therefore, some type of home treatment and home care is necessary and will be necessary for several years to come. Here it is that the family physician has a most important part in the program of tuberculosis control. Although state and Federal agencies have set up excellent administrative machinery, of which we are very appreciative, there has not been a solution offered for the problem as it exists outside the hospitals.

There has been great progress made in the control of tuberculosis since 1900. I wonder if the progress is as great as it would seem from study of the reduction of the death rate in the United States registration area from a rate of 195 in 1900 to a rate of 76 in 1929. Is this a true statement of existing conditions? Has not tuberculosis been the cause of death in many cases that have been reported as from other causes? Let me emphasize Dr. Keller's statement that inference from this data must not result in relaxation of effort on the part of the physicians.

Dr. Boswell has repeatedly stated that the physician must be constantly on the lookout for tuberculosis. The program as outlined by Dr. Keller in the use of the tuberculin test and roentgen ray in case finding is worthy of serious study by every physician in our state. There is no reason why every physician in Mississippi should not use the tuberculin test as frequently as he would a urinalysis or a blood count. In Pike County since January 1st we have tuberculin tested 438 people. Our findings have been as follows: Under ten years of age 50 per cent were positive; from 10-14 years of age 61 per cent were positive; from 15-19 years of age 77 per cent were positive; from 20-29 years of age 83 per cent were positive; from 30-39 years of age 89 per cent were positive; and above 40 years of age 93 per cent were positive. It is true that a large per cent of the persons tuberculin tested were familial contacts of active cases of tuberculosis. However, results of other workers agree with our findings fairly accurately.

The tuberculosis program of the Pike County Health Department is conducted in close cooperation with the Pike County Medical Society and the Pike County Tuberculosis Association. There is no local hospital or sanatorium for the treatment of tuberculosis available in Pike County. The quota of this county in our State Hospital is only about five or six. We are, therefore, making an attempt to use the tuberculosis cottage or its equivalent, a well constructed screen porch, in the home care of the

known cases. The cottage used is a modification of the Burr Cottage previously used in this and other states. It is believed that the cottage plan properly carried out is a practical one, but it is not intended or offered with any idea that it can completely replace or be as effective as sanatorium care.

The care of the patient located in the tuberculosis cottage is under the direct control and supervision of the patient's family physician. The health department personnel visit the patient and make reports to the family physician of their visits. Treatment of the patient is left entirely in the hands of the family physician. Health department nurses visit the patient at from weekly to monthly intervals. Routine service is carried out, which includes special emphasis on prevention of spread of the disease and necessity for frequent physical examination by a physician of all tuberculosis contacts. All contacts are urgently advised to submit themselves to a tuberculin test, and, if this test proves positive, every possible effort is made to follow it with roentgen ray examinations of the chest, if necessary.

Community educational work for the control of tuberculosis is done most efficiently by the family physician. His opportunity for the work is greater than that of any other individual or organization. The public health nurse, members of the health department personnel, members of the County Tuberculosis Association, and other auxiliary organizations can do a most effective educational work through their club activities and through personal instructions. Publicity should be carried on by the health department and the County Tuberculosis Association co-operating with the State Department of Health, the State Bureau of Tuberculosis and the State Tuberculosis Association.

Every county health department should strive to have regular tuberculosis diagnostic clinics carried on in the county. This can be done, and I feel it will be done in the near future in Mississippi by the co-operation of the State Health Department and members of the medical staff of the State Tuberculosis Sanatorium. Roentgen facilities should be available, and, where possible, provision made for hospitalization or care in a tuberculosis cottage of the active cases found.

Dr. D. J. Williams (Gulfport): I think it is particularly appropriate at this time to present to this Association, and especially to this Section, the immediate past president of the Woman's Auxiliary to the American Medical Association. The Woman's Auxiliary to the Mississippi State Medical Association has as their major work in Mississippi the support of a Preventorium for the prevention of Tuberculosis at our Sanatorium. I take pleasure in presenting Mrs. Arthur B. McGlothlan of St. Joseph, Missouri, immediate past president of the

Woman's Auxiliary to the American Medical Association.

Mrs. Arthur B. McGlothlan (St. Joseph, Mo.): I am the immediate past president of the Woman's Auxiliary to the American Medical Association and if I may be allowed, I would like to say just a word about what the Auxiliary has done by way of education in the prevention of tuberculosis. Two or three of the State Auxiliaries have carried on an intensive campaign of education under the direction of their state medical officer, the State Tuberculosis Association and their State Department of Health, by means of an essay contest on the prevention and cure of tuberculosis in the junior or senior high schools of the states, and the results of these contests have been very gratifying. Several thousands of children took part in these essay contests, and we feel that the educational work—the medical profession of the state feel that the educational work—done by these essay contests has been very worth while.

Dr. N. C. Womack (Jackson): Many years ago in a paper, I made the statement that tuberculosis was essentially a disease of infancy and childhood, and that its eradication would depend upon the recognition of that fact. At that time in a series of 250 cases from my own files, not acutely ill, 45 per cent showed a positive tuberculin reaction. My records since that time will not differ very much from that. Dr. Haney says 5 years to 6—under 5 years is correct. Over that age we pay very little attention unless the other signs of tuberculosis are present, which are low hemoglobin, and under-weight, and history of continued contact. It has been my experience during this time that the contact came largely from the parents. It is a difficult matter to convince a mother or a father who are perfectly well and have been all their lives, that they are the infecting factor in their child's life; however, it is my belief that 90 per cent or more obtain their infection from the parent. They sometimes get it from outside contacts—other relatives—grandparents—I have a serious indictment against grandparents living in the house with little children, particularly the kind that live a long time, are thin, can not work—the happiest people in the world—, delightful people to have around, but with a cough that manifests itself early in the morning, lasts for an hour or two and the balance of the time is not present. These are often chronic carriers of tuberculosis, and they infect children and grandchildren.

I do not get excited when a child shows a positive skin reaction, unless it shows the other signs, which have already been mentioned. I believe it is a disease that we will finally get the best of. It has been my experience that mothers who had tuberculosis 25 years ago and were considered cured will still transmit that infection to the new-born.

The first year of life is the sensitive stage of life, that is, they are more likely to get an infection then than any other time. It has been the rarest thing in my experience that an infant born to a known tuberculous mother did not show a positive reaction by the time it was twelve months of age. It is not a thing to make a difficult problem of. In a child who shows a tubercular reaction, relieve first any focal infections, bring the child up to its full weight and then let it live its own life.

I want to thank the doctor for his paper. It is in line with the most modern thought of tuberculosis, its incidence and control and I was awfully glad to hear it.

Dr. W. H. Frizell (Brookhaven): I did not get here in time to hear Dr. Keller's paper, but as Dr. Womack has suggested, tuberculosis control is essentially an educational program—must be primarily and continually so. It may be news to some of you, to know that it was a Mississippi local Medical Society that put on the first public educational program against the spread of tuberculosis not only in the state but in the United States so far as records go. Our Tri-County Medical Society (Copiah-Lincoln-Pike), back on July 23, 1919, put on an all-day public program before the Mississippi Chataqua Society at Crystal Springs. They gave us a day on the program. We had five papers, I believe, on the different phases of education for the prevention of tuberculosis. When Dr. Keller recited the condemnation of the child being infected by the parent, it brought very vividly to my mind statistics that one of the essayists, the late Dr. J. H. Johnson of Brookhaven, got from the records at Washington on the transmission of tuberculosis to the family through the Negro servant, the nurse, the washerwoman, the cook, etc., coming in direct contact with your child. We had a most delightful program that day. We were pioneers in that line and didn't know it.

Dr. V. B. Harrison (Clarksdale): I have enjoyed Dr. Keller's paper, but I notice that so far very little has been said about the economic side of tuberculosis. In Coahoma County last year, our survey showed that there were 56 deaths from tuberculosis of which 52 occurred in Negroes. Most of the Negroes were plantation tenants and unable to care for themselves, nor were the planters in a position to offer much assistance. The housing condition of tenants usually consist of a two-room "cottage" and not suited for the proper care to tuberculosis.

In the past, the Board of Supervisors has been sending the county's quota of five cases to the sanatorium, or actually using the sanatorium as a "dumping ground". Now, five cases in the sanatorium will in no wise touch the county's tuberculosis problem. From the previously quoted figures the

estimated death rate from tuberculosis is 122, or about twice that for the United States as a whole.

Recently I went before the Board of Supervisors and presented a plan for the local care of tuberculous cases. I think it is a good policy to use the sanatorium for what it was intended and not as an isolation hospital or "dumping ground". We have found that home patients who have had previous sanatorium training make excellent cases for home care. To keep five cases in the sanatorium until they die or are discharged costs the county \$1800.00 a year. We can send 24 cases to the sanatorium for a one month period for a total yearly cost of \$720.00. During this period they can receive the benefits of examination and training and be returned to the county. On returning to the county each case can be furnished with a cottage of the Burr type for an additional \$720.00; in other words, we are taking care of 24 cases a year for \$1440.00 in contrast with the present plan of five cases a year for \$1800.00, or a saving of \$360.00 a year. After the first year there will probably be no need for building more cottages as our statistics show that about half of our recorded cases die within one year after they are apprehended. This is due to the fact that most of the reported cases are in the advanced stages of the disease.

After the first year of the program, one case per month or a total of 12 cases per year to be maintained at the sanatorium should care for the problem. The maintenance program would cost \$360.00 per year, or the whole program would cost \$3240.00 for five years and care for 72 cases. Contrast this program with the present one which cares for from 5 to 25 cases, depending on the turnover, for a five year period at a cost of \$9000.00. By the proposed plan the county would save \$5760.00 and care for a minimum of 47 more cases.

I have approached the problem of tuberculosis from a community standpoint for I am sure that we now realize that tuberculosis has ceased to be an individual problem economically. It is unnecessary to add that when we laid this program before the Board of Supervisors that they were interested, for every governmental agency is interested in saving a dollar. I believe that the superintendent of the state sanatorium would also be interested in a program that would create a better use of the sanatorium facilities.

Dr. Joe E. Green (Laurel): We are not going to run this into intestinal obstruction or spinal anaesthesia discussion—however, this is more important than either of those discussions. The essayist doctor must have had in mind that this is not really dependent on the general practitioner, because that was the title you may say of his paper. Many of you here know in your heart that you are not going to make the minute detailed study that you would like to make, but I for several years have

been interested in children—I believe that although we are here in almost gun-shot distance of the greatest tubercular sanatorium in the world, one of the best minds in America at the head of it along tubercular lines, yet Henry Boswell can only help in treating tuberculosis in children. I think if we doctors would take more time in looking at our children that we never put our hands on, and talking to the mothers—telling them the child has positive signs of tuberculosis, we could get better information that would be worth while. I do not do that—I never tell a poor woman who is the mother of six or seven children in poor surroundings, when she comes to me nervous, saying Sally broke her leg and Johnny has colitis and on down the line—I do not tell that mother that a great percentage of little children under five years have tuberculosis. I do not think it is right, unless you have a direct reason for that, but in practically all these cases if you will observe them, you will find two things—where you get a positive tuberculin reaction, or where you have positive tests for tuberculosis, you will also have positive test of rickets in that child. They are hand in hand, and we have a compulsory school law in Mississippi compelling you to send your child to school, and I think down here where we all have the greatest climate, if we had some means of putting all the children in Mississippi in the open air in the sunshine with nothing on but a sun-suit, we would eliminate in thirty years 50 per cent of the tuberculosis as well as the rickets, and when you treat rickets today you are treating tuberculosis. Get the babies out in the sunshine and keep them in the fresh air and feed them, but don't always tell that nervous mother that is always broken down, that so many children have tuberculosis. You can get information from Dr. Boswell, but he can not help you only to a certain extent, but you can turn them out in the sunshine and let them stay there and up in the mountains of North Carolina and around Asheville, a pediatrician at Asheville brought in the clinic two children that had been out all one season and they looked like Indians, but they were fine specimens, and we won't have to have so many tubercular patients.

Dr. F. M. Smith (Vicksburg): I know Dr. Boswell is going to have to knit up the raveled sleeve of this discussion, so I had better get through with my raveling right here. We are taught that there are four kinds of tuberculosis—human, bovine, avian and reptilian—and that on account of the variation of temperature in these animals that these various kinds of tuberculosis can not successfully attack man with the exception of the bovine, and some one has stated that perhaps the avian type can sometimes be contracted by man. Now then in the human form we have two types, the childhood type and the adult type. The same

micro-organism, the tubercle bacillus, produces this disease in the child and in the adult, and the type of disease is defined only in the location of the tissues involved in the human being. Tuberculosis, if we are correctly informed, primarily is a disease of the lymphatics; whether the micro-organism is taken in from the alimentary canal or the respiratory tract, the battle royal begins in the lymphatic system and as long as the tubercle bacilli are in the lymphatics of the child, in the glands, especially in the bronchial glands, it is of the childhood type, and only when it goes beyond and infects the lungs attacking the bronchial tubes and breaking through in this open area is it communicable to other people. For that reason I am glad the essayist stressed the fact that the childhood type of tuberculosis is never communicable and my child and your child in the Preventorium is not menaced by any other child, and they can be carried there without endangering the lives of others.

I am glad that Dr. Green emphasized the fact that the time to fight tuberculosis is in the child, in the childhood type before it goes on into adult type, then and only then. In 1910 I read a paper before the Tri-State Medical Society at Memphis; my subject was "Prognosis in Pulmonary Tuberculosis", and I remember to have said, and it was true at that time, that the diagnosis of tuberculosis was like the "drum's discordant sound that beats our funeral marches to the grave". Dr. Caruthers knows the fight some of us made in that day and time. Some of us got by, but my conviction now is as long as we are confining our efforts entirely to the adult type, we are not going to make any progress in the control of tuberculosis.

Permit me to make a little defense for those infected grandmothers that Dr. Womack seems to hold so often responsible for childhood infection. It may be fortunate that we have a certain involvement—infection—that children have the childhood type of tuberculosis and can build an immunity, but for gracious sake don't let them get a mass infection from either a chronic case or an active young adult patient that is rapidly going on to a fatal termination. They will get some infection in hand plays and otherwise that helps to build this immunity, but probably it might be better to get it from that old chronic case who has fought and successfully resisted this disease through the years, attenuating the virulence of the causative organism, than from an acutely active case of tuberculosis, freely expectorating a potentially virulent strain of organism. (However, this is speculation.)

Now let me say right here, if you forget everything else, remember what Doctor Green from Greene County told you about putting these children out in the sunshine. If we can teach the people to care for the child and build a physical hu-

man being as we should, there, in my humble judgment, is the promise of the solution of the problem.

Dr. B. D. Blackwelder (Hattiesburg): In view of the fact that the decline in the death rate from tuberculosis is general, that it started at a definite time, that it is not restricted to localities where there has been definite work done for the prevention of tuberculosis, leads me to believe that something has happened to the tubercle bacillus itself in the way of attenuation. If this is true the recognition of the factors that contribute to this attenuation would certainly be worth while. It may be that some other strain of organism is being disseminated among the human race that is attenuating this bacillus. To me it looks very suspicious that something has happened to this organism that has lessened its virulence in the human race.

Dr. S. S. Caruthers (Duck Hill): The gentleman from south Mississippi brings in the open air and sunshine side; the economic side has been brought up. We see our government going to great lengths, great expense, and a lot of work trying to raise the price of cotton while here is a Mississippi doctor advocating going naked. Which is better, to have a lot of tuberculosis, a lot of clothes, and a good price for cotton, or go naked and starve to death?

Dr. T. W. Kemmerer (Jackson): I would like to have the essayist amplify on the interpretation of the tuberculin test. Is it an indicator of the degree of activity of the tuberculosis process rather than an immunity reaction? If so, it would be very valuable to the general practitioner not skilled in the differential diagnosis by physical and roentgen examination.

Dr. L. S. Lippincott (Vicksburg): May I ask the essayist one question? In recent years in Italy there has been worked out a test called the D'Amato test, and in the Italian literature it is said—they are very serious about it over there—that it is a valuable aid in determining the presence or absence of tuberculosis, perhaps better than the tuberculin test. It is very simple to perform, the diagnosis is made within an hour, and it is applicable to adults as well as to children. I would like to ask if the essayist has had any experience with this test.

We became interested in it and have tried it. It seems to be working. In a series of tests on fifty nurses who had recently had complete physical examinations and showed no evidence of tuberculosis, the reactions were all negative. Dr. Henry Boswell was courteous enough to let us make some tests on patients with definitely proven tuberculosis at the Sanatorium, and the reactions were positive. I have had no occasion yet to doubt that it is specific.

Anyone who can make an accurate leukocyte count can perform the test. At least three hours

after eating, a total leukocyte count is made. Then a small dose of old tuberculin is given subcutaneously. We have been using 0.1 cc. of a 1 to 1 million dilution, which will not harm anybody. In another half hour another total leukocyte count is made. In the presence of tuberculosis, there is a drop in leukocytes of at least 900 to 1000.

The test can be applied to other specific diseases—where there is a specific antigen. It may be used as a test for gonococcal infection and should be especially valuable in suspected gonorrhoea in the female when it is often difficult to decide from smears whether gonococci are present or not.

If Dr. Keller has had any experience with the D'Amato test, I certainly would be glad to hear of it.

Dr. Keller (closing): In regard to the question which was raised by Doctor Haney as to whether or not statistics which are available at the present time give an accurate picture of tuberculosis mortality, it is quite probable that a great many people who die from tuberculosis are recorded as having died from some other disease. Also, the reporting of tuberculosis at the present time is inadequate. For this reason I do not believe that the mortality records for tuberculosis give us an accurate conception of the problem, but from available evidence there has undoubtedly been a marked decrease in the tuberculosis mortality.

Doctor Haney discussed the problem of tuberculosis in Negroes. In any control program for tuberculosis, the problem of this disease in Negroes is one which should receive a great deal of attention.

In a program for the control of tuberculosis there is no doubt that hospitalization of patients in a well administered institution is necessary and of prime importance. There are, however, circumstances under which hospitalization is not available for patients, and those conditions it will be necessary to care for tuberculous patients in the home. It is possible that no one plan of caring for patients with tuberculosis will be satisfactory in any one community. Before instituting plans for the care of patients with tuberculosis it would be best to study the problem of tuberculosis in a community and after careful consideration of the results found during the study the method best suited for the care of patients with tuberculosis in that area could be adopted.

Doctor Smith brought up the question of tuberculosis in old people. I would like to call your attention to the fact that tubercle bacilli from patients with chronic fibroid tuberculosis are virulent and such individuals are especially dangerous since the disease is as a rule not discovered and diagnosed as tuberculosis. Such individuals are capable of spreading the infection over a long period of time. Patients with chronic fibroid tuberculosis

have repeated attacks of what is called by them bronchitis. They have recurrences of coughing, probably once or twice a year, especially during the spring and fall. Under such conditions a great many of these people are suffering from a recurrence of a tuberculous focus. In Tennessee the chronic fibroid type of tuberculosis is being found to be a very important source of spread of tuberculosis and I would like to emphasize this fact.

The question was raised by Doctor Blackwelder as to whether or not the tubercle bacillus might have become attenuated and this might account for some of the decrease in the mortality from tuberculosis. I have no accurate information that this has occurred, but is it not possible that something is happening to the population rather than to the tubercle bacillus? We are living under better conditions and it is possible that our improved economic condition may in some way account for the decrease in tuberculosis.

Dr. Lippincott asked about the D'Amato test. I have had no experience with this test, but from the description given by Doctor Lippincott it seems that the diagnostic accuracy of such a test depends upon not only the testing of the patient with tuberculin but also the determination of the leukocyte count for varying intervals after the tuberculin test has been done. He also mentions the fact that a similar technic may be employed in the diagnosis of other conditions, using different antigens in each condition. Doctor Lippincott also mentions the fact that the D'Amato test could be read earlier than the tuberculin test which is usually read at the end of forty-eight hours. As far as I know, this test has not been used very extensively in this country. It seems to me that while this test may be accurate we shall have to depend on the intracutaneous tuberculin test for reinforcement of our opinion of the presence or absence of tuberculous infection.

In regard to Doctor Kemmerer's question as to whether or not we can compare the degree of activity of the tuberculous focus with the intensity of the tuberculin reaction, I would say that those who are most familiar with the problem of tuberculosis think that in a general way the degree of intensity of the reaction will tell something of the degree of infection of the patient. One should not, however, depend upon this to determine whether or not the patient has an active focus of tuberculosis. It would be better to take into consideration the age of the patient with a positive tuberculin test than to depend upon the degree of reaction of the tuberculin test. In children under five years of age with a positive tuberculin test, it is likely that in a majority of the instances the child has an active focus. This is especially true if the child has been in contact with a patient who

has active pulmonary tuberculosis. In a general way a very intense tuberculin reaction in a young child probably means active disease. I wish to emphasize the fact that this is a general statement and to call your attention to the fact that the interpretation of the tuberculin test in children should be considered from the standpoint of the individual patient along with his past medical history and the history of his family in regard to previous tuberculous infection.

IODINE AND ITS RELATION TO HEALTH—A REVIEW*

MARGARET C. MOORE and HAL W. MOSELEY†

EARLY HISTORY OF IODINE THERAPY

Iodine has been known as an element for only one hundred and twenty years. Three years after its discovery in 1811, by Courtois¹, Davy² identified iodine in seaweed, and a few years later Fyfe³ reported iodine to be in sponges. Nine years after the discovery of the element, Coindet⁴, a Swiss physician, suggested that the ancient remedies for goiter—burnt seaweed and burnt sponges—might owe their efficacy to the iodine present in them.** Five years after Coindet suggested the efficacy of iodine, Angelini⁵ and Cantu⁶ analyzed certain waters, reputed to cure goiter, and found them to contain iodine. In 1896, Baumann⁷ demonstrated the presence of iodine in comparatively large amounts in the thyroid, and in 1915 Kendall⁸ worked with thyroid substance and isolated thyroxin, a compound containing 65 per cent iodine.

The early history of iodine therapy is practically the history of goiter treatment and prevention. To the lay mind, in fact, iodine therapy and treatment of goiter may

be synonymous, but there are other conditions than hypothyroidism and simple goiter where iodine in one form or another is of therapeutic importance. Among these may be mentioned especially the use of iodides in syphilitic conditions wherein the action of iodides is not definitely understood, but "definite results are seen in the rapid absorption of the tertiary lesions of syphilis"⁹. The beneficial effect of iodides in arteriosclerosis and aneurysm is probably due to this power of dissolving syphilitic deposits in the vessel walls. Iodine, in organic forms, such as iodoform and dusting powders, is used in the treatment of wounds, granulating surfaces, abscess cavities "whether due to syphilis or tuberculosis"⁹. Iodized oils are injected "as contrast mediums in roentgen diagnosis"⁹. Certain iodine compounds are almost specific when employed in actinomycosis and sporotrichosis. Iodine compounds are used in chronic bronchitis and in asthma. Thyroid substance has had a wide use in obesity. Iodine and its compounds are listed officially 25 times in the U. S. Pharmacopoeia X; 25 times in The National Formulary, 5th Edition, and 31 times in New and Non-Official Remedies, 1931. Iodine is an important drug in other conditions even though its use in the treatment of simple goiter may be considered practically specific and overshadows all its other uses.

Iodine therapy began in antiquity¹⁰; burnt sponges, probably containing alkali iodides, were used for the treatment of goiter. In 5000 B. C. the Chinese¹¹ were using thyroid soup for goitrous conditions; by 2000 B. C.¹² they were using dried thyroid. (Thyroid Siccum appeared in the U. S. Pharmacopoeia for the first time in 1910). The Phoenicians¹³ used burnt sponge; the Greeks, as mentioned in the writings of Hippocrates and Dioscorides¹⁴, used burnt seaweed and burnt sponges. That the Romans were familiar with the use of sponge ash in goitrous conditions is shown by Galen's writings¹⁴; Pliny¹⁴ and Vitruvius mentioned "goiter wells", wells which were supposed to cause goiter. Marco Polo¹⁵ mentioned the incidence of goiter in northern Asia and

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*Introductory part of a thesis submitted by Margaret C. Moore, "The Iodine Content of Certain Louisiana Sea Foods", in partial fulfillment of the requirements for the degree of Master of Science, Department of Chemistry, Tulane University of La., 1932.

**Goiter in this paper is used to cover the condition described as simple goiter, which is endemic in many parts of the world.

attributed goiter to the drinking water. In 1180 Roger de Palermo¹⁰ recommended the use of burnt seaweed and sponges for the treatment of goiter. In this country, some tribes of Indians made annual pilgrimages to the sea for salt and seafood.

Until the work of Coindet⁴, collaborating with the famous Dumas in 1820, however, no really scientific basis existed for the age-old belief in the efficacy of iodine-bearing substances in the relief of goiter. Chatin's¹⁶ work, covering the years 1850-1860, proved the presence of iodine in plants, in milk, in air, in soil, and in water, analyzing that from over 300 rivers. He divided the regions he studied into non-goitrous and goitrous sections, in the worst of which goiter was prevalent and cretinism common; the degree was inversely proportional to the amount of iodine present in the foods, air, and water of that section. Boussingault¹⁷, nearly twenty years earlier had collected very convincing data of the same nature in the goitrous regions of the Andes, but it was the work of Chatin that received general attention, was challenged and investigated by a Commission appointed by the French Academy of Sciences¹⁸. This Commission confirmed his chemical work, but the day of the recognition of the importance of Mendel's "little things" in nutrition and in disease had not dawned, and the Commission could not accept the theory that simple goiter was caused by a deficiency of iodine in food, air and water. Despite this report, medical men, particularly those in goitrous regions, continued to have faith in the efficacy of iodine therapy in goiter and kindred conditions.

The preventive side of the goiter problem was first stressed by Koetsl¹⁹ in Austria in 1855, and from time to time received attention in spite of the discouraging results following excessive usage of iodine in three departments of France.*¹⁹ After the work of Pasteur, 1873-1895, the germ theory was uppermost in the minds of everyone seeking the causative agent of any disease. It was only after Baumann's work⁷ and that of Magnus-Levy²⁰, who demonstrated the effect of thyroid substance on basal metabolism, that the theory of iodine deficiency as the sole, or chief, cause of goiter—a theory which had been so clearly indicated half

a century before by the work of Boussingault* and Chatin—again received attention. Nearly a century after the discovery of the element and more than a half a century after the work of Chatin, came the controlled experiments of Marine and coworkers²¹, which to many were conclusive proofs that iodine deficiency is the cause of goiter.

THEORIES CONCERNING THE CAUSE OF GOITER

Now, accumulating evidence has made many investigators question the accuracy of this conclusion which was accepted by most of them in the early part of the present century. The reports of the International Conference on Goiter in 1927²² challenge the iodine deficiency theory just as surely as did the reports of the Academy of Science challenge the conclusions drawn from the work of Chatin half a century before. There are those who hold to the germ theory; there are those who still claim that iodine deficiency is the sole predisposing factor of goiter; and there are those who believe that iodine deficiency is merely one of the predisposing causes of goiter.

McCarrison of the Indian Medical Service claims to have induced goiter by the administration of the contaminated sediment of drinking water and to have cured it by the administration of intestinal antiseptics.^{22, 23} Bircher²⁵ and Sasaki²⁶ are also protagonists of this theory, both claiming to have induced goiter in rats from contaminated feces from other goitrous animals. Crotti²⁴ of Columbus, Ohio, claims to have isolated "goitrogenous waters" and also to have isolated certain organisms constantly present in cases of endemic goiter. Such are the arguments put forward by the proponents of the microorganism theory of the cause of goiter.

In 1927 McClendon²⁷ was sure that iodine deficiency was the sole cause and that "goiter is the easiest known disease to prevent", and that "within another generation there will be no goiter problem."

These are the two extremes. Midway stand most of the writers of the present day, claiming that iodine deficiency is probably the major

*Boussingault and Grange, in 1860, were responsible for experiments carried on in Bas-Rhin, Seine-Inferieure and Haute Savoie.

predisposing factor in the causation of simple goiter. Other factors that have been suggested are mineral deficiencies other than iodine, but concerned with its utilization; vitamin deficiencies; periods of physical stress, fatigue and toxemias. Calcium seems to affect iodine metabolism. Abelin²⁸ reported that an excess of calcium in the diet diminishes the effects of thyroid feeding. A great deal of thought and much conflicting evidence has been reported on the effect of an excess of calcium in causing goiter,^{29, 30, 31, 22}. The effect of manganese, iron, and copper cannot, at the present time, be ruled out as unimportant according to Weston³³. Cameron²² has recently stated when discussing this controversial question, "the possibility of an effect on iodine metabolism from a vitamin deficiency" cannot be excluded. Among other causes may be fatigue, particularly during periods of physical stress, such as puberty, pregnancy, and menopause. In taking the middle ground, many would deal with the germ theory as a contributing factor. Infections and toxemias could so deplete the store of thyroid iodine that a deficiency would arise, and this deficiency of iodine would be the real cause of goiter. It seems that the last word on the cause of goiter has by no means been said.

Most recent of the theories concerning the cause of goiter is the one advanced by Chidester of West Virginia³⁴, based on his interpretation of the work reported by McCarrison³⁵, the Melanbys³⁶, the Burrs and coworkers³⁷. He claims that there must be a proper balance between the iodine fat intake, and that the degree of unsaturation of the fatty acids is also a factor. "The findings of the writer and associates indicate clearly that the reason why cod liver oil is ineffective is on account of the iodine carried with it. Burr's animals long depleted of fat and receiving potassium iodide must be given fats lacking in iodine or the iodine fat balance will not be restored. The significance of Burr's acid depends on the degree of unsaturation and not upon any specificity." He also suggests that the goiter producing ether extract from cabbage recently reported by Bauman, Cipra and Marine³⁸ was a highly unsaturated fat which had lost its iodine³⁹. Very recently Webster⁴⁰ stated that there exists in certain plants a "goiter

producing substance which is subject to a considerable seasonal and geographical variation". The author suggests that the substance may be a cyanide. This substance is capable of depressing "tissue oxidation in the body and causing, as a result, an increased demand for thyroxin. This brings about a relative iodine insufficiency, which, in turn, produces hyperplasia of the thyroid gland." "Simple goiters produced in this manner resemble essentially all other simple goiters in man and animals in their physiological and pathological reactions."

COMPARISON OF REPORTED EXPERIMENTAL DATA

Amid these varying opinions one cannot help looking at the literature (on which the opinions are based) with the following questions in mind: in these experiments in which iodine was administered, first, what form was used; second, what dosage was given; third, how long was the dosage continued, and fourth, were the control groups adequate? The following accounts illustrate a few of the better controlled experiments.

The earliest record comparing the use of iodized salt and salt without iodine on the population of three different towns was not an experiment, but a series of observations by Bous-singault in 1830¹⁷. Two towns used salt that contained iodine and they were goiter-free; one town used iodine-free salt and goiter was prevalent; one of two goiter-free towns changed its source of salt and, after using iodine-free salt, became goitrous. The iodine was probably present as potassium or sodium iodide; the amount used, unknown.

Coindet⁴ ten years before had experimented on his goitrous patients. Roughly estimated, he gave as a curative measure, within a period of six weeks and ten weeks, two to three grams of iodine as free iodine in alcohol.

Marine and Kimball²¹ gave iodine as sodium iodide. The dosage was approximately 4 grams (3.4 gms. iodine) per year for four years to over one thousand school girls. They gave

*Coindet dissolved 48 grams of iodine in one ounce of alcohol and administered 10 drops, three times a day. At the end of one week, he doubled the doses and a few days later raised each dose to 50 drops.

0.195 gms. of sodium iodide per day for two ten day periods each year.

Klinger of Zurich⁴¹ gave 1-1.5 gm. iodine per year as iodized fat for a period of 15 months to school children.

Hunziker and Eggenberger⁴² used 0.037 gm. of iodine per year as potassium iodide in salt for one year.

Hercus⁴³ and his coworkers in New Zealand used the same dosage as Marine and Kimball with gratifying results.

Nicolaysen⁴⁴ in Norway used 0.052 gm. of iodine per year as potassium iodide for 55 weeks.

The following tables will give the dosage and the results of these experiments, which have been chosen to show the very divergent methods of dosing as well as the different forms of iodine used in various parts of the world. In interpreting these results, it must be remembered that the physiologic action of the various forms of iodine differs; as does the action from small or excessive doses of the same form of iodine. Reference to tables I and II will show these data.

DOSAGE OF IODINE - EXPRESSED AS I ₂		
OBSERVER	DOSAGE	GRAPHIC REPRESENTATION
MARINE & KIMBALL	3.4 gm AS NaI	TO 1,182 SCHOOL GIRLS FOR 4 YEARS
KLINGER	0.5-0.8 gm AS IODIZED FAT	TO 750 CHILDREN, 90% OF WHOM WERE GOITROUS. FOR 15 MONTHS
NICOLAYSEN	0.052 gm AS KI	TO 931 SCHOOL CHILDREN FOR 55 WEEKS
HUNZIKER & EGGENBERGER	0.037 gm AS NaI OR KI	TO 339 GOITROUS CHILDREN FOR 1 YEAR
MARINE & KIMBALL, HUNZIKER & EGGENBERGER USED CONTROL GROUPS; THE OTHERS USED BEFORE & AFTER OBSERVATIONS		

TABLE I

GOITER INCIDENCE AS INFLUENCED BY IODINE DOSAGE		
OBSERVER	GOITER	GRAPHIC REPRESENTATION
MARINE & KIMBALL	PRESENT	TREATED
		UNTREATED
KLINGER	PRESENT	AFTER TREATMENT
		BEFORE TREATMENT
NICOLAYSEN	PRESENT	AFTER TREATMENT
		BEFORE TREATMENT
HUNZIKER ET AL	LARGER	TREATED
		UNTREATED

TABLE II

One great point of similarity exists: all of the experiments, both curative and preventive, show that iodine administration was followed by beneficial results. The differences in the treated and untreated groups are striking. The dosages differ widely among the various workers, but when it is considered that iodine in excess of the bodily need is merely excreted, this difference is less significant than the figures would indicate. The lower figures are likely to prove more important than the higher, for it would be important to know the minimum amount of iodine in its various forms that could be administered so as to be effective but not wasteful in human metabolism. Large doses are either toxic, or simply wasteful because they must be excreted. As to the form of iodine administered, it seems to be the consensus of opinion that organic iodine compounds are less rapidly eliminated than are the inorganic iodides⁴⁵.

Perhaps these universally good results following iodine administration by leading workers,—results that are in no way parallel to the amount of iodine, manner of dosing or amount of dosage,—explain the wide differences in the present practice in the use of iodized salt in the various countries. The following table from Cameron²² shows these differences:

Iodine in Iodized Salt		
Michigan, U. S. A	1 part KI or NaI to	5,000 parts of water
Canada	1 part KI or NaI to	10,000 " " "
Valtellina, Italy	1 part KI	to 100,000 " " "
Switzerland	1 part KI	to 200,000 " " "
New Zealand	1 part KI	to 250,000 " " "

It must be noted that simple goiter may develop into the more toxic forms. This happens in cases with and without iodine treatment. Some have argued that iodine therapy hastens the development in certain cases; others that the toxic form of goiter would probably have developed without iodine administration. The real point seems to be that all medicinal iodine administration should be under the observation of a physician. So far no literature reference has shown warning against a diet rich in iodine bearing foods.

IODINE IN NUTRITION

Thus far the discussion of the use of iodine has resolved itself into a brief glance at the material concerning goiter, for that condition being

endemic in various parts of the world, has attracted the most general attention. However, the goiter angle of iodine metabolism is perhaps not the most fundamental. Chatin found iodine in milk and eggs. Later work has proved iodine to be an unfailing constituent of milk. One would naturally suspect from its presence in these two foods for the young, that iodine would play an important part in normal growth and development.

Iodine is present in practically all the tissues of the body, in the blood, both in the plasma and in the corpuscles, and particularly in the thyroid. Rose⁴⁶ estimates that the iodine content of the adult man is about 25 mg. of which 15 mg. (60 per cent) occur in the thyroid. Von Fellenberg⁴⁷ believes that the tissues and the blood rank about the same in iodine content with the possible exception of the ovary and the spleen which he believes to have a somewhat higher content.

With these facts in mind, it is not surprising to learn that iodine is essential for normal growth. Bramwell⁴⁸ in 1895 demonstrated that growth can be induced in cretins by the administration of thyroid. This is dramatic but not nearly so significant in round figures as the number of children who fail to grow normally, and manifest various pathological symptoms. Langdon Brown⁴⁹ believes this may be due in many cases to hyperthyroidism. Hunziker (1920) and Hunziker and Eggenberger (1924)⁴² showed that children receiving small amounts of potassium iodide grew better than control groups receiving no potassium iodide. Fraser, working in Cumberland, states that after the administration of ferric iodide "in practically every case—a marked improvement in health and physique, a gain in weight, in energy, and in working capacity, results".⁵⁰

Kelly⁵¹ showed in experiments on pigs, that for doses of inorganic iodine that were not toxic, increased iodine intake seems to favor nitrogen retention and assimilation. Schafer⁵² and Hewitt⁵³ (1912, 1914) working on rats, showed that there was an optimal dosage of thyroid substance, the giving of which accelerated growth and caused a positive increase in nitrogen retention, but that over-dosage caused

a fall in nitrogen retention. The data on human beings concerning this point seem meager.

Regulation of the basal metabolism rate is certainly one of the functions of the thyroid. The rise in basal metabolic rates which follows the use of thyroid appears, according to Cramer and McCall⁵⁴, to be due to increased carbohydrate metabolism. This possible activating action of iodine and its bearing on diabetes mellitus was discussed by Geyelin.⁵⁵

Thyroid deficiency is associated with marked bone changes. "Lesser degrees of thyroid deficiency produce bone changes which have been taken to resemble rickets. These changes are associated with disturbance in the excretion of both calcium and phosphorus".⁵⁶

Kelly⁵¹ found that potassium iodide increases the retention and assimilation of phosphorus in growing pigs.

Thyroid substance has a direct influence on the formation of red blood cells, and inorganic iodine raises the red blood cell count, but less markedly than does thyroid dosage.

The skin and hair also are affected markedly in both animals and people during thyroid deficiency, and the administration of thyroid can change the harsh, dry tendency of the skin completely. Even early grayness as well as scant growth of hair have been associated in the minds of some workers with hypothyroidism.^{57, 58}

OPTIMAL IODINE INTAKE

Iodine, from all evidence that has accrued, is a potent factor in normal growth and well being, and in most instances where one can judge from the data available, there seems to be a distinct line between optimal intake and overdosage, each condition displaying a distinct set of conditions.

Since there is danger of excessive intake of so potent a drug as iodine in its various forms, it became necessary to study the normal intake of iodine and the form in which it was best assimilated by the body. The normal intake has been approached from two angles. First, the average intake of a population that was goiter-free as estimated by the content of the water and food supply of that region. These data were compared with those from similar groups in goitrous regions, and in goitrous regions where

cretinism was common. By this process seventy-five years ago, Chatin¹⁶ arrived at 0.01-0.02 mg. of iodine as the normal daily intake of a man in food and drink. In 1923, Von Fellenberg⁵⁹ estimated the average daily intake of a non-goitrous population to be 0.03 mg. per day. Hercus and Roberts in 1927⁶⁰, by similar calculations arrived at 0.035 mg. per person per day as a normal intake of iodine. Second, the approach to this problem is based on the excretion of iodine in the urine, the feces, and through the sweat glands, but mainly through the urine. Using analysis of these excretions as a criterion, Von Fellenberg⁶² was able to maintain an equilibrium in himself on 0.014 mg. of iodine per day. In two communities, Kaisten and Hunzenschwil,^{61, 62} he estimated the excretions in normal groups and found 0.024 mg. per day to be the average output of the normal groups in both places. He also studied the requirements of a child⁶³ and found it to be about three times the need of an adult. The Privy Council Medical Research, *Iodine in Nutrition*, concludes that 0.045 mg. per day will provide a satisfactory margin of safety for an adult male, and 0.150 mg. for a child.

The above figures apply only to normal conditions. There are other considerations that should be mentioned. There are times when the body makes an unusual demand on its store of iodine. Ovarian function and thyroid function⁶⁴ have been shown to be interrelated. The iodine level of the blood rises at the onset of menstruation⁶⁵ and at the end of pregnancy⁶⁴. Yoakam and Olesen consider iodine administration a wise precaution during pregnancy and lactation.^{66, 67} Acute infections⁶⁸ such as diphtheria and measles have been shown to create an excessive demand for iodine. Perhaps most infections constitute a drain upon the iodine store of the body.

ASSIMILATION OF THE VARIOUS FORMS OF IODINE

As to the assimilation of the various forms of iodine¹⁹, data exist for thyroid substance, for sodium and potassium iodide, and for iodized fats, but there is very meager knowledge concerning assimilation of the iodine content of various foods. The dearth of the latter information is deplorable since the greater part of the

world's population gets its iodine supply, which is so necessary for normal growth and development, from food and drink. Thyroid substance is very potent and should be ingested only on the orders of a physician; and its full effect is manifest seven days after administration. The alkali iodides if taken in large quantities are excreted mainly through the kidney, and hence the ingestion of such large amounts of these as has been given in some of the experiments cannot be considered as any more than iodine taken in excess and excreted²². Von Fellenberg's⁶² experiment on himself gives data that should certainly show the need for definite work with regard to assimilation of iodine in drugs and food. Before a figure for normal iodine intake is adopted and used with a table of iodine, one must consider that all the iodine intake is not assimilable. Von Fellenberg states in per cent of iodine intake that the following was the amount he assimilated:

Iodine Assimilation

Potassium iodide	34.4 per cent assimilated
Codliver Oil	47.7 per cent "
Sardines	24.5 per cent "
Watercress	12.9 per cent "
Sardines (oil removed)	9.5 per cent "

This shows that there is certainly a difference in the assimilability of the iodine as it occurs in foods, but the fact remains that these data on the assimilation reflect the assimilation of but one man at one particular time.

IMPORTANCE OF IODINE IN FOODS

It is well to admit that while the goiter aspect of the problem of iodine metabolism has received the most attention, yet it is probably far less important than the role of iodine in normal growth and nutrition. It must also be realized that while most of the studies made have concerned the administration of iodine as the element, the inorganic iodides, thyroxin and a very few other organic iodine compounds, yet most of the world unwittingly gets sufficient iodine to meet its needs from foods. This iodine from foods, probably supplemented in many regions by iodine in drinking water, is sufficient in most regions to prevent goiter and to insure a fairly normal existence for the majority of people.

Surely, the knowledge of the iodine content of foods from various regions should be an in-

creasingly important matter in studying the problem of nutrition as it affects populations as a whole. The incidence of goiter differs from region to region; the iodine content of native foods differs from region to region; eating habits also differ widely. In addition to these well recognized factors in interpreting data available, still another factor becomes increasingly important from year to year, and that factor is the ever increasing use of canned foods. It has been shown very clearly that most of the food canned in the United States comes from the sections of the country poor in iodine.^{69, 70}

The following table of the iodine content of carrots⁷¹ shows that regional variations are too great to be insignificant, and the figures assume an increasing importance when one considers that the work is recent. Methods of such refinement have been used that the determinations of even small amounts of iodine have become possible and dependable.

Iodine Content of Carrots

Expressed in Parts per Million, Dry Basis (71)

Oregon	2.3
California	170.3
South Carolina	235.0
Louisiana	1283.0

Research on the usability of the iodine found to be present is certainly equally as important as the amount present. This point is illustrated by dried thyroid. The potency of thyroid substance cannot be judged on a basis of its iodine content as was first suggested. The dextro and laevo forms of thyroin differ in activity.^{72, 73} Recent work has demonstrated two organic iodine compounds other than thyroxin to be in thyroid substance, one physiologically active, and the other not⁷⁴. One of these compounds, 3,5-diiodotryosin, is known to occur in certain marine organism.^{75, 76} This reference to the various forms of iodine so far isolated from the thyroid,—l-thyroxin, three times more active than d-thyroxin; and iodothyroglobulin, physiologically active, and diiodothyrotyrosin, physiologically inactive,—indicates that the iodine content of a food is likely only part of the story; the form in which the iodine occurs and the ability of the body to utilize it are two additional factors that sooner or later must be taken into consideration.

In studying the iodine content of foods, sea

foods claim attention because all work reported so far has shown them to be particularly rich in iodine⁸⁸, and because goiter, if it may be considered an index of adequate iodine in the diet, is said to be rare among people eating much sea food. In Japan, goiter is reputed to be almost unknown. In our country⁶⁹ statistics show the incidence of goiter to be low in the coastal states. Washington and Oregon are notable exceptions to this statement; but the figures on drafted men in the late war gave the southern coastal states less than one per hundred thousand as compared with twenty-one to twenty-seven per hundred thousand in Idaho and neighboring states.⁷⁸

If one might show that the diet in the coastal countries and sections consists in foods richer in iodine than those consumed by the people inland, then it might be assumed that there exists a relation between diets relatively rich in iodine and freedom from goiter. The work of the South Carolina Food Research Commission has been very interesting in substantiating this point.^{13, 33, 45} The influence of iodine on goiter was established by the experiments which supplemented the diets poor in iodine with medicinal iodine and showed that goiter incidence could be minimized. Olesen says, "The lesser incidence of goiter along the sea coast is due, in part at least, to the consumption by the people of iodine containing foods" (sea foods). Lunde, of Norway, also stresses the importance of sea foods in goiter prophylaxis. Turrentine⁷⁹ has held that iodine-rich foods might easily be expected to be more efficacious in preventing and treating goiter than inorganic iodine.

It would seem from the few figures available that there does exist an important relation between the incidence of goiter and the consumption of sea foods.

Indicated Relationship of Fish Consumption to Goiter Incidence

Place	Fish Consumption* Pounds per person.	Goiter Incidence per hundred thousand (1917) draft- ed men
Atlanta, Ga.	11 lbs. (edible portion) (1927)	0.52
Jacksonville, Fla.	18 lbs. (edible portion) (1926)	0.25
Louisville, Ky.	6 lbs. (round weight) (1921)	1.41
Greater St. Louis	9 lbs. (edible portion) (1926)	3.99
Massachusetts	20 lbs. (edible portion) (1926)	0.32

*These data were furnished by the U. S. Bureau of Commerce

It will be noted that the fish consumption figures are for cities, except in the case of Massachusetts, and that the figures on goiter incidence apply to states as a whole. The eating habits of the country are not necessarily those of the city. The years of comparison are also different, but eating habits of a whole people do not change readily, unless influenced by some economic factor that makes a food once a luxury into an everyday commodity, as in the case of bananas. With these allowances in mind, the comparison is not without meaning, and does seem to strengthen the observation of Olesen.

Now more than ever before, sea foods are of wider interest, for they are becoming increasingly available to the inland people. Modern methods of refrigeration not only make them available but cheaper. The cheapness will put sea foods on tables that in years past had to forego them as a food available only to the rich.

FACTORS THAT AFFECT THE IODINE CONTENT OF FOODS

As has been previously shown, the soil conditions influence the chemical constituents of plants. Carrots growing in Louisiana were found to be 550 times richer in iodine than those grown in Oregon.⁷¹ The mineral wealth of the land for countless ages has been leached away and carried to the sea.* The destruction of the forests has hastened this washing away; intensive agriculture has further depleted the land. Fertilizing has rebuilt the land in certain respects only. "But early in the so-called modern agricultural science—which may be said to have had its beginning nearly one hundred years ago in the work of Lawes and Gilbert, of England, and Liebig, of Germany—a world fertilizer prescription of nitrogen, potash and phosphoric acid got written and passed out to the lay and professional agricultural public"⁸⁰. Added to this there was a little regional attention to the addition of lime to certain soils. Thus only those four elements received attention in the large scale rebuilding of lands. Modern chemical processes producing more nearly chemically pure fertilizers have thrown into bold relief the fact that more elements than nitrogen, phosphorus, potassium and calcium must be returned to depleted farm lands. Magnesium, mangan-

ese, and sulphur have received some attention. Experimental work on sugar beets has indicated that iodine fertilization increases the yield.^{81, 82} All plant experiments show that the iodine content of plants is important and within limits, below toxicity, varies with the iodine content of the soil*

The iodine content of animal products such as milk and eggs differs with the food of the animal. "That raw milk can be made the means of furnishing iodine in organic combinations for goiter prophylaxis has been shown by Scharrer and Schwaibold⁸³. They found the iodine content of milk from cows fed from pastures close to the sea was 300 per cent to 800 percent higher than the content of milk from cows fed from pastures in Southern Bavaria and in Switzerland where goiter is endemia".⁸⁴ Cavanaugh, of Cornell, in 1925 recommended that the Certified Milk Producers' Association give attention to cows' feed to increase the iodine content of milk.⁸⁵ Arf, of Ohio, has recently completed eighteen years of experimentation with feeding iodine to high producing cows. He used inorganic iodides, seaweed and shrimp meal.⁸⁶ In the past year, Erf and Curtis† have collaborated in an experiment to increase the iodine content of carrots by fertilizing the land on which they are grown with materials containing iodine in organic and inorganic forms, the ultimate object being to increase the iodine content of milk by increasing the iodine content of the plants fed to the cows. The results have shown that iodine can be absorbed in large quantities by plants provided it is made available to them. At present a large milk drying concern is collaborating with pediatricians in certain hospitals in the Middle West to feed the milk from especially fed herds to gestating and lactating mothers to see what the effect will be on the goiter incidence in this especially protected group as compared with unprotected mothers in the same institution.

Less work has been done on increasing the iodine content of eggs, but the indications are that the iodine content can be increased by the

*The Mississippi River with its tributaries drains over 41 per cent of the total area of the United States and is estimated annually to carry into the Gulf of Mexico 406,250,000 tons of silt.

†Private communication.

iodine rich diets of the hens. With both high producing hens and cows, a plentiful supply of iodine is considered to be a decided factor in the animal's own health and well being.

An increasing amount of attention is being given to the poor economy entailed in using fish waste for fertilizer when it might so much more profitably be fed to farm animals. By this method the mineral matter not utilized by the animal will be economically returned to the land as fertilizer. "There is every reason to favor the view that fish meal should not be spread on the land until it has passed through the digestive apparatus of farm stock"⁸⁷. The high iodine content of fish meals is always one of the outstanding arguments for its use in feeding practices.

These aspects of agriculture and of animal husbandry have a direct bearing on the health of the people because they tend to increase the available supply of iodine in foods.

THE IMPORTANCE OF AN ADEQUATE SUPPLY OF ASSIMILABLE IODINE IN NUTRITION—A SUMMARY

Briefly, an adequate amount of an easily assimilable form of iodine is necessary for both animals and man to insure normal growth and to prevent disease. Simple goiter, while the best recognized disease concerned with the lack of iodine, is but one of the manifestations that can arise from an inadequate supply of iodine. Most of the studies that have been made concern the administration of iodine as inorganic iodides or as thyroxin; yet, in spite of the trend of these studies, most of the world continues to get its iodine from its general food supply. Foods of land origin differ greatly in iodine content depending in plants, on the soil; and in animals, on their feed. Sea foods are of especial interest because of their high iodine content, and due to modern refrigeration methods, will likely become a staple article of diet to inland people. This fact alone should be of great importance to the general health and well being of people of the interior.

BIBLIOGRAPHY

1. Courtois, Ann. de Chim., 88:305, 1813.
2. Davy, Phil. Trans. Royal Soc., 104: 74,487, 1814, 105; 215, 1815.
3. Fyfe, Ann. de Chim, et de Phys., 12:405, 1819.
4. Coindet, Com. a la So. helv. des Sc. Nat. seance, 25 juillet 1820; Ann. de Chim. et de phys., 15, 1820 *ibid.*, 16:252, 1821.

5. Angelini, Jahresber. Physischen. Win. (Bergerius) 3:73, 1824.
6. Cantu, Ann. de Chim. et de Phys., 28:221, 1825.
7. Baumann, Ztschr. f. physiol. Chem., 1:21-319, 1896. *ibid.*, II, 21:481, 186; *ibid.*, III, 22:1, 1896.
8. Kendall, J. Biol. Chem., 20:501, 1915.
9. New and Non-Official Remedies, 216-220, 1932.
10. McClendon, Physiol. Rev., VII, 7:2, 189 1927.
11. *Ibid.*, 194.
12. The Health Bulletin N. Carolina, 46:4-12, 1931.
13. Hayne, Am. J. Pub. Health, 19, 10, 1111, 1929.
14. Marine, Medicine, Ed. 6, 127, 1927.
15. Marco Polo, Voyages and Travels, Ed. 4 1927, Boni & Liveright.
16. Chatin, Comp. rend. Acad. d. Sc., 31:280, 1850; *ibid.*, 34:14, 51, 409, 1852; and other Academy reports as cited by Tressler and Wells in Bureau of Fisheries Document, No. 967, 1924.
17. Boussingault, Ann. de Chim. et de Phys., 48:41, 1831.
18. Academic des Sciences, 37:934, 1853, cited by Tressler and wells in Bureau of Fisheries Document, No. 967, 1924.
19. Medical Research Council, Iodine in Nutrition, 7, 1929.
20. Magnus-Levy, Berl. klin. Wehnschr., 32:650, 1895.
21. Marine and co-workers, Medicine, Ed. 3: 453, 1924; Arch. Int. Med., 1, 3: 66, 1909; *ibid.*, II, 4: 253, 1909; *ibid.*, 22, 1, 43, 1918; Am. Jour. Pub. Health, 18:587, 1928; J. Lab. and Clin. Med., 3:40, 1917; Jour. Am. Med. Assn., 97:1877, 1931.
22. Cameron, Can. Pub. Health Journ., Oct.-Nov., 1930, p. 1.
23. International Conference on Goiter, Berne, 280, 1927.
24. *Ibid.*, 342.
25. Bircher, Deutsch, Zeitschr. f. Chir., 112:368, 1911.
26. Sasaki, Deutsch, Zeitschr. f. Chir., 119:229, 1912.
27. McClendon, Physiol. Rev., 7:2-189, 1927.
28. Abelin, Compt. rend. Conf. Int. du Goitre, Berne, 545, 1927.
29. Lobenhoffer, Mitt. a. d. Grenzgeb d. Med. u. Chir., 24:475, 1912.
30. Berry, Brit. Med. Jour. I, Feb. 13, 1891; Lancet, I 1926.
31. Houston, 20th Ann. Rept. Metropolitan Water Board, London, 1926.
32. McCarrison, Brit. Med. Jour., 1:989, 1924.
33. Weston, So. ed. Jour., 1:989, 1924.
33. Weston, So. Med. Jour., 23: 6-487, 1930.
34. Chidester Science, 75:1934, 106, 1932.
35. McCarrison, Ind. Jour. Med. Res., 7:633, 1919-20.
36. Mellanby and Mellanby, J. Physiol., 55:7, 1921.
37. Burr and coworkers, Proc. Soc. Exp. Biol. and Med., 28:905, 1931; *ibid.*, 28:187, 1930; J. Biol. Chem., 82, 345, 1929; *ibid.*, 86:587, 1930.
38. Bauman, Cipra and Marine, Proc. Soc. Exp. Biol. and Med., 28, 9, 1017, 1931.
39. Chidester and Wesson, Med. Times, 58:11-319, 1930.
40. Webster, Endocrinology, 16:6-6617, 1932.
41. Klinger, Schweiz, Med. Wehnschr., 51:12, 1921.
42. Hunziker and Eggenberger, Die Prophylaxe der grossen Schilddruse, Bern, 85, 1924.
43. Hercus et al., J. Hygiene, London, 24:321, 1925.
44. Nicolaysen, Inter. Conf. on Goiter, 498, 1927.
45. Remington, J. of Chem. Ed. 7, 2590, 1930.
46. Rose, Ind. and Eng. Chem., 23:711, 1931.
47. Von Fellenberg, Biochem. Zeitsch., 174:355, 1926.
48. Bramwell, Edin. Hosp. Repts., 3:116, 1895.
49. Brown, Rept. Roy. Soc. Med. 18, 1-2, 28, 1924-25.
50. Fraser, Rept. School M. O. Cumberland, C. C., 51, 1925.
51. Kelly, Biochem., J., 19:559, 1925.
52. Schafer, Quart. J. Expr. Physiol., 5:203, 1912.
53. Hewitt, Quart. J. Expr. Physiol., 8:113, 1914.

54. Cramer and McCall, *Quart. J. Expr. Physiol.*, 11: 59, 1916.
55. Geyelin, *Arch. Int. Med.*, 16:975, 1915.
56. Medical Research Council, *Iodine in Nutrition*, p. 50.
57. Levi, *Lancet*, I, 1526, 1907.
58. Chang, *Am. Jour. Physiol.*, 77:562, 1925.
59. Von Fellenberg, *Biochem. Zeitschr.*, 139:371, 1923.
60. Hercus and Roberts, *J. Hyg.*, 26: 49, 1927.
61. Von Fellenberg, *Biochem. Zeitschr.*, 152:141, 1924.
62. Von Fellenberg, *Biochem. Zeitschr.*, 142:246, 1923.
63. Von Fellenberg, *Biochem. Zeitschr.*, 174:341, 1926.
64. Veil and Sturm, *Deutsch. Arch. f. klin. Med.*, 147: 166, 1928.
65. Maurer and St. Diez, *Munchen med. Wehnschr.*, 1: 17, 1926.
66. Yoakam, *Am. Jour. Obstet. and Gyn.*, 15:617, 1928.
67. Olesen, *U. S. Public Health Bulletin*, 192:62, 1929.
68. Farrant, *Proc. Roy. Soc. Med., Path. Section*, 6: 21, 1913.
69. Olesen, *U. S. Pub. Health Bulletin*, 192:27, 1929.
70. Food Industries, Nov. 1931, p. 469.
71. Merrill & Moseley, *An investigation of the Iodine Content of Certain Louisiana Vegetables and Its Relation to other Similar Studies*, Tulane University 1931. Unpublished Thesis, 1931.
72. Harington, *Biochem. J.*, 22:1429, 1928.
73. Gaddum, *Biochem. J.*, 22:1424, 1928.
74. Harington & Barger, *Biochem. J.*, 21:169, 1927.
75. Drechsel, *Z. Biol.*, 33:85, 1896.
76. Morner, *Z. Physiol. Chem.*, 51:33, 1907; *ibid.*, 55: 77, 223, 1908.
77. Wheeler and Mendel, *J. Biol. Chem.* 7:1, 1909.
78. Olesen, *Distribution of Endemic Goiter in the United States as Shown by Thyroid Surveys*, 1927, U. S. Public Health Report. Reprint No. 1125.
79. Turrentine, *Endocrinology*, 8:409, 1924.
80. Gates, *The Country Gentlemen*, July, 1932, p. 6.
81. Scharrer and Strobel, *Angew. Botanik.*, 9:187, 1927.
82. Stoklasa, *Biochem. Zeitschr.*, 176:38, 1926.
83. Scharrer and Schwaibold, *Biochem. Zeitschr.*, 180: 307, 1927.
84. Egdahl, *Certified Milk*, *Proc. of the Am. Assn. Med. Milk Comm., Cert. Milk Prod. Assn., and Metropolitan Cert. Milk Prod.*, p. 98, 1930.
85. Cavanaugh, *Proc. Annual Conf. Am. Assn. Med. Milk Comm. and Cert. Milk Prod. Assn. of Am.*, 19: 73, 1925.
86. Erf, *An Eighteen Year Survey of the Physiological Effects of Feeding Iodine to High Producing Cows*, Ohio State University, 1930.
87. Fish Meal as a Feed for Swine, *U. S. Dept. of Agr. Bull. No. 610*, 1917.
88. Olesen, *U. S. Public Health Bulletin*, No. 192, 56, 1929.

SOME OF THE SURGICAL ASPECTS OF OBSTETRICS*

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The application of the principles of surgery to obstetrics within the past quarter of the century has made it possible for the general ad-

vancement in modern obstetrical science. The development of antisepsis and asepsis marked the beginning of the new era in general surgery, so the application of modern surgery to the science of obstetrics has marked a new era in obstetrical practice.

The development of modern obstetrical surgery dates from the perfection of the classic caesarean section when Saenger, in 1882, accurately closed the uterine muscles and peritoneal coverings separately. The mortality and morbidity of the classic section materially fell to a rate corresponding to that of other abdominal operations, and when antisepsis and asepsis was applied in obstetrics and when the lesson was learned that repeated vaginal examinations after the membranes ruptured conveyed bacteria from the vagina to the uterine cavity causing infection, the mortality of obstetrical operations materially improved and now obstetrical surgery is a modern science, but still has its scope and limitations.

We have learned that it is bad practice to attempt to deliver the unengaged head by forceps, especially if the unengagement is due to a contracted pelvis or a disproportion between the head of the child and the pelvic outlet. While this may rarely be successful, it often fails and the unsuccessful attempt frequently leaves the patient wounded and infected. It is always necessary to wait for engagement and moulding of the head for the successful application of forceps, and if this is not accomplished it is far better to do a caesarean, which to my mind materially reduces the mortality or morbidity to both mother and child.

The modern conception of the genital tract at labor was for a time greatly confused by conflicting reports from bacteriologists concerning the condition of the vagina and cervix. There is abundant evidence that bacteria morphologically identical with virulent bacteria are present in the vagina during pregnancy and at the beginning of labor. The virulence can only be determined by transplanting them on a favorable soil. Some streptococci under these circumstances become hemolytic or directly poisonous, and others show much less virulence.

A complete sterilization of the vagina during labor is almost impossible, and too frequent at-

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

tempts usually injure the patient and cause infection. The best plan according to my opinion is a thorough application of a five per cent mercurochrome and 30 per cent alcohol solution to the vulva and buttock, and a gentle swabbing of the vagina with a 0.5 per cent acriflavine in glycerin.

All obstetrical surgery should be based on a simple obstetrical reasoning rather than depending on memorized or text book indications. Most authors give the same indications for the different obstetric operations. But when we come to the bedside of an individual case, instead of trying to memorize the surgical indications to suit the individual case, we should use our common sense obstetrical reasoning and we usually have time to reason and meditate, and it pays to take time in the majority of cases. The common midwife is better and will have less mortality than a doctor who is in too big a hurry.

In an article written in 1917 by Williams, he sounded the warning against the too frequent operation which seems to have overtaken the profession in the reckless and frequent inopportune performance of caesarean section. He attributed it then to defective medical training. I wonder if the same thing could be said of it today and not only caesarean section, but to all other obstetrical operations. Wherein is the fault in the medical or rather obstetrical training? This accusation could possibly rightfully be applied to our day of college training, because in those days we got very little practical training in the obstetrical science. The didactic lectures were about all we got. I believe all students of today get a decidedly better training. They not only get the lectures, but also get the practical experience under the guidance of a trained obstetrician. Notwithstanding this fact, there seems to be more radical procedures done now in this age.

About ten years ago a committee on maternal welfare of the American Association of Obstetrics, Gynecology and Abdominal Surgery in its report listed as one of the causes of maternal death in pregnancy and parturition "too much interference with the normal processes of labor by men who do not know how." We might add to that statement and say by men who do

not take time for the normal delivery, or possibly those who have not made a careful study of the individual case as regards the anatomic and physical condition of the mother and the proportionate size of the child before actual labor begins. We should never interfere with the normal processes of labor when the mother and child are normal so far as we are able to ascertain after careful study and examination of our patient.

Modern obstetrical surgery aims for the mother to obviate the dangers of contracted pelvis and disproportion between mother and child; to deal successfully with the pathologic conditions of the pelvis or abdomen complicating labor; to repair the lacerations produced by labor and thus restore the mother as far as possible to a sound anatomic condition after parturition.

It does far more in the interest of the child. Delivery by abdominal section is the safest artificial delivery; not only is the life of the child saved but also injuries to the nervous system which may seriously jeopardize its health are avoided.

In regard to the repair of lacerations following delivery, there still remains some differences of opinion as to when these repairs should be made. Some advise immediate repair and this is the plan I usually follow, while others with possibly as much or more reasoning advocate a later repair. We all know and it is old knowledge, that the uterus should drain freely during the puerperal period and it has been made reasonable and plain by modern research that retained lochia in the uterus without drainage will cause infection, and any attempt at immediate repair of a lacerated cervix or perineum to be successful must not interfere with drainage, or this condition of primary importance.

Going back to caesarean section, I would like to say that its indiscriminate application as a last resort is not modern obstetrical surgery. In cases in which unsuccessful attempts have been made at delivery and possible infection has developed, a caesarean in those cases is a very serious matter and if it should be done at all, it is better also to remove the body of the uterus together with the tubes, which adds quite

materially to the post-operative shock and leads to a higher mortality.

The decision to limit the classic caesarean section to proper cases is a modern decision and has resulted in great improvement. The application of delivery by section, when the mother is suffering from some dangerous disease such as eclampsia, is an error of the past and not the best teaching of the present. It is a subject that has been thoroughly discussed from time to time in recent years and we should have learned the lesson that forced labor and immediate delivery to those patients suffering from some acute disease has been relegated to the background. It is rarely ever a justifiable procedure. The mortality figures range from 24 to 66 per cent, while the mortality figures in cases treated conservatively range from 2 to 18 per cent.

One of the many reasons for the fearful mortality in caesarean section may be the extending of indications to such an extent as to make labor pathologic in far too many instances. As I have said before, individualization of all patients is desirable and indications for caesarean section are necessarily and rightfully elastic. In doubtful cases the invocation of one's obstetrical conscience will end in action which is safest for the patient. We must consider also in these acute pathological cases, that a difficult delivery from below with its attending lacerations, hemorrhages, traumatism, and long anesthesia is by no means without danger to the mother, and the number of still births, cerebral hemorrhages and fractures of the cervical spine of the child is appallingly high.

The mortality in caesarean section is also due in part to the time at which this operation is performed. The death rate increases approximately one per cent with each hour of labor and each vaginal examination, and increases 10 to 15 per cent after each attempt at delivery.

It is believed by some that the primary mortality in caesarean performed before rupture of the membranes, before the patient is unduly fatigued and without vaginal examination, will be so low as to contrast favorably with any method of delivery in similar cases, and especially if the operation be performed under local anesthesia.

Local or infiltration anesthesia has many advantages over general or inhalation anesthesia. There is a diminution of post-operation nausea and vomiting, the absence of shock, the fear of post-operative pneumonia being practically dispelled, and paralytic ileus with distention, a very serious post-operative complication following caesarean section, is rare or very much less liable to happen.

In complicated cases which are already taxing the patient's resistance to its capacity as renal toxemia with high blood pressure, profuse hemorrhage, organic heart disease or advanced tuberculosis, inhalation anesthesia is decidedly hazardous if not absolutely prohibited. In such cases local anesthesia may be used with comparative safety and the ease of its employment is most striking and convincing. In the use of local anesthesia there is no effect on the heart, lungs, kidneys or other vital organs of the mother, and it in no way affects the well being of the child. On the other hand when narcotics are employed or any form of inhalation anesthesia is administered to a pregnant woman at term, unquestionably some of the anesthetic agents are absorbed by the child producing cyanosis and often times rendering resuscitation difficult.

The absence of dehydration and suppression is a distinct advantage in the use of local anesthesia. The carbon dioxide content of the blood is not altered and asidosis rarely follows its use.

Spinal anesthesia in caesarean section is being used by some surgeons with very pleasing results, but I have had no experience with its use in such cases, and until recently obstetrics was given as one of the contra-indications for its use. However, from the reports of those who have used it I see no reason why it would not be all right in selected cases. It is said to have no effect on the uterine contraction and it has no effect at all on the baby. It would seem to be the anesthetic of choice in preventing the very troublesome and frequent post-operative condition of ileus in these cases.

The last, but by no means least important, surgical condition that I wish to call your attention to on this subject is episiotomy. This is described as a surgical incision in the vulval tis-

sue to prevent rupture of the perineum and to facilitate labor. It is a simple and a very important procedure and should be done more frequently than it is done today. DeLee says it should be done routinely as the prophylaxis against cerebral hemorrhages in the delivery of premature infants and in all primipara with a rigid vulval outlet. He says also that episiotomy without doubt has its place in obstetrics and cannot be dispensed with. Unless the obstetrician knows the anatomy and knows how to do clean obstetric work, he had better let nature tear the women when she will.

To those of us doing obstetrics, the delivery of a primipara without a tear either anteriorly or posteriorly is quite an accomplishment. But in doing so, are we aware of what might have occurred and in the greater percentage of cases does occur beneath the intact mucous membrane, viz., a stretching of the pelvic diaphragm to such an extent as to ultimately favor the condition of a rectocele, a cystocele and later a *descensus uteri*?

We see these conditions frequently and the only treatment is surgical, but the better treatment is prevention by doing an episiotomy at the right time.

The incidence of pelvic relaxation is 55.6 per cent after spontaneous lacerations due to labor, compared with only 3.4 per cent after episiotomy.

Some obstetricians prefer making the incision in the median line, or perineotomy, but the majority who have written on the subject prefer the left medio-lateral incision for the reason that it provides the greater space at the outlet and the incision may be extended into the ischio-rectal fossa if necessary.

In conclusion let me urge you that when you are called upon to resort to surgery in an obstetrical case, that you be not in too big a hurry but take time to give your patient the same pre-operative care and preparation that you would any other surgical case.

DISCUSSION

Dr. I. C. Knox (Vicksburg): Dr. Flynt has brought us some timely warnings as well as sound advice in his paper today. I believe there is more poor work being done in obstetrical surgery than in any other branch of surgery and I think it very

timely of Dr. Flynt to choose this subject and discussion at this meeting.

After reviewing the literature and obtaining the opinions and the results of experiences of many noted men doing obstetrics, we find ourselves, in each individual case, left to decide the proper procedure for adequate handling of the problem presented.

As to the episiotomy, the indications are, in the main, first in primiparae, where the perineum is greatly distended and the muscles are being over-stretched and separated, and where ultimate laceration is imminent; second, in premature labor, whether primiparae or multiparae, if the pressure is great. The method is left largely to the individual operator, but on account of less bleeding, in my opinion, and because better repair can be done, I prefer the median incision. This is almost universally followed in our clinic and in about eight per cent of our cases last year an episiotomy was done.

As to caesarian section, I am glad that the pendulum has swung back from the more or less radical viewpoint of a few years ago. The reasons ascribed at that time for doing caesarian sections were too numerous to mention now and I am glad that lots of them are being forgotten. Almost every doctor of any prominence and many less known have written their views relative to caesarian section. The indications for caesarian section, in my opinion, are few. Where there are obstructing tumors, placenta praevia centralis, rachitic or contracted pelvis, I see no reason to wait, but to do a caesarian as soon as possible. In eclampsia, we rarely find a case that should have caesarian immediately. To operate upon one of these cases without the recognized pre-operative preparation being made or without getting the patient in as good surgical condition as possible is inexcusable and no doubt the mortality reported in some of these cases is due to lack of proper pre-operative preparation. Occasionally these cases will not respond and perhaps caesarian section is indicated. There is one other condition—separation of placenta—which probably is an indication for caesarian section.

As to repair of a lacerated cervix, there we have different men, and excellent ones too, differing as to when to repair a lacerated cervix. It has been our rule to do these immediately, although I know there are some of the best men in America, namely DeLee, who wait until the ninth day and then repair the laceration of the cervix. If the cervix is lacerated alone and not the perineum this probably is a good procedure and is perfectly safe. If the perineum has undergone extensive repairs, then you are meeting not only with difficulty, but also facing a danger of undoing your primary repair of the perineum. So I think each case

should be handled according to its own merits and indications.

I enjoyed very much Dr. Flynt's paper and I am sure that I will benefit by having discussed it.

Dr. S. S. Caruthers (Duck Hill): I did not rise to discuss the paper but to ask for information—after caesarian section, followed up to show behavior of the uterus, is the danger of ruptured uterus materially increased in subsequent labors? I have not had opportunity to have come in contact with any carefully studied statistics with that question in front.

Dr. Joe Green, (Laurel): I was downstairs and could not be here in time to hear this paper read but I believe from the discussion I have heard, we are taking care of the surgical end of it which is right; however, you gentlemen have no surgical part in these cases. I do a little obstetrics all the time—would do more if I had the chance—I am more thoroughly convinced each day that practically the large number of cases of ulcerated perineum and torn cervix could be prevented if the obstetrician would do his duty. A man that hasn't patience should not do obstetrics, and a man that will go in because he is in a hurry with a ruptured os and begin giving pituitrin should be ashamed if he has any feeling for the future welfare of that woman. But if we get complete dilatation, this could be done in a majority of the cases by treating with morphine, but if you do I want to tell you now—watch your babies, and if you will watch them close enough you will conclude it is not the thing to do. I used to do obstetrics in a hospital where they required it, but I am saying, and I believe it is not worth while. Manufacturers claim it has no effect whatever on the constructual part of the uterus. I think they are wrong; however, it does work beautifully in a lot of these rigid cervixes. If you must use instruments to help the mother to deliver put her to sleep. Keep the thought before her "don't bear down" and she will go to sleep. It takes 20 or 25 minutes to get that baby's head, but if you go slowly you won't have any lacerations, and of course if you do get one, do your repair work. So many hundreds and thousands of women all over this country today are gynecological patients and surgical cases of jack-leg obstetricians. We can not help what has gone behind us, but let's do better in the future. We know better, we should be willing to stay with these mothers and take care of them if we assume the responsibility of the case.

Dr. M. L. Flynt (closing): I wish to thank the chairman and gentlemen for the discussion of this paper and in reply to inquiries with reference to caesarian section, some have said "Once a caesarian, always a caesarian." I do not know whether that is true or not. I have had the ex-

perience of delivering one woman normally after she had had caesarian. I also have had the experience of doing the third caesarian on a woman who had had two previous ones. I did not think she could deliver the baby normally. After she had gone into labor for a few hours, she rushed into our place and was having hard pains, and without any vaginal examination we put her on the operating table and did a caesarian. We were delighted that we did when we got inside, for she had had several pains and the uterus had ruptured about one inch. About one more pain and she would have had a baby in the abdomen. She is living today but won't have any more babies, because we tied off the tubes. I think that should be done in every case of the third caesarian. I do not believe women should be allowed to have more than three caesarians, anyway. That has been my experience in answer to that question.

In regard to Dr. Green in his discussion, I do not think he heard all of my paper. I do not care how careful we are with our obstetrical practice, we will have cases in which we will have to resort to surgery. As I brought out in my paper, there is one surgical procedure that I think should be done frequently, and that is episiotomy. Of course it is an operation, but it is simple, and you will be delighted with the results when you try it. If this operation is done and closed right, it will certainly help you in your bad cases.

CERVICAL OBSTRUCTIONS*

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In presenting this paper on cervical obstructions I do so, not with the idea of bringing out any new facts, but merely to bring to your attention a few points as "food for thought". If I may be able to cause you to think more often of the cervix acting as a focus of infection alone, I shall feel amply repaid. Not only the gynecologist, but the internist and general practitioner as well, are constantly encountering cases of cervical obstruction yet do not give these conditions the attention that they should be given. I am convinced that these lesions are of outstanding importance.

Cervical obstructions may be classified as congenital, acquired, partial and complete.

To understand congenital obstruction of the

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

cervix it is well to remember that the entire genital canal, vagina, uterus, and tubes, is derived from the Mullerian tubes, or ducts. When the Mullerian ducts fuse at their lower ends they are first solid, but eventually become hollowed out and form the common genital tract. Just as we may find congenital abnormalities of the vagina, uterus, or tubes, so it is with the cervix. There may be total absence of the endocervix, or only partial absence, producing complete or partial obstruction, or atresia. This type of case is rare, yet may occur. The cervix is peculiarly affected by genital infantilism. It may share in a general defective development that is apparent in all the organs, or it may exhibit individual faults, the rest of the system being normal.

The classification in which we are most interested is the acquired type of obstruction. The largest majority of cases of obstruction in young women is found in those who give a history of genital infection, frequently gonorrhoea, and those who have had instrumentation for one cause or another. Patients who have had gonorrhoeal endocervicitis, and who have had repeated treatments of the cervix, particularly during the acute stage, present cervixes with single or multiple strictures. Next in frequency is the stricture produced by the use of radium, within the uterus or cervix. This, as a rule, is due to an over exposure. These strictures usually become apparent at the stage of marked contraction which usually occurs after about six months. Quite often we see strictures, some severe, following the use of the cautery, particularly if the cautery is too hot or if too much of the endocervix is destroyed, by too many linear cauterizations or if the cauterization is carried too high in the canal. Curretage frequently causes obstructing bands of adhesions; corrosive drugs as phenol, zinc chloride, etc., are equally to blame for adhesion formation. Instrumentation of any kind, as in instrumental abortions, instrumental deliveries, normal deliveries with cervical lacerations, dilatation for various purposes, produce injuries to the delicate mucous membrane which allow formation of adhesions soon after the structures come in contact unless steps are taken to prevent such. The insertion of well lubricated gauze, or

smooth glass pessary for about thirty-six hours in case of simple dilatations answer the purpose well. Following such above mentioned dilatations or other instrumentations, leucorrhoea frequently follows, the treatment of which may cause strictures unless gentleness prevails.

Cervical operations and even supravaginal hysterectomies sometimes cause strictures which hinder the proper cervical drainage. Some of the worse types of strictures follow cervical amputations and trachelorrhaphies, some properly and some improperly performed. Senile changes following the menopause may cause a closing of the cervical canal itself, or may cause obstruction due to the presence of some premenopausal condition, as a polyp, which before the change had produced no obstruction or symptoms which were noticed at all. Abnormal growths in the cervix or even the lower portion of the uterus may cause obstruction. Polyps, fibroids, and other benign or malignant growths are frequent causative factors during and even after the child bearing period. Large nabothian cysts have been seen to partially occlude the cervical canal, preventing thorough and ready drainage. Malpositions of the uterus, either congenital or acquired, are mentioned, but in the opinion of the writer these abnormalities do not cause as much real trouble relative to the occlusion of the endocervix as is commonly believed. However, there are exceptions to all rules.

Why have we just come to realize the value of studying and looking for cervical obstructions? As Dr. Curtis, of Chicago, said in one of his papers, it must be due to the fact that we have heretofore had our mind on the pathology above the cervix and thus overlooked the real cause of the pathology. Frequently we see cases of cervical obstruction complaining of leucorrhoea, dysmenorrhoea, dark tarry blood at the period time, nervousness, and other signs and symptoms. There may be intermittent discharge of pus or muco-pus caused by the accumulation above the obstruction. Above practically all obstructions there is a certain amount of dilatation which acts as a pocket. This dilated area retains secretions which become old and irritating, producing vaginitis and other symptoms. Pyometra and hydrometra follow

cervical obstructions. These latter conditions are usually, not necessarily, seen after the menopause, especially hydrometra. Cervical obstruction may cause a back flow of menstrual blood into the peritoneal cavity, infection may be carried up that way with all of its consequences but no doubt this is rare.

In patients who are past the menopause and come in complaining of persistent or intermittent leucorrhœa be careful in exploring the cervix for there is usually some sort of obstruction, malignant or otherwise. Obstructions are not always easy to find. In exploring the cervix it is best to first use a small flexible sound with the enlarged rounded tip. This type will do no damage if carefully used. If no obstruction is found a small blunt fish-hook type sound should be used so that on withdrawing the sound the hook will become lodged in the pockets.

The usual type of obstruction, that is from mild adhesions or constricting bands, usually yields to simple dilatation, not one dilatation but frequent gentle dilatations with graduated dilators. Strictures following the use of the cautery are very difficult to handle. Prevention is the best. What the writer thinks to be the best method of cauterization, if cauterization is to be used at all, will be shown on the screen later. Even this method should be followed by the use of sounds to prevent cervical stenosis. Obstructions due to polyps of course can be relieved only by removal of the obstructing body. Occasionally more extensive surgery must be resorted to, as one of the operations for complete removal of the endocervix, the Sturmdorf or Shroder operation. The Shroder operation has the disadvantage of leaving a greatly mutilated cervix in case the sutures slough or the operation is not well performed. Since the advent of the radio knife, a special attachment thereto enables one to core out the endocervix nicely. As much of the endocervix may be removed as is desired, small bits being removed at a time and very little contraction follows and no hemorrhage, the ends of the vessels being seared over by the coagulating current. Occasionally in cervical obstruction it becomes necessary to do a total hysterectomy. The writer believes that total hysterectomy will soon replace

the supravaginal operation in many of the cases which are now receiving the latter.

SUMMARY

1. Obstructions of the cervix may be either congenital, acquired, complete or incomplete.
2. The recognition of cervical obstruction is just now beginning to be given proper consideration.
3. Symptoms of obstruction are persistent or intermittent leucorrhœa, offensive or unoffensive, before or after the menopause; dysmenorrhœa; dark tarry discharge; enlargement of the uterus from pyo- or hydrometra in case of complete obstruction; amenorrhœa in case of congenital obstruction; various general symptoms which may develop in the face of any other focal infection.
4. Pathology includes all types of obstruction either partial or complete, with retained products which act as a focus of infection.
5. The treatment of cervical obstruction resolves itself into the removal of the obstructing parts, whatever they may be, by proper surgical procedures.

DISCUSSION

Dr. A. M. McCarthy (Electric Mills): While the essayist was reading his paper I recalled very vividly my clinical introduction to this subject and if you will spare me a few minutes I believe I will relate it, for it will emphasize by example two or three of the major points that Dr. Hand has brought to our attention. This experience dates back to my internship. A white woman was admitted to the gynecological service complaining of lower abdominal discomfort and amenorrhœa of three months duration. In her past history she related that she had a cervical cauterization, in the same hospital, about a year previously. In my examination I found what I thought was an exceptionally normal appearing cervix for a multiparous woman, i. e. the external os was round, small, and clean. Bimanual palpitation revealed the uterus to be enlarged to approximately the size of a three months pregnancy, it was symmetrical, soft, and moderately tender. I immediately concluded that the woman was pregnant and was about to call upon the obstetrical department to accept the patient on their service when the attending gynecologist came in to make ward rounds, and it happened to be my former professor of gynecology. When we came to this woman's bed I related the history and my physical

findings and ventured the opinion that the patient should have been admitted to the obstetrical service. Professor quizzed the woman in detail about her symptoms and past history and then suggested that we examine her together before we called in any outside help. As soon as she was placed upon the examining table, Professor became very interested in this woman's cervix. He inspected and palpated it and then called for a probe. He very gently tried to pass this up the cervical canal. It entered the external os and passed up the canal about a cm. and met an obstruction. He tried a smaller probe and it would not pass the obstruction. He sent me to urology for a small filiform bougie and even this would not pass the obstruction. Thus, very much to my chagrin, I had demonstrated to me my first complete cervical obstruction. Investigation of previous record revealed that this woman's cervix was cauterized with an actual cautery of the old soldering iron variety. I assisted at the operation, next morning, that was necessary to relieve the obstruction, and it amounted to virtually an amputation of the cervix. When the canal was opened about a cupful of chocolate colored thick fluid material was evacuated from the uterus. This was the accumulated discharge of three menstrual cycles some of which no doubt was expelled back through the tubes into the pelvic cavity and probably the cause of some of her pain. I was taught three important lessons from this one case, and that is the one reason that I mention this experience. First, it taught me the fallacy of an inadequate examination; second, it taught me the value of a cervical probe; and third, it taught me the disastrous results that can occur from improper cervical cauterization.

The essayist has demonstrated to us a simple and safe method of electro-surgical treatment of endocervical infections which will eliminate the possibility of such disastrous results. I heartily agree with him that too little attention is paid to the cervix in our search for focal infections. If we could but see the lymphadenitis and often the phlebitis that occurs in the perimetrial tissues and broad ligaments in association with endocervical infections, then we would be just as prone to accuse the cervix as we are the tonsils when we feel the enlarged glands in the neck. I wish to congratulate Dr. Hand for the manner in which he presented this very timely subject; one that has been crying for emphasis for a long time.

Dr. E. R. Nobles (Rosedale): This is the first time I have heard a paper on this subject in quite a long time. It appeals to me as being very timely, and I want to compliment the essayist for presenting it so concisely.

Benign lesions of the cervix have a three-fold meaning to me: First, to be considered is the

local effect, manifested generally by an annoying discharge, either continuous or intermittent that often will tax the ingenuity of any of us to cure; second is the focal effect to which our attention has been especially directed in recent years; and, third, the irritation present and the trauma often inflicted to effect a cure, causes a certain degree of apprehension as to the ultimate fate of this tissue as the patient approaches the cancer zone.

The cervix has been treated by the profession as a whole I think with as little consideration as any organ, the tonsil and appendix not to be excepted. It has been incised, curretted and cauterized, and then promptly forgotten, in spite of the fact that one-third of the cancers in women originate in it. We know that it is only passively involved in the menstrual cycle, but we also know that there are several critical periods in its history, and those of us who give our patients routine care should be certain to inspect it: (1) a month or two after parturition; (2) again at the end of the nursing period; (3) always in the presence of a leucorrhea or a history of prolonged treatment for this condition; and, (4) once a year at least for the first five years after the menopause.

If this is done our position is greatly improved in handling these troublesome lesions and our patient can often be relieved of a surgical attack, which even in the best of hands is not always so satisfactory.

Although the use of strong chemicals such as tincture of iodine, carbolic acid and strong solutions of zinc chloride and silver nitrate have been approved and used, they hardly fit in with our present conception of the treatment of local infections elsewhere, and undoubtedly the abuse of these agents has been responsible for many strictures in this canal.

Milder antiseptics, even in the chronic infection, are much the safer treatment.

Electric cauterization as a routine for these infections should not be over emphasized, but in certain selected cases it is certainly an effective means of eradicating these infections, if properly used, not repeated too often, and the effect is carefully observed for at least six months.

Dr. E. R. Nobles (Rosedale): There appears to be no direct relation between this procedure and the future development of cancer, but there is danger of causing a stricture unless the principles are observed that you have just seen demonstrated here on the screen.

I would like to direct your attention to some absolute contraindications to electro-cauterization which have not been brought out, namely: (1) pregnancy; (2) acute endocervicitis; (3) any acute or subacute inflammatory process within the pelvis; and, (4) the group of cases in which cauteri-

zation is to be immediately followed by repair work for then the discharge will usually be so profuse as to endanger the suture line.

Chronic endocervicitis with deeply infected mucous glands, presenting with any of the numerous types of strictures, can really be the bane of gynecologic practice.

Associated with this condition is sometimes evidence of a focal infection, manifested quite often by arthritis of the smaller joints, certain ocular diseases curiously similar to the type we see from the prostate.

Frequently relief can only be obtained through radical surgery or cauterization and the results every once in a while are brilliant. In the operation of subtotal hysterectomy, if the patient is to receive all the protection she rightly expects, the mucous lining of the cervix should be coned out at the time or thoroughly cauterized prior to the section.

Following this operation the cervix is left poorly supplied with blood, certain degenerative changes always take place, its resistance is low to recent or latent infections, and, consequently it is often found to be the source of a focal infection, and besides in those women who have borne children, two of these out of a hundred are the future sites for cancer.

Just as haemorrhage after the menopause causes a suspicion of cancer, also should an intermittent or profuse leucorrhoea at this time lead us to suspect obstruction as the cause.

There are three simple factors always to be considered in making a diagnosis of obstruction here, time, plenty of light and make a careful search, and the chief consideration in the treatment should be the pathology back of it and then the method of management determined afterwards.

Dr. W. H. Scudder (Mayersville): In this connection I will mention two cases which came under my observation. The first occurred many years ago. A young white country girl of 16 or 17 years of age married a lusty young farmer, and in due time developed the usual abdominal enlargement then the rule with the recently married in those days. Nine or ten months elapsed, and no baby. Something was wrong. Finally an old country doctor was called in to find out why she did not have her baby. This was the first time in her life that a doctor had ever been called to her. It is not recorded how the old medical pioneer made his diagnosis, but he knew some anatomy and had common sense. He made a puncture where the os uteri ought to be, dilated this opening with a pair of glove stretchers, and with the long handle kitchen spoon scraped out a pailful of dark tarry blood. The girl had never menstruated, and this was the accumulation of

five or six years. The way was thus opened, and straightway she began her work of replenishing the earth.

The second case was that of a robust young negro girl of 12 to 14 years who had never menstruated. The abdomen was distended, and more so periodically. An examination revealed a tough, imperforated hymen. An incision to complete a useful vagina for her was suggested, and refused by her mother—afraid to have the girl "cut." After about a year there was a slight stain at menstrual periods, from two or three pin point holes in the hymen, probably from hat pin punctures. A year later the young woman came to me very sore with a rough, jagged hole in the hymen, v-shaped, and 1½ inches long, made with some blunt instrument. After treatment this hole was regularly and systematically enlarged by the frequent use of the proper organ, and the result was a pair of fine twins.

NEURONITIS COMPLICATING PREGNANCY*

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The actuality of a polyneuritis or neuronitis from some form of autointoxication during pregnancy causing a paralysis, has long been an established fact. It is true it is seldom encountered, but the seriousness of the complication demands attention and emphasizes the need of careful neurological study of pregnant women with hyperemesis.

Since the latter part of the nineteenth century a rather large number of cases have been reported in the literature as neurological changes of pregnancy, but after careful examination of the records, Berkowitz and Lufkin of the University of Minnesota, have been able to collect only fifty-two cases including four of their own, in which they believe the neurological changes producing a paralysis were dependent upon pregnancy. To this condition they have applied the term "neuronitis of pregnancy" because their autopsy findings have shown nerve cell involvement as well as peripheral nerve changes. Also both clinically and pathologically it presents a distinct picture from other compli-

*Read before the Section on Medicine at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

cations which result from toxic conditions in pregnancy.

That there should be neurological aspects in pregnancy is not surprising when we consider the changes that take place in the blood, in the vital organs and in the new direction of increased metabolic activity during this period.

A great many varying theories have been submitted to explain the cause of neuronitis of pregnancy, and even now, the exact nature of the toxin is obscure, but most investigators agree it is apparently of autogenous origin, possibly arising from disturbed metabolism associated with defects in the excretory organs in the pregnant state; where even in healthy individuals there is so great a change in the biochemistry of the body.

The appearance of this complication is similar to a severe form of nausea and vomiting and the symptoms of the nerve changes are the same as those resulting from alcoholism, "jake" paralysis and infectious conditions. Records show it occurs more frequently in the first or second pregnancy, within the first three months, in women between twenty and thirty years of age. The vomiting, beginning in the first two months, is generally mild, indistinguishable from the ordinary type of vomiting of pregnancy, but gradually becomes more severe and shows little response to treatment; until symptoms of paralysis occur when it usually abruptly stops. The patient becomes weak and dehydrated, the pulse gets rapid, blood pressure and temperature may vary but little from the normal. The early manifestation of neurological symptoms are complaint of weakness, numbness and muscle cramp usually in the lower extremities, not suggesting a particular alarming condition, but as it progresses there is paralysis of the lower extremities, then the abdominal muscles, diaphragm, thorax, upper extremities and even cranial nerves are involved. Sphincter disturbances may appear from cord lesions. Mental symptoms as confusion, disorientation and delirium appear not uncommonly along with the peripheral nerve changes.

Laboratory examinations may reveal no information, showing normal blood picture, normal blood chemistry, negative urinary findings, and normal spinal fluid. Berkowitz and Lufkin

made gross and microscopic postmortem examinations on three cases and reviewed six other cases where these examinations were made. The summary of their findings is that gross anatomical changes are few, and microscopical lesions seem slight for the symptoms presented. The liver and kidney may show cloudy swelling. There are definite degenerative changes in the peripheral nerves and anterior horn cells of the cord, with petechial hemorrhages in the brain and cord.

In the treatment of the condition early diagnosis is the sheet anchor to successful therapeutics. Pregnant women with severe vomiting should be very carefully examined and the symptoms of weakness, numbness and muscle cramp recognized as possible neurological changes and not altogether due to inanition disturbances.

The sooner artificial induction of labor is considered the better the prognosis in this complication. Most patients show immediate improvement after abortion, but some will continue to grow worse for two or three weeks. If abortion is deferred until paralysis occurs, the nerve cells are frequently destroyed preventing complete recovery. If paralysis does occur the muscles and joints should be given active and passive exercise as soon as pain and tenderness will permit, to prevent contractures and deformities. The usual symptomatic treatment as rest, sedatives and supportive diet should be instituted.

CASE REPORT

R. N., white, married, aged 27 years, admitted to Greenwood-Leflore Hospital September 3, 1932, rather weak and dehydrated but apparently not very toxic. Her family history was essentially negative. She was a college graduate and led a rather quiet sedentary life. She married five years ago, became pregnant the first time about one year ago and had spontaneous abortion about the sixth week. Became pregnant the second time May, 1932 and was extremely anxious to have a baby. Nausea began about the sixth week after last menstruation but she did not lose a meal until two months pregnant. Nausea and vomiting continued uncontrolled until she had lost thirty pounds when she entered the hospital. She improved for a week and returned home. She again vomited frequently and was readmitted to the hospital October 2, having lost five more pounds, more dehydrated and more toxic. She was complaining of numbness and

pains in the lower extremities at this time. Absolute rest, sedatives, hypodermoclysis, intravenous glucose and nothing by mouth was rewarded by even more severe vomiting and aggravated neurological symptoms. On October 7, an abortion was produced delivering a foetus that had been dead apparently a few days. She was extremely weak and toxic the day following abortion and continued to vomit every few minutes. Three days following abortion vomiting ceased, the lower extremities that had been having cramping pains, became completely paralyzed. The paralysis was progressive in nature extending within ten days to the diaphragm and upper extremities with incontinence of urine and feces. She was desperately ill, pulse rapid and weak, respiration rapid, shallow and carried on by the thoracic muscles. She talked in a husky whisper, was disorientated and confused and complained of severe pains in the lower extremities. Within fifteen days after abortion she began to improve, sphincter control returned, breathing became more diaphragmatic, and function began to return in muscles of arms and shoulders. Improvement was slow and gradual and she was able to be removed from the hospital November 20, forty-four days after abortion. Throughout the course of this illness laboratory findings were of no significance of its seriousness.

The extremities showed definite atony and atrophy of muscles especially the distal muscle groups. Under rest, supportive diet, active and passive muscle exercise by a faithful and efficient nurse, the patient is now able to stand alone and take a few steps. There is still rather marked weakness and atrophy in the distal muscle groups of the extremities, with the typical "jake-leg" type of gait, but we feel this patient will eventually recover with little deformity.

This one experience impresses us that neuronitis complicating pregnancy is a serious neurological phenomenon that should be recognized early and prevented by therapeutic abortion.

DISCUSSION

Dr. S. E. Eason (New Albany): When the chairman first called me and told me he wanted me to discuss this paper on neuronitis, I did not know what he was talking about, and thought it was my ignorance. So far as my experience goes, I am like Dr. Gillespie, what I read in the paper is all I know about it. When I got his paper last Friday to prepare my discussion I ran across an article on polyneuritis. A day or two before I found that meant the same thing, and I have about decided it is like the professor of obstetrics asking the medical student what was the cause of eclampsia, and he studied a long time and finally he said, "Doctor, I knew but I declare I have forgotten." The professor said, "You have committed the greatest

crime known to medicine, because you are the one man who ever knew and you have forgotten."

So far as I can find from the study of polyneuritis in pregnancy they have failed to isolate the toxin that has caused it. Strauss and Castleman have not only failed to find the toxin, but they have found a lack of vitamin B 1 and B 2, and a lack of iron in the blood, and Strauss lays particular stress upon the fact that after all is done the only cure is abortion, but he advises in all cases of pregnancy a reasonable protein diet before the nausea begins; then when these symptoms begin if there is nausea you feed liberally a heavy protein diet, together with iron and yeast; liver extract administered intramuscularly, and in many cases he claims in which he uses it intramuscularly he has succeeded in controlling nausea enough to get them on a diet by mouth, where he can save a great many of these cases from abortion. He lays especial stress on the iron and yeast, or any diet containing vitamin B 1 and B 2, and the cases that he reports—a great many of them—were just like the one Dr. Gillespie reported. He lays particular stress on the prophylaxis of protein diet in all cases of pregnancy and the intramuscularly administered liver extract rather than an abortion where possible to avoid it.

Dr. Joe Green (Laurel): This is an interesting paper because to most of us it is a new aspect we have to deal with. I think we are all indebted to the doctor for bringing this paper at this time. I am not going to discuss it, however, I will say this that possibly there are more of these cases than we know about. We overlook them and call them something else. I was thinking about a case—I did not see the woman, she was in the state hospital and the doctors, who were both good men, in charge, gave practically the symptoms the doctor mentioned here and discussed it with me on several occasions, and their diagnosis was that she had hysterics. She became paralyzed and in due course of time, I am not sure that labor was brought on or whether she delivered normally, but they isolated her and kept folks away, but she was a very sick woman. I do not know whether the baby lived or not. One of the doctors said that two weeks after she delivered he let her go home, and he told them to keep her in bed and she would be all right. He might have been right, and I was just wondering if she didn't have what the doctor spoke of here today. If it was, the doctor, and I say it is no reflection on him—but it will pay us to look well into our cases at all times under all circumstances. It was a good paper.

Dr. R. C. Bunting, (Memphis, Tenn.): It is interesting comment that most of us associate Korsakoff's syndrome with alcoholism when as a

matter of fact, the first case he reported in outlining the mental condition, now bearing his name, occurred in a case of polyneuritis of pregnancy.

The type of case being reported by Dr. Gillespie, while unusual, is not exceedingly rare. In addition to Berkowitz' and Lufkin's cases referred to by the doctor, I can recall, off hand, von Hosslin, Ely, Ledoux, and Layain making similar case reports. Some of these cases occurred in the third month of pregnancy and in another, neuritis developed two weeks after the uterus was emptied preceded by six weeks of incessant vomiting.

Much splendid work has been done by many men upon the lower animals in the study of deficiency of vitamins. We have but to recall the work done by Eijkman reporting experimental production and cure of polyneuritis by means of diet. The production of polyneuritis in pigeons fed on diets lacking vitamin B, though containing some of the other vitamins, has been reported by Randoin and Lecoq. Sandles produced nutritional polyneuritis in rats and other have shown chronic polyneuritis can be developed in rats on diets not entirely lacking but deficient in the anti-neuritic vitamin. Further, he could induce clinical signs of degenerative changes in the cord by the ergot toxin and by the addition of vitamin A to the diet he could arrest the degenerative condition.

Burnette and Howe have shown that malabsorption, or deficiency of vitamins, may manifest itself clinically in impaired digestion, diarrhea, weakness, and colitis before the occurrence of the nervous symptoms. So, at this point, we can ask ourselves if the case that is being reported here, today is not the result of not so much of a "toxic or infectious" agent, but rather are we not dealing with the clinical picture of polyneuritis arising in sequence of absence of vitamins? Dr. Gillespie has related the extreme amount of vomiting occurring in this case and even when she ate she did not retain. If she did retain any food, was it digested? If digested, was it assimilated? As a matter of fact, the patient took very little food and when she did take any, more often she vomited than she retained, and if she retained it, it is doubtful if there was satisfactory metabolism of it. I think we can definitely say, from the details that have been given us by the doctor, this woman was suffering with avitaminosis—a food deficiency. If there was a "toxic or infectious" element present, then the connecting link producing the neuritis, or neuronitis, was on absence of vitamins.

As the essayist has so appropriately said, the peripheral changes in the nerves are often the least of the damage, for it is a fact that the central nervous system changes may be greater

than the peripheral ones. To illustrate, you have but to recall cerebral changes sometimes occurring in lead poisoning. It is reported in literature the optic nerve shows degenerative changes in some cases of multiple neuritis.

If the premise of the absence of vitamins being a large factor in the production of multiple neuritis is true, is it not plain that with cases so affected a major part of the treatment should be directed toward a diet rich in vitamins A, B-1, and B-2 (G).

Dr. Gillespie (closing): I am grateful to the gentlemen for their discussion. I may say that I am indebted to the investigators at the University of Minnesota, Drs. Berkowitz and Lufkin, for the term neuronitis. They differentiated it from polyneuritis, because they claim there is a definite change in the nerve cell. Where we have been speaking of a polyneuritis there are changes in the peripheral nerves, but these cases show changes in the cord and in the brain and for that reason they adopted the term neuronitis. This article on polyneuritis came out in the *Journal of the A. M. A.* two weeks ago, after I had studied the literature and written my paper, and is very similar to the report that I have made here this evening. They claim it is a dietary deficiency due to a deficiency in the vitamins but in accord with the investigators at the University of Minnesota, I argue the question that even though it may be a dietary deficiency yet it is toxic in nature and will produce a destructive effect upon the nerve cells and the peripheral nerves.

I brought this subject before us this afternoon because this one case has been a trying experience to the doctors that have been trying to pull this poor, unfortunate patient through this terrible experience—a strong, fine, healthy, vigorous woman that was afflicted and it looked as if she would die from the paralysis. I firmly believe if I had known as much about the toxic nerve changes in pregnancy when she came to me four, or five or six months ago, and I had recognized those symptoms of numbness and pains in the muscles of the extremities and had instituted an early abortion, I believe we would have saved her from this terrible experience. This is the one point I want to stress today—lets' observe these things, because a therapeutic abortion is not a serious procedure. A woman can become pregnant again, but when she gets into the condition this poor woman was in, I do not believe we will ever allow her the privilege of becoming pregnant. One point I want to stress. Let us beware of our patients who are pregnant and suffering with severe vomiting. Let us observe the early nerve changes and not hesitate to do a therapeutic abortion.

CARCINOMA OF THE COLON*

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Although this paper is being read before the surgical section it was not prepared particularly for presentation to surgeons. I have nothing new to present in either diagnosis or treatment and all surgeons are or should be very familiar with everything in the scope of this presentation. Many general practitioners attend this section of meetings and read the papers presented when they appear in the *Journal* and it is to them that I really look for interest in this paper.

It is gratifying to turn from consideration of the other visceral carcinomas to study the prognosis of colonic cancer. It offers the profession a real opportunity in the cancer field. The majority of the colonic cancers are of scirrhus type, are slow of growth, late to metastasize, and produce death by slowly developing bowel obstruction rather than by metastasis and general carcinomatosis. Since such is the case the surgical problem then is chiefly one of handling a chronic progressive bowel obstruction, necessitating resection. While this is true of the scirrhus type of carcinoma of the colon it is not true of adeno-carcinoma types that tend to grow toward the peritoneal covering and frequently metastasize early. Nevertheless we can safely make a general statement that cancer of the colon in the majority of the cases is of slow growth, metastasizes late and has a high degree of operability, and if diagnosed reasonably early and properly treated offers an excellent prognosis for cure. This can be said of no other visceral carcinoma. After making these statements it is incumbent upon us to attempt to explain why carcinoma of the colon, if offering so much in the way of hope of cure, is so fatal in the outcome, as it is usually handled in the United States.

The explanation is two-fold. First, because the average doctor does not make the diagnosis as early as he should, and second because the

patient receives poor treatment in many cases after severe anemia, and has lost weight excessively and become weak, pale, sallow; or has come in on account of hepatic enlargement from metastases. These conditions are what the surgeon usually finds when the patient comes for operation and they are not early or even middle symptoms but late symptoms. The fact that many in these late stages are still able to be cured shows us what is possible if the diagnosis was made earlier. But what are the earlier symptoms and how can we diagnose these cases in the early state?

The first rule I would like to impress upon the general practitioner, for he is the man who sees these cases first is, "Do not forget that there is such a thing as colonic cancer." The early symptoms are suggestive if one will only bear them in mind, and while only suggestive and not diagnostic they show the need for more thorough study of the case and when the study is made the diagnosis will probably be made as well. The early symptoms are of two types, those dependent upon partial bowel obstruction and those dependent upon toxæmia from absorption above the obstructing lesion. The obstruction at first is slight but as it progresses the patient begins to have complaints such as the following,—(a) Sense of fullness in the abdomen increasing during the day and usually better in the morning and relieved at least temporarily by enemata. (b) Indigestion, sense of fullness in abdomen with belching of gas and considerable borborygmus. (c) Ill defined sense of discomfort in the abdomen below level of navel, often slight colicky pain referred to appendix region. (d) Periods of constipation followed by diarrhea (2, 3 to 5 bowel movements in succession) which seem to give temporary relief to abdominal discomfort. (e) Blood, mucus, and pus in bowel movements. (f) Loss of appetite and weight associated with previously named symptoms.

None of these symptoms mentioned are definitely diagnostic but they are a hint that something is definitely wrong and an indication for thorough examination. These symptoms do at least point to the colon and certainly suggest the possibility of cancer. Once that possibility is suggested the physician is derelict in his duty

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

unless he continues his investigation until the possibility is a proven fact or definitely ruled out. The procedure is not easy or simple in all cases but should be persisted in.

A stool examination for blood is the first step. A recto-sigmoid examination with an electrically lighted sigmoidoscope is the next procedure, and may disclose the carcinoma if it is low in the sigmoid. The next step is a complete roentgen ray examination of the colon filled with barium taken by mouth and again roentgen ray the colon filled from below by a barium enema. This procedure may disclose obstruction or filling defect so definite as to clinch the diagnosis, or at least it usually shows enough to give us a lead in locating the growth. No one maintains that all colonic cancers can be diagnosed by use of the roentgen ray but most of them can and it is our most valuable single agent in diagnosis. If this course is followed not many colonic cancer will escape detection for any extended period of time.

In this early stage of colonic cancer there are many things that may confuse one. Chronic appendicitis is the diagnosis most frequently made in carcinoma of the right half of the colon. We now understand by this term only the tender appendix in between attacks of acute appendicitis. In cancer of the colon the trouble is chronic and constant with no history of acute attacks. There is little justification for this diagnosis. Gall-bladder disease is sometimes confused, but the pain or tenderness in gall-bladder disease is rather localized in the upper abdomen while the discomfort of colonic cancer is indefinite but located below the navel. Chronic constipation when it begins to cause serious abdominal discomfort, attacks of diarrhea, blood or mucus in stools, or loss of weight and anemia should certainly lead to more thorough investigation including roentgen ray examination of the colon. Acute appendicitis is sometimes diagnosed in cases where the cancer is in the cecum or ascending colon, and fever, cecal tenderness and even colicky pain may be present. However, a careful history will reveal that the complaints are not recent but have been present for weeks or even months, and we know that appendicitis does not act in that fashion. It is not contended that all colonic cancers can be

diagnosed early, or that a mistake in diagnosis is not excusable but that the vast majority of cases could be diagnosed in an early stage. It is the opinion of the writer that the chief cause of the failure of diagnosis is because the attending physician "did not even think of cancer of the colon."

The second portion of this paper deals with treatment after diagnosis has been made. It is understood that end results in surgery of colonic cancer would be much better if the cases were received at an early stage and in better condition, but even discounting this factor the surgical end results in the hands of the average surgeon are by no means brilliant, and do not even approach those of some of our master surgeons. There must be reasons for this and an exposition of these reasons will indicate the road to improvement in our surgical mortality.

Let us first consider the pathologic physiology of colonic cancer. We have an infected ulcerating tumor partially or completely encircling the bowel and producing partial intestinal obstruction. The colon proximal to the growth is always dilated, sometimes little, usually greatly dilated, its walls thickened from a slight amount to the extreme of doughy edema found in long lasting almost total obstruction. Whether the dilatation be slight or great and regardless of whether the obstruction is slight or great, obstruction exists and with it an infected ulcerated surface constantly bathed in a liquid fecal current. Severe infection exists in the colon proximal to the tumor. In the presence of dilated thickened intestinal wall from obstruction that is complete, we know that bacteria pass all the way through the wall causing peritonitis. Where incomplete obstruction is the case the same thing applies only in lesser degree, at least we know that the wall is highly permeable to bacteria and that an attempt to handle or suture this thickened wall will result in infection. Eighty per cent of the surgical deaths following operation for colonic cancer are directly the result of peritonitis.

Next comes the problem of the obstruction itself and the debility caused by it. It is true that obstruction of the lower bowel does not cause death so rapidly as a higher obstruction but if unrelieved it is just as certain only slower.

These cases are frequently in debilitated condition and will not withstand severe surgical procedure. The third problem is the handling of the cancer itself. This resolves itself into a question of operability which is not in the scope of this paper. Suffice it to say that resection where possible is indicated with re-establishment of continuity of the gut then or later as indicated.

The principles of surgery in colonic cancer are about as well established as the surgery of any other organ. To state briefly they are, "multiple staged operation beginning with complete decompression of the obstruction and complete diversion of the fecal current away from the cancer."

These principles are violated repeatedly by many reputable surgeons and possibly rightly so, for surgery is an art and it is difficult to lay down hide-bound rules covering an art. Yet it is the opinion of the writer that violation of these very principles and the cause of our present unsatisfactory surgical mortality from colonic cancer. The fact that a surgeon may boast of a number of one-stage resections does not prove the principles are wrong. It may merely prove that he is skillful, or that he is rapidly using up his share of good luck, but more probably that he is telling us only of his successful cases and not mentioning those that died of peritonitis, but who might have recovered if treated according to the accepted surgical principles. The conservative and careful surgeon rarely ever violates these principles willingly. Sometimes the patient's desires or circumstances force him to take risks he would prefer not to take. I must plead guilty to having performed two one-stage resections for carcinoma of the ascending colon with one recovery and one death. Both operations were performed only after the patient had absolutely refused the multiple state procedure. I will never repeat the offense and if my patient will not submit to intelligent surgery he may seek someone else, for I have no doubt that the patient that died would have recovered if handled correctly. The fact that the other patient recovered and is living and well now will not excuse the loss of the first case.

We know that in the presence of acute in-

testinal obstruction that has lasted for a long period and the patient become quite toxic, that radical surgery is fatal, and we contend ourselves with an enterostomy above the obstruction and reserve the curative procedure until later after decompression is complete and the patient has recovered from the severe toxemia. The same principle applies in colonic cancer.

The first surgical step in treatment of colonic cancer should be a colostomy (or in cecal carcinoma an ileostomy) well above the obstruction so done that not a portion but all the fecal current is diverted from the cancerous portion of the gut. There are many things gained by this minor operation. First, the distention of the bowel and the absorption of toxic matter is stopped. Second, the patient is able to eat and drink and anemia and dehydration can be combated, and the necessity to operate for cure before the patient's resistance is built up in obviated. Third, and not least important, the infection, edema, thickening and dilation of the gut proximal to the cancer rapidly subsides as soon as obstruction and the irritation of the liquid fecal current is removed. We know that we can do gastric and upper intestinal resections not with impunity to infection but without a great deal of fear of peritonitis provided our technic is good. The reason is that the stomach and upper jejunum is usually relatively sterile compared with the lower gut. If our colostomy completely diverts the fecal current, after a period of rest the colon becomes almost equally safe for resection. Fourth, it is frequently wise to leave the colostomy open until after healing of the anastomosis after resection, thereby preventing distention or leakage at the suture line.

At this point I wish to mention, only to condemn a method of decompression and diversion of the fecal stream which is all too frequently and unfortunately used by many excellent and capable surgeons, namely side to side anastomosis of the gut above the obstruction to the gut below the obstruction as the first step of the surgical procedure. While his method is occasionally successful in outcome, it violates all the principles of surgery of colonic cancer, and the successful outcome must frequently be credited to the patient's high resistance to infection

and the surgeon's rabbit foot rather than surgical skill and judgment. This method forces operation and anastomosis in a highly infected field and the suture of thickened chronically inflamed gut that is highly permeable to bacteria. It does not sufficiently decompress the gut. It does not completely divert the fecal current away from the cancer area for much of the fecal current does not pass through the anastomosis but continues the normal route and distention and infection continues in the gut proximal to the cancer. All too frequently there is swelling and edema of the gut at the point of anastomosis obstructing the stoma and sometimes resulting in more obstruction than existed prior to operation. Even if successful, the infection in the gut proximal to the cancer continues and the resection must later be done in an infected field.

Surgeons as a whole know the principles of surgery of colonic cancer and there must be reasons for the frequency of the violations of these principles. The reasons are not far to seek, and the usual event is that the surgeon is forced by the economic situation of the patient or by his refusal to cooperate, into risking unsafe surgery. To list the reasons that operate:

First. The patient desires to get by with as few anesthetics and operations as possible and insists on taking risks in order to avoid multiple operations.

Second. The patient absolutely refuses to have a colostomy because of its unpleasantness.

Third. The patient is financially unable to care for the prolonged hospital attention necessitated by the multiple staged method.

These are the reasons that lead good surgeons into the performance of risky surgery. The difficulties are real and hard to overcome and I have no program to offer the profession for overcoming them. I am making a decision for myself alone and that decision is "To operate for colonic cancer in a safe and conservative manner or not to operate at all." I would recommend the same decision to the profession as a whole.

I have avoided in this paper a discussion of operability or particular surgical technic, or particular types of operation. Surgeons should be artists and most of them have their meth-

ods and technics and I have nothing new to present, and desire to avoid discussion of and comparison of particular technics. There are only two points I wish to emphasize in this paper and if I have made them clear then the object of the paper is achieved. 1. Earlier diagnosis can, should, and will be made by the general practitioner if he will only remember and consider the possibility of colonic cancer in cases presenting the symptoms of vague abdominal colic, associated with severe constipation or periodic diarrhea or bloody or purulent stools. It is the opinion of the author that the majority of the cases are diagnosed late or not at all because the attending physician did not even consider colonic cancer. 2. Surgery of colonic cancer should be multiple staged and should begin by complete decompression of the gut above the lesion and complete diversion of the fecal stream away from the lesion. Lateral anastomosis of the gut above with the gut below the lesion as the first stage of treatment is in most cases to be condemned as unsafe and unscientific.

DISCUSSION

Dr. Frank Carroll (Biloxi): I wish to compliment Dr. Ewing on a most able paper, and it is indeed too bad that this paper could not have been read before the General Assembly of the medical men of our Association. This paper instead of being filled with operative technic, diminutia, etc., has emphasized one thing in particular that I think we should all bear in mind—that there is no field in medicine or surgery where operative procedure in carcinomata offers more than it does in carcinoma of the colon. We can usually expect, or extend to our patient a possibility of his living out his expectancy. Unfortunately the cases that I have seen have come to me as cases of acute intestinal obstruction—that is what has happened I presume with a majority. That is most unfortunate. As Dr. Ewing has brought out forcibly in his paper the general practitioner who sees these cases in a majority of instances before the surgeon, should bear in mind the possibility of carcinoma in the colonic tract and he should not let age cloud his ability to recognize a condition of that sort. I have seen one case in a girl 23 years old; age is not necessarily the means of making, or aiding you in making a diagnosis as it occurs in the young as well as the old.

I can add but very little to this excellent paper, but there are a few points I would like to empha-

size, that is the constant bearing in mind by the general practitioner in those cases that the doctor has mentioned—frequent vomiting, colicky pains, chronic constipation—bearing in mind the possibility of carcinoma in the colonic area. A barium enema and barium meal given early with subsequent roentgen ray examination will oftentimes make the diagnosis easy, at a time when operative procedure offers the most. In the majority of instances the two-stage or multiple stage operation is absolutely indicated as the doctor has so forcibly brought out; giving your patient a chance and then later with your second stage removing the cause of the attack will give your patient a much better chance of recovery. I want to mention in this particular, this is one field in which spinal anesthesia is particularly indicated in my estimation and a great help in spite of some of those who do not seem to think much of it. This is one field I believe spinal anesthesia is particularly indicated in practically all cases.

The general practitioner is the man who will have these cases or will bear the responsibility in a majority of instances as he is the man who has the opportunity of making the diagnosis prior to the time that the case is one of complete obstruction and to present it to the surgeon. Treatment, of course, suggests itself. Some remarkable work has been done along this line even in those cases that were showing certain obstructive symptoms, but contrary to the rule we men in smaller communities do not see these cases prior to complete obstruction—the cases come to them with a long history of indigestion and constipation and all that sort of thing with a final acute obstruction apparent. In those cases seen early, diagnosis accurately made, the employment of proper technical methods offers that case complete recovery if you have a case without metastasis; if not, certainly a lengthening of the years of expectancy. In some instances we will find a case with all of the acute symptoms simply, so to speak, dumped into your lap. I unfortunately have had several. I think you all have. The mortality will be high. Where you have an acute toxic condition with an obstruction which is increasing that condition hourly, there is absolutely every indication of an increase in your mortality percentage. Therefore, I say the two stage operation is absolutely necessary, the first stage for immediate relief, giving your patient a chance to get his head above the tide, build him up a little—you have plenty of time after the immediate symptoms are relieved, because nowhere do we find better results offered in cancer than in this particular type that the doctor has so ably presented.

Dr. Paul Gamble (Greenville): Dr. Ewing has covered his paper, I think, very thoroughly. The mortality of this condition can be lowered by the

general practitioner recognizing this condition sooner and referring him to some surgeon for operation. The large percentage of cases that go to operation are practically inoperable only for temporary relief, and when the case is operable it is better always to do it in the two-stage operation and go high above the point of obstruction and then irrigate your bowel below, clean out all fecal matter in the colon, get out all infection possible, and these patients will do better when done this way than if you try to do it in one stage. When the second-stage is done the high mortality is usually due to peritonitis, and if you have cleaned your bowel out as thoroughly as the colon can be cleaned, your stitches will hold better and you will have fewer perforations around your suture where practically all the peritonitis develops.

ALLERGIC NASAL CONDITIONS: DESCRIPTION OF A NASAL SYMPTOM-COMPLEX SUGGESTING ALLERGIC MANIFESTATIONS*

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Allergy is a most fascinating study. Research in this field has proven so fruitful that literally hundreds of physicians have become interested. The literature is already voluminous but out of the mass of accumulated data have come enlightening facts that have reconstructed many of our theories concerning certain diseases.

Papers^{1,2} have previously been presented before this group setting forth the scope of allergy, its mechanism and reactions. It is doubtful if any field is more influenced than that of rhinology.

Seasonal hayfever, or pollenosis, is comparatively well understood and easily recognized. Many hayfever sufferers have been able to establish the diagnosis before consulting a physician. If there is a history of the same symptoms occurring at approximately the same season one or more years previously, its recognition is usually easy. When patients come in during their first

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

season, the matter is not always so simple. The usual symptoms are paroxysms of sneezing, blocked nasal passages, intense itching of the nasal and postnasal membranes and frequently of the conjunctivae, profuse seromucous rhinorrhea and lachrymation. On examination, the conjunctivae are usually injected, the nasal membranes are edematous, pale or bluish-gray in appearance, the nasal passages are blocked and there is a profuse serous or mucoserous discharge present. Unfortunately, this typical picture, so well accepted, is not always present. The nasal membranes may be highly congested and the symptoms may be those of a constantly recurring coryza, which responds poorly to treatment. I wish to emphasize this fact; allergic nasal membranes may be congested. The symptom of itching is most important and almost pathognomonic. The following abstract illustrates both observations:

During the spring of 1930, Mr. C. J. O. presented himself, complaining of a cold, which he had not been able to relieve by home treatment. He stated he "kept catching a fresh cold". The family and past history were of no particular interest. The nasal membranes were moderately congested, ventilation was poor and there was some mucous discharge in all meati. The septum was normally straight and there was no sinus pathology. General measures and local treatment were instituted with poor response. Catarrhal vaccine was administered and after some three months he was relieved. He had no trouble during the fall and winter months but the following spring came in with the same complaints. The second week he complained of an itching sensation of the naso-pharynx. Diagnostic tests were made and he was found to be sensitive to the pollens of some trees and early grasses. He was not sensitive to the late pollens which accounted for his relief during the summer. Co-seasonal pollen therapy was instituted with a fair measure of relief. The following year he was placed on pre- and co-seasonal treatment with approximately 90 per cent relief from symptoms.

Perennial hayfever (also described as vasomotor rhinitis, turgescens rhinitis, nasal neurosis, nasal hydrorrhea, rhinorrhea and allergic rhinitis) is of far more importance to the rhinologist than seasonal hayfever. The latter condition as mentioned above, is usually easily diagnosed and can be referred to

an allergist (unless the rhinologist has proper facilities for testing and treating such cases) with assurance of improvement. On the other hand, the diagnosis of perennial hayfever is frequently quite difficult.

In the commonly recognized type of perennial hayfever there is frequently a positive family history. The patients have suffered for months or even years with little or no seasonal variations in symptoms. They complain of sneezing frequently, occasionally of paroxysms, more often on arising from bed or following a change of body temperature. Occasionally one complains of itching. On inspection the nasal membranes are boggy, edematous, pale in color and frequently covered with thick glairy mucus. In advanced cases polypi are noted. On diagnostic testing they are usually found to be sensitive to feathers, animal hair and dander, orris root, etc., and marked improvement is found when contact with such substances are eliminated.

Unfortunately, all cases do not have such definitely recognized signs and symptoms. A review of text books and a search of the bibliographical material available, have disclosed only indefinite descriptions, though Arbuckle³ has covered the range of symptoms and signs most thoroughly. In my experience I have found the following symptom-complex to be quite suggestive of perennial hayfever:

The family history is usually negative. Some patients have a history of nettle-rash in childhood, following the ingestion of certain foods; occasionally the patient still has such reactions. The chief complaints are usually a susceptibility to colds, nasal stuffiness, an annoying postnasal discharge, headaches and a feeling of general lassitude. They are sensitive to changes in body temperature, some patients more so than others. As a rule, they sneeze occasionally, especially when suddenly chilled but rarely in paroxysms. On examination no obstruction or frank sinus pathology is found. The nasal membranes appear thickened or hypertrophied and only rarely are they edematous. The color of the membrane varies in dif-

ferent patients; it ranges from a pale gray through pink and may be a fiery red; most often it appears moderately congested. This range in color has been quite puzzling to me but the recent observations of Jarvis⁴ and Frank⁵ on the effect of acid and alkaline ash food on the color of the septum membrane suggest an explanation. There is usually some mucus or muco-purulent discharge present in all meatus and the majority of patients complain of an annoying, profuse postnasal discharge. The turbinates are slightly hypertrophied and ventilation is poor. On transillumination the frontal sinuses, as a rule, are clear but both antra frequently appear slightly cloudy. Roentgenograms may reveal slight cloudiness of the sinuses but, when noted, all sinuses are usually involved. These cases show a characteristically poor response to local treatment.

In my humble opinion, this class of case is the rhinologist's greatest problem. Goaded almost to desperation by the constancy of such annoying symptoms, such a patient is ready to embrace any opportunity for relief. All too often they have sought relief in ill-advised surgery, only to be made more miserable.

This statement must not be misconstrued as condemning all nasal surgery, even in allergic patients. Obstructions should be removed; purulent infections, in some cases must be drained, but preferably after the allergic condition is under control. If polypi are present, they will probably remain and must be surgically removed later. However, it is astonishing how edematous, hypertrophied and, at times, even polypoid membranes will return to normal, allowing free ventilation of the sinuses and bringing relief to the patient.

Today there are many of these patients who have undergone nasal surgery with no improvement; some are actually worse. Four years ago Guyton⁶ presented a paper before this group calling attention to the danger of nasal surgery on allergic patients. His views are generally accepted and today no competent rhinologist would advise

surgery in an active case of seasonal hayfever or asthma. Unfortunately, this symptom-complex I have just described is not commonly recognized as an allergic condition, but surgery in such cases will fail to give relief. Careful consideration has led me to the conclusion that the huge majority of patients who have undergone repeated nasal operations without benefit, are allergic. Lipsey⁷ considers the allergic factor so important that he makes diagnostic tests on every sinus case before advising surgery, even when the patient's history is negative for allergy. As Arbuckle³ emphasized in his most excellent paper before this group, the treatment of these cases is medical, not surgical.

Diagnoses of these borderline cases are difficult and it is to be hoped that further research will disclose more accurate methods.

A careful history here, as elsewhere, is most important. The family history is usually negative for hayfever and asthma, but may be positive for migraine, eczema, urticaria, nettle-rash or "chronic sinus trouble." The past history may also be positive for one or more of these conditions. Often there is a history of fairly frequent attacks of indigestion. Whenever a patient complains of a chronic nasal condition that has been treated spasmodically for years with no improvement and on examination no definite obstruction or sinus pathology is found, an allergic condition should be suspected.

Arbuckle³, Dean⁸, and others have emphasized the value of examining stained smears of the nasal discharge; a high eosinophil count indicating an allergic condition. Stroud⁹, advises the use of the imported Giemsa stain (in preference to Wright's stain) with his special technic. In my experience, I have found this type of test of little value. I have examined smears not only from suspicious cases, but from known allergic patients and have been unable to find a single eosinophil. Furthermore, when found, they were usually in clumps, so a cell count is of

no value; I prefer to have them reported as none, few and many. Their presence is corroborative but their absence must not be considered of diagnostic import. Occasionally eosinophils may be found increased in a differential white cell count; an allergic condition must then be considered a possibility.

The surest method of diagnosis now known is to make diagnostic tests, both "scratch" and intradermal, with extracts of pollens, foods, feathers, animal epithelials and a miscellaneous group comprising orris root, pyrethrum, house dust, etc. Space does not permit my going into a discussion of this method other than to say that all offending factors are eliminated and that the food tests form the basis of elimination diets. I inform my patients that this method is a course of education and attempt to teach them how to care for themselves. It is not always successful but it offers a greater possibility of relief than any other. Since it necessarily requires many tests, followed by a fairly long period of using elimination diets, I advise it only in those cases with definite indications of allergy.

Other forms of treatment have been used with varying degrees of success and will be briefly mentioned.

General measures, building up a patient's resistance, are always indicated and are beneficial. Mild purgation has been found to be helpful during exacerbations. A small dose of a saline cathartic is prescribed daily, to be taken before breakfast. This is of benefit only in food cases.

Vaccines are beneficial in a goodly percentage of such cases. Henry¹⁰ advises intradermal testing with various stock catarrhal vaccines and treatment with the one to which the patient is most sensitive. I have found his suggestion of value.

Sodium iodide has been administered intravenously in asthmatics and I have found it helpful in some of these cases. Obviously, consultation with an internist should precede its use. Recently Levine¹¹ reported the use of free iodine in sodium iodide solution, ad-

ministered subcutaneously, and I have found it to be even more effective. I have used it during exacerbations with most encouraging results; three daily injections usually bring great improvement.

In 1930 Beckman¹² discussed allergy as a type of alkalosis and presented a series of cases of hayfever which he had treated by administering acid, with a remarkable percentage obtaining marked or complete relief. I have used acid as a therapeutic adjunct and have found it valuable. Since following the work of Jarvis⁴ and Frank⁵, I have used it only in those cases presenting a pale nasal mucosa. However, it should be mentioned that none of these observers have reported chemical studies of the blood to substantiate their observations.

Sluder¹³, Ruskin¹⁴, and others have blocked the nasal ganglia in cases of vasomotor rhinitis with satisfactory results. I have had no experience with this method of treatment but would not hesitate to use it should other methods fail.

From the variety of methods of treatment it is obvious that we still have much to learn about allergy. Unquestionably, this field presents great possibilities, particularly to otolaryngologists. In considering it, we can feel assured that "the labor will be hard but the reward will be great" for I feel that it will help us to accurately diagnose and successfully relieve many uncomfortable and suffering patients.

SUMMARY

1. The importance of allergy to otolaryngologists is emphasized.
2. The atypical, as well as the typical, picture of seasonal and perennial hayfever is presented.
3. A nasal symptom-complex indicating an allergic condition is described.
4. Surgery is unqualifiedly condemned in uncomplicated allergic cases and advised against, during any active allergic manifestations.
5. Methods of diagnosis are discussed.
6. Various methods of treatment are reviewed.

BIBLIOGRAPHY

1. Henry, John P.: Allergic diseases with special reference to those involving the respiratory tract. *N. O. M. & S. J.*, 84:846, 1932.
2. Jones, Edley H.: *Allergy. N. O. M. & S. J.*, 85:578, 1933.
3. Arbuckle, M. F.: Some of our present conceptions of sinusitis. Presented before Miss. State Medical Assn. 1932; to be published shortly.
4. Jarvis, D. C.: The red septum. *Laryngoscope*. 43:42.
5. Frank, Ira: The nasal mucous membrane as an indicator of faulty body chemistry. The pale septum. *Laryngoscope*. 43:48, No. 1, p. 48.
6. Guyton, B. S.: Nasal surgery on allergic patients, *N. O. M. & S. J.*, 82:287, 1929.
7. Lipsey, James H.: Personal Communication.
8. Dean, L. W.: Laboratory investigations as aids in otolaryngological diagnoses. *J. A. M. A.* 99:542, 1932.
9. Stroud, C. Malone: Personal Communication.
10. Henry, John P.: Personal Communication.
11. Levine, Morris: Free iodine in the treatment of vasomotor rhinitis and the symptom-complex of sneezing and nasal hydrorrhea. *Laryngoscope*. 43:39.
12. Beckman, Harry: Allergy considered as a special type of alkalosis. *J. Allergy*. 1:496.
13. Sluder, Greenfield: *Headaches and Eye Disorders of Nasal Origin*. C. V. Mosby Co., 1919.
14. Ruskin, Simon L.: Atrophic and vasomotor rhinitis; The physiology of the nasal mucosa. *Archives of Otolaryngology*. 2:689.

DISCUSSION

Dr. J. C. Pegues (Greenville): I'm sure we have all enjoyed Dr. Jones' paper. As the essayist has pointed out so graphically, the allergic nose is quite a problem in many cases. Food allergy plays a more important part than Dr. Jones had time to discuss in detail. Adam and Eve were the first recorded cases of food allergy. They ate apples, developed an urticaria, treated themselves with fig leaf poultices, but had to scratch for a living the rest of their lives.

Rowe lays a great deal of stress on foods as a factor especially in perennial hay fever.

Please pardon the personal reference but I used to suffer with what my old professor, Dr. Calhoun McDougall, called vacuum headaches. I could relieve this by shrinking the middle-turbinate with cocaine and adrenalin and applying hot applications over the frontal sinuses. I did this for four or five years at irregular intervals. Within the last eighteen months I have discovered that this headache can be kept off by abstaining from ham, onions, cabbage, turnips and an excess of wheat products. I find that I can eat ham once every three or four days but if I eat it twice in succession my nose becomes congested and a headache always follows. Tobacco smoke will also give me a stuffed nose and headache.

I have one patient so sensitive to lemon that a small piece of lemon pie is enough to bring on a severe attack of asthma. Sutton in 1927 reported a case so sensitive to egg that the presence of an egg in the room would provoke an attack of urticaria. In 1920 Walker reported hay fever due to raw carrots, celery, pork, onions, oat meal and can-

teloupe. In 1928 Rowe stated that "hay fever and sinus congestion are not infrequently due to food allergy alone," and reported a case of coryza due to wheat. In 1929 Balyeat reported three cases with perennial hay fever due to food allergy. In 1930 Eyer mann reported 95 cases in which food allergy was a cause of nasal symptoms.

Foci of infection often produce a congested nose. Everyone is familiar with the effects of an abscessed upper tooth on a maxillary sinusitis. This acts by direct extension but an old prostatitis, colitis or pyelitis can give just as much trouble in the nose as an abscessed tooth. I do not doubt that many of the cases tested specifically for bacteria, and treated beneficially with bacterial antigens are cases having a focus of infection. Autogenous vaccines from the kidney, colon, prostate or sinus have been a great deal more helpful in our cases than vaccines based on specific skin reactions. I have never tried combining the two methods.

When Bechman reported a long series of hay fever cases relieved by the use of acid it sounded like a panacea for all allergic conditions. Other allergists have failed to confirm his results. The idea is based on the fact that most allergic cases have an alkaline urine. But it fails to consider that an alkaline urine does not always mean that the system is too alkaline. The alkaline salts may be leaking through the renal cells and actually producing an acidosis instead of an alkalosis.

A simple test for acidosis was suggested by Yandell Henderson in 1914. It is based on the patient's ability to hold his breath. He should normally hold it thirty to forty seconds. If it is below twenty seconds there is danger of acidosis. If below normal the body is too acid instead of too alkaline. In these cases the mineral carbonates may prove helpful.

It occurs to me that a gastric analysis ought to be made before pouring a lot of acid into the stomach which may already be too acid. And the kidneys should be examined more than once for irritation, infection, nephritis or pyelitis before any more work is given these organs. If the stomach acid is normal, and the kidneys without disease and their secretion alkaline, and the breath holding time thirty or above, an acid producing diet based on the Jarvis report may be helpful, and it is to be preferred to the use of acids. If the stomach acid is low that of course is a different matter. Why is it low?

The internists haven't found out too much about hypoacidity. The condition itself is only a sign, not a basic cause or condition. There is some underlying factor that produces low acid and it seems to me that there is too great a tendency to stop our examinations and treat the patient symptomatically when once we have found hypoacidity of the stomach.

Dr. D. C. Montgomery (Greenville): I would like

to bring the attention of these gentlemen to a point which is very confusing at times.

The symptoms of perennial hay fever, and those of auto-intoxication are very similar in a great many cases, particularly is this true in those patients who have definite gall-bladder disturbances or chronic colitis. I have often found it difficult to differentiate between these two conditions, particularly in those cases who have an allergic family history, but who have not presented any allergic symptoms themselves previously.

There seems to be an overlapping of these two conditions. For example—one of our patients with a moderate cholecystitis was having a great deal of difficulty with his nose. Nasal mucosa was swollen and edematous, and pale in color—a great deal of thin acrid discharge; sneezing, particularly in the morning; and inability to breathe through his nose especially at night. The appearance was definitely that of an allergic condition, but there was no reaction to any of the tests, nor was there any family history of allergy.

A gastric analysis showed hydrochloric acid 98 per cent, yet this patient did not complain of any gastric distress. Correction of this condition through diet and alkalies cleared up all symptoms within a few days. The symptoms did not return except when the patient neglected the proper diet and regime as prescribed by his physician.

It has been clearly demonstrated that both chronic gallbladders and colons are capable of producing not only such symptoms in the nose but chronic progressive deafness and other ear, nose and throat symptoms.

It is therefore important that we as nose and throat specialists be able to recognize the fact that constitutional conditions cause many symptoms resembling those of allergy and also we must be able to make differential diagnoses along these lines.

Dr. J. R. Hume (New Orleans): I am not an allergist but appreciate this excellent paper on the subject. The picture of the red and pale septum that Jarvis describes, from my observation, is of real value. A more delicate indicator to determine the acidity or alkalinity would be helpful. To my knowledge a satisfactory one has not been found.

Dr. Jones (closing): I thank you for your liberal discussions. There are several remarks I want to make here. I believe that allergic methods of diagnosis and treatment will be of great assistance to otolaryngologists and that many patients who have not obtained relief from the ordinary methods of treatment can be very much improved and made more comfortable by following out this method. I am referring in particular to that class of cases who complain of constant nasal stuffiness and a profuse annoying postnasal discharge, whose nasal membranes are always congested but who do not have any definite sinus infection.

Let me again warn against over-enthusiasm. All factors must be considered and if this method is looked upon as a cure-all, you will be greatly disappointed and the method will be discredited. If any of you propose to follow out this method to the extent of making your own tests, etc., let me suggest that you take a few days off and visit a first class allergist. Both scratch and intradermal tests should be used and there are so many factors to be considered that a few days in a good allergy clinic will be well worth while. To simply study a book or to follow the advertising of the allergy laboratories would, I think, be sure to give poor results and you would be dissatisfied.

The question of the alkaline-acid balance of the body is still a puzzling one to me. I took the matter up with Dr. Leon S. Lippincott whom all of you know to be an excellent pathologist, and it seems that we do not have reliable laboratory tests. To estimate the blood pH is of no practical value because of the buffer salts present. When a patient develops such an extreme acidosis or alkalosis that it can be determined by the blood pH, it has already been evident in the patient's condition. The estimation of the carbon dioxide combining power of the blood would seem to be the most reliable test but is not practical for office use. It requires a rather complicated apparatus, the test takes some time and should be performed by one familiar with the method. One leaky valve would upset all calculations. At Dr. Lippincott's suggestion, I have been trying out Marriott's apparatus for the determination of the alveolar tension. By this method a patient inhales and exhales four times in twenty seconds into a football bladder or other container; the air is then run through a dye solution and by comparison with a standard in a colorimeter, the alveolar tension can be estimated in percentages. I have been using this on all known and suspected cases of hayfever, allergic rhinitis, etc., but have used it on too few cases to be able to estimate its value.

Referring to Frank and Jarvis' work, I understand that in order to estimate the paleness or redness of the septal membrane, it should be compared with a healthy pink fingernail as normal. Dr. Montgomery has mentioned an important point in auto-intoxication. Of course, it must be understood that all other foci of infection should be eliminated. In early and borderline cases a patient may only have allergic symptoms when suffering from auto-intoxication. When this auto-intoxication is eliminated, the patient's resistance is sufficient to overcome the allergic sensitivity with a more or less prompt remission of symptoms.

In conclusion I wish to commend this subject for further study and to thank you for your consideration.

NEWER METHODS IN THE TREATMENT OF PROSTATIC OBSTRUCTIONS*

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and

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It is becoming known by the medical world quite generally that the surgical treatment of the enlarged prostate is undergoing a complete renaissance.

I deeply appreciate the honor of coming before your Society to discuss a subject destined to be of interest to twenty-five per cent of all men reaching the age of fifty years,—the relief of prostatic obstruction and its consequences by transurethral resection.

Innovations, especially in surgery, are susceptible to two types of receptions. Frequently, they are greeted by a spirit of hostile resistance through which, if basically meritorious and fundamentally sound, they make their way until they are finally accorded adequate recognition. On the other hand, such innovations may be accepted and applied with such enthusiasm and promiscuity as to militate against the recognition of full merit and usefulness. My object is to present a fair and unbiased appraisal of the method. It is not necessarily appropriate in this discussion to review the historical milestones in the eventual development of present methods, further than to say that the feasibility of an instrumental method for correction of prostatic obstructions was first appreciated one hundred and three years ago. Medical annals record these developments through the ensuing years. While we are all quite willing to acknowledge, I believe, that medical, surgical, and diagnostic facilities have steadily improved, there still were many in the profession who were willing to grant that a large percentage of men in the prostatic age were unfit subjects for major surgery. Indeed, it has been conclusively shown that forty per cent of all men of this age are suffering some form of cardiovascular disease.

It is needless to remark that these and other infirmities of age are not well suited to major surgery and prolonged hospital residence necessary in prostatectomy.

EQUIPMENT

The construction of the resectoscope, now the instrument of most modern design, has come through the efforts of Stern, Davis, Kirwin and McCarthy. The McCarthy instrument has been used in all of approximately one hundred cases of our series. The electrical currents developed to energize the cutting electrode and control bleeding are of two distinct types, to wit: vacuum tube and spark-gap transformers. Examples of both types have been used in our cases. We have attempted to determine the most satisfactory cutting current by pathological examination of the excised tissues, and have learned in this manner that the undamped current supplied by the vacuum tube machine produces the least depth of tissue destruction. We feel that this is important, since it affords some assurance that subsequent sloughing with late bleeding or scar contraction is not probable. In the sections examined, we have found that the destruction of tissue incident to the excision of prostatic tissue has not exceeded from one to three millimeters in depth. This uniform result has been accomplished by an accurate setting of the machine, with a rather slow excursion of the cutting loop consuming from twenty to twenty-five seconds. It has also been found that by the application of a flat cystoscopic electrode and the deep dissemination of controlled heat generated by the tube transformer, it is possible to produce marked shrinking of an extensively congested and water logged prostate. This is accomplished without the sacrifice of any prostatic tissue, and seems to hold great promise in the management of prostatic carcinoma.

PURPOSE OR OBJECTIVE

It has been considered axiomatic by leading urologists and surgeons that complete removal of the prostate was the only method of relieving prostatic obstruction. The proponents of transurethral prostatic surgery, however, have shown that it is not only unnecessary, but useless, to remove the entire gland. McCarthy has chosen to describe the procedure as a revision,

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

rather than a resection, stating that the restoration of the prostatic encumbered urethra and vesical neck to a moderate exaggeration of its normal tubular character should suffice. Since it is known that deviation of the urinary stream by cystostomy is invariably followed by shrinkage of the gland, it follows that the enlarged prostate is a hydrated rather than an essentially hyperplastic organ. We do not propose to imply that prostatectomy is obsolete, for we have found it expedient to perform prostatectomy four times in this series of cases. Four per cent, we now think, is an unusually small incidence, and may be explained by the fact that in all early efforts we undertook to determine the breadth of application of resection, and included even some of the very large intravesical enlargements, which we now feel are better treated by open surgery.

The facility with which prostatic resection can be accomplished recommends it particularly as a prophylactic measure. If early micturitional difficulties, such as increasing loss of force of the urinary stream, urinary frequency, and nocturia were recognized and heeded early and subjected to the relief possible by resection, the late devastating effects of prostatic hypertrophy would be obviated and prostatism would become an obsolete clinical entity.

PRE-OPERATIVE PREPARATION

It is almost too well known to mention that simple catheterization and removal of residual urine from the prostatic has often been followed by serious or fatal results. Instrumentation of any character is hazardous, for it may readily upset an existing delicate renal balance and be followed by evidence of a fulminating renal infection, or uremia.

It has been our practice to exercise the same diligent care in the pre-operative preparation of the cases to be treated by resection as was given to those in whom prostatectomy was to be done. Gradual decompression of the distended bladder, catheter or suprapubic drainage to relieve stasis and infection, and the determination of renal and cardiac function are of major importance. It is also necessary to provide a replenishment of the body fluids and stimulation of the eliminative processes. In short, it is neces-

sary to accomplish the best possible rehabilitation of the patient before resection should be attempted. An accurate study of the character and extent of the prostatic enlargement should be made through the clinical facilities, and by cystoscopy and cystography. It is not always possible to accurately determine in advance for the patient the period of time that will be required for his rehabilitation.

OPERATIVE ROUTINE

It has been our practice to use anesthesia which seemed most appropriately suited to the case. A low spinal or sacral anesthesia has been used in all of our cases. With preliminary analgesia, the patient is relieved of all apprehension or pain. The obstruction is attacked by serially removing the obstructing portions of the gland either at the vesical neck or in the deep urethra. We feel that it is equally important to remove tissue in the deep urethra which is exerting its obstructive influences by a lateral encroachment upon the urethra. The resection should be carried forward up to, but not beyond, the verumontanum. Bleeding points are meticulously sealed by the application of the coagulation current as they appear following the removal of each section of tissue. Following the complete revision of the bladder neck and deep urethra, a large catheter is fastened in the bladder to affect drainage and further hemostasis. It is subsequently removed in from two to five days, and the patient permitted to void.

COMPLICATIONS

The complications are those that have always confronted the prostatectomist. Hemorrhage may be effectually controlled by careful coagulation of all bleeding points at the time of the resection, and the subsequent drainage of the bladder with an inlying catheter of liberal size. In one case in which close nursing supervision was not provided post-operatively, the catheter became blocked and clotted blood filled the bladder, requiring suprapubic cystostomy. At no other time in our experience has hemorrhage given us serious concern. Epididymitis, which occurs in about eight per cent of the cases, produces no serious concern, as a rule, but affords the patient serious discomfort. In two cases, we were obliged to drain the epididymis,

and in one, unilateral orchidectomy was necessary. Closure of the prostatic surface by tissue coagulation safeguards the patient largely against absorption. It is not unusual for the post-operative course to be afebrile. There is, however, usually a moderate bladder infection which persists for some time after the removal of the catheter, that should be given appropriate treatment.

RESULTS

With the previously noted exceptions, the results have been uniformly satisfactory. One resection has been sufficient in most instances. In three cases, we have been obliged to do two resections, and in one case three resections. In several cases, a small amount of residual urine was present for a few days or a week. This most often was accounted for by the obstructive influence of post-operative edema at the vesical neck, and subsided within a week or ten days. If a larger residuum remained longer, a second resection was considered necessary. Moderate dysuria and urinary frequency, which invariably follows removal of the inlying catheter, subside rather rapidly, particularly if care is given to the resulting post-operative cystitis.

MORTALITY

We are confident that failure to provide sufficient pre-operative preparation was responsible for the loss of one case. Heeding the urging of the patient's physician and family, the operation was done without adequate preliminary preparation and study. This error has not been committed since. The second case died with an acute hepatic and renal insufficiency, although preliminary cystotomy drainage for two months and meticulous preoperative care had been given. The third case collapsed following the administration of the spinal anesthetic, and died five hours later.

SUMMARY

1. The amount of tissue that may be removed by transurethral resection is limitless, and must be determined through experience by the operator. The soft adenomatous gland requires the widest and most liberal resection, while the fibrotic or carcinomatous prostate usually requires the least.

2. Transurethral prostatic surgery is not a minor surgical procedure. Preoperative care is as important as though the patient were being prepared for prostatectomy. The method is not one for the casual instrumenteur, but should be undertaken only by those whose urological and surgical training qualify them to exercise judicious discrimination in the selection of cases and supply prompt decision in an emergency.

3. We feel that transurethral prostatic resection is a most important and paramount addition to our urological equipment, and that it should imbue us with a great sense of comfort in abiding senescence.

DISCUSSION

Dr. W. L. Britt, (Jackson): It has been a very great pleasure to have Dr. Hennessey with us and to present this interesting paper. It is a subject that I have been very much interested in for a great many years, and for the past seven or eight years I have been doing the punch operation to relieve prostatic obstruction in certain types of cases, and recently I have been using and doing some of the trans-urethral prostatic resection work and like it very much, and I believe it will replace the punch operation.

Now the doctor has covered this subject so well that there is very little to be said except that I would like to have him in closing tell us more about the post operative care of these patients. We understand that as soon as resection is done we put in a retention catheter and it remains in four or five days until the urine is clear. When this is removed how long should the patient remain in bed? Is it safe to send them home as we very often do riding in a car? I know that depends on a great many conditions, but this post-operative treatment has never been brought out very well.

The doctor also spoke of using a roller electrode in treating certain types of prostates. That was very interesting. I have heard something about it, and I am glad he mentioned that. I would like to know whether he uses the cutting type or the coagulation type, and what kind of anesthetic is best to use. How many applications is necessary? The subject has been so well covered that I have nothing more to say.

Dr. Temple Ainsworth, (Jackson): I want to first thank Dr. Hennessey for his paper. I enjoyed it very much. I wish to give you a short survey of my experience with prostatic resection. I have done 19 resections on 15 patients; in other words, I have had to repeat the operation the second time on four of my patients. I want to especially stress the point Dr. Hennessey made, that this is not a minor surgical procedure. It re-

quires a great deal of experience to remove the correct amount of tissue from the correct place in the deep urethra. It sounds rather easy to hear Dr. Hennessey talk about it, but take it from one who has had a great deal less experience, it is not so easy. I have had two deaths in my series—one was from a cerebral hemorrhage and one was from infection. I feel that post-operative infection is a problem; in other words post operative care of these patients is very, very important. I want to again thank Dr. Hennessey for his paper. I enjoyed it very much.

Dr. A. Street, (Vicksburg): I am sorry I was late and did not get to hear Dr. Hennessey's paper. My fan belt on my car broke when I got half way here and held me up. Dr. Hennessey failed to send me a copy of his paper, and the only remarks of interest that I can make are those relating to my own experience with trans-urethral resection. I have done 26 of these operations, and three of these were for malignancies. Two of the malignancies died, all of the remaining cases are living. This experience covers a period of about a year and a half. I used Dr. McCarthy's outfit, and I hear a lot of discussion about the various outfits. I do not pay much attention to it. I think there is more in learning how to use it than in the outfit itself.

So far as results are concerned, my impression is that the results are as good as we can get by any other method. I have used the method on cases that were positively not permissible surgical risks for the usual type of prostatotomy. I think we have always to be careful. There is a necessity for preparing the patient for this type of work, just the same as for the supra-pubic or perineal operation. I usually take these cases in and study the kidney fraction, and get the blood chemistry and subject them to catheter drainage until I think they are in good condition, because I believe if you neglect that factor you will have a mortality that you would not otherwise have. I thank you.

Dr. Hennessey, (Closing): I feel, as Dr. Britt has remarked, that while the punch instruments employed by Caulk or Young are excellent instruments, they are applicable in the hands of most of us only to a small and selected group of cases. It has been our policy to exercise perhaps unusual precaution in the post-operative care of our cases. We have not been inclined to release from our observation these cases until several days have elapsed after the removal of the inlying catheter, which is

inserted at the time of resection. We are particular that the patients are able to void their urine comfortably and freely, and that the degree of retention is negligible, or very small. Our opinion is that the tell-tale symptom of inadequate resection is considerable pain with urination. I think it is a very good point that Dr. Britt made about the amount of physical activity that should be permitted in these patients after resection. While we have had no serious difficulty with late hemorrhage, we have considered it a valuable measure of precaution against this exigency to advise against any vigorous physical exertion for at least two weeks after their dismissal. The results we obtain in prostatic resection are commensurate entirely with the amount of our experience. We are all having to work out our own problems, particularly with reference to the amount of tissue that must be removed. This, we have found, varies greatly with the type and make-up of the obstructing gland. Alcock was frank to state that he was an amateur of the first water until he had accomplished fifty resections.

Dr. Ainsworth spoke of repeat operations. I think it is no blemish on his reputation, and I am sure that he should suffer no personal recrimination about having to repeat two of them. We have had this experience, as has most everyone who is striving to accomplish good end results for resection. The necessity for repeat operations has been found to occur more frequently in the large, soft, adenomatous gland, which tends to cave in and continue to exert its obstructive influence, even after a very liberal resection. While we are finding that the application of resection is becoming increasingly wider, I think it is wrong for us to assure any patient that may be suffering from obstructing prostate that they may be relieved by resection until a careful and complete examination has been made of their case. We think that certain types of glands, particularly the large intravesical growth, or the sub-cervical hypertrophy, is still best treated by open operation.

Dr. Street's comments on the necessity for preliminary treatment, whether by suprapubic drainage or inlying catheter, is recognized to be as important in the preparatory care of the patient before transurethral resection as it was for prostaticectomy. We do not feel that any procedure designed to relieve the patient of the cause or consequences of prostatic obstruction should be undertaken until the patient has been revived to the maximum of physical rejuvenation.

NEW ORLEANS Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

THE EMERGENCY RELIEF ADMINISTRATION AND MEDICAL ECONOMICS

At the time this editorial is being written the State Medical Society of Louisiana and the Administrator of the Emergency Relief Administration, Mr. Harry J. Early, are unable to agree upon the fee schedule for those physicians who

are to serve those who are on the rolls of the Emergency Relief Administration. This is unfortunate, because at the present time, despite the expressed desires of the Government of Washington, the doctors are not being paid for services rendered those who are obtaining governmental aid. The physicians are being deprived of just and fair rewards for the services that they are giving to the poor who are receiving governmental help. As it was so pithily noted in the Mississippi section of the Journal last month, the butcher, the baker, and the candle stick maker are being paid for whatever he sells to those governmental dependants but the doctor very largely and generally is losing out, though in some communities in the State he is getting some monetary reward.

The Executive Committee of the Louisiana State Medical Society is not to be blamed for this impasse. The schedule of fees presented to the Committee was very much less than those that had been given and are being given in nearly every other State in the Union. Without giving the full fee schedule, which appears in the Louisiana section of this number of the Journal, it may be said that Mr. Early offered the doctors of Louisiana \$.75 for an office visit, \$1.25 for a house visit, and five cents for each mile more than four miles away from city limits or incorporated towns, and \$15.00 for obstetrical attendance before, during, and after delivery of the woman. These fees are woefully inadequate for the amount of time the doctor has to give to a case, and in the instance of the out of town visits considerably less than the actual cost of making the trip by automobile.

The medical profession of Louisiana and of Mississippi are perfectly and completely willing to make sacrifices in order to help out with the present emergency. Our doctors realize that an emergency does exist, and they are willing to lower their fees for the time being, but not to such ridiculously small figures as those which have been presented to them for their acceptance. Other professions and other businesses have not made similar reductions, but the humanitarian character of the doctor's work is exemplified magnificently in the willingness of the physician to forego emoluments that are commensurate with his training and the cost

of rendering service during this emergency as he has in all times of stress, danger or plague.

It should be very definitely and positively understood that these fee reductions which will be undoubtedly adjusted in a short time are only for the duration of the present economic emergency. This can not be too strongly accentuated. The doctors are making sacrifices to help out the Government, but this does not mean that they should make denials for the benefit of insurance companies or compensation organizations, nor for the communities themselves with the people that they contain who can pay fees which will return to the doctor at least a decent living wage. If the impression gets around that the physician is able to render services for such low fees it will be a great calamity. The average individual does not realize that the doctor has spent a considerable capital in obtaining his education, that years of training necessarily shorten the time that he can obtain a livelihood, and that for many more years than the average individual a physician must be dependant upon financial help from others. The thoughtless person does not comprehend, furthermore, that there is considerable expense in the practice of medicine, expenses which range from the cost of materials for the treatment of patients and the diagnosis of their malady, to rent of offices, upkeep of automobile, the maintenance of a library, and similar expenses, the cost of which pile up materially. Furthermore, in the few years of economic independence in which the physician is making his expenses, he should be able to put aside enough surplus to maintain him in his old age. In the present chaotic economic conditions in this country and the world, this is not much more than a hoped for state of affairs which should be, but is not.

There is one other aspect of this problem that deserves attention. On the last page of Bulletin No. 7, issued by the central authorities of the Emergency Relief Administration, is a statement that failure of organized medicine to function will result in the putting into effect of medical relief under a group of physicians selected by the State Administrator. This is pernicious. A layman should not select a group of physicians to work under governmental authorities.

Such a group might well form a body which will be perpetuated and which would be the entry wedge for state medicine. One of the redeeming features of the medical relief plans has been the maintenance of the important principle of free selection of physician by the patient. If a group is called upon to administer medical aid and this group is without the bounds of organized medicine, certainly one of the most fundamental and important principles of medical practice will be obliterated and done away with. The patient will no longer have an individual right to select his own doctor, but he will have to take that man as designated by the group that is running medical care.

To epitomize what has been written above, it might be said that physicians of Louisiana and Mississippi are willing to cut their fee schedule; they are willing to maintain the humanistic attitude of their profession, but they do balk at monetary returns which are so woefully inadequate as to be ridiculous.

THERAPEUTICS OF MALARIA

The third general report of the Malaria Commission of the League of Nations has to do largely with a discussion of all drugs available for malaria control. An abstract of this report has been sent out from Amsterdam, presumably to the medical profession as a whole in all countries. In view of the fact that the Dutch are the chief world producers of quinine, it is only to be expected that the report would stress the advantages of quinine. In spite of this, the information concerning the use of quinine, atebirin, and plasmoquine is really worth calling to the attention of the physicians who are treating malaria, particularly on a large scale.

The Malaria Commission expresses the opinion that for prophylactic purposes quinine is the best drug to use; that the curative effect of quinine and atebirin is comparable and apparently equal; that in the treatment to prevent relapses quinine again is effectual; and lastly that in the prevention of the spread of the disease (gametocyte therapy) quinine and atebirin are each effective in destroying the gametocytes in benign tertian and quartan malaria, but in the treatment of estivoautumnal malaria, plasmoquine

is capable of preventing crescent carriers from infecting mosquitoes.

Quinine is effective and has stood the test of time. It is very much cheaper than any form of malarial therapy, and it fills the requirement of being abundant and cheap. Atebrin undoubtedly is effective, but because of its tendency to quickly color the skin yellow should not be given prophylactically. For the treatment of the attack, economical consideration aside, both drugs are effective in periods no longer than seven days, usually five days being sufficient for any ma-

laria therapy with either drug. Smaller doses of quinine should be then continued for a period of several months.

The dosage of quinine recommended is 1.2 gm. (20 grains) for five days, and of atebrin 0.3 gm. (5 grains) daily for five days. To continue the quinine therapy 0.4 gm. (6 grains) daily is sufficient for a period of eight weeks. Plasmoquine to destroy gametocytes is recommended to be administered in doses of 0.04 gm. twice a week during the period when crescents are present in the peripheral blood.

HOSPITAL STAFF TRANSACTIONS

HOTEL DIEU

The regular monthly meeting of Hotel Dieu Staff was held November 20, 1933, with Dr. P. B. Salatch, President, in the Chair, and Dr. Ruth Aleman, Secretary, at the desk.

Dr. C. C. DeGravelles presented a paper "Caisson Disease".

Caisson disease, compressed air illness, or more properly speaking, air embolism, is a condition caused by a too-rapid decompression after exposure to high pressure for a time. It is characterized anatomically by the presence of free nitrogen in the body tissues and fluids, interfering with their normal functions, and clinically by one or a combination of the following symptoms: localized pain, vertigo, prostration, or symptoms referable to the central nervous system.

It is estimated that the blood is 5 per cent of the body weight, and the circulation time of the blood is about 1 minute. During compression the blood while going through the lungs takes up nitrogen to the point of saturation, which increases approximately 1 per cent for every additional pound of atmospheric pressure applied. In decompression the action taking place is just the reverse. The super-saturated tissues give off nitrogen to the blood which is de-saturated by going through the lungs. The blood is again saturated with nitrogen from the tissues, and de-saturated in the lungs, and so on until equilibrium with a normal atmosphere is established.

Should the decompression be so rapid as not to permit enough time for the blood to carry the nitrogen, freed from the tissues, to the lungs, or should the lungs be incapable of ridding the blood of excess nitrogen, gas bubbles of nitrogen will form in the body fluids and tissues. This formation of gas bubbles is at present the accepted theory of the cause of caisson disease.

Heavy drinkers were more susceptible than were

the men who drank in moderation or not at all. The largest proportion of the bends occurred at a pressure of 29 pounds and at 34 pounds. There is a Federal law prohibiting a man working under more than 52 pounds of pressure. However, by special permission the government has allowed the limit to be raised to 55 pounds where it was shown to be imperative.

Symptoms: 1. Affection of the central nervous system: This may be either motor, sensory or both, due to the pressure of air emboli upon the brain, spinal cord, or some particular nerve trunk.

2. Localized pains: Localization of pain depends on muscle fibre, tendon sheath, bone or nerve terminal.

3. Dizziness is the result of gas emboli in the middle ear, or may be caused by disturbances of the central nervous system.

4. Chokes: Difficult breathing is due to bubbles of gas forced through the pulmonary arteries into the lungs.

5. Unconsciousness or collapse: This is usually caused by large quantities of gas distributed generally throughout the circulation.

6. Ear-blocking: When equalization of pressure does not take place from within, severe pain occurs from the consequent stretching of the ear-drum, and if pressure is increased to a certain point, the ear-drum finally ruptures.

Treatment: In order to prevent the blocking of the ear-passages, each man on entering compressed air on his initial trip should be instructed to swallow, or to close both nostrils with the thumb and fore-finger, shutting the mouth firmly, then making a strong expiratory effort. By doing this he expels air from the nasal pharynx to such an extent that he opens up the Eustachian tubes, thus preventing ear-block.

All cases of bends should be rushed at once to the hospital lock and the pressure in the lock be

raised immediately to the pressure under which the man was working. Decompression should then start at the rate of two minutes per pound of pressure. That is, if the man was working under 40 pounds pressure, decompression should last 80 minutes.

Knowing the suffering that the bends entails, you would think that men doing this kind of work for a number of years would be careful to follow the usual rules of decompressing two minutes to the pound, but I have found it almost impossible to follow this rule, as the men, after from 20 to 25 minutes in the decompression chamber, always clamored to come out, often to their subsequent regret.

Dr. V. Fuchs: It has been found that in extreme dampness there is more tendency to the bends than there is when working under dry conditions. The whole secret of avoiding the bends is proper and slow decompression. The Diver's Manual of the U. S. Navy goes into detail on the decompression of divers. The reason for the paralysis is that the material of the spinal cord is not profusely supplied with blood vessels and therefore the nitrogen that accumulates in the spinal cord is not rapidly carried off.

Dr. Walter Otis: The situation is largely one of a myelitis, classed under the compressed air diseases, better known as the bends, by reason of the fact that the bodies of the victims are contorted due to the saturation of the tissues with nitrogen under increased pressure. The motor and sensory changes depend largely upon the areas affected and the amount of damage following. Externally, from a pathologic standpoint, for the most part no apparent lesion may be evidenced. Then again, there may be marked cyanosis of the face, with hemorrhagic conditions from the mucous membranes. Crepitation of the skin may be elicited on light pressure, even though the skin is not obviously puffed up. Petechial hemorrhages may be found in the brain and cord, with gas in small blebs in the nerve tissues.

Treatment is largely symptomatic, decompression being the principal one, performed by various means, particularly so by the air chamber. Hot packs, systemic tonics, balanced diet may aid. In recovered cases there is also a susceptibility to re-occurrence.

Dr. M. Couret: Although it has been well established that nitrogen gas remains in tissue for a long time, as for example, in the thoracic cavity, I am a little skeptical that it would remain long enough to produce such permanent lesions as we find in caisson disease. I have wondered if, perhaps, hemorrhage may not be more likely responsible for the paralysis.

Dr. L. Levy spoke on some of the high lights in the way of papers at the Richmond Meeting. The

paper by Dr. Dean Lewis was mentioned. One of the notes was on the expression made by Dr. Lewis on appendicitis, he said that there is no such thing as chronic appendicitis, he stated that "recurrent attacks of acute appendicitis" was the correct diagnosis.

A paper by Dr. O. S. Lowsley was spoken of and the use of strips of fascia in kidney work was emphasized. In obstetrics, a paper emphasized the Scanzoni method in persistent occipital posterior position by Dr. Edward Speidel was favorably received and favorably commented on. Dr. J. J. Pemberton's paper on Hyperthyroidism mentioned the use of Iodine, X-Ray, Radium, and Surgery. Dr. R. B. Bailey was an ardent advocate of surgery in the treatment of tuberculosis, using paralysis of the diaphragm as one of the chief aids. A paper was read by Dr. E. L. King on medical indication for sterilization and contraceptive measures, emphasizing contraceptive methods in certain diseases. A paper by Dr. Milton Lewis on the use of sodium amytal in eclampsia gave great hope in the progress in the control of convulsions in eclampsia. Sodium amytal given intravenously controls convulsions in every case. He reported a large percentage of recoveries. He emphasized in the use of sodium amytal that it should be given slowly and no dose should be given in less than ten minutes. Altogether the meeting was a scientific treat and it was pleasing to note that the New Orleans men acquitted themselves well and held many prominent places as officers, chairmen of sections, and essayists.

JOINT MEETING OF THE BAPTIST HOSPITAL STAFF AND OF THE NEW ORLEANS GYNECOLOGICAL AND OBSTETRICAL SOCIETY

A joint meeting of the Baptist Hospital Staff and the New Orleans Obstetrical and Gynecological Society was held on Tuesday, November 28, 1933 at 8:00 o'clock with Dr. H. V. Sims presiding, and members of the Second District Medical Society as guests. The following program was presented.

1. The Postpartum Kidney: Drs. H. W. E. Walther and Robert M. Willoughby, Discussion, Dr. E. A. Ficklen.

2. The Heart of Pregnancy: Dr. Oscar W. Bethea, Discussion, Dr. E. L. King.

3. Extrauterine Pregnancy Complicated by Intestinal Obstruction: Dr. H. B. Alsobrook, Discussion, Dr. Curtis Tyrone.

4. (a) Some Unusual Complications in the New Born: 1. A Case of Polydactylism. 2. A Case of Intrauterine Fracture. (b) Carcinoma of the Body of the Uterus. (c) Bleeding Nipples; Cyst of one Breast and Carcinoma of the Other. Dr. W. D. Phillips, Discussion, Dr. Edwin H. Lawson.

5. A Case of Hydatidiform Mole, Dr. H. W. Kostmayer, Discussion, Dr. Thomas B. Sellers.

6. Bicornuate Uterus with Twin Pregnancy, Dr. John T. Sanders. Discussion, Dr. H. V. Sims.

Following the presentation of this program there was a discussion of the deaths of the month by Dr. J. G. Lilly, Jr.

There being no further business, the meeting adjourned to meet again on Tuesday, December 26, at 8:00 p. m.

FRENCH HOSPITAL

A regular monthly meeting of French Hospital Staff was called to order Friday, December 8, 1933, Dr. H. B. Alsobrook presiding. The secretary read the report of discharges and the deaths for the previous month were opened to discussion. A case of lobar pneumonia was presented by Dr. A. M. Powe. This case was discussed by Drs. H. B. Alsobrook, R. H. McCarty and W. R. Strange.

A death due to tumor of spinal cord was opened to discussion. The striking feature of this case was the rapidity with which the patient developed an ascending paralysis which was symmetrical on both extremities. Dr. L. L. Cazenavette was of the opinion that this was a case of ascending myelitis rather than tumor of the spinal cord.

A case of cerebral hemorrhage in a woman 46 years old was then taken up. Dr. R. H. McCarty presented the details of the case and Dr. Cazenavette opened the discussion. The two feature points in this case were the comparatively low blood pressure and projectile vomiting. He stated that cerebral hemorrhage may be caused by a diseased artery even though the pressure is not very high. The vomiting he said was evidently due to the sudden change in the circulation of the brain.

The following officers were then elected for the year 1934: Dr. J. J. Baron, Chairman, Dr. M. L. Stadiem, Vice-chairman, and Dr. N. J. Tessitore Secretary.

Dr. H. B. Alsobrook then thanked the members of the Staff for their cooperation during the past year and turned the chair over to Dr. Baron. The following committees were appointed: Executive Committee—Dr. P. Graffagnino, Chairman, Drs. W. H. Harris, L. J. Menville and H. F. Ader, Membership Committee—Dr. M. O. Miller, Chairman, Drs. M. J. Lyons and A. V. Friedrichs. Program—Dr. M. L. Stadiem, Chairman, Drs. H. B. Alsobrook and N. J. Tessitore. Records—Dr. A. M. Powe, Chairman, Drs. R. L. Gordon and R. H. McCarty

CHAMBERLAIN-RICE HOSPITAL STAFF MEETING, NATCHEZ, MISSISSIPPI

ABSTRACT.—FOREIGN BODY IN RHINO-PHARYNX.—Dr. Raymond T. Smith.

Identity of patient—A. L. W. Colored, male in-

fant—Case No. 4348. Aged 6 months; admitted to hospital 11/16/33 for removal of foreign body from the rhino-pharynx (cockle burr). Discharged 11/20/33. Complaint—Nasal obstruction, discharge, epistaxis, mucous bronchitis, cough, temperature. Present Illness—Began a few days over two weeks prior to admission to the hospital when the baby had a cockle burr in its mouth which it evidently sucked up behind the nose. Patient was taken to a doctor immediately who told the mother that it was no longer there. Mother stated that she saw the burr about ten days before bringing patient to the hospital. Owing to the continued discharge and epistaxis the patient was taken to Dr. Chamberlain who made a diagnosis of foreign body in the rhino-pharynx and referred the patient to the writer for treatment. Past history—Patient was delivered normally and has not been sick since birth until the present illness. Family history—Father and mother both living and well; one brother living and well; no sisters. Physical examination—Reveals a well developed, well nourished male infant, approximately six months old; acutely ill. Breathing was labored and there was evidence of much mucus in the bronchial tree. There was a copious discharge from the nose and there are traces of blood in it. Temperature 101° (rectal). Head, normal shape and contour—no scars; no rachitis; eyes normal; ears normal; nose, there was evidence of a bloody purulent discharge from both nostrils with blockage of the airway; throat slightly reddened otherwise negative; mouth, essentially negative; larynx, no pathology. Lungs, there was evidence of considerable mucous bronchitis with moisture over both lung areas; heart, very rapid, no evidence of any murmurs or hypertrophy; abdomen flaccid, no palpable tenderness or tumor masses; reflexes, normal throughout; skin dry, no rashes. Clinical Laboratory—Essentially negative. Preoperative Diagnosis—Foreign body in the rhino-pharynx. Description of operation—Without anaesthesia the foreign body was palpated with the index finger in the rhino-pharynx on the anterior wall. After heroic efforts had been made to remove the object with ordinary instruments the attempt was abandoned due to the critical condition of the patient. The patient was returned to bed to recover from the manipulations. Two days later with the aid of a stiff wire loop and a soft rubber catheter the object was successfully removed. The catheter was passed through the nose and when it appeared in the pharynx the wire loop was fastened on to it and the loop was drawn back into the naso-pharynx and with the aid of the fingers was placed around the foreign body. Then with rotatory movements the object was dislodged and removed. Patient was returned to bed and given ordinary sedatives along with nasal antiseptics.

Gross Pathology—Generalized hyperemia and

exudation of the mucous membranes of the respiratory tract. Foreign body—cockle burr.

Final Diagnosis—Foreign body in the rhinopharynx—cockle burr.

Condition on discharge—Recovered.

Remarks—The interesting factor in this case is that a six months old infant could possibly get a full grown cockle burr in back of the nose since the usual route for foreign bodies is downward into the larynx and trachea; that more complications did not develop prior to its removal and that recovery was so rapid and complete. The author hopes that this experience will be beneficial to someone else under like circumstances.

Natchez,

December 9, 1933.

CLARKSDALE HOSPITAL STAFF MEETING

The regular monthly meeting of the Coahoma County Medical Club was held in the sun parlor of the Clarksdale Hospital on Wednesday, December 6, at 2:30 p. m. Dr. J. A. Slack, president, called the meeting to order.

The Coahoma County Medical Club, which had been designated as the Clarksdale Hospital Medical Staff by the Board of Directors of the Hospital, but which had not organized as such, met for the purpose of organization as a medical staff. It was agreed that for the time being the two organizations would meet jointly, concurrently and function identically, and that the officers should serve in a dual capacity in both organizations. The chairman of the Committee on the Constitution, V. B. Harrison, presented a report and tentative draft of the proposed constitution for the Clarksdale Hospital Medical Staff, which after a general discussion and amendments was adopted.

The next order of business was the election of officers for both organizations for the first term in 1934 with the following results: E. L. Wilkins, President; W. H. Brandon, Vice-President; and V. B. Harrison, Secretary-Treasurer. Drs. T. G. Hughes, I. P. Carr, and D. H. Griffin were elected to the Relations Committee. The president appointed a Committee on By-Laws to consist of J. A. Slack, T. M. Dye, and W. H. Brandon. The staff instructed the committee to limit the membership of the Relations Committee to Clarksdale physicians.

Dr. T. M. Dye made a report on the recent meeting of the officers and council of the State Medical Association with the State F. E. R. with reference to the proposed fee scale in the cases of the indigent sick. Inasmuch as the State Medical Association recommended that each County be organized into a County Medical Society, Dr. Dye made a motion that a Coahoma County Medical Society be organized with officers the same as the Coahoma County Medical Club, and that such organization

apply to the State Medical Association for a charter.

There being no further business, the Club was adjourned.

V. B. Harrison,
Secretary.

Clarksdale,

December 6, 1933.

HOUSTON HOSPITAL STAFF MEETING

The regular monthly staff meeting of the Houston Hospital was held in the hospital building, Wednesday night, November 27, with a good attendance. Dr. E. K. Guinn, McCondy, presided.

"Diseases of the Thyroid Gland" was the subject for this meeting. Dr. Douglas D. Baugh presented a chart giving the most common classifications of goiter; also a series of six patients with various types of goiter trouble. A full discussion was given by Drs. Williams, Armstrong, Philpot and Baugh of Houston, Young and Webster of Vardaman, Guinn of McCondy, Walker of Houlika and Abernethy of Algoma.

Following the hour and thirty minute discussion of goiter, a motion picture, "Open Thoracotomy" with rib resection, was enjoyed by all present.

Refreshments were served by the hospital nurses and an excellent musical program was rendered by Miss Jennie Grace Blizzard of Houston.

The next meeting will be held December 28.

Eva Collins,
Secretary.

Houston,

December 8, 1933.

KING'S DAUGHTERS HOSPITAL STAFF MEETING, GREENVILLE, MISS.

The staff of the King's Daughters Hospital, Greenville, held its usual monthly meeting Wednesday evening, December 6, with Dr. C. P. Thompson presiding.

Dr. J. F. Lucas presented an unusual case of ovarian cyst complicating the puerperium. The woman was 27 years of age. A previous pregnancy, four years earlier, was entirely uncomplicated. She had been in excellent health since that time. Her second pregnancy was normal. Examination at the third month established that no abnormal tumor existed. Her abdomen was exceptionally small through the latter months. She was delivered at term, in her home without untoward incident. Four days after delivery she had a chill, followed by fever, malaise, and some pain and soreness in the lower abdomen. These symptoms increased in severity with slight abdominal distention, to the ninth day postpartem, when she was admitted to the hospital with diagnosis of puerperal sepsis. Within a few hours after admission the fever

reached 104°F., pulse 120; there were 20,400 leukocytes with 86 per cent polynuclear cells; the urine showed a moderate albumin reaction and contained no pus. The abdomen was moderately distended, rigid and painful below the umbilicus. There was a small amount of purulent lochia without special significance in the stained smears. Tenderness made the pelvic examination unsatisfactory. The bowels were evacuated freely by enema. The physical examination afforded no other important information. Serious consideration was given the diagnosis of peritonitis, secondary to puerperal infection, or possibly a ruptured appendix.

By the twelfth day postpartem the patient appeared very toxic; leukocytosis had increased; blood cultures were negative. Pain was severe but did not require an opiate. The abdomen was rigid and distention increased rapidly, until it was greater than a full term pregnancy. A roentgen ray examination showed a large oval tumor in the mid-abdomen and pelvis, outlined against the gas filled bowel which it displaced.

Operation on the thirteenth day after delivery disclosed a large ovarian cyst partly twisted upon its pedicle. This was removed, after being aspirated. Recovery was uneventful. The pathologist's diagnosis was cystoma, with necrosis and acute inflammation.

Dr. Lucas said that ovarian cyst complicating pregnancy is rare, about 1 in 1,500. They may seriously complicate delivery. About half of them cause grave symptoms during the puerperium as a result of traumatism and torsion occurring during labor.

Dr. Davis recalled a similar case, occurring in another city, in which the diagnosis was not reached until after exploratory operation.

Dr. Paul Gamble presented brief clinical reports and the roentgenograms of a number of cases illustrating anomalies of the kidney, their pathologic and surgical importance. Two cases were of anomalous renal arteries which caused constriction and atrophic changes in the proximal portion of the ureter, resulting in hydronephrosis, eventual infection and extensive destruction of the kidney. Dr. White demonstrated the gross specimens, as both cases required nephrectomy. Dr. Gamble said that anomalous arteries are rather common, though not always producing hydronephrosis. The usual symptoms are similar to those of renal colic, often mistaken for calculi; but are not so severe, or so typical in radiation. If the condition is recognized before serious renal damage has occurred, it may be treated by simply severing the artery, if small, or by plastic operation on the renal pelvis, if the artery is large.

Two examples of unilateral hypoplastic kidney were presented. One was a young woman having multiple calculi in the pelvis of the fully developed

kidney. These calculi were successfully removed by nephrectomy. The other case was in an older woman, a long sufferer from chronic pyelitis affecting the hypoplastic kidney. These cases while not very common, have great surgical significance, for if not recognized, removal of the fully developed kidney, for any cause, would result in death of the patient through incapacity of the small kidney.

Cases of double and bifid ureter were presented.

An interesting case of pelvic kidney was recounted. The man had for years, attacks of pain and persistent discomfort within the pelvis. A very complete diagnostic study had revealed no probable explanation. The urine was negative. A routine pyelographic examination disclosed the pelvic kidney which was hydronephrotic. Its removal completely relieved the symptoms.

Dr. Gamble and Dr. Thompson in discussing the paper emphasized the point that anomalous conditions are of frequent occurrence, but often not appreciated except when routine cystoscopy and pyelographic examinations are performed. They are important because it is the anomalous urinary apparatus that is most susceptible to disease.

John A. Beals, Secretary.

Greenville,
December 12, 1933.

MISSISSIPPI BAPTIST HOSPITAL STAFF
MEETING, JACKSON, MISS.

The staff met in the dining room at six o'clock in the evening for dinner, with thirty members present and one visitor. The superintendent, Mr. Alliston, made a talk on the financial affairs of the hospital.

Dr. Robin Harris reported the following cases: Two cases reported to him in his office on the same day with headache in the lower half of the head and with pain behind the ear. This was suspected as being typical of sphenopalatine ganglionitis. The ganglion was cocainized and all the pain was relieved in both cases except in the second lower molar tooth. These teeth were roentgen rayed and found to be abscessed. They were then removed as well. Conclusion: Two typical cases of sphenopalatine ganglionitis which were caused by abscess of teeth and which cases were relieved by removing same.

Rabies: Dr. Garrison, Jr., reported the following case:

Case Report: C. McD.

History: Present Illness: Admitted to the Baptist Hospital, Dec. 11, '33, with the history of onset two days prior, with nervousness, choking, and a sensation of suffocation in the neck and chest. Extreme restlessness at night and extreme difficulty in attempting to swallow for the past 24 hours. The patient's nurse had noted intermittent attacks of clonic convulsions, which were accom-

panied by respiratory difficulty and some cyanosis. Patient was counting and mumbling but would not answer questions intelligently.

Past History: At the age of four months the right eye was removed by Dr. Posey for glioma and the left eye at seven months for the same condition. No other childhood diseases. Six months ago the child was scratched by a pet cat that was sickly, and a few weeks later the cat was killed because of its poor condition, but it was not suspected by the family to be rabid. Three months ago the child was in daily contact with a pet dog, which one week later ran away from home and was shot by a negro, who said the dog was mad. There was no microscopical examination of the brain made. The child has since been in the School for the Blind, and had no contact with animals.

Physical Examination: Temperature 104° F, pulse 180, respiration 52. An acutely ill, highly nervous and apprehensive white girl of eight years of age. Both eyes had been removed. The ears, nose and throat were normal. There was no rigidity of the neck. The heart was a little enlarged and the sounds were weak, but there were no irregularities or murmurs. The lungs were clear and the abdomen was negative. There were no pathological reflexes. Roentgengram of chest showed the heart to be dilated and the lungs clear.

Differential Diagnosis: (1) Rabies. (2) Bulbar poliomyelitis; no localized signs, stiff neck or neck drop. No spinal fluid findings. (3) Encephalitis. (4) Tetanus; has tonic rather than clonic convulsions with spasms of masseter muscles.

Progress: Large doses of sedatives were given with very little effect, and the patient continued to have clonic convulsions and spasms of the muscles of deglutition on attempting to swallow, and expired five hours after admission to hospital. Spinal puncture was not attempted while patient was alive, due to her extreme condition. Five minutes after death a puncture was performed and 5 cc. of clear fluid, not under increased pressure, was removed. This spinal fluid showed negative globulin, negative Wassermann, a total of 4 cells, and no growth was obtained on culture.

Autopsy: A complete autopsy was done and all the organs were normal on gross appearance except that the meninges of the brain were congested and hyperemic. A section of the hippocampus major was taken and negri nodies were found.

Interesting points in this case: (1) Unusual occurrence; (2) History of scratch by a cat 6 months prior to onset which was probably rabid, and playing with a dog three months before onset but no known bite by it. Usual incubation period is 3 to 6 weeks; (3) Rapidly fatal with no paralysis stage; (4) The importance of giving Pasteur treatment.

Dr. Rehfeldt made a talk on his trip to the World's Fair in the clinics and hospitals in Chicago, which was a great deal of interest to the staff. He also reported on a visit to the A. M. A. headquarters.

Dr. Robert McLean was proposed as an associate member to the staff.

Drs. Armstorg and Wall and Mr. Allistan were the committee selected to reorganize the rotating service of the hospital. Dr. Wall read the report and presented cards to the staff be filled out and returned to aid them in reorganizing the services.

L. W. Long, Secretary.

VICKSBURG HOSPITAL STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Hospital was held on November 9. The scientific program included the following:

1. Obstetrical Complications with Case Reports.—Dr. W. N. Jenkins.
2. Carcinoma of the Large Bowel, with Case Report.—Dr. W. H. Parsons.
3. Acute Osteomyelitis in Children, with Case Report.—Dr. W. P. Robert.
4. Review of Current Literature.—Staff.

The cases of mortality for the previous month were discussed.

Routine business was discussed, luncheon was served and the meeting adjourned.

W. H. Parsons.

Abstract.—Carcinoma of the Sigmoids, Case Report.—Dr. W. H. Parsons.

The patient, a male, aged 51 years; registered at the Clinic, September 29, 1933. There was nothing of especial interest in the family history. Very careful inquiry was made concerning the occurrence of malignancy in other members of the family, but so far as could be determined, there have been no such cases. Twice married and by first wife had three children, all of which are living and well. Two children had died in infancy. The patient had always enjoyed most excellent health. His general habits were most conservative. He used tobacco moderately and did not use alcohol at all. In 1928, an attack of acute appendicitis with perforation of the appendix occurred. Surgery was done, and while recovery was stormy, it was ultimately complete. Except on this occasion, the patient had never consulted a physician. **Present Illness:** Until May of 1933, has been entirely well. The bowels had always moved regularly without slightest difficulty and laxatives, until the time mentioned, were practically never employed. In May, he noticed that constipation was occurring with increasing frequency and at that time began the use of tablets of veracolate. For a few weeks they produced satisfactory move-

ments, after which time the patient developed what he thought were hemorrhoids. It then became necessary to take more vigorous laxatives and feenamints were used with satisfactory results for a time. After a few weeks, they likewise failed to produce an evacuation and enemas were employed but very soon became ineffective. In August, a burbling, gurgling sound was heard in the abdomen and a mass would at times be palpable in the mid portion of the left abdomen. The patient attributed all of his difficulties to hemorrhoids and on the date previously noted consulted us for treatment of this condition. In September (one month before admission) weight lost was first noticed. In 1928, he had weighed 149 pounds. His average weight for the past year had been 130 to 138. The gastro-intestinal history, except for the story of marked progressive constipation, the occurrence of gas in the abdomen and occasionally a mass in the left abdomen, was negative. The significant feature in the history, of course, was the definite change of bowel habit. There was nothing of especial moment in either the respiratory or urological history. Physical examination showed a poorly nourished, middle aged male, who apparently recently had lost considerable weight. The oral hygiene was quite poor, there being definite sepsis. With these exceptions, the head and neck showed nothing remarkable. The supraclavicular glands were not palpable and study of the heart and lungs showed no especial abnormality. The blood pressure was: systolic 130, diastolic 80. The abdomen was quite distended with gas. There was an operative scar in the right lower quadrant with good union. There were no palpable masses, but a sensation of increased resistance was noted over the lower left colon. The patient stated that at times a definite mass would develop here, that gurgling would occur and that after taking an enema some gas would be passed and the mass would disappear. The liver could not be felt nor were the spleen or kidneys palpable and the abdominal study otherwise was negative. Sigmoidoscopic examination made by my associate, Dr. Sparks, showed a few small external hemorrhoids. The instrument entered without difficulty until the region of the lower sigmoid was approached, whereupon an obstruction was met which could not be passed. A diagnosis of probably annular carcinoma of the recto-sigmoid was made and the patient was referred for roentgen ray study.

Roentgen ray study by Dr. W. D. Anderson: Examination of the colon during the administration of barium enema. Preliminary palpation of the abdomen revealed a mass deep in the lower left quadrant. As the barium enters, the rectal pouch filled out rapidly and easily. After the rectum becomes filled, patient complained of a great deal of pain and fullness. The barium did not pass the

rectosigmoidal junction. Even at the end of about five minutes of fluoroscopic control and after the introduction of about half of the barium mixture it could be made to pass the rectosigmoidal junction by palpation. The patient still complained bitterly of pain. At this point it was thought advisable to stop the examination. A film was taken although the patient evacuated some of the barium before it could be made. It showed the rectum fairly well filled. No barium beyond the rectosigmoidal junction.

Opinion: Obstruction, rectosigmoidal junction, probably malignant.

Advice: Repeating examination in two or three days and under morphine and atropine preliminary to relax any spasm that may be present.

The patient, three days later, returned and roentgen ray study was repeated with similar findings. On October 6, 1933, the patient was admitted to the Vicksburg Hospital a high caloric but low residue diet was begun, enemas were administered twice daily and mineral oil was given frequently by mouth. Unfortunately all medication by mouth was regurgitated and codeine was necessary because of abdominal pain. Glucose was then begun intravenously and two days later frequent doses of paregoric were given. On October 3, employing local anesthesia, a cecostomy was made. The tube, at first failed to drain and it was necessary to irrigate the bowel with warm mineral oil, whereupon impacted feces were dislodged and exceedingly free drainage was established. There was relatively little post-operative discomfort and by October 15, a liquid diet was being taken without discomfort. The patient was again prepared for surgery and on October 24 abdominal exploration was done. Spinal anesthesia was used, the abdomen was opened through an incision just to the left of the midline. The liver was explored and no evidence of metastases was found. An annular carcinoma at the recto-sigmoid junction was noted; the growth was very firmly fixed to the posterior abdominal wall and there were many glands in the mesentery, these glands being thoroughly attached to the bowel and to the underlying vessels. The descending colon, the sigmoid and upper rectum were mobilized in the usual fashion and these structures were retracted to the midline. The ureter was identified quite early and retracted from the field. At first it was thought that the growth probably was inoperable, but after thorough mobilization it was found that it could be removed together with its adherent mesentery and glands. Accordingly the appropriate vessels were ligated at their points of origin, the sigmoid was clamped well above the growth, the upper rectum was clamped below the growth and the bowel with its contained cancer, adherent mesentery and glands removed. The raw surface was then covered and

both limbs of intestine allowed to project from the wound having first been united by the triple bladed Rankin clamp. The wound was closed in the usual fashion without drainage.

Post-operative convalescence was quite uneventful. On October 26 the Rankin clamp was removed and on October 30 clamps were applied to divide the spur. In November 1, the clamps had cut through and were removed. Satisfactory bowel evacuations were occurring. On November 3, the sutures were removed and the patient discharged from the hospital. On November 9, satisfactory movements were occurring from below and on December 5 the cecostomy wound had completely closed, the left abdominal wound was practically closed and all bowel movements were passing by the natural route.

Surgical pathology.—Section of sigmoid (weight 112 grams)— $5 \times 1\frac{1}{2}$ to $1\frac{3}{4}$ inches in diameter. At $1\frac{1}{4}$ inches from one end is thick area, 1 inch diameter, with wall thickened $\frac{1}{2}$ inch in each direction. Attached to surface at this area is mass $1\frac{1}{2} \times 1 \times \frac{5}{8}$ inch, irregular, dense, contains lymph nodes. Specimen opened longitudinally; some green brown mucoid feces. Growth extends around lumen, thickest on side of mesocolon attachment. Lumen $3-16$ inch at narrowest part. Mass on section is dense, gray-white, with some yellow mottling. Adherent mass is made up of lymph nodes and connective tissue, largest node $1-4 \times 3-16 \times 3-16$ inch. Remainder dense, white, with some yellowish areas.

Microscopic: Adeno-carcinoma (Grade IV); extends from lumen through wall and into mesocolon. Numerous mitotic figures. Mucinous some areas. Much hyaline fibrosis some areas. Much chronic, some acute inflammatory; some interstitial blood; some passive congestion; some granular necrosis. Few vessels contain growth near surface. Lymph nodes adherent contain growth.

Section from end of the specimen nearest growth shows no cancer.

Diagnosis: Adeno-carcinoma (Grade IV).

Extension to mesocolon and lymph nodes.

Abstract—Acute Osteomyelitis of the Right Ulna, Case Report.—Dr. W. P. Robert.

The patient, a male child, three and one-half years of age, was first seen on October 6, 1933. The chief complaint at that time was the occurrence of high fever and of a sore right arm. The mother stated that the child had been perfectly well until 16 hours previously, at which time fever reaching a height of 104 degrees developed and that pain of increasing severity and situated in the right forearm was noted. Since that time the youngster had slept but very little, had tossed about and had complained bitterly. Six days ago, the child had been struck and knocked down by an

automobile and at that time he had complained of some injury to the right arm. There was nothing noted of consequence in the respiratory, gastrointestinal or genito-urinary histories. The child had been born at full term and the delivery had been spontaneous. He has been breast fed for ten months, had suffered infrequent colds and had had no attacks of tonsillitis or of otitis media. Pertussis occurred two months ago. The family history reveals nothing of any especial importance. Physical examinations showed a well developed male child acutely ill. The skin was hot and dry, the cheeks were flushed, the pupils were dilated and the temperature was 102 degrees. Both ear drums were normal. The sclerae were clear, the pupils were regular, equal, dilated and reacted normally both to light and accommodation. The tonsils were small and cryptic, but not inflamed. There was no cervical adenopathy, no rigidity of the neck or pain on motion. Examination of the chest showed the heart rate accelerated but otherwise not remarkable and the abdominal examination was entirely negative, as was the urologic study. There was a skin lesion on the anterior surface of the left thigh, and beneath the scar thick yellow pus was seen. The right forearm was swollen on the ulnar surface at the lower third. The skin was tight and red but there was no fluctuation. As well as could be determined the wrist joint was not involved. A diagnosis of acute osteomyelitis of the lower third of the right ulna and impetigo involving the left thigh was made.

Roentgen ray study of the forearm, as was expected, was negative. The laboratory examination showed a total leukocyte count of 20,900, with 85 per cent neutrophils, 34 of which were band forms. Study of the stool and of the urine showed no abnormality, the blood chemistry was normal, the Wassermann was negative and blood culture was negative.

Under ether anesthesia, my associate Dr. Parsons, exposed the lower extremity of the right ulna. Upon dividing the periosteum, necrosis of the bone was found and pus was exuding from the medullary canal. A gutter was cut, a soft Penrose drain was left in place and the wound was loosely closed. The culture from this revealed staphylococcus albus. The patient improved quite rapidly, but the consulting surgeon felt that the arm should be reopened. This was done and considerable necrotic bone was removed. The wound was then packed with irradiated petrolatum and convalescence from this time was uneventful. Recovery was complete.

Comment.—This case seems to illustrate very well the usual history and findings in acute osteomyelitis. There is generally a preceding history of injury, there is not uncommonly a coincident skin infection and the isolation of the staphylococ-

cus is quite usual. There are always, during the early stages, negative roentgen ray findings. This is a matter of importance inasmuch as it has been remarked upon for many years and is yet not generally appreciated. There invariably occurs early bone destruction and usually lack of involvement of the epiphysis.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on December 11, at 6:30 p. m., with eleven members and three guests present. Following the reports from the records department and analysis of the work of the hospital, the deaths for the month were discussed in detail. Dr. F. Michael Smith, director, Warren County Health Department, presented a report of the vital statistics of the county for November.

(1) Squamous cell carcinoma of Cervix Uteri

In connection with the cancer clinic, the following cases were presented for discussion:

(Grade III); (2) Squamous cell carcinoma of Right Tonsil (Grade I); (3) Adeno-carcinoma of Right Breast (Grade IV); (4) Adeno-carcinoma of Left Breast (Grade IV); (5) Adeno-carcinoma of Left Breast (Grade IV); (6) Squamous cell carcinoma of Cervix Uteri (Grade IV); (7) Squamous cell carcinoma of Cervix Uteri (Grade II); (8) Hemangio-endothelioma of Hand.

Special Case Reports were presented.

(1) Asphyxia Neonatorum.—Dr. G. C. Jarratt.

(2) Carcinoma of the Cervical Canal.—Dr. J. A. K. Birchett, Jr.

(3) Carcinoma of the Cervix Uteri.—Dr. G. M. Street.

Drs. J. A. K. Birchett and L. J. Clark reported the recent meeting of the Southern Medical Association in Richmond, Virginia.

Three-minute reports of the literature of the month were presented as follows:

Dr. G. M. Street.—The Use of Theelin in Treatment of Gonorrhoeal Vaginitis in Babies.

Dr. L. S. Lippincott.—Virus Diseases.

Dr. J. A. K. Birchett, Jr.—Pilonidal Sinus.

Selected radiographic studies were presented:

(1) Osteoarthritis of Cervical Spine; (2) Pulmonary Tuberculosis; (3) Chest Findings With Sarcoma of Ovary; (4) Mastoiditis; (5) Ureteral Calculus.

This being the annual meeting, officers of the staff for the year of 1934 were elected as follows: President, Dr. G. M. Street; Vice-president, Dr. J. A. K. Birchett, Jr.; Secretary, Dr. L. S. Lippincott; Chairman of Program Committee, Dr. L. J. Clark; Chairman of Records Committee, Dr. G. C. Jarratt.

The next meeting will be held Wednesday, January 10.

Abstract.—Carcinoma of the Cervical Canal.—Dr. J. A. K. Birchett, Jr.

Patient.—White, female, aged 45 years; three children; no miscarriages. Present complaint.—Prolonged menstruation. History of present complaint.—Six months ago began to have menstrual flow that lasted seven to ten days, before that time only lasted three to five days. For last two months periods were for 14 days with passage of large clots of blood. Has been in bed for past three weeks under medical care because of the severe flow and the weakness and prostration following the large amount of blood lost. Past history.—General health excellent. For past several years has noted passage of several large clots of blood on second menstrual day but period usually only lasted four days. Had forceps delivery with first and second pregnancies. No serious illness. Has had slight digestive attacks past two years suggestive of mild gall bladder disease, otherwise history negative. Family history.—Father died, aged 65 years, apoplexy; mother died aged 57 years, peritonitis; four brothers living and well; three sisters dead, cancer, pneumonia and Bright's disease. Physical examination.—Well developed and nourished white female of middle age with evidence of anaemia. Dental caries, oral hygiene poor; no palpable glands in neck; thyroid normal; heart rate 90, regular, no murmurs. Pulse soft; blood pressure systolic 120, diastolic 90 lungs normal. Abdomen.—No scars, no areas of tenderness, no masses; liver and spleen not palpable. Pelvic.—Perineal relaxation Grade II; cervix eroded; lateral tear with granulating tissue which bleeds easily noted and removed for biopsy. Uterus fibrotic; cervix very much thickened and elongated; backward displacement. No ovarian or tubal masses. Skin sallow, has yellowish tinge. Mucous membranes show evidence of anaemia. Laboratory.—Urine essentially negative. Serology.—Wassermann, Kline and Young, Kahn, and Eagle Flocculation tests negative. Blood.—Hemoglobin 87 per cent; color index 1.05; erythrocytes 4,100,000; leukocytes 10,400; small lymphocytes 29 per cent; large lymphocytes 13 per cent; monocytes 8 per cent; polymorph, neutrophils, mature forms 7 per cent; band forms 11 per cent; eosinophils 2 per cent. No malaria found.

Procedure.—When this patient was examined following the above history with the findings of the markedly ulcerated cervix which the biopsy showed to be a polyp and acute and chronic endotrachelitis we felt that we were dealing with a uterus which either harbored a polyp in its cavity or a submucous fibroid and with the presence of this ugly cervical ulcer which in itself looked potentially malignant a complete hysterectomy was advised for relief of the causative factor of this prolonged menstruation of fairly recent development. As this patient was 45 years of age we did not feel that we were asking her to sacrifice her

uterus especially when we felt that malignancy could very probably be the cause of the disturbance, whether located in the fundus, body or cervical canal.

Surgery was accepted as a means of relief and under ether anaesthesia a total hysterectomy was performed. The uterus was of fibrotic type; no subsereous fibroids were noted; left ovary was cystic; otherwise adenexa were normal. Large boggy retrocecal appendix was also removed. Gall bladder and stomach were negative on palpation and inspection.

Post-operative period was uneventful except for slight rise in temperature on second day (101°F) and slight gastric upset following indigestion of first solid nourishment. Patient was up in chair on 12th post-operative day. Discharged on 15th post-operative day.

Transfusion was not indicated in the preoperative conditioning of this case for which reduced iron was administered and forced nourishment given. Blood was rapidly restored.

Dr. Lippincott, our pathologist, reported carcinoma Grade II of cervical canal, a condition which if it had been allowed to persist in a few weeks would have invaded the pericervical structures and floor of bladder with a bad prognosis for the future.

It seems to me this case further accentuates the fact that unexplainable profuse bleeding especially at menopause should always make us suspicious of malignancy until this suspicion has been dissipated by thorough careful examination, even if we have to remove the uterus to prove our contention.

I feel that this patient has a favorable prognosis.

TOURO INFIRMARY

The regular monthly meeting of the Touro Infirmary Medical Staff was held Wednesday, December 13 with Dr. I. I. Lemann presiding.

Dr. Arthur Caire, Jr., presented a summary of a case of Congenital Unilateral Telangiectasis in Pregnancy. This presentation initiated considerable instructive discussion.

The next presentation was by Dr. C. Jeff Miller who discussed 1. Vesicovaginal Fistula and 2. Uretero Sigmoidostomy.

Following the discussion on the preceding cases Dr. C. S. Holbrook briefly summarized a most unusual case of brain tumor. He and Dr. J. C. Rodick demonstrated the roentgenograms of the case. The program committee, through its Chairman, Dr. J. D. Rives presented two deaths to the staff for discussion.

Willard R. Wirth, M. D.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

January 3—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

January 3—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

January 5—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

January 8—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M. Installation of Officers, 1934. Dr. Theodore Diller of Pittsburgh will be the Annual Orator.

January 10—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

January 10—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

January 12—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

January 12—French Hospital Staff, 8 P. M.

January 15—Hotel Dieu Staff, 8 P. M.

January 16—Charity Hospital Medical Staff, 8 P. M.

January 17—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

January 17—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

January 17—Charity Hospital Surgical Staff.

January 18—Eye, Ear, Nose and Throat Club, 8 P. M.

January 19—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

January 19—I. C. R. R. Hospital Staff, 12 Noon.

January 22—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

January 23—Baptist Hospital Staff, 8 P. M.

January 24—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

January 24—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

January 26—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

January 31—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

January 31—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

During the month of December the Society held three meetings, one a regular scientific meeting and two special meetings.

On December 4, 1933, the eighth Stanford E. Chaille Memorial Oration was delivered by Dr. Edgar G. Ballenger of Atlanta. The subject of Dr. Ballenger's paper was: "Affections and Lesions of the

Prostatic Urethra with Special Reference to Trans-urethral Resection.

In addition to the scientific program at the meeting of December 11 Drs. J. H. Musser and Maurice Sullivan spoke in reference to the tuberculin testing of school children to be carried out under the auspices of the Louisiana Tuberculosis and Public Health Association and the Orleans Parish Medical Society.

A resolution was considered endorsing the proposed changes in the Pure Food and Drug Laws.

The Society was informed that a fee schedule submitted by the representative of the Louisiana State Medical Society to the Emergency Relief Administrator was not acceptable to him and presented a fee schedule proposed by Mr. Early of the Emergency Relief Administration. The Chair announced that the Secretary was obtaining information from various states on this subject, and action on this matter was deferred pending receipt of this information.

As this meeting constituted the election meeting the President announced the following results of the election of Officers for 1934:

Dr. Waldemar R. Metz, President.

Dr. Val H. Fuchs, First Vice-President.

Dr. Edmund L. Leckert, Second Vice-President.

Dr. Philips J. Carter, Third Vice-President.

Dr. Frederick L. Fenno, Secretary.

Dr. Walter P. Gardiner, Treasurer.

Dr. Alton Ochsner, Librarian.

Dr. Foster M. Johns, Dr. Edward L. King, Dr. Spencer B. McNair—Additional Members, Board of Directors.

The following Delegates and Alternates to the Louisiana State Medical Society were elected for a term of two years, with the exception of President who serves for the term of his office only:

DELEGATES

Dr. Waldemar R. Metz, Pres.

Dr. Foster M. Johns

Dr. Emmett Irwin

Dr. Edward L. King

Dr. A. E. Fossier

Dr. M. T. Van Studdiford

Dr. L. C. Chamberlain

Dr. H. B. Alsbrook

Dr. Val H. Fuchs

ALTERNATES

Dr. Theo. F. Kirn

Dr. W. H. Seemann

Dr. Leopold Mitchell

Dr. O. W. Bethea

Dr. Russell E. Stone

Dr. A. A. Keller

Dr. L. A. Fortier

Dr. Adolph Jacobs

Dr. E. C. Samuel

The Judiciary Committee, in compliance with the resolution of the Society of November 13, 1933:

"That the Judiciary Committee be directed to call before it to determine the attitude and make recommendations in the case of any and all members of this Society who have sponsored the movement to secure loan of \$9,850,000.00 to erect buildings and increase the capacity of Charity Hospital to 3939 beds and establish pay wards therein, knowing that the Orleans Parish Medical Society had by resolution disapproved this project."

reported that Drs. Geo. S. Bel, Jos. A. Danna and Amedee Granger were interrogated regarding their support of plans of the Board of Administrators of Charity Hospital to enlarge that institution and establish pay beds therein, and recommended that after careful consideration of the expression of these members of the Orleans Parish Medical Society who, through their support by public endorsement of a proposal already disapproved by this Society, the Judiciary Committee is of the opinion that these members have assumed an attitude antagonistic to the best interest of the Society and Profession at large.

This Committee recognizes the right of any person to an individual opinion, and it is further believed any member of this Society having an opinion in conflict with an expressed policy of the Society should make such opinion known to this organization in open meeting in an effort to convert the Society to his point of view, but failing therein and a policy contrary to his views having been adopted by the Society, it is believed by this Committee that it becomes incumbent upon such a member to abide by the action of the Society. It must be remembered that this Society is an organization in which membership is voluntary and continued membership therein is contingent upon willingness to abide by the attitude and actions of this Society.

It is further believed the seriousness of the offense in such cases warrants expulsion from membership but in so much as this is the first offense of its kind, the Judiciary Committee recommends leniency through approval of this report which shall constitute a censure of these members.

This report was adopted by the Society.

The Judiciary Committee, in compliance with instructions of this Society, interrogated Drs. J. M. Batchelor, C. Grenes Cole and E. F. Salerno, members of the Orleans Parish Medical Society, regarding their attitude toward the proposed plan of the Board of Administrators of the Charity Hospital to enlarge that institution and include pay beds therein, and learned that these physicians were in accord with the opinion of the Society and the Profession in opposing this plan; and the Committee

recommended that these physicians be commended on their attitude.

A special meeting was arranged to permit Dr. R. G. Leland, Director of the Bureau of Medical Economics of the American Medical Association to discuss medical economics with the members of the Orleans Parish Medical Society. Dr. Leland advised that the Society go on record as announcing its willingness to co-operate with E. R. A. to the extent of caring for the individuals on the National Welfare Rolls. Special emphasis was placed on the fact that this is an emergency procedure.

Action on the proposed fee schedule for this type of work was postponed to be considered as a special order of business at the first regular meeting in January.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 10/31/33.....	\$ 886.56
November receipts.....	386.34
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TOTAL CREDITS:.....	\$1,272.90
November expenditures.....	438.33
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ACTUAL BOOK BALANCE: 11/29/33.....	\$ 834.57

LIBRARIAN'S REPORT

The diminished number of books now being received from the publishers, through the medium of the Journal, as well as our own depleted funds, have markedly decreased the current growth of the Library. Under present conditions, we are able only to maintain our journal subscriptions and bind current volumes of periodicals, as completed. This limited amount of binding is absolutely necessary, since unbound current journals would soon be so defaced through the hard use received as to necessitate replacement,—and replacement cost materially exceeds that of binding. No book purchases are possible.

Only 36 volumes have been added to the Library during November. Of these, 15 came from the New Orleans Medical and Surgical Journal (received from the publishers during two months), 5 by gift and 16 by binding. New titles of recent date are listed below.

Material has been collected, at the request of physicians, on the following subjects:

Caisson disease.

- Quantitative analysis of bile.
- Information relative to B. Schick of the Schick test.
- Jamaica ginger paralysis.
- Treatment of tapeworm infestation.
- Pituitary treatment of alopecia.
- Primary pemphigus of mouth.
- Relation of economic depression to the nutrition and growth of children.
- Relation of World War to the nutrition and growth of children.
- Construction of isolation hospitals.
- History of artificial teeth.
- Barium enema in diagnosis of pelvic disease.
- Hypophysis.
- Hyperglycemia.
- Sugar metabolism in allergy.
- Perityphilitis.
- Splenomegaly.
- Houssay.
- Autopsy of Napoleon.
- Medical book plates.
- Contraceptive jellies.

NEW BOOKS

- Curtis, A. H.—Obstetrics and Gynecology. 1933.
- Rockefeller Foundation—Annual Report. 1932.
- Milbank Memorial Fund—Review. 1932.
- Leven, Maurice—Practice of Dentistry and Income of Dentists. 1932.
- Durupt, A.—L'interferometrie en clinique. 1932.
- Reed, L. S.—Ability to Pay for Medical Care. 1933.
- Falk, I. S.—Incidence of Illness. 1933.
- Falk, I. S.—Costs of Medical Care. 1933.
- Clendenning, Logan—Behind the Doctor. 1933.
- Cowdry, E. V.—Arteriosclerosis. 1933.
- Guillan, Georges—Les sequelles de encephalite epidemique. 1932.
- Knopf, S. A.—Report of U. S. Government on Tuberculosis. 1932.
- Weil, Arthur—Textbook of Enuropathology. 1932.
- Horsley, J. S.—Surgery of Stomach and Duodenum. 1933.
- Hertzler, A. E.—Technic of Local Anesthesia. 1933.
- Pusey, W. A.—History and Epidemiology of Syphilis. 1933.
- McCollum, E. V.—Food, Nutrition and Health. 1933.

FREDERICK, L. FENNO, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

SYNOPSIS OF THE STATUS OF THE ACTIVITIES OF THE EXECUTIVE OFFICERS OF THE LOUISIANA STATE MEDICAL IN REGARD TO MEDICAL SERVICES UNDER THE EMERGENCY RELIEF ADMINISTRATION

The following letter was sent to Governor O. K. Allen under date of July 17, 1933, by Dr. C. A. Weiss, President of the Louisiana State Medical Society.

Hon. Oscar K. Allen, Governor,
State of Louisiana,
Baton Rouge, La.

Dear Governor Allen:

Quoting from a recent editorial in the Journal of the American Medical Association under the date of July 1, 1933.

Now that federal funds have been made available, physicians and hospital administrators, wherever state and local funds are inadequate to provide relief should lead the way in asking the governors of their respective states, if they have not already sought Federal Aid under the Federal Emergency Relief Act of 1933, to seek such aid at once. If the State has already obtained a grant under that act, the use of it to afford relief for illness and injury may be demanded. The first effective move in any case must be made by the governor of the state, who alone is authorized by the act to make application for a federal grant.

Acting upon this information I beg to submit the following questions relative to the use of the above fund.

(1) Have you as Governor of the State of Louisiana applied for the funds provided by the Federal Emergency Relief Act, and if so, is this fund available at the present time for the care of the indigent sick and injured of our state?

(2) Have any of the hospitals of Louisiana requested the use of this fund?

My inquiring is prompted by the fact that the medical profession as well as the hospitals of our state have and are continuing to care for an ever increasing number of patients without any means of support, unfortunate victims of the existing economic depression. This unfortunate condition of affairs has worked many hardships upon the medical profession and added greatly to the expense of our hospitals.

The members of the medical profession, as well as the hospitals, are always willing and ready to extend aid and comfort to suffering humanity. However, if our Federal Government is providing for the compensation of physicians and hospitals

in caring for the unfortunates requiring our services, and a fund is available for this specific purpose, I can see no reason why we should not make use of same.

If these funds are available, or should they become available, can you inform me what steps are necessary to obtain the use of them? Appreciating your co-operation in this matter, and thanking you for the desired information, I am,

Respectfully yours,
C. A. Weiss, M. D., President.

On September 16 conference was arranged with Mr. R. B. Pixley, who was then the Executive Director of the Emergency Relief Administration, in Baton Rouge. As a result of this conference it was decided to hold a special meeting of the Executive Committee at the meeting of the Eighth District Medical Society in Alexandria on October 4, 1933.

As a result of this meeting of the Executive Committee plans were developed for initiating this work. A questionnaire was first sent out to every Parish Medical Society to find out the average charges for medical services in their locality. When this was obtained a general average was made.

At a special called meeting of the Executive Committee on October 28, 1933, to consider this important work, Mr. Harry J. Early, the new Executive Director, was present by request. A full discussion was had, and Mr. Early explained to the Committee the functions of the Emergency Relief Administration in reference to medical services. Subsequent to his appearance the Executive Committee, after considerable discussion, submitted the following fee schedule:

FEE SCHEDULE OF THE LOUISIANA STATE MEDICAL SOCIETY FOR MEDICAL SERVICE TO BE RENDERED UNDER THE EMERGENCY RELIEF ADMINISTRATION OF THE STATE OF LOUISIANA

1. Office Calls.
\$1.00.
2. Out Calls (within incorporate limits or 2 miles of doctor's office when in unincorporated towns.)
\$2.00—day. \$3.00—night.
3. Out Calls (outside incorporate limits or more than 2 miles from doctor's office in unincorporated towns.)
\$2.00—day, and \$3.00—night, plus \$.50 per mile one way, computed on distance over 2 miles from doctor's office or incorporated limits.
4. Maternity cases, including prenatal and post-natal care.

\$20.00. Abnormal or instrumental cases additional charges upon proper authorization.

5. Surgical Fee.

Major operation—\$50.00.

Minor operation—\$5.00.

Authorized doctors who furnish their own drugs for a specific case should receive nominal charges as provided in Rules and Regulations No. 7 (h) and (i), page 5.

Respectfully submitted,

C. A. Weiss, M. D.,
President.

P. T. Talbot, M. D.,
Secretary-Treasurer.

The following letter accompanied the above schedule:

October 26, 1933.

Mr. Harry J. Early, Executive Director,
Emergency Relief Administration of the State of
Louisiana,
1409 Canal Bank Bldg.,
New Orleans, Louisiana.

Dear Mr. Early:

We are enclosing herewith recommendations of the Executive Committee of the Louisiana State Medical Society for your consideration, representing their opinion as an equitable and fair estimate of medical fees and etc., to be applied to medical relief under the Emergency Relief Administration.

This decision has been rendered after a survey of the various Parishes and the results of numerous conferences of the Executive Committee, who have tried to establish in their opinion an equitable remuneration for the doctors, with due consideration for such emergency medical services and with a full knowledge of the importance of their obligations to the patient and public under present conditions.

Organized medicine in the State of Louisiana is very proud of their traditions, having at all times responded most nobly in the past to various emergency calls for their services in times of stress either national or local. When medical services were needed you have always found our profession most desirous and cooperative in any issue necessitating their services.

We would wish you to know that in this grave time of stress and reconstruction you may depend on one hundred per cent cooperation of our profession in helping to carry to a successful issue the great plans that have been mapped out by our illustrious President Roosevelt. Although the results of the depression have been acutely felt by the medical profession as well as other businesses, we are imbued with the principle that with a full cooperative spirit of the various professions, businesses, and etc. we will be able to satisfactorily

meet the issue and ultimately return to a period of contentment and satisfaction.

We, furthermore, wish for you to know that these sacrifices are being made with the feeling that only by such spirit and cooperation will our country be restored to a normal degree of prosperity.

Therefore, this reduced fee basis of medical service under the Emergency Relief Administration should be considered only as a charitable contribution by members of the Louisiana State Medical Society to take care of the indigents in the present special emergency.

In the elucidation of this work there may appear from time to time certain differences or conflicts in the administration of this medical work, and we would be pleased to be advised when you would feel that our further opinion and help would be of value in the carrying on of this important phase of your administration.

Yours very respectfully,

C. A. Weiss, M. D.,

President

P. T. Talbot, M. D.,

Secretary-Treasurer.

On November 9, 1933, we received from Mr. Early a counter proposal as follows:

FEE SCHEDULE FOR MEDICAL SERVICE TO BE RENDERED UNDER THE EMERGENCY RELIEF ADMINISTRATION OF THE STATE OF LOUISIANA

1. Office Calls.

\$.75.

2. Out Calls within incorporate limits of two miles of doctor's office when in unincorporated towns.

\$1.25.

3. Out Calls (Outside corporate limits or more than two miles from doctor's office, or in incorporated limits.)

\$1.25 with five cents mileage for distance over first four miles.

4. Maternity cases including prenatal and post-natal care.

\$15.00.

5. Surgical fee—Major operation

\$25.—major operation,
including dressings
and necessary visits.

Minor operation

\$5.00—Minor operation
including dressings
and necessary visits.

6. Prescriptions.

All prescriptions must be restricted to the National Formulary or the U. S. Pharmacopeia. Exceptions must be covered by special E. R. A. authorizations.

7. Nursing Care.

To be furnished only on authorization and on doctor's order.

8. Hospitalization.

Not authorized by Federal Emergency Relief Administration.

A copy of his letter follows:

November 9, 1933.

Dear Doctor Talbot:

We deeply appreciate the consideration that the Medical Society has given the whole problem of medical care for the State. We have compared the proposed schedule with those of South Carolina, North Carolina and Alabama. Kentucky and Mississippi are lower than those states.

The attached schedule, which we are willing to institute immediately, is higher than the last two named states. It compares favorably in every respect with the first three named. By and large, it is as fair as any schedule that we might agree upon.

As quickly as the Society can give it further consideration, we will broadcast the authority so that its provisions may become operative to the mutual advantage of the profession and those we seek to serve—the needy unemployed of the State of Louisiana.

Respectfully,

H. J. Early,
Executive Director.

Dr. P. T. Talbot, Secretary-Treasurer,
Maison Blanche Building,
New Orleans, Louisiana.

After some consideration Dr. Weiss, our President, replied to this communication as follows:

November 12, 1933.

Mr. H. J. Early, Executive Director,
Emergency Relief Administration,
1409 Canal Bank Building,
New Orleans, Louisiana.

Dear Mr. Early:

In reply to your letter of November 9th, submitting revised prices for medical services to the E. R. A. indigent sick:

I regret very much that you found it necessary to submit a revised list of reduced prices acceptable to the E. R. A. state administration. The schedule submitted to you by the officials of the Louisiana State Medical Society, is what we consider a fair and reasonable adjustment of the regular medical fees charged by the physicians throughout Louisiana.

This schedule, as you well know was made at considerable sacrifice to the individual members who will be employed to do this work. The fees submitted to you were not arrived at in a haphazard way, but only after considerable time and effort were consumed in collecting the necessary data. The prices charged for medical services

throughout the entire state were gathered, both urban and rural, and carefully tabulated so as to arrive at a fair estimate.

The Councilors and Officers of the Louisiana State Medical Society, at considerable expense and inconvenience to themselves gathered both in New Orleans and Alexandria to carefully revise these tabulations and arrive at a fee basis commensurate with honest, proficient and ethical medical services to be rendered under the auspices of the Louisiana State Medical Society to the indigent sick under your administration.

It is the concensus of opinion that you reconsider the fee schedule submitted to you by the Executive body of the Louisiana State Medical Society, with a view to granting the prices submitted, or at least a more generous one than the one you have submitted to us. We are certain that you, and the officials in Washington whom you represent are most desirous that the unfortunates under your care receive the most proficient medical and surgical attention. The Louisiana State Medical Society proud of its traditions, can only be held responsible for the efficiency of the medical services rendered by its members, if the just and reasonable prices officially submitted by the Executive body of its membership be given fair consideration.

Your attention is respectfully called to some of the prices submitted by you.

1. We had reduced the price of office visits 50 per cent and you further reduced them 25 per cent.
2. We had reduced the price of house visits 33½ per cent and you further reduced them 40 per cent, and made no allowance for night calls.
3. Our price was \$.50 per mile outside of incorporate 2 mile limit, while you allow only \$.05 per mile outside of 4 mile limit. A fee per mile even lower than that submitted by Mississippi, and the most economical operation of an automobile makes this price impossible.

Our desire to do our part has been amply demonstrated by our past services rendered these unfortunates absolutely gratis. Now that the opportunity has arrived to acknowledge some recognition for past services rendered, I pray you to grant the medical profession of Louisiana a fee for services, that will at least allow us to maintain our self respect, and the dignity of our profession.

Respectfully yours,

C. A. Weiss, M. D., President
Louisiana State Medical Society.

Since this time we have had several conferences with Mr. Early, but have been unable to secure a satisfactory fee schedule. In a conference with him on November 24, an agreement was reached

for night calls for \$1.75, and five cents a mile allotted is to be computed for distance beyond two miles from doctor's office each way.

Our President had a further conference with Mr. Early on December 2, when refusal was again made to change the schedule as offered and the matter seemed apparently closed as far as the Emergency Relief Administration in this State was concerned. Mr. Early was desirous of entering into this agreement temporarily, but without any assurance of future improvement.

Through the cooperation of the Councilors of the various Districts, the question of accepting or rejecting this counter proposal has been discussed by a great many of our Parish and District Societies throughout the State. Rejections of this fee schedule have been received by Caddo, Calcasieu, East Baton Rouge, East and West Feliciana, Orleans, and Ouachita Parish Medical Societies.

These rejections were accompanied by appropriate resolutions.

The following letter was received from the Orleans Parish Medical Society.

December 21, 1933.

Dr. P. T. Talbot, Secretary-Treasurer,
Louisiana State Medical Society,
1430 Tulane Avenue,
New Orleans, Louisiana.

Dear Doctor Talbot:

The Board of Directors of the Orleans Parish Medical Society at a meeting held December 19, 1933, passed a resolution favoring the cooperation of the Louisiana State Medical Society with the Emergency Relief Administration in the care of the cases of illness developing among the indigent registered with the N. R. A.

The Orleans Parish Medical Society is willing to do its full share in this humanitarian work, and understands that its members engaged in this work are to be compensated only to the extent of meeting the actual cost of rendering such services. The Orleans Parish Medical Society is ready to undertake this cooperation as soon as a proper fee schedule is arranged between the Louisiana State Medical Society and the E. R. A. It is understood that this is to be for the period of the temporary emergency only.

The Orleans Parish Medical Society is of the opinion that the care of the indigent sick under such an arrangement shall be the function of the Parish and District Societies which shall arrange lists of those physicians desiring to engage in this work. This would insure an equitable division of the work among the members of the profession in the various localities.

Very truly yours,

Edward L. King, M. D.,
President.

Further conferences with Mr. Early not being productive of any results, the status of our activities was referred to the members of the Executive Committee. Their opinion was divided as to the final disposition of this reduced schedule. It is hoped that a concession yet may be made by the Emergency Relief Administration for the proper adjustment of these differences. However, judging from our past experiences the possibility seems rather remote.

These facts are being disseminated in order that the medical profession of the State may be properly apprised of the efforts and activities of the Executive Officers to obtain an equitable and fair working agreement with the Emergency Relief Administration.

PARISH SOCIETY OFFICERS 1934

Officers for 1934 have been elected by the following Parish Medical Societies:

Ascension Parish—President: Dr. D. C. Brumfield, Darrow; Vice-President: Dr. T. H. Hanson, Donaldsonville; Secretary-Treasurer: Dr. Myer Epstein, Gonzales; Delegate: Dr. D. T. Martin, Donaldsonville; Alternate: Dr. H. A. Folse, Donaldsonville.

DeSoto Parish—President: Dr. R. A. Tharp, Mansfield; Vice-President: Dr. V. L. Sandifer, Logansport; Secretary-Treasurer: Dr. W. G. Jones, Mansfield; Delegate: Dr. R. A. Tharp, Mansfield.

Iberia Parish—President: Dr. Guy A. Shaw, New Iberia; Secretary-Treasurer: Dr. Henry Allen King, New Iberia.

Pointe Coupee Parish—President: Dr. J. F. Caza-youx, New Roads; Vice-President: Dr. J. W. Plauche, Morganza; Secretary-Treasurer: Dr. J. M. Mosely, Lakeland; Delegate: Dr. R. McG. Caruth, New Roads; Alternate: Dr. M. O. Becnel, New Roads.

Rapides Parish—President: Dr. H. Aubrey White, Alexandria; First Vice-President: Dr. J. W. Phillips, Boyce; Second Vice-President: Dr. R. P. Evans, Alexandria; Secretary-Treasurer: Dr. D. B. Barber, Alexandria; Delegates: Dr. King Rand, Dr. D. C. McBride, Dr. F. V. Gremillion; Alternates: Dr. Jack Cappel, Dr. M. H. Foster, Dr. I. N. Adams.

Red River Parish—President: Dr. W. T. Wilkinson, Coushatta; Vice-President: Dr. L. S. Huckaby, Harmon; Secretary-Treasurer: Dr. W. W. Gahagan, Coushatta.

Terrebonne Parish—President: Dr. R. W. Collins, Houma; Vice-President: Dr. J. B. Duval, Houma; Secretary-Treasurer: Dr. S. F. Landry, Houma; Delegate: Dr. T. I. St. Martin, Houma.

Fourth District—President: Dr. J. G. Yearwood, Gayle; Vice-President: Dr. Wilkins McDade, Minden; Secretary-Treasurer: Dr. Paul D. Abramson, Shreveport; Delegate: Dr. L. T. Baker, Dixie.

FIFTH DISTRICT MEDICAL SOCIETY

A meeting of the Fifth District Medical Society was held in Monroe, Friday, December 1, at 3:00 p. m., in the Frances Hotel. The meeting was quite successful and there was a wonderful program. Dr. Victor Carey of Dallas, Texas, read a very interesting paper on "Cultural, Spiritual, and Material Medicine." Dr. Fred Rankin of Lexington, Kentucky, gave a very interesting paper on "Diagnosis and Surgical Treatment of Cancer of the Colon and Rectum." Dr. M. W. Hunter of Monroe also read a very fine paper. Officers for 1934 were elected as follows: Dr. C. C. Thompson, Delhi, President; Dr. J. S. McBride, Ansley, Vice-President; and Dr. John G. Snelling, Monroe, re-elected Secretary-Treasurer.

EAST AND WEST FELICIANA BI-PARISH
MEDICAL SOCIETY

The Bi-Parish Medical Society held their November meeting in the Dining Room of the East Louisiana State Hospital, Jackson. After the usual excellent dinner as the guests of Drs. Glenn J. Smith and Staff, the Society repaired to the Staff Room for the scientific program. Two papers were read and freely discussed by members present. Dr. C. S. Toler of Clinton read a paper on "Pulmonary Tuberculosis," and Dr. E. N. Robards of Jackson on "Spontaneous Pneumothorax".

At the December meeting the Bi-Parish Medical Society met in the Dining Room of the Rist Hotel, Clinton. After a bounteous repast prepared and served by Mr. and Mrs. August Rist, the Society was called to order by the President. Election of officers for 1934 resulted as follows: Dr. C. C. Blakeney, President; Dr. J. B. Stanley, Vice-President; Dr. E. M. Toler, Secretary-Treasurer; Dr. E. N. Robards, Delegate to Louisiana State Medical Society; and Dr. C. S. Toler, Alternate. The scientific program consisted of two excellent papers by Dr. J. M. Bamber of New Orleans and Dr. C. A. Weiss, Baton Rouge, President of the Louisiana State Medical Society. The subjects respectively were "Arteriosclerotic and Hypertensive Heart Diseases" and "Commoner Diseases of the Eye and their Relation to General Systemic Diseases". Both papers were favorably discussed by members present. A vote of thanks was extended to Drs. Bamber and Weiss for the presentation of their papers. Dr. Bamber was elected an honorary member of our Society. Members and guests present were: Drs. J. M. Bamber, Robins, C. A. Weiss, Sr., C. A. Weiss, Jr., S. L. Shaw, L. D. Farragut, J. W. Lea, E. M. Robards, C. S. Miller, Odom, Stafford, E. M. and C. S. Toler, Miss Tate, Mrs. Robards, Mrs. Miller, and Mr. Bamber.

E. N. Robards, President.
E. M. Toler, Secretary.

CLAIBORNE PARISH MEDICAL SOCIETY

The annual meeting of the Claiborne Parish Medical Society was held at the offices of the Claiborne Parish Health Unit in Homer, La., December 12, 1933. At this time the new officers for 1934 were elected: Dr. E. A. Campbell, Homer, President; Dr. L. T. Waller, Haynesville, Vice-President; Dr. H. R. Marlatt, Homer, Secretary-Treasurer; Dr. H. R. Marlatt, Homer, Delegate; and Dr. P. Gibson, Homer, Alternate.

DR. RUDOLPH MATAS HONORED IN MEDAL
GIVEN BY THE VIOLET HART FOUNDATION

A fund has been provided by Mr. Mike S. Hart in compliance with the expressed desire of his sister, the late Miss Violet Hart, a former devoted patient and admirer of Dr. Matas. According to the deed of gift establishing the Violet Hart Fund it is to be administered by Tulane University, the award to be made as occasion arises by a Committee of Surgeons selected by the Hart family, with the addition of the head of the Department of Surgery of Tulane University of Louisiana Medical School. Members of the Committee will serve for their life time and when a vacancy occurs on the Committee a successor will be named by the Committee to the Board. At present the Committee is composed of Dr. Emile Bloch, Chairman, Dr. Lucien Landry, Dr. Isidore Cohn, and Dr. Alton Ochsner.

The first award of the Matas Medal will be given to Dr. Mont R. Reid, Professor of Surgery of the University of Cincinnati on the evening of January 23, 1934. Dr. Reid, the recipient of the first award to be made, is at present Professor of Surgery at the University of Cincinnati. For years he served as Assistant to the late Dr. W. S. Halstead, Professor of Surgery, Johns Hopkins University. During this association with Professor Halstead, Dr. Reid became an ardent admirer of Professor Matas and through the years his admiration and appreciation for Dr. Matas and Professor Halstead caused him to direct his efforts to the subject of vascular surgery. Dr. Reid is recognized today as one of the most outstanding active surgeons in the field of vascular surgery.

As with the present award, future awards will be given to the "North American Surgeon who has contributed outstanding work in vascular surgery." This is a beautiful recognition of the magnificent work that has been done by Dr. Matas in vascular surgery in the past. His contributions in this field constitute an epoch of the advancement of surgical knowledge.

It is a real pleasure to see Dr. Matas honored in this way. Those of us in Louisiana and the South recognize Rudolph Matas as a master surgeon. The honors that have been conferred on him are

known to many of us. He has had honorary degrees conferred by Washington University of St. Louis, by the University of Pennsylvania, by Tulane University, and Princeton University. He has received decorations from many foreign countries, and in 1926 he was awarded the Bigelow Medal by the Boston Surgical Society, an honor that he shares with W. J. Mayo, W. W. Keen, J. M. T. Finney, and Chevalier Jackson.

At the meeting January 23 Dr. Matas personally will present the medal to Dr. Reid. It is earnestly hoped that for many more years this great Louisiana surgeon will be able to present the medal to those men who are selected for their excellence in vascular surgery.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending November 11, there was reported in the City of New Orleans 140 deaths, divided 79 white, 61 colored, with a death rate for the three groups of 15.2, 12.0, and 22.8 respectively. The infant mortality rate was only 56 for this week, but in the week ending November 18 it had risen to 84. There was a corresponding increase in the total number of deaths, 174 being listed, with a death rate of 18.8, divided white 92, rate 14.0, and colored 82, rate 30.7. For the week ending November 25, the total deaths numbered 152, apportioned 93 white, 59 colored. The death rate for the three groups was 16.5; 14.2; and 22.1. The infant mortality rate was practically unchanged. For the following week, which ended December 2, there was exactly the same number of deaths as in the previous week, the only difference in the report for this week being that the white deaths number 96, with a death rate of 14.6, and the colored deaths numbered 56, with a rate of 20.9. The infant mortality rate was 101, divided about equally between the two races. There was a slight increase in the number of deaths for the week ending December 9, 160 being listed, with a death rate of 17.3. Ninety-five of these deaths occurred in the white portion of the population, and 65 in the colored, with a death rate for the two groups of 14.5 and 24.3 respectively. The infant mortality rate was 90. The death rate for 1933 for the first forty-nine weeks is more satisfactory than for the previous year. So far for this year the rate is 15.6, as contrasted with the 1932 rate of 16.2.

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized informa-

tion: During the week ending November 18, there was still being reported a large number of cases of malaria, 246 in all, an increase of 29 over the previous week. Diphtheria had also taken quite a jump, there being 61 cases reported as contrasted with 27 the previous week. Other diseases that were reported in numbers greater than 10 were: Fifty cases of cancer, 40 of pneumonia, 39 of syphilis, 37 of tuberculosis, 27 of scarlet fever, 19 each of typhoid fever and gonorrhoea, 11 of influenza, and 10 of whooping cough. The typhoid fever cases came from different parishes throughout the State, no one parish reporting more than 2 cases. Rapides Parish reported 8 cases of diphtheria, and Orleans and Caddo Parishes each 11. The other cases were scattered throughout the various parishes in the State. For the week ending November 25, malaria showed a very sharp drop, falling to 65 cases. The instance of diphtheria also dropped slightly, having 49 instances listed. The other diseases that occurred in double figures were: Thirty-three cases of pneumonia, 31 of tuberculosis, 27 of scarlet fever, 25 of syphilis, 24 of gonorrhoea, 18 of typhoid fever; 5 cases of the last disease were reported from St. Landry Parish. One case of cerebrospinal meningitis was reported from Orleans Parish, and one case of typhus fever. For the forty-eighth week of the year ending December 2, malaria was still decreasing, and the same may be said of diphtheria, there being 40 cases of the former disease and 36 of the latter. Pneumonia still continued above the five year average, there being 35 cases in Louisiana. Other diseases reported in figures over 10 include: Twenty-nine cases of scarlet fever, 15 of cancer, 13 of pulmonary tuberculosis, and 11 of syphilis. There were 4 cases of smallpox reported in Lafayette Parish, 1 case of anthrax in Plaquemines, and 1 of undulant fever in Orleans Parish. The next week, which ended December 9, found a slight increase in the cases of malaria, 68 appearing on the list. Diphtheria was down to the five year average, there being 24 cases only reported. The other diseases in large numbers were: Fifty-eight cases of syphilis, 52 of pneumonia, 47 of gonorrhoea, 30 of scarlet fever, 22 of influenza, 24 of typhoid fever, 16 of chickenpox, 15 of cancer, and 14 of pulmonary tuberculosis. An additional case of smallpox was reported from Lafayette Parish, 1 of undulant fever from Terrebone, and 1 of poliomyelitis from Franklin. No parish reported more than 3 cases of typhoid fever. For the week ending December 16, malaria was exactly one-half as frequent as in the previous week. The other diseases reported in double figures include: Thirty cases each of diphtheria and smallpox; 23 of pulmonary tuberculosis, 22 each of whooping cough and syphilis, 20 of pneumonia, 15 of typhoid fever, and 11 each of influenza, chickenpox, and cancer. Evidently Cata-

houla Parish has before it problems of an epidemic of smallpox, as 28 cases were reported this week from this parish. One case of infantile paralysis was reported in Avoyelles, and one of typhus fever in Calcasieu.

NEWS ITEMS

Prof. T. B. Sellers of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana addressed a meeting of the Issaquena-Sharkey-Warren Counties Medical Society held at Vicksburg, Miss., December 12, and a meeting of the Northeast Mississippi Thirteen County Medical Society at Tupelo, Miss., on December 19, the subject of both lectures being "Office Treatment of Certain Neglected Gynecological Conditions".

Prof. Roy E. de la Houssaye of the Faculty of the Graduate School of Medicine of The Tulane University of Louisiana delivered an address on "A General Discussion of the Thymus" at a meeting of the Seventh District Medical Society held at Crowley, La., December 15, 1933.

Dr. Isidore Cohn, Professor of Surgery and Head of the Department of Surgery in the Graduate School of Medicine of The Tulane University of Louisiana attended the meeting of the Southern Surgical Association held at Hot Springs, Ark., the week beginning December 11, 1933.

Application blanks are now available for space in the Scientific Exhibit at the Cleveland Session of the American Medical Association, June 11-15, 1934. The Committee on Scientific Exhibit requires that all applicants fill out the regular ap-

plication form and requests that this be done as early as convenient.

The final date for filing applications is February 26, 1934. Any persons desiring to receive an application blank, should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

DR. MATAS GIVEN THE ORDER OF ISABEL LA CATOLICA

In the presence of the New Orleans consular corps, representatives of the Chamber of Commerce, representatives of the Orleans Parish Medical Society, and many business and social leaders of New Orleans, with Mayor Walmsley presiding, Dr. Rudolph Matas was presented by Luis Careaga, Spanish consul, with the order of Isabel la Catolica. This is the sole Spanish decoration retained by the Spanish Republic from the late monarchy.

WOMEN IN MEDICINE

A book collection of special interest is one which is being gathered by Dr. Elizabeth Bass of New Orleans, on and about women and the work of women, in the field of medicine. Dr. Bass has already secured a number of portraits, books and pamphlets from the United States and Great Britain, and will be grateful for information concerning additional material suitable for her collection, which she plans to give, when completed, to the Tulane University School of Medicine. She is particularly desirous to secure all information, both in manuscript and print, having to do with medical women in the South. A special book-plate is being planned. Such an interest may suggest to others the idea of "special" collections on different subjects.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

HAPPY NEW YEAR FROM OUR PRESIDENT

To the Members of the Mississippi State Medical Association:

The New Year 1934 has begun and I trust this new year will bring to each one of you the largest possible measure of success and happiness.

At this season when new resolutions are the order of the day, I trust that each one of us will resolve to take an active interest in our local medical societies, that each member will resolve to be present at all meetings of his local society and endeavor by all means possible to make his medical society a strong militant organization.

Many problems that will call for careful study in order that a satisfactory solution may be reached

lie before us. These problems affect the material welfare of every physician in our land.

The trend of public sentiment today is largely toward socialization of medicine; we may not be able to prevent some form of socialization but we must endeavor to so mould public opinion to the end that the final result may not be entirely unsatisfactory to our profession. We can no longer ignore the signs and tendencies of our time. Economic conditions in our body politic are in process of change. The economic laws that have governed in the past have broken down and to meet these changes a new order is being evolved. Every business and profession will be affected by the new economic principles now in process of formation.

The high cost of medical care brought about by

the advance in our knowledge of the science of medicine has reached a point where the great majority of our population, the great middle class, find it beyond their reach. The very rich can afford to pay for it and the very poor have it given to them without cost. This problem must be satisfactorily solved if we would prevent some form of state medicine. The problem is one that must be solved largely by local county medical societies. The State Medical Association can evolve certain general principles to guide the local societies but the ultimate solution rests with the county societies. The problem is a little different in each county, and no hard and fast rule can be made to suit all localities.

The imposition on the medical profession by organized charity is another problem that awaits solution by our local county medical societies. Concerted action by the physicians in each county acting through their local county medical society can solve both of these serious problems in a manner that will be acceptable to the profession and to the public.

In order that we may solve the problems that are confronting us we must organize. As individuals we cannot stem the tide of public opinion but by organized effort we may be able to mould public opinion in our favor.

I believe our plan of organization in this state can be improved. For several years past we have drifted away from our original plan of organization—the county medical society. We have built up several splendid component societies, composed of a number of counties. These societies furnish fine professional programs for their meetings and the programs are instructive and interesting. Occasionally the programs are perhaps devoted too much to the specialties rather than to subjects of benefit to the general practitioner who compose the large majority of our members. The economic problems confronting our profession are conspicuous by their absence from these programs. In fact the large societies are not so constituted that they can take up questions affecting the material welfare of the physicians in their territory. The economic conditions are not the same in all counties. The problem has a different setting in each county and can only be solved by the physicians in their respective counties.

A study of our membership statistics reveals some rather interesting facts. The percentage of membership in the five counties that have county societies is seventy-seven plus; the percentage of membership in our component societies is only fifty-five plus.

I would not in any way disturb our component societies. I think they should be continued as district societies whose function should be to fur-

nish instructive interesting professional programs only. The district societies may meet yearly, semi-annually, or quarterly as desired and should collect no dues. The expense required for the meetings of the district societies can be prorated among the county societies of the district. We have a plan of that kind in operation in the Eighth Councilor's District and find it very easy to maintain.

Medical societies should meet monthly and their territory should be small enough to make it possible for all members to be present at all meetings. This is not possible with our component societies covering a large territory and meetings only quarterly or semi-annually or yearly.

I believe we should organize county medical societies in each county where possible. There are extremely few counties in the state where the number of eligible physicians is too small to have a county society. The physicians in these few counties can be taken care of by the societies of adjoining counties. These county medical societies should be the foundation of our State Medical Association. The county medical society should direct the affairs of the profession in this county, also elect its delegates to the State Medical Association. In other words the function of the county society should be legislative largely.

At a meeting of the Council held in Jackson on November 9, 1933, it was the unanimous opinion of the members that we should return to the plan of county medical societies as the unit of organization of the State Medical Association. Each councilor was directed by the Council to begin immediately the organization of county medical societies in his district.

At the request of the State Director of FERA I appointed the Council as the advisory committee from the State Medical Association for the FERA in our State. This committee will act in an advisory capacity to the FERA in all matters pertaining to the program for the care of the indigent sick. At the meeting on November 9 we submitted our fee schedule to the Federal Emergency National Headquarters. In order, however, that it may work satisfactorily each county society must adopt a fee schedule for private work. Our fee schedule for the care of the indigent sick calls for a rate of fifty per cent of the regular rate charged for private work. In order to protect physicians in counties where the rate for private work is low we inserted a proviso, that under no consideration could the fee for office calls be less than \$1.00 per call, \$1.50 for visit in town or within a reasonable distance from the doctor's office if situated in the county, and \$15.00 for obstetrical cases. Mississippi is one of the few states that has been able to obtain fees as high as the ones called for in our schedule. The right of free choice of physicians

by the indigent sick was insisted upon and agreed to by the FERA.

The plan of organization of county medical societies becomes imperative if the physicians of our state wish to take advantage of the fee schedule arranged with the Federal Emergency Relief Administration, as the Administration in Washington states that it will only deal with organized medicine through county medical societies. Each county medical society is requested to appoint an advisory committee to act with the local administrator of Federal Emergency Relief in each county in all matters pertaining to the program for the care of the indigent sick in that county. This local committee should see that the local administrator complies with this agreement in every particular. It should report all violations of the agreement to the Secretary of the Council, Dr. W. H. Frizell, or to the Chairman, Dr. Dan. J. Williams. The State Administrator of Federal Emergency Relief will promptly take up and correct any complaint that comes through these channels.

The gentlemen composing the State Headquarters of the FERA were very considerate of all of our requests and aided us in every way possible to obtain the adoption of our fee schedule.

The members of the Council responded well to our call for a meeting to take action on the subject of a fee schedule. Every member was present except one and this member was prevented from attending on account of being summoned into court as a witness.

I trust each member of the State Medical Association will redouble his activities in our membership drive. Let's try to go over the top with the largest possible number of new members by February 1, 1934.

J. W. D. Dicks.

FROM THE COUNCIL

December 12, 1933.

Dr. L. S. Lippincott, Editor,
Vicksburg, Miss.
My Dear Doctor:

The Council, Mississippi State Medical Association, in extraordinary session called by the Chairman for that and other purposes investigated thoroughly the Ward-Shipp controversy, which was published in the late numbers of the N. O. Journal.

After this investigation the Council found that Dr. Shipp was in no wise to be censured as his conduct was in every way commendable.

The Council then instructed the Secretary to request that you as Editor allow no more personal matter of the kind referred to to be published hereafter.

We are sure that you did not realize the personal

equation in this particular matter, hence its insertion.

Very sincerely yours,

(Signed) H. W. Frizell,

WHF/fw

Secretary, Council,
Mississippi State Medical Association.

WHERE DO YOU STAND, DOCTOR?

Recently the Jackson Evening News commented editorially on the fact that Jones County physicians had published an advertisement informing the public that they—the physicians of Jones County—were tired of treating certain residents of that county, who gave nothing but excuses in return for medical services. They also intimated that it costs something to practice medicine. It was further stated that the doctors were overcome by fatigue, and suffered great mental anguish when they at times found these delinquent patients with better cars, or better radios, than the aforesaid doctors were able to buy. Fred Sullens more than once has taken some of the hide off of our noble profession. On this occasion he asks how many physicians will abide by the agreement outlined in the advertisement.

The physicians of Alcorn County, if I am not mistaken, published an advertisement of this sort first. Probably other groups have done the same.

The large majority of physicians are not mercenary, but too many are inclined to take up a patient that another doctor has relinquished without taking the trouble to find out why the former is no longer treating that person. Ethics merely demands that the latter satisfy himself that the first physician has either given up the case or has been notified that his services are no longer required.

Tactful inquiry often may reveal the fact that the other doctor had not been paid. The members of the profession are to blame that this state of affairs has existed so long. Every physician carries hundreds and thousands of dollars on his books in the form of accounts that no other business man would think of considering for a moment.

It is distasteful to have to tell a patient that they must put up the money before they are treated, but there are certain thick-skinned individuals that cannot be handled otherwise. And they will continue to pursue the same course until there is united action on the part of the profession.

It should not take very much time to tell whether or not Mr. Sullens has correctly estimated the sticking ability of these doctors.

J. S. Ullman,

Natchez,

December 12, 1933.

FEE SCHEDULE

To County Secretaries:

The following is the schedule of fees agreed

upon by the Mississippi State Medical Association and the State Board of Public Welfare:

"A uniform fee of fifty per cent of the usual prevailing fees obtaining in each community, provided that in no instance shall the minimum fee be less than one dollar for office calls and/or one dollar and fifty cents for visits to the home in town or within a reasonable distance of the physician's office when same is in the country, and fifteen dollars for obstetrical attention."

The regulations are under the direction of the County Medical Societies which are now being organized in each county, and only members in good standing of the State Medical Association will participate in these fees. Call this fact to the attention of the non-members of your territory. It should add greatly to your membership.

Yours truly,

T. M. Dye,
Secretary.

Clarksdale,
December 7, 1933.

MEMBERSHIP

The membership of the Mississippi State Medical Association has shown a steady gain since our president, Dr. J. W. D. Dicks some months ago through President-Elect E. C. Parker and the vice-presidents of the Association called attention to the importance of organized medicine to the physicians of the state. Even so late in the year as the month of November, six new members were added to the list. Four were in the Harrison-Stone-Hancock Society, placing this society in the leadership for number of members added since May 1, with a gain of over 20 per cent. The Winona District Society added two members to show a gain of nearly 17 per cent, second only to the showing of the Harrison-Stone-Hancock Society.

Dr. T. M. Dye, Secretary, has furnished the secretaries of the component societies with the official blanks for their annual reports. These reports are required not later than February 1, and should show the largest membership ever attained in Mississippi. Members of the Association should be reminded that so far as medico-legal defense by the Council is concerned, membership lapses with the calendar year.

The following gives information is regard to membership by societies and districts for the period of May 1 to December 1, 1933:

Society	No. of Members		Per Cent	
	May 10	Dec. 1	Gain	Gain
1. Harrison-Stone-Hancock,	34	41	7	20.59
2. Winona District	36	42	6	16.67

3. Issaquena-Sharkey-Warren	40	45	5	12.50
4. East Mississippi	76	85	9	11.84
5. Central	106	116	10	9.43
6. Homochitto Valley	32	35	3	9.38
7. Tri-County	23	25	2	8.70
8. South Mississippi	70	76	6	8.57
9. Northeast Mississippi	107	115	8	7.48
10. Delta	83	87	4	4.82
11. Claiborne County	6	6	0	0.00
12. Clarksdale & Six Counties	44	44	0	0.00
13. DeSoto County	8	8	0	0.00
14. Jackson County	11	11	0	0.00
15. Pike County	28	28	0	0.00
16. Tate County	9	9	0	0.00
17. North Mississippi	44	41	0	0.00
TOTALS	757	814	60	7.94

Society	No. of Physicians	No. of Mem.	Per Cent Mem.
1. Pike County	30	28	93.33
2. Jackson County	14	11	78.57
3. Homochitto Valley	45	35	77.78
4. Issaquena-Sharkey-Warren	58	45	77.59
5. Tate County	13	9	69.23
6. Claiborne County	9	6	66.67
7. Central	178	116	65.17
8. Harrison-Stone-Hancock	64	41	64.06
9. East Mississippi	139	85	61.15
10. Tri-County	43	25	58.14
11. Clarksdale & Six Counties	77	44	57.14
12. DeSoto County	14	8	57.14
13. Northeast Mississippi	212	115	57.23
14. Delta	169	87	51.54
15. Winona District	88	42	47.73
16. North Mississippi	89	41	46.07
17. South Mississippi	165	76	46.05
TOTALS	1,407	814	57.85

STANDING BY DISTRICTS

District and Councilor	No. of Physicians	No. of Mem.	Per Cent Mem.
1. Eight—W. H. Frizell	118	88	74.58
2. Ninth—D. J. Williams	78	52	69.23
3. Fifth—W. H. Watson	245	167	68.16
4. Sixth—H. L. Rush	139	85	61.15
5. Third—M. W. Robertson	212	115	54.23
6. First—J. W. Lucas	246	131	52.44
7. Second—L. L. Minor	116	58	50.00
8. Fourth—T. J. Brown	88	42	47.73
9. Seventh—J. E. Green	165	76	46.05
TOTALS	1,407	814	57.85

CALENDAR
SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CLAIBORNE COUNTY MEDICAL SOCIETY:

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Alcazar Hotel, Clarksdale.

DELTA MEDICAL SOCIETY: April, Cleveland.

DeSOTO COUNTY MEDICAL SOCIETY: First Monday of January (Jan. 1), April, July, and October, Hernando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December, Meridian, 3 P. M.

HARRISON-STONE-HAICOCK COUNTIES MEDICAL SOCIETY: First Wednesday of each month, Bay St. Louis, Pass Christian, Gulfport or Biloxi, 7:30 P. M.

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, (Jan. 11), March, July and October, Natchez, 2 P. M.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, Pascagoula, 7:30 P. M.

NORTH MISSISSIPPI MEDICAL SOCIETY:

NORTHEAST MISSISSIPPI MEDICAL SOCIETY:

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June; alternates between Hattiesburg and Laurel, 3 P. M.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 p. m. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, Wesson, Tybertown, Monticello or Brookhaven, 12:30 P. M.

WINONA DISTRICT MEDICAL ASSOCIATION: May 8, 9, and 10, 1934, Natchez.

COUNTY EDITOR APPOINTMENT

On nomination of the Pike County Medical Society, Dr. Gladys Ratcliff, McComb, has been appointed editor for Pike County.

MISSISSIPPI STATE BOARD OF HEALTH

Notice of the award of sixteen fellowships for graduate study to Mississippi physicians by the Commonwealth Fund was recently received by the Mississippi State Board of Health. Each award

provides tuition and travel expenses and \$250 a month during the four months at Tulane.

The following physicians will enter Tulane in January, 1934: Dr. C. E. Boyd, Amory; Dr. George Barnes, Belzoni; Dr. T. F. Clay, Tutwiler; Dr. E. F. Hand, Waynesboro; Dr. A. B. Harvey, Tybertown; Dr. F. L. McGahey, Calhoun City; Dr. S. B. McIlwain, Pascagoula; Dr. M. L. McKinnon, Lauderdale; Dr. W. B. Shackelford, Hollandale; Dr. J. C. Wallace, Osyka; Dr. D. L. Walker, Meridian; Dr. J. T. Weeks, Biloxi; Dr. Dudley Stennis, Newton; Dr. A. P. Smith, Bay St. Louis; Dr. H. E. Frizell, Vaughn; Dr. H. G. Johnson, Dundee.

Under this arrangement between the State Board of Health and the Commonwealth Fund, forty-two physicians have received fellowships. Fifteen students have received four-year scholarships for the study of medicine which provide \$100 a month to each student during the entire medical course.

Under the ten year agreement, the Fund will award 150 of the fellowships and fifty scholarships, which with the financial arrangement with Tulane to care for these students, will bring to Mississippi physicians and their sons, \$1,000,000 worth of medical education. This is only one phase of the Commonwealth Fund's program of cooperation with the Mississippi State Board of Health.

Quoting Dr. Clarence L. Scamman, representative of the Commonwealth Fund: "The Commonwealth Fund chose Mississippi for financial cooperation because of the outstanding public health program conducted without political interference, and because of the hearty cooperation given by the medical profession."

The Mississippi State Board of Health held its regular December meeting on the seventh. All members of the Board were present as follows: Dr. J. W. Lipscomb, Columbus, President; Dr. S. E. Eason, New Albany; Dr. L. B. Austin, Rosedale; Dr. B. J. Shaw, Slate Spring; Dr. Dudley Stennis, Newton; Dr. William R. Wright, Jackson; Dr. Felix J. Underwood, Jackson, Secretary; Dr. W. A. Dearman, Gulfport; Dr. W. H. Frizell, Brookhaven; Dr. John Darrington, Yazoo City.

License to practice medicine in Mississippi on the basis of reciprocity with another state was granted to each of the following: Dr. Ira Broyles Bright, Greenwood; Dr. Archibald Clinton Hewes, Gulfport; Dr. William Daniel Hickerson, Natchez; Dr. William Krauss, Meridian; Dr. Wallace Harden Smith, Natchez; Dr. Vernon LaGrange Terrell, Columbia; Dr. Harvey McLean William, Aberdeen; Dr. Marion Joseph Wolfe, Bay St. Louis.

The manufacture of alum precipitated toxoid which is given in one dose is a long step forward in the control of diphtheria, and the inconvenience and expense of giving three doses of toxin-antitoxin or two doses of toxoid is now eliminated.

Dr. Felix J. Underwood and H. C. Ricks left on

December 8 for Opelika, Alabama, for a study of the special tuberculosis work being done there. From Opelika, they will drive to Tennessee where they will visit the State Health Department and will go to Rutherford and other counties to observe the public health work being done. This trip is being financed by an outside philanthropic organization.

Miss Ora E. Phillips is now associated with the Mississippi State Board of Health in the capacity of supervising nurse with the Field Unit. For the past several years Miss Phillips worked in the Rutherford County, Tennessee, Health Department. She has had special training and valuable experience in public health nursing and Mississippi is fortunate to have her services.

Felix J. Underwood,
Executive Officer.

Jackson,
December 9, 1933.

WELFARE NURSING
MISSISSIPPI STATE BOARD OF HEALTH

December 5, 1933.

Dear Doctor:

"It has come to our attention that welfare committees in some counties have approved the employment of nurses to be assigned to county health departments. If these nurses are to be employed as public health nurses to do preventive work under the direct supervision of the county health department, their employment meets with the hearty approval of the State Board of Health. However, if these nurses are expected to do relief nursing, such as bedside nursing as is ordinarily done in welfare programs, they should be employed by the welfare committee and work under the supervision of the welfare committee *only*.

"It is *not* the policy of the State Board of Health for its public health nurses to do welfare work or bedside nursing in the care of sick persons except for purposes of demonstration to members of the family. Many nurses are well trained for bedside nursing of the sick as approved by the CWA, and could do acceptable welfare work, but they are not sufficiently trained for public health work as practiced by the State Board of Health.

"Those nurses who are employed in county health departments should write to Miss Mary D. Osborne, Associate Director of Public Health Nursing, for application blanks in order that our usual and necessary routine may be observed.

"Please acknowledge receipt of this letter.

"Your cooperation will be appreciated."

Very truly yours,

Felix J. Underwood,
Executive Officer.

THE TWO DELTA MEDICAL SOCIETIES MERGE

At a meeting of the committees representing the Clarksdale and Six Counties Medical Society and The Delta Medical Society held in the office of Dr. E. R. Nobles at Rosedale on December 7, plans were formulated and adopted for the consolidation of these two societies which comprise all the counties in the delta with the exception of Sharkey and Issaquena.

The new Society will be known as The Delta Medical Society with a potential membership of approximately 250 physicians, making it the largest district society in the state.

It was agreed that there would be three meetings a year, rotating with Clarksdale, Greenville and Greenwood.

Present at this coalition meeting and representing The Clarksdale and Six Counties Society were Dr. T. M. Dye, secretary of the State Association and Dr. Leon Brevard, president of the Clarksdale and Six Counties Society. The Delta Medical Society was represented by its secretary, Dr. F. M. Acree, and Dr. E. R. Nobles, vice-president of the State Association. Also present as guests were Dr. R. C. Smith, president of the Delta Society and Dr. J. W. Lucas, councilor for this district.

E. R. Nobles.

Rosedale,
December 9, 1933.

COALITION

A committee of five members, two from the Clarksdale and Six Counties Society and two from the Delta Society, together with Councilor Lucas from the First District, met at Rosedale on December 7 and formulated plans for the coalition of the two delta societies.

The Clarksdale and Six Counties Societies has already voted for the union and action will probably be taken by the Delta Society at its April meeting in Cleveland. If this action is favorable the joint Society will apply for a charter at the May meeting of the Council and House of Delegates.

T. M. Dye,

Secretary,

Mississippi State Medical Association
Clarksdale,
December 10, 1933.

CENTRAL MEDICAL SOCIETY

The annual meeting of the Central Medical Society was held on the Roof Garden of the Robert E. Lee Hotel, December 5, at 7 o'clock P. M. The meeting started with a dinner which was very enjoyable.

Mr. George Power, C.W.A. Official, Director of Relief for the State, made a short, but interesting talk to the Society on the mechanism of Rule No.

7 as applied to medical service to relief workers. There was some discussion as well as questions asked concerning this and Dr. Parksdale made a motion that the Society go on record as opposing any charges being made for any of these cases that might be brought into any of the charity hospitals of the State. This motion was carried unanimously.

The various committees of the Society for the year made their annual reports in writing, each being read at the meeting.

The guest speaker for the meeting was Dr. E. C. Parker, who read a paper on "A Brief Resume of Heart Surgery," with the presentation of a case of a colored man who had suffered a laceration of his heart which had been sewed up by him, one of the few cases with so severe a cut as same that had gotten well. The patient was well and healthy and reviewed by the Society.

Motion was made by Dr. Hall that the dues be increased to \$7.00 per annum which was seconded by Dr. Adkins and passed after some discussion.

Motion was made by Dr. Hand, and amended by Noblin that money collected from members for dinners be reverted to the treasurer when paid by the Merchants Bank after same has been tendered to the respective members, should they not desire to accept same. This motion was carried.

The election of officers was then entered into with the following results:

President—Dr. E. L. Green, Carpenter.

Vice-Presidents: Dr. T. E. Wilson, Jackson, Hinds County; Dr. J. W. Melvin, Camden, Madison County; Dr. H. N. Holyfield, Brandon, Rankin County; Dr. Austin, Scott County; Dr. A. E. Kennedy, Magee, Simpson County; Dr. W. D. McCalip, Yazoo City, Yazoo County.

Delegates to Mississippi State Medical Association: Hinds County: Dr. N. C. Womack and H. F. Garrison, Sr., Jackson; Alternates, Drs. W. F. Hand, Jackson and Hardy R. Hays, Jackson; Rankin County: Dr. J. B. Ainsworth, Florence; Alternate Dr. R. N. Whitfield, Florence; Madison County: Dr. J. B. Howell, Canton; Alternate Dr. R. W. Smith, Canton; Scott: Dr. R. B. Austin, Forest; Alternate Dr. Edward Anderson; Simpson County: Dr. S. L. Knight; Alternate Dr. E. L. Walker, Magee; Yazoo County: Dr. Gilruth Darrington, Yazoo City; Alternate Dr. J. L. Rainer, Yazoo City.

Secretary—Dr. L. W. Long, Jackson.

Treasurer—Dr. George E. Adkins (re-elected).

The incoming president, Dr. E. L. Green, made a short talk at this time.

Adjournment.

D. W. Jones,

Jackson,
December 11, 1933.

EAST MISSISSIPPI MEDICAL SOCIETY

The East Mississippi Medical Society will meet in the Lamar Hotel, Meridian, on Thursday afternoon, December 21. This is the annual meeting and officers will be elected for the ensuing year. Dr. J. W. D. Dicks of Natchez will give an official address, Dr. E. C. Parker of Gulfport will speak on "Some Phases of Heart Surgery," Dr. William Krauss of Meridian will speak on "Haematology." Following the meeting a banquet will be held in the Lamar Hotel.

T. L. Bennett,
Secretary.

Meridian,
December 10, 1933.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The December meeting will be held at the King's Daughters' Hospital, Gulfport, Wednesday, December 13, at 7:30 P. M. Officers will be elected.

E. A. Trudeau,
Secretary.

Biloxi,
December 12, 1933.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, Vicksburg, on Tuesday, December 12, with fifty-eight members and guests present. Invocation was given by Rev. C. E. Woodson, Christ Episcopal Church, Vicksburg, and a banquet followed. The tables were beautifully decorated by a committee of the Woman's Auxiliary.

The scientific program included the following:

Some Neglected Gynecological Conditions Amenable To Office Treatment.—Dr. Thomas Benton Sellers, New Orleans. Introduced by Dr. George Y. Hicks, Vicksburg.

Physical Diagnosis.—Dr. Oscar W. Bethea, New Orleans; introduced by Dr. J. A. K. Birchett, Jr., Vicksburg.

Dr. J. W. D. Dicks, Natchez, President of the Mississippi State Medical Association, addressed the Society on "Matters of Vital Importance To the Profession." Dr. Dicks was introduced by Dr. W. C. Pool, Cary.

Dr. E. C. Parker, Gulfport, President-Elect of the Mississippi State Medical Association, presented a report of the successful surgical cure of an extensive knife wound of the heart and showed the patient now in good health.

This being the annual meeting, the nominating committee composed of Drs. J. B. Benton, Valley Park; W. C. Pool, Cary; and N. B. Lewis, Vicksburg, presented its report and the following officers

for the year 1934 were unanimously elected: President, Dr. W. H. Scudder, Mayersville; Vice-Presidents: Issaquena County, Dr. T. W. Huey, Grace; Sharkey County, Dr. E. B. Stribling, Rolling Fork; Warren County, Dr. Guy P. Sanderson, Vicksburg; Secretary-Treasurer, Dr. L. S. Lippincott, Vicksburg (re-elected); Member of Board of Censors, Dr. P. S. Herring, Vicksburg; Member of Committee on Medical Defense, Dr. L. J. Clark, Vicksburg; Delegate to Mississippi State Medical Association from Warren County, Dr. G. C. Jarratt, Vicksburg.

The next meeting of the Society will be held at Vicksburg, Tuesday, January 9, at 7 P. M.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY

The last quarterly meeting of the Northeast Mississippi Thirteen Counties Medical Society will be held at the First Methodist Church, Tupelo, on December 19 at 1 P. M. The program follows:

Meeting called to order.—President F. L. McGahey.

Invocation.—Rev. H. F. Brooks.

Reading and Adoption Minutes Last Meeting.

President's Address.—Dr. F. L. McGahey, Calhoun City.

"Some Post Operative Complications and their Management," Dr. J. W. Lipscomb, Jr., Columbus.

Discussion opened by Drs. Philpot and Kirk.

"Some Neglected Gynecological Conditions Amenable to Office Treatment," Dr. Thomas B. Sellers, New Orleans, La.

General Discussion.

"Sodium Amytal in Surgery," Dr. J. P. Ward, Aberdeen.

Discussion opened by Drs. Anderson and Ewing.

"The Proper Care of the Insane," Dr. L. L. McDougall, Booneville.

General Discussion.

Business Session.

Election Officers.

Announcements.

Adjournment.

The 1934 President will be elected from Chickasaw County.

J. M. Acker, Jr.,
Secretary.

Aberdeen,
December 11, 1933.

PIKE COUNTY MEDICAL SOCIETY

The Pike County Medical Society had its regular monthly meeting at the Dew Drop Inn in Summit, at 6:30 P. M., on December 7. The entire program was devoted to business of the Society.

After the society was called to order by the tem-

porary chairman, Dr. M. D. Ratcliff, in the absence of the president, the minutes of the November meeting were read by the secretary.

A communication from Dr. H. R. Fairfax stating the amount due from Pike county for the expenses of the Eighth Councilor's District meeting was read. This amount, \$10.48, was ordered to be paid.

Bills from J. W. Beachan, florist, were presented. It was ordered by the society to assess each member \$1.00 to get money to pay said bills amounting to \$22.00.

The meeting was then opened for nominations from the floor for the different officers for the year 1934. The following men were nominated and unanimously elected: Dr. T. E. Hewitt, Summit, President; Dr. M. D. Ratcliff, McComb, Vice-President; Dr. T. Paul Haney, Jr., McComb, Secretary-treasurer.

The president then appointed Dr. Gladys Ratcliff as County Editor for the Society. He stated that delegates to the state convention would be named in the next few days. Society dues for 1934 were then fixed at \$6.00, the same as for 1933.

Motion was then made that each member be assessed \$2.50 to go towards buying a slide lantern for the use by the society.

The Pike County Dental Society had been invited to meet with us on this occasion and the matter of asking them to meet with us each month was submitted to both societies at this time. It was decided by both societies that committees of three men each, be appointed from each society to work out all details and present the subject again at the January meeting which would again be a joint session of both societies. Drs. L. W. Brock, Otis Biggs and the secretary were appointed by the medical society. Drs. Fulger and O. L. Colee and the secretary were appointed from the Dental Society.

The resolutions adopted by the State Medical Association governing fees to be paid by the Welfare Board to physicians were unanimously adopted by the society. Dr. L. J. Rutledge and Dr. R. H. Brumfield from the medical society and Dr. P. M. Fugler and Dr. F. C. Sneed from the Dental Society were appointed to meet with the local welfare board and work out all details of the program to be carried on. Dr. W. H. Reaben, President of the Pike County Dental Society, then extended appreciation of the Dental Society for the invitation to meet with the Medical Society on this occasion. Response was made by Dr. M. D. Ratcliff.

There was no further business to come before the society and it was adjourned.

T. Paul Haney, Jr.,
Secretary.

McComb,
December 10, 1933.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The December meeting of the South Mississippi Medical Society will be held in Hattiesburg, at the Forrest Hotel, at three p. m., on the evening of December 14. The following is the program to be rendered.

1. The Emergency Care and Splinting of Long Bone Fractures Preliminary to Transportation.—Dr. J. W. Stringer.
2. Anatomical Considerations Involved In Colles's and Pott's Fractures: Method of Reduction and the Necessary Anatomical Requirements for the Proper Reduction and Restoration of Function.—Dr. C. H. Ramsey.
3. Compound Fractures.—Dr. T. E. Ross, Jr.
4. Fractures About the Elbow Joint.—Dr. J. W. Speed, Memphis, Tenn.
5. Musical Numbers.
6. One-Act Play—By two talented artists.
7. Banquet.

We hope to have an unusually good crowd present since this is the last meeting of the year and the time of the annual election of officers.

The Medical Clinic, 990 Hardy Street, Hattiesburg, announces the association of Dr. V. C. Temple, Pediatrics and Obstetrics, and Dr. F. T. Bower, formerly of Crawford Clinic, Diagnosis and Surgery.

J. P. Culpepper, Jr.,
Secretary.

Hattiesburg,
December 11, 1933.

TRI-COUNTY MEDICAL SOCIETY

The regular meeting of the Tri-County Medical Society was held in Brookhaven, December 12.

We had with us as guest speaker Dr. E. C. Parker of Gulfport who is president-elect of the Mississippi State Medical Association. He gave us an excellent paper on wounds of the heart and presented a case of stab wound of the heart, that of a colored man aged about forty years, that he had recently operated on with splendid results. This was followed by an address by Dr. J. W. Wilson, the retiring president, and his address gave some valuable suggestions for the improvement of our society.

The election of officers was then taken up with the following result:

President—Dr. C. L. Simmons, Hazelhurst.

Vice-President—Dr. J. H. Beavers, Wesson, Copiah County; Dr. J. R. Markette, Brookhaven, Lincoln County; Dr. T. F. Conn, Monticello, Lawrence County; Dr. B. L. Crawford, Tylertown, Walthall County.

Secretary and Treasurer—Dr. H. R. Fairfax, Brookhaven (re-elected.)

Delegates to the Mississippi State Medical Association:—Dr. W. L. Little, Wesson, Copiah

County; Dr. O. N. Arrington, Brookhaven, Lincoln County; Dr. J. W. Wilson, Montivello, Lawrence County; Dr. A. B. Harvey, Tylertown, Walthall County.

Board of Censors:—Dr. R. E. Sylverstein, Tylertown; Dr. R. S. Savage, Brookhaven.

Member of Medico-Legal Defense Committee:—Dr. F. E. Collins, Brookhaven.

Legislative Committee:—Dr. W. H. Frizell, Brookhaven; Dr. R. C. Massengill, Lincoln County; Dr. C. L. Simmons, Hazelhurst, Dr. W. L. Little, Wesson, Copiah County; Dr. B. L. Waller, Silver Creek, Dr. J. W. Wilson, Monticello, Lawrence County; Dr. A. B. Harvey, Tylertown, Dr. B. L. Crawford, Tylertown, Walthall County.

H. R. Fairfax,
Secretary.

Brookhaven,
December 13, 1933.

ADAMS COUNTY

The Homochitto Valley Medical Society meets in Natchez Thursday, January 11, with its new officers at the wheel. Let us hope every member will bend their efforts to enroll every eligible physician in its territory to make it a 100 per cent membership, to follow out what our State President Dr. J. W. D. Dicks, so much desires.

Dr. C. A. Everett and family made a flying trip to Tupelo before the holidays.

The hospitals of Natchez are making preparations for the meeting of the Mississippi State Hospital Association in May and hope for a large attendance.

Lucien S. Gaudet,
County Editor.

Natchez,
December 9, 1933.

CHICKASAW COUNTY

Dr. F. L. McGahey, Calhoun City, president of the Northeast Mississippi Thirteen Counties Medical Society, has been awarded a scholarship of the Commonwealth Fund, consisting of a four months' post graduate course at Tulane University beginning January 1. We congratulate Dr. McGahey.

Dr. J. M. Hood, Houlika, attended the meeting of the Southern Medical Association at Richmond and Washington. He reports a very interesting meeting and a wonderful time. He also visited the mint in Washington and saw more money than he ever saw in his life. Dr. Hood says he can't understand why they have so much money "hoarded" up there and the doctors have so little.

Fortunately I had the pleasure of meeting with the Houston Hospital Nurses Alumnae Association, which was held in the hospital building Wednesday night, December 27. A report was given of

the Mississippi State Nurses Convention at Meridian, and the wonderful work being done by nurses all over the state. A luncheon was served preceding the meeting.

W. C. Walker,
County Editor.

Houlka,
December 8, 1933.

DESOTO COUNTY

An old adage has it that—"No news is good news," so this is applicable in this good county.

Physicians are feeling better since there is a distinct improvement financially and otherwise.

Our next Society meeting will be held on January 1, 1934. Plans will be made for the year and also election of officers.

We wish all of our readers a most happy and prosperous New Year: and may this Mississippi State Medical Association have the largest enrollment in its history and the New Orleans Medical and Surgical Journal its largest list of subscribers.

L. L. Minor,
County Editor.

Memphis, Tenn.
Route 4,
December 10, 1933.

FORREST COUNTY

Dr. T. E. Ross, Jr., and wife spent a week in Chicago attending the Century of Progress Exposition during October.

Drs. L. B. Hudson and wife and H. C. McLeod, wife, children, and mother-in-law attended the Century of Progress Exposition during October. Drs. Hudson and McLeod attended the Clinical Congress of the American College of Surgeons during the recent meeting.

Dr. and Mrs. W. W. Crawford and Dr. J. P. Culpepper, Jr. represented the Forrest County profession at the meeting of the Southern Medical Association, at Richmond, Va., in November.

Dr. F. T. Bower was married to Miss Hazel Draughn November 23. Hearty congratulations are extended.

Drs. F. T. Bower and Carlton Temple have moved their offices to the Hardy Street Medical Clinic.

Drs. T. E. Ross, Sr. and T. E. Ross, Jr. are now possessors of new Ford V 8's.

L. B. Hudson,
County Editor.

Hattiesburg,
December 9, 1933.

HINDS COUNTY

Dr. and Mrs. L. B. Moseley spent a most pleasant Thanksgiving week-end in Nashville, Tenn.

Dr. and Mrs. Harvey Garrison, Sr., and Dr. and

Mrs. Noel Womack attended the Southern Medical Association meeting in Richmond. Dr. Womack was elected vice-chairman of the Pediatrics Section. They all report a most wonderful meeting. Other points of interest were visited before the parties returned to Jackson, including New York and Washington.

The staff of the Baptist Hospital held its last meeting the first part of November. A fine turkey dinner was enjoyed by all as well as the splendid program.

The staff of the Jackson Infirmary met the last Tuesday in November. Dr. L. B. Moseley gave a nice demonstration as to the use of the resectoscope in prostatic resection. The usual fine dinner was thoroughly enjoyed.

The Central Medical Society meets Tuesday evening, December 5, at the Robert E. Lee Hotel. The secretary says we are going to have a big turkey dinner. Believe it or not! Come see for yourself.

Dr. Stephenson of Lexington was the guest of honor at the last meeting of the staff of the Jackson Infirmary. He presented a most interesting and instructive paper entitled "Abdominal Trinity in Infants and Young Children." We hope that Dr. Stephenson can be with us again soon.

Wm. F. Hand,
County Editor.

Jackson,
December 4, 1933.

LEFLORE COUNTY

Dr. W. E. Denman visited relatives in Blytheville, Ark., November 9.

Dr. Gray Williamson, Memphis, attended the Junior Chamber of Commerce banquet in Greenwood, November 11.

Dr. J. A. Crawford visited Memphis, November 10.

Dr. W. F. Hand, Jackson, County Editor for Hinds County, was a visitor to Greenwood on November 12 and 13.

Dr. and Mrs. J. H. Wade, New Orleans, stopped in Greenwood November 18, on their way to Memphis.

Dr. Robert B. McLean, New York City, formerly of Greenwood, has opened offices in the Lamar Life Building, Jackson, for the practice of surgery.

Dr. C. J. Pittman, Ruleville, spent Thanksgiving in Greenwood the guest of his sister, Mrs. W. M. Loyd.

Dr. G. Y. Gillespie, Jr., spent Thanksgiving with his father at Duck Hill.

Dr. R. B. Yates spent Sunday, December 3 with his mother at the old home in Philadelphia.

Dr. L. B. Otken and daughter, Mary Frances,

spent the week end after Thanksgiving in Jackson with Dr. and Mrs. R. S. Lewis.

W. B. Dickins,
County Editor.

Greenwood,
December 6, 1933.

MONROE COUNTY

Well we are on the last lap of the 1933 circuit. Let us not fly the track or slacken speed until the race is run and won. May we not hope that "old man depression" will be left at the last quarter post? But such a race he has given us. Of course the race is not over but it seems to me that we are coming into our second wind. All honor to our jockey. Many a race has been forfeit because of poor riders. Here is hoping for brighter days in 1934.

On Armistice Day, November 11, just past, I was much pleased to have as my guest, Dr. W. A. Evans of Chicago. The visit was promised me when we met in Jackson last May. The plans and exact date were fixed in the early fall. What an interesting character he is. So full of energy and so human in his interests and activities. Old Monroe county is the mother of counties in Mississippi and there are many spots that are closely associated with early history. One of these is old Cotton Gin Port on the east bank of Tombigbee river just below where Amory now stands. In Claiborne's history, it is stated that this town and Natchez were begun in the same year. Natchez still stands. She was "planted by the water (the father of waters) and shall not be moved," while Cotton Gin Port is but a memory. Dr. Evans wanted to visit this historic spot and some others equally historic. It was a great pleasure to have him do so as my guest. As the day wore on, we discussed many things that may have influenced us both in our youth and early manhood.

On Sunday, November 26, in company with my two daughters and a distant relative whose great grandfather was my great grandfather too, I drove to Collierville, Tennessee. From that lovely old town we drove three miles south and just as we crossed the state line into Mississippi, we came onto the old plantation home of four generations of my maternal ancestors. I visited this farm home when I was but six years old. What a glorious month that was. Under some giant oaks that were centuries old, even then, lay the ashes of four generations of ancestors, while the same negroes who had been slaves on the estate, were there. They remained until "Marse Dave and Marse Jack," two brothers who owned the property jointly, passed on. The estate was then sold to outsiders and subdivided into smaller farms. When we entered the estate it was over a state

highway that has been opened through it in recent years which divides the holdings of different owners (all of whom are aliens). An old negress informed me that the "big house" had been torn down years ago and a barn built of the lumber. Still there was much to remind me of tradition and the things that I remembered from childhood. I easily found the burial place of my ancestors, but I was told the tombstones might be found scattered about the fields where they had been used for weights for harrows and such like. The parties had so desecrated the graves, not even knowing or caring who lay buried there. Such is life and truly, time and death level all things. I am glad I went and I am glad my girls went too.

Last night, December 5, the doctors of Monroe county met in Amory and organized a Monroe County Medical Society—this in compliance with the request of our great president and under the authority of our councilor. We had, almost, a full attendance. We confidently expect 100 per cent membership, which is better than our present status. But in organizing this county society, we have no thought of abandoning the thirteen counties society. I told the boys last night that my dead body would have to be trodden under foot before this could happen. I love our old district society as dearly as I love our state society. This district society, I claim, is without a rival in all the South land. Should any one doubt that it is, let such a one come to Tupelo two weeks from yesterday-or come to any one of our quarterly meetings during next year.

When this shall be read, the holidays will have passed and a new year will be with us. May you all live long and prosper is my hearty wish.

G. S. Bryan,
County Editor.

Amory,
December 6, 1933.

NEWTON COUNTY

Not pleasant to report from Newton County. I have been afflicted and in hospital and bed for more than half of the year; just now getting on my feet again. Not anything of interest in the way of medicine and surgery. When a man reports it should carry something that would be instructive to the reader, but to just show you that I have not lost any of my professional zeal or interest in my profession and colleagues I pen this note.

S. A. Majure,
County Editor.

Hickory,
December 4, 1933.

NEWTON COUNTY

Dr. H. B. Gilmer has located at Hickory. We are glad to welcome him to our county.

Dr. Dudley Stennis attended the meeting of the State Board of Health, Jackson, December 14.

Next meeting of the East Mississippi Medical Society will be held at Meridian, December 21, at 3 P. M. Good program and election of officers.

Project is under way to try to control breeding of mosquitoes in town of Newton and vicinity.

Dr. Dudley Stennis of Newton has been advised that he was awarded a Commonwealth Fund scholarship and will begin work in Tulane Medical School, January 3.

Mr. S. Kemp,

Newton,
December 11, 1933.

PONTOTOC COUNTY

Northeast Mississippi Thirteen Counties Medical Society will meet in Tupelo, December 19, at which time officers for the ensuing year will be elected. We always have a large attendance at Tupelo as it is pretty centrally located.

Mrs. E. A. Simmons and little daughter of Birmingham, Ala. spent Thanksgiving with their father and grandfather, Dr. R. P. Donaldson.

We are sorry to announce the recent death of Mrs. T. A. Williams of Pontotoc, R. 4. Mrs. Williams was the widow of the late Dr. T. A. Williams, one of Pontotoc County's leading physicians.

Here's hoping all a Merry Xmas and a prosperous, happy New Year.

R. P. Donaldson,
County Editor.

Pontotoc,
December 7, 1933.

SIMPSON COUNTY

The hand of time has practically covered the face of 1933 and what we have done for mankind is history. Am just wondering if the communities in which we live feel that they have been bettered morally and physically by our works? We have all worked, and in the words of Paul "we have fought a good fight." We have done it with but little remuneration and have smiled our way through it. The year of 1934 can be made better and I feel that it is our duty to go into it with a full determination to do our very best under any and all circumstances. We need to be paid for our services and should demand it wherever possible, but we knew beforehand that the poor were with us, are with us and will always be with us. I'm sorry for the community that has in it a doctor that is working for money as his chief aim. Yes, and I'm sorry for a state that has in it five or six

charity hospitals and can't finance them adequately to give to the people what they are justly entitled to. I believe the legislators are going to do something about it this next session. Maybe they will give us one good hospital or leave it to each county to look after its indigents. Too much money and politics are being spent for the good we are getting.

Central Medical Society met on regular time, elected officers, had a paper on heart disease ably presented and well discussed, a good all round meeting, made everybody feel better and pay their dues.

The mosquitoes must have heard something of malaria control in this section as we have had very little to contend with in the past three weeks. If you want to forget all your troubles, get up a jolly good crowd of men, a good pack of deer dogs and go hunting; nothing so exciting as for a big buck to almost run over you. Mims Mitchell, our efficient funeral director and myself have just gotten off of a fine hunt. Bagged four deer.

E. L. Walker,
County Editor.

Magee,
December 10, 1933.

TISHOMINGO COUNTY

Dr. and Mrs. A. H. Montgomery of Burnside spent two or three weeks in Memphis lately where Mrs. Montgomery underwent a very serious operation, but is back home again.

The better prices of cotton, etc., here don't seem to be putting much money into the doctor's pockets some way or other. The government ties up their accounts, the merchant makes himself safe, but the doctor has no strings that hold when collection time comes.

The vice-president for Tishomingo county has called a meeting of the M. D.'s to organize a county group as the delegate to the State Association is to be selected by our group of doctors this year.

Dr. and Mrs. T. P. Haney, Sr., accompanied by their daughter Mrs. Stephens and children, visited in the home of L. O. Bishop Thanksgiving at Bishop, Ala.

Dr. and Mrs. K. F. McRae of Belmont made a business trip to Red Bay, Ala., on last Monday.

Miss Liela Clements did some very efficient work in mouth hygiene in Tishomingo County. Her program is fine and teaches a splendid lesson in a very short, pointed lecture and demonstrates her work so well.

T. P. Haney, Sr.,
County Editor.
Iuka,
December 8, 1933.

WARREN COUNTY

"On to Richmond!" was the exultant cry of many of the grandsons and granddaughters, descendants of that other generation who attacked and who defended Richmond, attacked and defended with a patriotism and heroism born only of citizens of a land where individual liberty has been cradled and nurtured. But the cry this time was not from a solid phalanx of blue or gray in battle array, but from the doctors and doctors' wives of "Dixie" who were coming to Richmond not to "learn war" but to attend the Southern Medical Association and the Southern Branch of the American Public Health Association, that they might learn more of that science and practice more correctly that art that has brought the greatest blessings to mankind whether in war or in peace. The Rappahannock flows on in its winding course, whispering gently of peace. The Shenandoah holds in its marvelous valley nature's richest contributions to awe inspiring grandeur, that creates in the heart and mind of thoughtful man a desire for peace; in those historic places there yet dwells the omnipresent spirit of Lee, Jackson, Jeb Stuart, and the unnamed and unknown soldiers who we opine from their sacred abode, Sans Souci, look with beneficence upon this gathering of their children for the promotion of a service that prolongs and enriches life, that abates and eradicates disease, that alleviates and subdues suffering, that safeguards the coming of new life and sympathetically and tenderly sustains the old in its inevitable going. It is with sorrow akin to pain that possesses your editor when he realizes that he cannot be one among that happy throng in its annual convocation. Old Man Depression "has done us wrong".

At the November staff meeting of the Vicksburg Hospital, D. W. N. Jenkins, Port Gibson, was an invited guest and guest speaker. He discussed "Obstetrical Complications" with a case report.

You ask your correspondent why Dr. D. A. Pettit wears such a broad smile and bears himself in truly superb grace and manners. Sure, for his daughter was awarded the distinction of being one of the most beautiful girls in her section of the Carr Central High School. But no one is mistaking the identity of the gracious handiwork of Mrs. Pettit.

Dr. Stafford of Newellton, Louisiana, was a visitor in our city early in November, and while here he attended the staff meeting of the Vicksburg Hospital.

What is Vicksburg's undoubted loss is Shreveport's undoubted gain in the departure from our city of Dr. Walter Johnston, to locate in Shreveport, Louisiana. Walter, as we know and greet him, is the son of Dr. Sidney Johnston and grandson, on maternal side, of Dr. H. H. Haralson. He comes from a line of forebears of no mean medical and

surgical ability. Dr. Walter is a graduate of Vanderbilt University, class of 1931. He served an internship of one year in the Vicksburg Sanitarium, another internship in the U. S. Marine Hospital, Chelsea, Mass. We bespeak for him many friends and eventually success in his chosen profession and location.

Low visibility may have marked the path of egress of an automobile leaving Vicksburg in the early morning hours of November 11, 1933, but in due time it rolls along the nation's highway No. 11, in superlative poise and keeping, unmindful and unconscious of the effulgent halo of its own making, as it joins the innumerable caravan of autos that wind their steadfast course to Richmond and the S. M. A. This auto journey was of interest and significance in more than one way; the car, the passengers, the destination. This patriotic car bore the invisible insignia of the Government, N. R. A., which when translated into its more applicable setting would read—"No Rowdies Aboard." The passengers were our venerable, likeable, and most highly esteemed Dr. J. A. K. Birchett, Sr., and his good and adorable wife. The chauffeur was none other than our debonair Dr. Lawrence J. Clark, esprit de corps, who was under the guidance and watchful eye of his better three-fourths, the vigilant and inimitable Press and Publicity Chairman of the Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society, who inevitable gets the "scoop" on all the news and each month leaves ye county editor with nothing to report. The destination was Richmond and the S. M. A., other than Dr. J. A. K. Birchett, Sr., who, not unlike the Bavarian "Student Prince" returning to "Old Heidleburg", our beloved doctor after forty-five years' absence becomes the "Student Prince" from Vicksburg returning to "Old Petersburg, Virginia," the Heidleburg of his young manhood's collegiate experiences and the Mecca of his mature recollections and dreams.

No, it is certainly a mistake, a report not to be given any credence whatever. Dr. George Street, one of our sauve and reputable surgeons, has not accepted the Homeopathic teachings, "simila similibus, curantur," like is cured by like, he does not believe that it necessarily "takes a thief to catch a thief," or a "quack to snare a quack," he just went out duck hunting because he is fond of the sport.

A marriage of unusual interest was solemnized by the Reverend Baley H. Lovelace, at Clinton, November 25, 1933, when Dr. Richard A. Street, Jr., of Vicksburg, took for his bride the lovely and accomplished Miss Catherine Noble, of Fayette. Miss Noble is the daughter of Mr. and Mrs. John W. Noble, of Fayette. She attended Gulf Park College on the Mississippi Coast, and National Park Semin-

ary, Washington, D. C., in pursuit of her literary attainments. Dick obtained his B. S. degree at the University of Mississippi and graduated in medicine at Columbia University, N. Y. We are advised that after a further pursuit of studies in Chicago, Dr. Street and his bride will return to Vicksburg to make this city their future home. Best wishes from the numerous friends follow this young couple.

Dr. S. S. Kaufman, one of Vicksburg's ambitious and capable sons, leaves with her good wishes, to locate at Eden, to practice his chosen profession. Dr. Kaufman took his first two years of medicine at the University of Mississippi, and received his degree of Doctor of Medicine from the University of Chicago. He served an internship in Charity Hospital, New Orleans, and completed the full internship requirements of the Mississippi State Charity Hospital. He goes to his life work well prepared for rendering a worthwhile service.

Dr. Jack Birchett, Jr., has indirectly advised your editor that he would like for the "cockeyed" world to know that he goes places and does things other than training as a sparring partner for prospective bridegrooms. You know, Jack, last month met with the American College of Surgeons and attended the Inter-State Post-Graduate Assembly at Cleveland, Ohio, and ye editor in his last communication failed to chronicle either of these newsy events. Accept our "Repologies," Jack, "we'll tell 'em" hereafter.

Dr. H. T. Ims,
County Editor.

Vicksburg,
December 6, 1933.

WASHINGTON COUNTY

Dr. S. L. Lane, Hollandale, and several friends enjoyed a goose hunt November 20 and 21.

Dr. and Mrs. K. L. Witte, Leland, attended the Indianola-Greenville football game at Greenville, November 3.

Drs. E. T. White and J. F. Lucas, Greenville, attended the Leland-Clarksdale football game at Leland, November 3.

Dr. P. G. Gamble, Greenville, spent several days this past month on his farm in Arkansas.

Dr. and Mrs. S. L. Lane, Hollandale, attended the Centenary-University of Mississippi football game in Jackson. They also visited Dr. and Mrs. Berry Reese in Yazoo City.

Dr. and Mrs. Paul Gamble and children, Mary and Paul, Greenville, spent Thanksgiving week in Nashville, Tenn., visiting relatives. They also attended the Alabama-Vanderbilt football game Thanksgiving.

Dr. A. J. Ware, Greenville, has announced for councilman at large for the City of Greenville. The election will be held on December 11. All of Dr.

Ware's friends hope an overwhelming victory for him.

Dr. and Mrs. D. C. Montgomery, Greenville, entertained most elaborately Thanksgiving week the house guests of Mr. and Mrs. Will Atterbury of Estill. The house guests included Mr. and Mrs. Jim Rayner, Mr. and Mrs. Fritz Scharf, Mr. and Mrs. John Bullington, and Mr. and Mrs. R. Walker, all of Memphis, Tenn.

Dr. J. C. Pegues, Greenville, made a special trip to Memphis to see "Green Pastures," the show that had such a long run in New York and is now making all the large cities of the South.

Dr. L. C. Davis, Greenville, has been elected president of the Greenville Kiwanis Club for the next year.

Dr. and Mrs. F. M. Acree, Greenville, have had as their house guests this past month Mr. and Mrs. Morris Folks and Mr. Lester Acree of Dover, Tenn. A goose hunt was enjoyed by Dr. Acree, his brother, Mr. Acree, and Mr. Folks.

Dr. E. T. White, Greenville, visited his mother in Merigold several Sundays ago.

Dr. and Mrs. T. B. Lewis, Greenville, had a most enjoyable time this past month visiting relatives in Jackson and Columbus.

John G. Archer,
County Editor.

Greenville,
December 6, 1933.

WINSTON COUNTY

Dr. L. T. Parks, Fearn Springs, took over a bankrupt stock of goods and store building in our city last week. We are not informed as to whether he will go in business or not.

Drs. W. W. Parks and E. L. Richardson went to the Southern Medical meeting last month.

Dr. C. A. Kirk was selected as a member of the C. W. A. Committee in this county. He is thoroughly capable to handle the place with credit to the county.

Rodger Parks, son of Dr. W. W. Parks had the misfortune of getting his shoulder dislocated playing football a few days ago.

We are persuaded to believe that the various complicated governmental conditions herald the approach of prosperity again.

M. L. Montgomery,
County Editor.
Louisville,
December 8, 1933.

YAZOO COUNTY

Dr. and Mrs. B. C. Rush and children, Susie, Clarene and Benjamin of Vaughn, spent last week end on the coast visiting Dr. Rush's father.

Dr. J. B. Anderson, Yazoo City, made a business trip to Jackson last Tuesday.

The wedding of Dr. Gilruth Darrington, Yazoo City, to Miss Anne Dubussion Hogue, of Marion, Ala., on October 6, will be of interest to his many friends. Dr. and Mrs. Darrington have been the recipient of a great many social affairs given in their honor since returning from their honeymoon.

Dr. and Mrs. J. T. Rainer were among those who attended the American Legion Convention in Chicago.

Dr. Hugh L. McCalip, our efficient health officer, has been the busiest man of our profession in this section of the country. He reports he has several cases of scarlet fever and diphtheria in different sections of the country.

Dr. and Mrs. S. H. Woods are expecting to return to their former home, Benton, the latter part of this month. Dr. Woods has been connected with the government service for the past three years in Central America. Their many friends will be glad to welcome them back to the states.

Dr. John Darrington, Yazoo City, seems to be having trouble keeping his hounds together during the fox season.

I notice Dr. C. W. Bonney, Satartia, makes frequent visits to Yazoo City, since he is one of the profession in our section who is able to drive a new car.

Am glad to report that I am improving after a short stay in Jackson Infirmary where I had a tonsillectomy done.

H. E. Frizell,
County Editor.

Vaughan,
December 7, 1933.

WOMAN'S AUXILIARY

to the

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson.

President-Elect—Mrs. Henry Boswell, Sanatorium.

Secretary—Mrs. Adna Wilde, Jackson.

Treasurer—Mrs. E. C. Parker, Gulfport.

Press and Publicity Chairman—Mrs. Leon S. Lippincott, Vicksburg.



MRS. DAN J. WILLIAMS
Gulfport, Miss.

AN EXPLANATION!

When the first sketch of our history went to press we sent a mat for the printing of Mrs. Williams' picture, but as it is impossible to use a newspaper mat in the Journal, it could not be used, and we did not have time to have a new cut made before the article the should have accompanied, was published. We have now obtained the proper cut to place in our records, for no record of auxiliary work would be complete without the picture of Mrs. Williams, the organizer and guiding hand through the years of the auxiliary work.

Mrs. Frank L. Van Alstine.

A MESSAGE FROM YOUR PRESIDENT

HAPPY NEW YEAR! I take this opportunity to send New Year greetings to all Auxiliary members and to wish for each one a year full of joy, happiness, health and friendship.

At this time several auxiliaries will be changing officers, and to all retiring officers I wish to express my thanks and appreciation for the co-operation and friendship they have shown me and each other during their terms of office, and wish for

the ones assuming their new duties an even larger sense of fellowship during the coming year. For in such ways fellowship grows.

Our annual meeting is not far off and I would like for each auxiliary to take stock of what they have done and see if they have accomplished their program they set for themselves.

The one state project was the talks to schools on the prevention of tuberculosis and the work of the Preventorium. If you have not yet arranged for this, please do so at once and let us see if we can have each auxiliary reporting at least one such talk.

I have found the superintendents and teachers glad to have such talks and the doctors more than willing to give them, so it all depends on a little effort on the part of the auxiliary.

May I again call your attention to the importance of increasing our membership in the organized auxiliaries where it is at all possible, for only through an informed membership can we be able to do our part in the changing economic situation that faces the medical profession.

Mrs. Frank L. Van Alstine.

Jackson,
December 10, 1933.

We are not publishing any of the history notes this month, there is a nice lot of news, and we wish there were more, but will continue it next month.

Do you read the pages in the American Medical Association Bulletin which have been given over to the Woman's Auxiliary?

Do not fail to look up the October issue of the Bulletin and enjoy the greeting from your National President, Mrs. James Blake, of Minnesota. You will also find the first of the regular monthly letters that will be written by your national press and publicity chairman, Mrs. Robert E. Fitzgerald, of Wisconsin. Her letters are filled with valuable information about the activities of the national auxiliary, and through her efforts you may become familiar with the various state auxiliaries, and how they manage their affairs.

Permit me to recall to your mind the old saying, "You can lead a horse to water, but you cannot make him drink." Now, your press and publicity chairman writes these instructive and interesting articles for you every month and they are published in the Bulletin. DO YOU READ THEM? If you really desire to be well informed on the activities of YOUR auxiliary, read these articles which Mrs. Fitzgerald takes the trouble and time (and what a great deal of precious time it does take!) to write for your benefit.

Ask your doctor to bring the Bulletin home to you, and if he says he does not receive it, ask him

to please make it possible for you to have it, as you really need it to be a loyal member of your auxiliary.

WOMAN'S AUXILIARY TO THE HARRISON-
STONE-HANCOCK COUNTIES MEDICAL
SOCIETY

On Wednesday, December 6, the Woman's Auxiliary to the Harrison-Stone-Hancock Counties Medical Society held its annual election of officers, at the home of Mrs. Dan. J. Williams. The business meeting was preceded by a bridge luncheon, with Mrs. W. A. Dearman, Mrs. Elmer Gay and Dr. Emma Gay assisting Mrs. Williams.

Officers elected were: Mrs. Dan J. Williams, president; Mrs. Elmer Gay, president-elect; Mrs. W. E. Manney, secretary-treasurer; Dr. Emma Gay, vice-president for Harrison county; Mrs. John Laird, parliamentarian; Mrs. C. A. Sheely, historian, and Mrs. Cummings McCall, publicity chairman.

Mrs. Henry Boswell, president-elect of the Woman's Auxiliary to the Mississippi State Medical Association, addressed the auxiliary on the subject of the Preventorium, which is located on the grounds of the Sanatorium. Mrs. Boswell explained the plans of the state auxiliary for an essay contest in the seventh and eighth grades of the public schools of the state on the preventorium work as an educational move in health. At the close of her address Mrs. Boswell was presented with a gift from the auxiliary of whom she was a guest, Mrs. Williams making the presentation.

Those present at the meeting were: Mrs. Henry Boswell, Sanatorium, Mrs. C. Floyd Haviland of New York, Mrs. N. W. Lake, Mrs. A. L. Jagoe, Dr. Emma Gay, Mrs. A. R. Robertson, Mrs. B. G. Linder, Mrs. C. A. Sheely, Mrs. Clifton Culpepper of Honolulu, Mrs. R. F. Wafer, Mrs. C. G. Beckett, Mrs. J. C. Huggins, Mrs. W. S. Dearman, Mrs. John Laird, Mrs. Cummings McCall, Mrs. W. E. Manney, Mrs. D. G. Rafferty, Mrs. C. H. Denser, Mrs. Geo. M. Melvin, Mrs. Elmer Gay, Mrs. Dan. J. Williams, Mrs. R. H. Foster, and Mrs. Mary S. Murphy.

Mrs. Dan J. Williams,

Gulfport,
December 8, 1933.

GULFPORT

President-elect of the Mississippi State Medical Association, Dr. E. C. Parker, and Mrs. Parker were in Jackson, Tuesday evening, December 5. Dr. Parker read a paper before the Central Medical Society. On December 12, they go to Brookhaven to attend the Tri-County Medical Society as honor guests, leaving in the afternoon for Vicksburg, when the annual election of officers of the

Issaquena-Sharkey-Warren Counties Medical Society, will follow a banquet.

Mrs. Henry Boswell, president-elect of the Woman's Auxiliary to the Mississippi State Medical Association was the house guest of Dr. and Mrs. Dan J. Williams and honor guest at the annual meeting of the local auxiliary. Mrs. Boswell has many friends and admirers on the coast.

Dr. W. A. Dearman of Gulfport attended the meeting of the State Board of Health at Jackson on Tuesday, December 7. Dr. Dearman is on the State Board from this district. (This is not strictly auxiliary news, but—well, let it go this time.)

Mrs. Clifton Culpepper of Honolulu, a daughter-in-law of the late Dr. S. E. Culpepper of Wiggins, is visiting her parents, Mr. and Mrs. N. P. Nason of Gulfport. Her husband, Dr. Clifton Culpepper, is practicing medicine in Honolulu.

Mrs. Dan J. Williams.

Gulfport,
December 8, 1933.

NEWS OF JACKSON

Among those attending the Southern Medical Association meeting in Richmond, Va., were Dr. and Mrs. H. C. Ricks; Dr. and Mrs. George E. Riley; Dr. Underwood; Dr. and Mrs. Noel Womack; Dr. and Mrs. Harvey F. Garrison; the latter enjoyed a trip to New York, Washington, and Baltimore.

Miss Ameer Shands has returned from Colorado where she spent several months with her family.

Dr. and Mrs. John C. Walker have announced the engagement and approaching marriage of their daughter Juanita, to Mr. Clarence Reynolds, of Louisville, Kentucky.

Plans are going forward for the Christmas Party to which members of the auxiliary are inviting their husbands.

Mrs. Harley R. Shands has returned to Jackson for the holidays.

THE WOMAN'S AUXILIARY TO THE SOUTH MISSISSIPPI MEDICAL SOCIETY

The second meeting of the Woman's Auxiliary to the South Mississippi Medical Society, since its organization in May, was held in June at Hattiesburg, the regular time of meeting being quarterly when the doctors meet, was attended by most of the enrolled members. A splendid program on activities of the various state auxiliaries was prepared by Mrs. L. L. Polk, Purvis. Mississippi report was given by Mrs. Mable Mason, Lumberton, on the Preventorium at McGee, and its founder, Dr. Henry Boswell. A most enjoyable social hour followed the program, after which the members attended dinner with their husbands. Special honor guest at the auxiliary meeting was Mrs. E. C. Parker, Gulfport, state treasurer of the auxiliary.

The next meeting will be held in Hattiesburg, December 14, Forrest Hotel.
December 4, 1933.
Hattiesburg.

THE WOMAN'S AUXILIARY TO THE HOMOCITTO VALLEY MEDICAL SOCIETY

The Woman's Auxiliary to the Homochitto Valley Medical Society held the last meeting of the year in Natchez, October 14, 1933. Natchez was hostess for the Auxiliary, entertaining at Duncan Park, where a bountiful lunch was served. After which the meeting was called to order by the president, Mrs. C. E. Mullins. We had as our guest Mrs. Henry Boswell, Sanatorium, who gave an inspiring talk on the Preventorium. Mrs. Walker of Magee accompanied Mrs. Boswell. Special music was rendered by Mrs. Enochs and Mrs. Kidd of Natchez.

Officers for the new year were elected as follows: President, Mrs. E. E. Benoist, Natchez; President-elect, Mrs. M. Beekman, Natchez; First Vice-President, Mrs. R. Smith, Natchez; Secretary-Treasurer, Mrs. C. E. Mullins, Bude.

The next meeting will be held in Natchez, in January.

Mrs. C. E. Mullins,
Secretary-Treasurer.

Bude,
December 5, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The November meeting of the Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society was held in the Monroe Room of the Hotel Vicksburg.

Mrs. Preston Herring was hostess for this lovely meeting. A delicious luncheon was served to a large number of interested members. After a short business session presided over by the President, Mrs. Sydney W. Johnston, the meeting was then turned over to the leader for the day, Mrs. Hugh H. Johnston. The members enjoyed an interesting program carefully planned for Thanksgiving time. Mrs. H. H. Haralson, Vice-President of the Anti-Tuberculosis Association, made a splendid talk on the merits of that association and its work in Warren county.

Plans were made and discussed for the annual sale of the tuberculosis seals, beginning Thanksgiving day. Miss Zita O'Leary was appointed chairman of the seal sales. The doctor's wives promised to help with the work of getting out the fifteen

The meeting then adjourned, until the annual hundred letters that were to be sent.

election of officers to be held in December.

Mrs. L. J. Clark.

Press and Publicity Chairman.

Vicksburg.

December 13, 1933.

WOMAN'S AUXILIARY TO THE ISSAQUENA-
SHARKEY-WARREN COUNTIES MEDICAL
SOCIETY

The December meeting marked the close of an outstanding year of successful work for Mrs. Sydney W. Johnston, President of Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society. This meeting at the close of the year is always a brilliant event for at that time the distinguished out of town guest speakers for the Medical Society and the local officers are guests at our luncheon. The wives of the visiting doctors are always especially welcomed at the meeting.

Mrs. J. S. Ewing served as hostess for this meeting, assisted by Mrs. F. M. Smith. Mrs. Sydney Johnston with appropriate remarks introduced the president of the local Medical society, Dr. Preston S. Herring. Dr. Leon S. Lippincott, local treasurer and secretary, the next speaker, and our very capable advisor, spoke of the good work our auxiliary is doing and assured us of his heartiest cooperation. He then introduced the out of town guests, Dr. J. W. D. Dicks, Natchez, President of the State Medical Association, Dr. Oscar W. Bethea and Dr. Thomas Benton Sellers of New Orleans, the latter two being connected with Tulane University. Each gave us a most interesting and inspiring talk. It was with the greatest respect and admiration that the doctors spoke of the high place in life that a doctor's wife occupies.

After luncheon, the busy doctors were excused, and the ladies began their business session. Minutes of the previous meeting were read and approved. Reports given, and last the report from the chairman of the nominating committee, Mrs. B. B. Martin, who presented the following names, which were elected as they stood.

President, Mrs. H. S. Goodman, Cary; President-Elect, Mrs. Laurence J. Clark, Vicksburg; First Vice-President, Mrs. D. A. Pettit, Vicksburg; Second Vice-President, Mrs. M. S. Few, Rolling Fork; Secretary, Mrs. W. H. Parsons, Vicksburg; Treasurer, Mrs. H. H. Haralson, Vicksburg, Historian, Mrs. J. S. Ewing, Vicksburg; Parliamentarian, Mrs. Charles Edwards, Vicksburg.

Mrs. Sydney Johnston presented the new president Mrs. H. S. Goodman, with the gavel, who with befitting remarks accepted the duties of office with determination and desire to carry on the work as

successfully during the coming year as it had been carried on in the past.

A rising vote of thanks was given to Mrs. Johnston for her splendid work as President.

Mrs. Lippincott then extended to all the ladies present, a cordial invitation to come to her home between the hours of 4 p. m. and 6 p. m. to meet our guest, Mrs. J. W. D. Dicks of Natchez. The meeting was then adjourned.

Mrs. Sydney W. Johnston entertained Mrs. J. W. D. Dicks, Natchez, Mrs. E. C. Parker, Gulfport; Mrs. W. C. Pool, Cary; Mrs. H. S. Goodman, Cary; Mrs. Leon S. Lippincott, Mrs. B. B. Martin and Miss Grace Golden at a picture show party, which followed a banquet these ladies had attended in the early evening as guests of the Medical Society.

Mrs. Leon S. Lippincott entertained at a tea in honor of her guest, Mrs. J. W. D. Dicks, Natchez. She was assisted by her mother, Mrs. Frances Holcomb.

Dr. and Mrs. Edley Jones and Edley, Jr. spent Thanksgiving in Canton with Mrs. Jones' mother, Mrs. Jiggetts.

Mrs. W. H. Parsons and two young daughters spent a week in Jackson with her mother, Mrs. Sparks, while Dr. Parsons attended a medical meeting.

Mrs. George Street and daughter, Polly, spent last week end in New Orleans. Dr. George Street and other daughter, Lois, spent that week end hunting on his plantation.

Mrs. John Birchett, Mrs. Laurence Clark and Mrs. W. H. Parsons returned with glowing accounts of their trip to the Southern Medical Auxiliary meeting in Richmond, Va.

Mrs. Hugh H. Johnston, and little daughter, Martha Ann, and Mrs. Sydney W. Johnston motored to Shreveport to visit Dr. Walter E. Johnston who is located there. Miss Sydney Johnston returned with them after a most pleasant visit with her brother.

Mrs. Laurence J. Clark.
Press and Publicity Chairman.

Vicksburg,
December 13, 1933.

HONOR ROLL

The following have contributed to the Mississippi Section of our Journal this month:

COUNTY EDITORS—Lucien S. Gaudet; W. C. Walker; L. L. Minor; L. B. Hudson; Wm. F. Hand; W. B. Dickins; G. S. Bryan; S. A. Majure; R. P.

Donaldson; E. L. Walker; T. P. Haney; F. M. Smith; John G. Archer; M. L. Montgomery; H. E. Frizell.—15.

SOCIETIES—Delta Medical Society, E. R. Nobles; Clarksdale and Six Counties Society, T. M. Dye; Central Medical Society, D. W. Jones; East Mississippi Medical Society, T. L. Bennett; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Issaquena-Sharkey-Warren Counties Medical Society; Northeast Mississippi Medical Society, J. M. Acker, Jr.; Pike County Medical Society, T. Paul Haney, Jr.; South Mississippi Medical Society, J. P. Culpepper, Jr.; Tri-County Medical Society, H. R. Fairfax.—10.

HOSPITALS—Chamberlain-Rice Hospital, Raymond T. Smith; Clarksdale Hospital, V. B. Harri-

son; Houston Hospital, Eva Collins; King's Daughters' Hospital, Greenville, John A. Beals; Mississippi Baptist Hospital, L. W. Long, H. D. Garrison, Jr.; Vicksburg Hospital, W. H. Parsons, W. P. Robert; Vicksburg Sanitarium, L. S. Lippincott, J. A. K. Birchett, Jr.—10.

WOMAN'S AUXILIARY—Mrs. Leon S. Lippincott; Mrs. Frank L. Van Alstine; Mrs. Dan J. Williams; Mrs. C. E. Mullins; Mrs. L. J. Clark. Notes from Jackson and the Auxiliary to the South Mississippi Medical Society were unsigned.—7.

OTHER CONTRIBUTORS—J. W. D. Dicks; W. H. Frizell; J. S. Ullman; Felix J. Underwood, Mrs. S. Kemp.—5.

GRAND TOTAL—47. THANK YOU.

HAPPY NEW YEAR.

BOOK REVIEWS

The Diseases of Infants and Children: By J. P. Crozer Griffith, M. D., Ph. D., and A. Graeme Mitchell, M. D. 3rd. ed. Philadelphia, W. B. Saunders Co. 1933. pp. 1155. Price \$10.00.

The third edition of this work, which in two previous editions was published in two volumes, is now available in a single volume, in compliance with requests from many quarters. In fulfilling this demand, the authors have in no way sacrificed the thoroughness of the previous edition. In revising the material, they state in their preface that every effort has been put forth to maintain the textbook as a reference for pediatric practitioners and writers, and at the same time to fit it for the needs of undergraduate students.

Throughout its pages there is every evidence that the authors have constantly borne in mind the importance of discussing the various phases of diseases of infants and children so that the practitioner can obtain all of the information necessary to understand the management of the ill child and the child's illness. It reflects a combination of the extensive bedside experience of the elder author, and the scientific acumen as well as the clinical observations of the younger author.

The chapters devoted to nutrition leave nothing to be desired, and while the subject is presented in a simple style no one method of feeding or type of food is recommended to the exclusion of others which modern experience has taught us fulfil the nutritional requirements. The nutritional accessories and recognized infant diet materials are adequately discussed and properly evaluated in keeping with our newer knowledge of nutrition.

The anatomy, physiology, and hygiene of early life, as well as therapeutic measures indicated in the treatment of sick children, are discussed in a most practical style. The commoner diseases of

childhood are fully discussed and our knowledge concerning them has been brought up to date, as evidenced by an extensive bibliography of the more important contributions to pediatric literature in recent years. There are few diseases, however, to which an infant or a child is heir, that are not included in this work. The text is supplemented and interpreted by numerous colored plates, photographs, and charts. Preventive pediatrics is stressed throughout the book.

It has in every way fulfilled the expectations of pediatricians who have been waiting for it, and it is going to serve the dual purpose of a text-book for students and a reference work for practitioners. The expressed ambition of the authors to create such a work in a single volume has been achieved.

ROBERT A. STRONG, M. D.

The History and Epidemiology of Syphilis: By Wm. Allen Pusey, A. M., M. D., LL.D., Baltimore, Charles C. Thomas. 1933. pp. 113, 37 illustrations.

Delivered in honor of Dr. Adolph Gehrman, pioneer epidemiologist and bacteriologist, these three lectures touch upon the high lights in the history and epidemiology of syphilis.

Lecture I is a summary of the important events in the history of the disease. As a disease it is unique in that it made its first appearance with dramatic suddenness. The most Christian King Charles VIII in 1494 invaded Italy claiming the throne of Naples. Italy, weakened by luxury and internecine strife, rendered sparse resistance, so that Charles' triumphal march was one of debauchery rather than a serious military campaign. Dissipation and disease disrupted the troops and in one year the conquering horde was dispelled by the high and mighty Dame Syphilis. It was verily a

triumph for the Queen of the Fountain of Love. They scattered all over Europe, disseminating in their wake a generous crop of pale spirochetes along the fair and fertile country sides. It was widespread in France in 1495, in Holland and Greece in 1496, in England and Scotland in 1497 and in Hungary and Russia in 1499. There is a plethora of well authenticated reports of syphilis in Europe in and after 1494, but numerous writers who have sought to discover descriptions in pre-Columbian literature, have failed. Also the absence of pathognomonic bone changes in excavated bodies has been striking. On the other hand, there is an embarrassing amount of evidence in favor of the American origin of syphilis. First of all the date of its sudden appearance is impressive, but more important is the finding of centuries-old syphilitic bones in New Mexico, Tennessee, Ohio, Peru and the Argentine. Thus the disease, which the French call the Italian disease, and the Russians call the Polish disease, etc., should probably be called the American disease.

Lecture II deals with the less dramatic but more significant history of the growth of the knowledge of syphilis. In 1498 Bartholomew Steber wrote a learned treatise on syphilis. There followed an enormous output of syphilographers which indicated, according to Garrison, not only activity in the study of syphilis, but also activity in the whole field of medicine. In 1530 Paracelsus suggested hereditary transmission, and later he prescribed mercury for treatment (1568). Fracastor, in his poem "Syphilis sive Morbus Gallicus," published in Venice (1530) named his hero syphilis from *συσ* (swine) and *φίλος* (lover). Although the chancre early was recognized as the initial lesion of syphilis and was separated from gonorrhoea and chancroid, by the middle of the 16th century there was great confusion in differential diagnosis due to the incorrect teaching of Paracelsus who had called syphilis "French gonorrhoea." Morgagni made extensive studies of morbid anatomy and described with amazing conclusiveness syphilis of all the internal organs. Fallopio, Jean Fernel, Ambroise Paré, Valsa, Astruc, van Swieten, Boerhaave, Balfour, Benjamin Bell and many another giant in medicine made important contributions to the understanding of syphilis. Unfortunately, Hunter, who dominated the field in 1767, muddied the waters, and forced his misconceived notions on countless disciples. Gonorrhoea and syphilis were one disease, hereditary and extragenital transmission did not exist, claimed he. For more than 50 years his influence was felt until Ricord clarified the situation (1837) and paved the way for the development of modern school of syphilology.

Lecture III deals with the epidemiology of syphilis and in order are considered the reservoir of

infection, the infecting organism, the susceptible host and the means of transmission.

MAURICE SULLIVAN, M. D.

Textbook of Neuropathology: By Arthur Weil, M. D. Philadelphia. Lea & Febiger, 1933. pp. 335. Price \$5.00.

This admirable textbook is presented in a very handy octavo size. It contains much more useful information than its size would indicate, as the subject material is presented in a very concise form for the student of neuropathology and neurologist alike. Nearly all of the photographs and microphotographs are excellent, enhancing the value of the book. The various staining methods used on the tissue sections reproduced in microphotographic form have been thoughtfully included in the appendix. The book is heartily recommended to all who would approach this subject from the microscopic, chemical and physical viewpoints or who desire a rapid review of the essentials and recent advances of neuropathology.

K. Hosor, M. D.

International Clinics, September, 1933. Lippincott, 1933. pp. 316.

In the reviewer's opinion, this volume is one of the best of the better books devoted to the review of medicine. The present volume maintains the high standard that characterizes its predecessors. A detailed review is impossible in the small space allotted. Subjects of great value and importance are to be found. A symposium on the parathyroid, a splendid clinico-pathological conference on jaundice and essays on infectious mononucleosis and agranulocytic angina are several of the features of the book.

I. L. ROBBINS, M. D.

Report to the U. S. Government on Tuberculosis, with some Therapeutic and Prophylactic Suggestions: By S. Adolphus Knopf, M. D. New York City. National Tuberculosis Association, 1933. pp. 59.

A concise, detailed report of the International Congress devoted to Tuberculosis is the *raison d'être* of this book. In it the author takes the privilege of airing some of the ideas to which he has devoted many years of study, principal among which is his diaphragmatic respiration. To those interested in medicine and particularly pulmonary tuberculosis, it will prove of value since it gives the opinions of world-famous authorities, including the author, on some of the recent important advances in the study of the disease.

I. L. ROBBINS, M. D.

Behind the Doctor: By Logan Clendening, M. D.
New York, Alfred A. Knopf. 1933. pp. 458, 148
illustrations. Price \$3.75.

A popular presentation of such a subject as medical history seems like an almost impossible task, yet Dr. Clendening has done just this. He has presented the most important phases of medical history from the dawn of time down to the present day and he has described the epoch-making contributions to medicine in a light, jovial and at times facetious manner. Although some might object to the handling of such a dignified subject as medical history in this light and airy way, nevertheless the subject matter as it is presented is certain to attract the general public and even for the doctor makes readable a branch of medicine which he might consider more or less as a chore to go over. The savant might criticize the style of presentation but it is most certainly enjoyable and most decidedly intimate. Dr. Clendening's arch comments on many of the revered features of the past are often most amusing. These comments may at times seem a little forced as if an effort was being made to interest and also just a bit too animated to ring entirely true. Despite these minor criticisms Clendening has brought out a book which is going to be successful and one which is thoroughly reliable. A medical historian of note and a student of medical history who has the happy faculty of being able to write cannot do otherwise than bring out and publish a successful volume on his pet hobby.

J. H. MUSSER, M. D.

Recent Advances in Pathology: By Geoffrey Hadfield, M. D., F. R. C. P., (London) and Lawrence P. Garrod, M. A., M. B., B. Ch. (Camb.) M. R. C. P. (Lond.). Philadelphia, P. Blakiston's Son & Co., Inc., 1932. pp. 392.

The title of this book, in the reviewer's opinion, is somewhat misleading, inasmuch as some of the data dates back to 1905 and beyond. It is quite true, however, that the bulk of reviewed work covers the past five to ten years. Perhaps a more accurate title would be "Modern views or concepts of pathology" in that the text deals with the modification of old views and adds much of the experimental pathology that has been published in the last decade.

In this connection, it must be realized that subsequent to the discovery of the fundamentals or basic principles of pathology but little remains to be added excepting the data produced through experimental pathology including observations on cytology.

The authors have set forth quite clearly the present day status of the pathology of most of the systems and on the etiology of the neoplasia. The chapters on cardio-vascular lesions, on the kidneys and on the central systems are particularly good.

The illustrations (67) are reasonably good and as a whole demonstrate the tissue changes satisfactorily.

The information contained herein forms a useful reference book for the progressive clinician. From the standpoint of the pathologist however, it represents to a large extent standard information long since published in our journals and referred to in our texts.

WILLIAM H. HARRIS, M. D.

Manual of Urology: By R. M. Lecompte, M. D., F. A. C. S. Baltimore, William Wood & Co., 1933. pp. 317. Price, \$4.00.

A short and condensed manual of urology in which discussions, opinions, case reports, and personal experiences are omitted with the object of saving the student or practitioner the necessity of assimilating matter which is not of basic importance. Practically the entire urological field, exclusive of surgical technique, is covered in the short space of 272 pages.

Since it is felt that the reading of discussions and personal experiences helps one to retain important points in his mind, it is quite difficult to see how this manual, giving the bare fundamentals in briefest form, can be recommended for general usage.

CHAS. D. EHLERT, M. D.

PUBLICATIONS RECEIVED

The Macmillan Company, New York: Diet and Personality, by L. Jean Bogert, Ph. D. Hygiene of the Mind, by Baron Ernest Von Feuchtersleben, translated from the German by F. C. Sumner, Ph. D.

J. B. Lippincott Company, Philadelphia: International Clinics, by Louis Hamman, M. D. Volume IV.

Eugenics Publishing Company, Inc., New York: The Pregnant Woman, by Porter Brown, M. D.

Doubleday, Doran & Company, Inc., New York: Red Medicine, by Sir Arthur Newsholme, K. C. B., M. D., and John Adams Kingsbury, LL.D.

American Medical Association, Chicago: Quarterly Cumulative Index Medicus, by Morris Fishbein, M. D., Majorie Hutchins Moore, and Magdalene Freyder.

Charles C. Thomas, Springfield: Benign Tumors in the Third Ventricle of the Brain: Diagnosis and Treatment, by Walter E. Dandy, M. D.

New Orleans Medical

and

Surgical Journal

Vol. 86

FEBRUARY, 1934

No. 7

THE SURGICAL ETHIC IN MALIGNANT DISEASE*

By

URBAN MAES, M. D.†

With

ELIZABETH M. McFETRIDGE, M. A.

NEW ORLEANS

There can be no general rule for the treatment of malignant disease in all parts of the body any more than there can be a general rule for the treatment of malignant disease in any special part of the body. The patient, as in all therapeutics, furnishes the first variable and his disease furnishes the second. It can, however, be stated categorically and absolutely that surgical excision is still the ideal method of treating cancer in all locations, even though other methods are frequently more expedient. For surgery is the single agent which entirely eradicates the disease. It is the single agent whose forces can be completely controlled. It is the single agent whose destructive capacity can be adequately gauged.

That does not mean, of course, either that surgery can always be employed or that it should always be employed. For one thing, taking them as they come, in half and more of all cases when they are first seen the malignant process has reached the stage where surgical removal is an anatomic and physiologic impossibility. For another, surgery is always the lesser of two alternatives, both of which are evil. It has the defects of its merits. Inherent in it is the risk that it may be more promptly fatal, if not more inevitably fatal, than the cancer itself. It

is quite possible by heroic measures to cure the disease and kill the patient, and the mortality of cancer must not blind us to the possible mortality of its treatment.

Furthermore, aside from the other risks that surgical treatment involves, particularly the grafting of cancer cells upon freshly cut surfaces and their dissemination through lymphatic and vascular channels, is another equally cogent even if less practical consideration, that surgery may leave the patient so anatomically or functionally mutilated that he becomes perforce a social outcast for whom life is not worth the great price with which it was purchased.

"At the door of life, by the gate of breath,

There are worse things waiting for men than death."

For the surgical principle that must be applied in malignant disease is altogether destructive. There is nothing constructive about the operative act. It consists of two essential parts, wide removal of the primary or central malignant focus, plus wide removal of the adjacent lymphatic and vascular supply. The natural tendency in cancer is not, as in most other diseases, toward recovery, it is toward death, and a mortal enemy must be fought with his own weapons. In cancer, therefore, there can be no conservative operations or half-way measures. In this disease the surgery that gives life is the surgery that destroys, that is ruthless and merciless, that uproots all structures that are not vital, that ablates all function whose ablation is not incompatible with life.

Now surgery of this sort ought not to be undertaken without a due sense of all that it implies. The surgeon who undertakes it must be of more than the average ability, must be able to do radical surgery with as much safety

*Read before the Orleans Parish Medical Society, October 23, 1933.

†From the Department of Surgery of the Louisiana State University Medical Center.

as radical surgery can be done. The surgeon who undertakes it must steer a middle course between "vacillation and vagrancy of mind" on the one hand and light-hearted recklessness on the other. Forgetful of his own reputation, concerned only with the welfare of his patient, he must decide, on the merits of the individual case and in the light of his own experience and the accumulated experience of others, whether to institute the surgical procedure that will eradicate the disease, or the surgical procedure that will merely alleviate the symptoms because it is too late to treat the disease, or some substitute curative measure, or to refrain from all treatment except such as will smooth the patient's path to the grave.

The surgeon's first duty in malignant disease is to be certain that he is really dealing with malignant disease. From the scientific standpoint biopsy is desirable in every case, from the practical standpoint it is unnecessary in the vast majority, for the victims "carry the candle of death in their hands" and whoever runs may read. In the early case, however, which is at the same time the doubtful case and the curable case, any method of treatment not based upon microscopic evidence is as unscientific as it is unsafe. The first purpose of biopsy is not to confirm the diagnosis of malignant disease but to make the distinction between benign and malignant disease, which is not always as simple as it sounds. You will recollect Lord Moynihan's classic essay on the mimicry of malignant disease in the large intestine: within the last week a patient came to autopsy upon whom I had done a colostomy for an apparent malignancy of the rectum; it was the only treatment possible under the circumstances, for his obstruction was almost complete, but the postmortem showed that in reality he had a diverticulitis, inoperable, it is true, because of neglect, but still essentially benign. One has only to remember the numbers of women once subjected to lethal operations for the supposed malignancy of the recto-vaginal septum which now, owing to the work of Sampson, is recognized as endometriosis and benign, to realize how exceedingly important this differentiation is. Biopsy is the final diagnostic word, and its negative value is as great as its positive value. To proceed to radi-

cal treatment, with all that radical treatment implies in the way of morbidity and mortality and ablation of function, without indisputable evidence of its necessity is almost as culpable as to fail to diagnose malignancy at all.

The prognostic and therapeutic helpfulness of biopsy, as well as the technic of its performance, have no place in a general paper of this sort, but the relations between the surgeon and the pathologist most certainly should be emphasized. The more the surgeon knows about pathology, says Wolbach, the less he needs the pathologist, but the more often does he use him, and the more intelligently does he use him, and he goes on to point out, with equal correctness, the evils of "long-distance pathology." The pathologist belongs in the operating room, by the side of the surgeon, not at a desk in a laboratory several floors away. He should have the opportunity of seeing *in vivo* the structures he must later pass upon. He should have something to say in the selection of the specimen and in the method of its excision. He should be supplied with all the clinical data that is available, for under no other conditions can he do his best for the patient. Finally, while the surgeon should never operate merely because the pathologist tells him to, any more than he should operate merely because the radiologist or internist tells him to, he should be very sure of his ground when he disregards the therapeutic suggestions of a competent pathologist with a clinical mind or when he flies in the face of his advice.

Biopsy of the inaccessible regions of the body necessitates surgical exploration, and that brings us to another grave responsibility of the surgeon in malignant disease. How certain should he be of the diagnosis before he advises operation? Not at all certain, I would say, remembering Moynihan's pithy aphorism, that in malignant disease the certainty of diagnosis is also the certainty of death, and agreeing, as I do, with Francis Carter Wood's statement that the most successful cancer operations are always exploratory in principle.

Clinically the decision for or against surgery should rest upon three things, the general condition of the patient, the estimated extent of his local disease, and the probable existence of

metastases. But the poor risk patient is very often a justifiable candidate for surgery, and the last two points can be fully determined only when exploration is undertaken. The criteria for surgery are undoubtedly correct, but if they be strictly adhered to, many patients with intraabdominal malignant disease would lose even the gambler's chance they are sometimes given now. They are frankly bad risks, their disease is of long-standing, the existence of metastases can well be presumed, but the surgeon who withholds surgery from any patient whom the mere act of operation is not likely to kill takes upon himself a very heavy load of responsibility. There is always the chance, even if it be a dubious chance, that the clinical evidence may be wrong, always the chance, even in the most hopeless-seeming case, that something can be done for comfort even if nothing can be done for cure.

It is often the duty of the surgeon, I would say, to stay his surgical hand, to weigh the good he may do by carrying out the procedure he has planned against the harm he may achieve by so doing. Operations for rectal carcinoma form a case in point. The Miles one-stage operation produces from 50 to 60 per cent of 5 year cures, but at the price of a mortality almost as high, while two-stage operations give a smaller percentage of cures, but with a far lower initial mortality. These are the results of the average surgeon, it is true, but the brilliant results achieved by surgeons of exceeding ability and vast experience should not tempt the rank and file of surgeons, who do most of the surgery and whose ability and experience are far more limited, to take unjustifiable chances in a field in which any surgery is serious. Furthermore, as Coffey points out, the colostomy which can convert the poor risk into a good one should in all fairness be applied to the patient who is not handicapped, to make him an even better risk than he already is, since in a final life and death contest time is of no particular consequence.

In gastric surgery, on the other hand, the situation is different. Gastroenterostomy is a less radical procedure than gastrectomy, but the results of the latter, even in advanced cases, are frequently so much better than the results of

the former, and the difference in the immediate mortality is so slight, that the surgeon is often justified in choosing it in preference to the short-circuiting operation. These are specific instances, but the general point I would make is that no surgeon has the moral right to undertake procedures of such gravity without fully weighing what the consequences, initial and remote, may be.

Surgical excision is, as we have said, the ideal treatment of cancer, but there is no field of disease in which its limitations are so clearcut. Its manifold failures may be all in the day's work, my results and yours may be no worse than other men's, but that comfort is curiously cold to the surgeon as well as to the patient, especially if, as sometimes happens, we cannot escape the conviction that by surgical interference we are merely hastening the fatal end, are merely making the termination more dreadful than it would otherwise have been.

The alternative to surgery was once throwing up our hands in utter helplessness and defeat, and by the admission that we could do nothing at all for them, taking from the miserable men and women who sought our aid the last vestige of courage, but that alternative no longer confronts us today, when in radium surgery has an ally which supplements it when it does not supplant it entirely, which succors even when it cannot cure. Radium has done as much to mitigate the lot of the surgeon as the suffering of the patient.

Cancer of the oral cavity perfectly illustrates this point. It is particularly likely to be treated by mutilating surgery because it is particularly resistant to any sort of surgery. Now all of my professional life I have taught and practised that mutilating operations rarely do anything but add fresh terrors to death; I have never resorted to them except as a frank counsel of desperation, even when that course laid upon me the chastening duty of explaining to some sorely afflicted human being that nothing that I could do for him would be likely to help him permanently, that whatever I did for him would be likely to hurry him to his grave, that the only surgery possible for him was the surgery which would make of him a horror to himself and others. But that day is mercifully past. I

must still only too frequently say to some patient that I greatly fear that whatever I may do for him can have but slight effect on the ultimate outcome of his disease. But I can also say, with a fair degree of confidence, that even though I may not be able to cure him by a simple surgical procedure, ligation of the external carotid arteries, plus an equally simple application of radium, I can probably prolong his life, I can undoubtedly make him more comfortable, and I positively can spare him the hideousness of the mutilating surgery which was once all I could have offered him. I question whether we fully realize the psychologic effect of such an assurance for the patient with cancer, but I can testify to its value for the surgeon.

In some varieties of cancer radium has, and rightly, almost entirely displaced surgery. Cancer of the cervix is an example. Jones of the Cleveland Clinic has recently analyzed the statistics of the radical operation and has shown that Wertheim's own figures really mean that by this method of treatment only 9 out of every 100 patients with this variety of malignancy are likely to be alive at the end of 5 years. Ward and Farrar, on the other hand, with an estimated operability only half as high as Wertheim's, have by the use of radium achieved a curability of 57 per cent for their early cases, of 25 per cent for all cases, and of nearly 18 per cent for their advanced cases, that tragic group of women for whom surgical procedures could not possibly be considered. This is the record of unselected cases, based on the sort of "hard-boiled" follow-up recommended by the late John B. Deaver, and achieved with a primary mortality of less than 1 per cent as opposed to a surgical mortality in selected cases that runs from a minimum of 10 per cent in the hands of masters to several times that figure in the hands of less able men. If radium had nothing else to its credit, there could be set down in its favor that it spares the young surgeon what Julian Smith calls the "soul strain" of mastering such an operation, and that it spares his patients the heavy initial mortality he is bound to have while he is acquiring his experience.

The results of radium vary, of course. Keynes

may be correct in his caustic comment that its results in mammary carcinoma would have to be very poor indeed to be worse than those of surgery, but in spite of what he has personally accomplished by irradiation alone, most of us, I think, until the signs are clearer, will continue to do the radical operation and to use radium only as an adjunct measure. Sir Charles Gordon Watson has pointed out what irradiation can accomplish in rectal malignancy, but he still preaches, and rightly too, that the disease is surgical whenever surgery can be done, and that radium, at least for the present, is an antecedent to surgery or a supplement to surgery, but an independent measure only when surgery is impossible. Even Forssell, whose whole professional life has been spent in working with radium, preaches and practises that irradiation must be combined with some surgical procedure in two-thirds of all cases if it is to accomplish its maximum results. The use of radium and surgery in combination, or the substitution of irradiation for surgery, is the clear duty of the surgeon whenever either plan promises to give results as good as or better than surgery alone can offer, if for no other reason than that the application of radium carries with it no such initial mortality as is inevitable when radical operation is done.

Finally, there must be a new deal for the "forgotten man," as Alvarez calls him, the hopeless cancer patient. Much more can be done for him than is usually done. Nerve sections for pain, as well as alcoholic injections, should be done more frequently than they are. Procedures to relieve visceral obstruction, indirect and incomplete though they be, are often worth the inconvenience and risk that attend them. Even removal of the primary focus in the face of widespread metastases is sometimes worth doing, for it always increases comfort and it occasionally holds the disease in check for a surprisingly long time. The relief of pain, as Moynihan so comprehendingly says, is often quite as important as rescue from impending death. The duration of life is only one aspect of surgery in malignant disease; freedom from pain and suffering is just as important a consideration, even though it cannot be set down in the statistical tables, and it should be weighed

against the mortality which an attempt at relief so often brings to pass. "Guerir quelquefois, soulager souvent, consoler toujours." to cure sometimes, to relieve often, to comfort always, should be the aim of every surgeon who treats cancer and whose responsibility the cancer patient always is until he is "relieved by art or released by death."

THE CONSTITUTION OF THE CANCER PATIENT*

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A critical review of the results of experimental cancer research of recent years brings forth one observation which seems to me to be of the utmost importance, namely, that the results obtained by various investigators using the same method of producing cancer, differ more from each other than do the various results obtained by various workers in any other biological experiment.

A few examples may illuminate this statement. Tar, the classic cancer medium, does not produce the same results in all animals. Yamagiva and Itchikawa, Bloch and Dreifuss, reported nearly 100 per cent results from their experiments on a series of rabbits and mice. Mertens, Lewin, Borst and many others, however, obtained positive results in only a small percentage of cases. The species and race of the animal are important factors. Rats, guineapigs, and chickens are far less susceptible to tar cancer than are rabbits and mice. The white mouse is more susceptible than the spotted variety, the dark rabbit has a greater susceptibility than the white one. Murray emphasizes that the time elapsing between the tarring of the animals and the appearance of the cancer may vary from fourteen days to several years in the same series of experiments. Borst's explanation of this great variation is that some endogenous factor exists which influences the experiment differently in the case of each individual animal. Reding believes this endogenous influence to be of outstanding im-

portance, and cites the experiments of Deelman and van Erp and others who could produce a malignant growth by means of simple burns in animals previously treated with tar or arsenic. Borst found that tar cancer could be produced in a higher percentage of cases in animals fed with cholesterol or lanolin. These and similar experiments forced Reding to the conclusion that the essential factor in the production of experimental cancer is presented by the susceptibility of the individual animal, which in turn depends upon the constitution of its organism.

The same conclusions can be drawn from experiments with engrafted tumors. Many animals have been found to possess a high degree of natural resistance to the inoculated malignant cell. Transplantation of tumors to animals of a different species is extremely difficult and the tumor is usually absorbed in a short time. Ehrlich's explanation of this natural immunity of some animals is that they lack specific nutritive media for the growth of the tumor. (Atreptic theory). Murphy sees a reaction of the reticulo-endothelial system as the reason for tumor immunity. The importance of the species of the animal is also evident from the report of Roffo who could transplant a certain spontaneous rat tumor only in animals of the same stock. Even the various organs and tissues in the same animal react differently to the same inoculated tumor. This varying susceptibility is stressed by Levin as an influential factor in metastasis.

The importance of the endocrine system of the host for the development of engrafted tumors is emphasized by Fraenkel and Engel. A great deal of work has been done in this direction but the observations of the various authors are so variable that no conclusions whatsoever can be drawn from the results. The hormones of the sex glands, adrenals, thyroid, hypophysis and parathyroids have been found alternately to inhibit and accelerate the growth of engrafted tumors. The correlation between vago-sympathetic tonus and experimental cancer which is stressed by Reding, Meyer and others still lacks the necessary proof.

*Read before the Orleans Parish Medical Society, October 23, 1933.

Of outstanding importance for our knowledge of the endogenous factors in experimental cancer research is the work of Loeb, Maud Slye and others who studied the influence of heredity on cancer susceptibility and cancer resistance. On the basis of extensive observations, Maud Slye came to the conclusion that cancer resistance is a dominant hereditary unit, cancer susceptibility a recessive hereditary unit, and that both follow the Mendelian law. This observation can be proven equally well by means of experimentally produced tumors as with spontaneous carcinoma and engrafted tumors in mice. The litters of hybrids carrying cancer susceptibility as a recessive factor showed up to 25 per cent absolute resistance to the development of a malignant tumor. In 50 per cent the recessive factor of susceptibility continued to be latent, and in 25 per cent the inherited disposition led to the development of cancer. The ratio of absolutely cancer-resistant individuals to persons susceptible to cancer is therefore 1 to 3.

The importance of Maud Slye's work is obvious. The predisposition to cancer, indicated so often in the literature, and its hereditary basis, have been proven. Whether this predisposition consists in the presence of abnormal or immature cells (Cohnheim's theory) or in an humeral influence upon normal cells is unknown. The results of experiments with tar cancer and engrafted tumors permit the acceptance of either theory.

Opinions are divided regarding the importance of a predisposition to cancer in the human. Elsner accepts a constitutional basis for all cases of cancer in which clinically no chronic irritation can be found. Lewin warns against overestimation of the constitutional factor and emphasizes that our knowledge concerning irritating factors is still very limited. Any undiscovered bacterial infection must be regarded as chronic irritation. Constitution alone can be accepted as an etiologic factor in human cancer only in rare cases such as xeroderma pigmentosum in which sunlight is sufficient to produce a malignant growth. Willy Meyer sees in the constitutional unbalance of the endocrine-nervous system the factor of chronic irritation.

It is evident that the only reliable basis for

studying the problem of predisposition to cancer in the human is offered by statistics. From a study of these we come to the same conclusion as is arrived at from a review of the experimental statistics namely, that race, age, and living conditions have a certain influence upon the distribution of cancer. We know that the disease is rare among the wild tribes of Africa and among the American Indians although cases have been reported (Goebel, Levin). Italy has the lowest mortality rate from cancer. Switzerland has the highest (Lewin). Peller reports that only six deaths from cancer occurred among 10,000 Americans whose mothers were Italian, and twelve deaths among 10,000 Americans whose mothers were Irish. Peller observed also that the incidence of cancer among the white race is much higher than among the colored race.

The frequent occurrence of cancer in individuals of advanced age is a well-known fact. Opinions are divided as to the reason for this. Experiments on young animals contradict the constitutional factor and Fibiger is of the opinion that the long period of time necessary for the development of a malignant growth explains the occurrence of cancer in later life. Freund and Kaminer, however, found that the serum of old people loses the power to dissolve cancer cells, and stress the constitutional factor. Nather and Orator confirm those findings and give the forty-fifth year as the border-line beyond which 75 per cent of the examined sera show no ability to dissolve cancer cells. Elsner, Rohdenberg and others believe that in old people a disturbance in the salt metabolism on an endocrine-nervous basis takes place, thus constituting a condition favorable for a malignant growth.

Statistical observations regarding certain forms of cancer associated with certain modes of living and occupations of patients are interesting. Common examples are: the lip carcinoma of pipesmokers (v. Hansemann), the esophagus carcinoma in Chinese (Bashford), the abdominal skin cancer in Kashmir (Neve), the cancer of scrotum and bladder in chimney-sweepers, tar workers and anilin workers (Ross). Although chronic irritation must be recognized as the important cancer-producing

factor, the comparatively infrequent occurrence of cancer among people exposed to this irritation compels us to believe in the existence of some endogenous factors which predispose to the development of a malignant growth. More impressive is the presence of a specific cancer disposition in cases in which one single injury led to the development of cancer although those cases are disputed by many authors. The irritation factor alone is not sufficient to explain why tumor formation in these instances is so rare.

The problem of heredity in human cancer can not be satisfactorily studied from statistics alone (Slye). We know of the existence of cancer families, of identical cancer in twins, but who can discriminate between rule and coincidence? Von Hansemann mentions the example of peas thrown over a surface which is divided into small squares. Some of the squares will show several peas, some of them none. Wood is very skeptical as to the importance of heredity in human cancer. It is my belief that the experimental results of selective breeding (Slye and others) give a greater significance to the so-called cancer family than pure coincidence, and I agree with Boyd who sees in the frequent occurrence of one type of tumor in the same family for several generations a strong hereditary disposition to cancer.

These and numerous other examples from experimental and statistical literature demonstrate that the existence of a predisposition to cancer represents a logical fact and that it is an important etiological factor in the disease. We have seen further that it can be inherited or acquired and that it is influenced by race, age and evolution of the individual. The factor of chronic irritation, once believed to be the main principle of cancer, has become less important since we know that many agents may produce cancer but do not necessarily do so. Our experience teaches us also that there is no specific correlation between the external factors and the type of tumor.

The term "precancerous lesion" has been introduced to characterize some conditions, usually a chronic inflammatory process, which may lead to cancer. It is my belief that this definition can be easily dispensed with, since

every type of lesion is potentially a malignant growth. A correct decision as to whether a certain type of lesion is of a precancerous nature can be made only after we have ascertained whether the patient has a disposition to cancer.

Many efforts have been made in recent years to define the symptoms and stigmata of the individual with a predisposition to cancer but none of the data which are supposed to differentiate the cancer-susceptible from the cancer-resistant individual have remained undisputed, and the nature of predisposition to cancer is still obscure.

The reason for our failure to solve the problem of cancer disposition might be said to be two-fold: (1) the choice of material and (2) the choice of methods. Nearly all the observations and investigations have been made on individuals afflicted with severe and often inoperable cancer. It is evident that many humeral changes are merely a consequence of the existing growth and have nothing to do with a specific constitution. We could, for example, prove that the increased phosphorous quotient which has been stressed by Groebly as an important constitutional factor appears also in the blood during the course of Rous sarcoma, and that it is evidently caused by the growing tumor (Haam and Stoehr). Those secondary changes however, produced by the growing cancer itself depend upon the size and nature of the tumor and must not be mistaken for constitutional symptoms.

The material of choice would be the organism in which no evidence of cancer is present but in which a disposition toward malignant disease can be strongly suspected according to our general knowledge. Twins or close relatives of cancer patients offer the best material for the study of cancer susceptibility because of the inherited disposition. These individuals should be compared with members of cancer-free families. With this consideration in mind, I examined the blood of 100 relatives of cancer patients for its mineralogic content (potassium, calcium, phosphorus and sodium), its viscosity and surface tension and for its morphological blood picture. The results of my investigation did not permit any conclusions to be drawn as to

an existing cancer disposition, and I realized the inadequacy of my method of working. The strictly biochemical methods used by myself and by the majority of workers give only humeral changes as possible signs of an existing cancer disposition. This, however, is a dangerous basis from which to draw conclusions, since we know very little about the normal fluctuations of humeral values and their dependence upon exogenous factors.

Biochemical methods alone, although very helpful, will never discover and explain the complexity of organic conditions and correlations which form the disposition to cancer. This can be accomplished only by a systematic study of the constitution of the individual. The methods adopted by the school of constitutional medicine are anthropometric measurements, pharmacodynamic and psychological tests completed by the study of personal and family history. An exact determination of the endocrine formula of the individual is very important. Draper divides the methods of the study of constitution into anatomical, physiological, psychological and immunological examinations, the correlation of which gives us a "clear understanding of form and function of mind and body, their strength and weakness, and susceptibility to disease." By means of serial frequency curves, the normal constitution and its variability can be determined and separated from the types of constitutional anomalies. This constitution is determined, according to Pende, by inherited characteristics and their variations during the evolutionary stage and is composed of morphological, dynamic-humeral, and psychic intellectual factors.

Constitutional anomalies present a potential disease condition (diathesis or disposition) and may be distinguished by the fact that physiological stimuli produce truly pathological conditions. Pende distinguished, from a practical standpoint, six different dispositions including a heredo-neoplastic diathesis. Most of the theories which have been formulated regarding the constitutional characteristics of the tumor disposed have a purely speculative basis. Some authors consider the apoplectic type to be cancer disposed, and Fichera emphasizes hyper-

genitalism as the main factor in neoplastic diathesis.

Numerous investigations will be necessary for the full recognition of cancer disposition or predisposition. Constitutional medicine seems to me to offer a more promising solution of the problem than any other method. The correlation of various methods before drawing final conclusions is an excellent means of discovering new facts and avoiding errors which the use of one or the other method alone would inevitably bring forth. An editorial in the *American Journal of Cancer* (17:154-156, 1933) stresses the inadequacy of the present method and the sad outlook of the so-called rabbit method of research. Constitutional medicine suggests many new ways to attack the problem of cancer, and whether they are successful or not, they are worthy of a trial.

CONCLUSIONS

1. The results of experimental research and the study of statistics regarding cancer in the human demonstrate the existence of an individual predisposition to cancer.
2. The nature of this cancer disposition is not known, except for the fact that it follows certain hereditary laws.
3. The present methods of studying the problem of cancer predisposition are open to criticism, and it is suggested that the science of constitutional medicine may offer a solution to the problem.

BIBLIOGRAPHY

1. Bashford, E. F., Murray, J. A., and Bowen, W. H. Third Scientific Report on the Investigations of the Imperial Cancer Research Foundation, London, Taylor and Francis, 3:284-314, 1908.
2. Bloch, B., and Dreifuss, W., *Experimenteller Teer krebs*. Schweiz. med. Wchnschr. 51:1033-1037, 1921.
3. Borst, K., *Allgemeine Pathologie der malignen Geschwulste*. Leipzig, Hirsch, 1924, pp. 57-127.
4. Boyd, W., *Textbook of Pathology*, Lea and Febiger Philadelphia, p. 233.
5. Deelman, H. T., and van Erp, T. P., *Beobachtungen an experimentellem tumorwachstum*, Ztschr. f. Krebsforsch. 24:86-98, 1926.
6. Draper, G., *Human Constitution*, Saunders, Philadelphia, 1924, p. 42.
7. Ehrlich, P., Cited by Lewin: *Die Aetiologie der Boesartigen Geschwulste*. Springer, Berlin, 1928, p. 157.
8. Elsner, H., *Growth of tumors and endocrine system influence of extracts of endocrine glands on growth of tumors*. Zeitschr. f. Krebsf. 23:28-44, 1926.
9. Engel, D., *Organotherapy of malignant disease*. Zeitschr. f. Krebsforsch. 19:339-380, 1923.
10. Fibiger, T., Cited by Lewin: *Die Aetiologie der malignen Geschwulste*. Springer, Berlin, 1928, p. 130.

11. Fichera, L., I fattori interni nello sviluppo Dei Tumori. Melano, Hoeppli, 1933, p. 147-152.
12. Fraenkel, M., Roentgen irradiation of carcinomas; effect of stimulating doses in increasing cell functioning. Deutsche med. Wchnschr. 47:1396, 1921.
13. Freund, E. and Kaminer, G., Biochemische Grundlagen der Disposition fur Carcinom. Springer, Berlin, 1925.
14. Goebel, C., Cancer in the tropics. Deutsche, med. Wchnschr. 48:1541-1543, 1922.
15. Grobly, W., Ueber den relativen Phosphorgehalt des Blutes; eine Studie zur Biologie des Karzinoms. Arch. f. klin. chir. 115:261-274, 1921.
16. Haam, E. and Stohr, R., Uber den Phosphorgehalt des Blutes beim infektiösen Huhner-sarkom (Peyton-Rous), Biochem. Ztschr. 220:399-419, 1930.
17. Hansemann, von, D., Das Problem der Krebsmalignitat. Ztschr. f. Krebsforsch. 17:172-191, 1919-20.
18. Levin, I., Cancer among the American Indians and its bearing upon the ethnological distribution of disease. Ztschr. f. Krebsforsch. 9:422-435, 1910.
19. Levin, I., The mechanisms of metastasis formation in experimental cancer. J. Exper. Med. 18:397-405, 1913.
20. Lewin, C., Die Aetiologie der Boesartigen Geschwulste. Springer, Berlin, 1928, pp. 119-181.
21. Loeb, L., Causes and Definition of Cancer. Am. J. Med. Sc., 159:781-802, 1920.
22. Mertens, E., Tar cancer in mice. Zeitschr. f. Krebsf. 21:494-501, 1924.
23. Meyer, W., Cancer. Paul Hoeber, New York, 1932, pp. 189-253.
24. Murphy, J. B., The Lymphocyte in Resistance to Tissue Grafting, Malignant Disease and Tuberculous Infections. Monog. of the Rockefeller Inst. of Med. Res. Nr. 21:1-168, New York, 1926.
25. Murray, J. A., Primary and secondary resistance to induction of cancer. Lancet, 2:159-163, 1923.
26. Nather, K., and Orator, V., Refractometrische Serumuntersuchungen uber Krebskrankhen und Disposition. Mitt. a. d. Grensgeb. d. Med. u. Chir. 35:611-636, 1922.
27. Neve, E. F., Squamous celled epithelioma due to kangri burn. Indian M. Gaz. 59:341-344, July, 1924.
28. Peller, S., Frequency of cancer and question of its increase. Zeitschr. f. Krebsforsch. 22:317-358, 1925.
29. Pende, H., Constitutional inadequacies. Translated by S. Naccarati. Lea and Febiger, New York, 1928, pp. 84-103.
30. Reding, R., Le Terrain Cancerem et cancerisable. Masson Co., Paris, 1932, pp. 16-32.
31. Roffo, A. H., Sur le role du facteur race dans la transmission du cancer chez le rat; transformation progressive d'une race non receptive en receptive. Compt. rend. Soc. de biol. 83:968-970, 1920.
32. Rohdenburg, G. L., Bullock, F. D., and Jonuston, P. J., The effects of certain internal secretions on malignant tumors. Arch. Int. Med. 7:491-499, 1911.
33. Ross, H. C., Occupational Cancer, J. Cancer Res. 3:321, 1918.
34. Slye, Maud, Relation of pregnancy and reproduction to tumor growth; incidence and inheritability of spontaneous tumors in mice. J. Cancer Res., 5:25, 1920, (Resume)
35. Wood, F. C., Textbook of Pathology. Delafield and Prudden, New York, Vol. I, 1931, p. 398.
36. Yamagiva, K., and Itchikawa, K., Experimentelle studie uber die Pathogenese der Epithel-geschwulste. Virchow's Arch. 233:235, 1915.

THE ROLE OF THE ROENTGENOLOGIST IN MALIGNANCY*

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The prime essential in any consideration of the relationship of roentgenology to malignancy whether in its diagnostic or therapeutic application must be that our particular specialty of medicine is but a part, however important, in the proper general scheme of medical attack of the problem. By this statement it is desired to emphasize that no matter how valuable a part roentgenology may seem to play, in reality that part is of little moment unless equally careful consideration has been given to the clinical, pathological and surgical side of the problem whether diagnostic or therapeutic.

The modern study of malignancy demands the closest possible cooperation and coordination of all medical specialties and it is only in this way that either the best interest of the individual patient may be served or that the whole problem may be intelligently approached. We have thus as our ideal an increasing number of groups or institutions devoted entirely to this purpose, diagnosis, treatment and research.

With this more intensive study, the roentgenologist has taken on a most important responsibility. It is no longer sufficient that he give a more or less casual opinion in diagnosis because he has steadily become more important with the increasing importance of radiation in the treatment of malignant conditions and may present lack of recognition of the importance of the roentgenologist in general in the cancer problem has been due to the fact that he himself has completely failed to realize this responsibility and measure up to the place that should be his. When one considers the number of so-called roentgenologists in the profession and balances this number against those who can be truly considered to have a merited place in the campaign against cancer, the showing is a sorry one. It is purely and simply a condition for which he alone is responsible and he is evading his duty, not only to his fellow

*Read before the Orleans Parish Medical Society October 23, 1933.

practitioners but also to his community in neglecting to take his place properly in this situation. The internist who is sincerely endeavoring to do his part is only too willing these days to avail himself of whatever help may be at hand in making his decisions, his diagnosis, his prognosis and this is equally true of the surgeon.

There is certainly no other medical specialty where one has so constant an opportunity to perfect his knowledge than in the daily routine of the roentgenologist with a fairly active practice. It is impossible, for instance, for him to become interested primarily in the surgical aspect of cases because of the varied nature of his work. The patient primarily surgical may be followed by one equally purely medical to be followed by an essentially urological one and so on. We often hear a lament from the roentgenologist as to the lack of proper cooperation shown him, that essential clinical data is withheld or that he is not supplied properly with the outcome of the case. This is again purely the responsibility of the roentgenologist. He has the opportunity to serve as an ideally helpful consultant in practically any type of case and if he is not given the chance, it is unfortunately quite possibly due to the fact that he has failed to measure up to his opportunities.

The roentgenologist so far as possible should not specialize within his field, confining himself purely to diagnosis or to therapy. Practically every therapeutic case has been primarily a diagnostic case with very often a prognostic angle additionally, such as consideration of the suitability of the patient for radiation therapy and it is therefore decidedly best that the whole problem be in the hands of the one man. In some large medical communities, large institutions, a division of the work may be feasible but only with the assurance of the closest cooperation between the specialists in diagnosis and therapy. For the average community, however, the interests of his confreres and of the public are best served by the general roentgenologists.

What then shall be the keynote of our place in the campaign against malignancy? Thoroughness in every part we play, whether diagnostic or therapeutic, a very real feeling of sincere

responsibility and finally a proper degree of receptivity that we may be ever ready to give new ideas and new methods at least a fair trial before condemning them.

Thoroughness in this field is so much more essential than in any other that emphasis upon this aspect of our study does not come amiss. The possible ramifications of a malignant focus are so infinite when compared to the consideration of a case of traumatism for instance and the manifestations of the disease are so varied that we must consider the patient as a whole rather than as a part. We must take an initiative in suggesting any desirable further investigations beyond that demanded of us in case there seems to be any indication. It goes without saying that we must inform ourselves as well as possible in regard to the entire field of malignancy, clinically, pathologically, surgically and so far as possible handle the problem as carefully and conscientiously as we would have wished had we been the patient.

A proper sense of serious responsibility is very necessary because it is very frequently true that it is our opinion as the result of our examination which clinches the diagnosis and few of us will question that the making of such a diagnosis entails a very real responsibility. Nor is the negative finding any less serious a responsibility. There will be less reproach of our specialty in our relations with our fellow physicians if we can show them that we take our job seriously and are not mere "picture takers" who leave our cares in our offices each evening.

When we have made our diagnosis of malignancy and the question of treatment arises, let us insist that we be given the proper recognition in deciding what forms it shall take. In these times it is no longer necessary to fight the battle for radiotherapy but it still remains necessary for us to aid in securing for the patient the proper course of radiotherapy. The surgeons are gladly conceding us many patients no longer considered ideally treated by surgery and with the newer methods of our treatment we are gaining additional converts. With our pre-diagnostic study of the patient we are frequently vastly better able to judge of the efficacy of any form of treatment than our colleagues and therefore let us definitely decide

for ourselves what treatment is indicated and carry it out rather than be told to give such and such a treatment something like the request for a certain radiograph. A case is given a surgeon to handle as he sees fit and similarly the medical man follows his own methods, so when it is the carefully considered judgment of the physician in charge of a case of malignancy that radiation is indicated as a method of treatment, let us be given the responsibility and accept it gladly no matter how serious it may seem to be.

Finally let us avoid any attitude of self complacency and self-satisfaction and seek constantly to improve the standard of our diagnostic skill and our methods of treatment. Roentgenologists in the past have set a fine example as a body in their eager self-sacrifice in their work as is even now recalled to us as we learn that yet another pioneer has succumbed to the burns received in the early days of roentgenology. Let us as a group be equally as eager as were they to develop ourselves and our specialty and so far as we are able let us take every advantage of such newer developments in therapy for example as the Coutard method of long protracted fractional dosage and the new extremely short wave radiation produced by the newest high voltage machines. This latter opportunity will not be available to many of us owing to the expense connected with such installations but we can each of us strive constantly to improve our abilities and bring more and more actual knowledge to our work as a result of study and self-improvement. Surgeons and physicians are constantly gaining greater knowledge of what can be gained from competent roentgenology and it is no longer a question of referring the patient to a laboratory. They will be increasingly referred to the laboratory of the man who has diligently applied himself to the study of his art.

SPINAL ANESTHESIA*

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Patients enjoying modern surgery are being

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

given more and more a nearly normal physiologic condition during and after the operation. The greatest contribution towards maintaining this condition is the increased efficiency and safety of spinal anesthesia. Patients that have heretofore done without surgery because of some metabolic disease such as diabetes mellitus, those with kidney and liver disorders, and those with acute and chronic lung conditions are now able successfully to undergo surgery without any severe toxic effects from the anesthetic.

For the past four decades attempts towards perfecting drugs and technic for regional anesthesia have been in progress with very gratifying results. Many drugs have been put on the market with a great variation in the outcome of their uses. There are still many phases yet to be improved upon, but at the present the practicability and safety of the procedure have been attributed to the general adoption of novocain as the anesthetic agent. The preliminary injection of ephedrine has proven to be a valuable means of controlling a fall in blood pressure.

Much has been written and said lately on the subject of spinal anesthesia, with the writers showing a wide variation of opinions. There are several phases that are common to all these discussions. I shall not attempt to discuss these variations but shall confine myself to the results found on five hundred consecutive cases given spinal anesthetics at the Natchez Charity Hospital without a death attributable to the anesthetic.

In this series there were 187 laparotomies with 15 complete hysterectomies, 97 appendectomies, 20 fractured legs reduced, 6 leg amputations, 18 hemorrhoidectomies, 6 vesico-vaginal fistulae (with good results post operative), 30 inguinal herniae, 24 incomplete abortions, 4 deliveries by version, 11 cesarean sections, 5 prostatectomies, 11 intestinal obstructions, 5 cholecystectomies, 11 gunshot wounds of the abdomen, 12 cystoscopic examinations, and many minor operations. These patients ranged from 5 to 82 years of age.

In this series one case died suddenly four hours after being taken back to the ward. No cause of death could be found other than a possible embolus. Her blood pressure remained

over 100 mm. of mercury throughout the operation and had risen to 128 mm., systolic before death which was instantaneous. This is the only case in the series in which the question of a fatal outcome being due to the anesthesia may be raised. We were unable to get an autopsy on the patient.

Several of the cases in which this type of anesthesia alone could be used were:

One, a white male 16 years old, with right lobar pneumonia and an acute gangrenous appendix. He was given 150 mg. novocain and had an uneventful recovery.

Another, a white male 82 years old with a strangulated inguinal hernia complicated with acute bronchitis. The patient had an uneventful recovery.

In the majority of these cases the blood pressure did not fall over 25 mm. of mercury. In several the pressure fell as much as 50 mm. of mercury. These variations were found as we varied the technic of the administration.

This type of anesthesia has distinct advantages in operative obstetrics. Our series contains 11 cesarean sections. These were more easily done under this type of anesthetic because the intestines were well contracted out of the way. The mothers suffered no ill effects from the anesthesia, no loss of uterine contractions and no post partem hemorrhages. There were no ill effects on the babies whatsoever. Cosgrove¹ reports 500 cases of spinal anesthesia for operative obstetrics. He is convinced that spinal anesthesia is "definitely safe" for such use; that it is almost uniformly efficacious; that it facilitates the surgeon's work by securing quiet for the patient, relaxation of the soft parts and minimizes bleeding; and also permits the conscious co-operation of the patient, as no other anesthetic does. "It is absolutely not deleterious to the infant." Spinal anesthesia is "by far the safest" in handicapped patients, those with bronchitis, pneumonia, pulmonary tuberculosis, thyroid or heart disease, toxemia or eclampsia. "If its availability were limited to these classes of cases alone, its place in the obstetric armamentarium would be important and secure."

We have used this anesthetic with gratifying results in cases where forceps had to be applied.

One case had been in labor 20 hours with a contracted cervix. Spinal anesthesia was given and the patient delivered herself while the doctor was scrubbing up. The cases where podalic version was performed reacted well. The uterus contracted immediately after delivery and there were no ill effects on the baby.

We have used novocain in all these cases and have found no toxic effects from the drug on the patient. In a report by Bower, Clark, Wagoner, and Burns,² they found that novocain was the least toxic of all the preparations on the market, the French preparation "neocaine" being the least toxic. We have used novocain crystals and neocaine in all this series giving more of the former than the latter.

In summing up the distinct advantages of spinal anesthesia we find:

The toxic effects of the anesthetic are greatly reduced. This is especially advantageous in the metabolic diseases and in very weak patients, and those suffering with liver and kidney diseases.

The ease of administration. The surgeon gives his own anesthetic. By the time he re-scubs and gets ready for the operation the patient is ready. We have a nurse trained to check the blood pressure every five minutes during the operation and for six hours after the operation. A good operating room nurse can comfort the patient and keep his mind off the operation.

Shock is almost entirely eliminated. We control the blood pressure with a preliminary injection of ephedrine sulphate, the dose of ephedrine varying from 50 to 150 mgs. depending on the amount of movement of the sympathetic system. Patients who are in shock previous to the operation are treated with a glucose infusion and caffeine and sodium benzoate before or during the operation. To patients who are having high abdominal surgery with a blocking of the lower sympathetic system with the novocain we give 100 or 150 mgs. ephedrine 10 minutes before the anesthetic is given and the blood pressure does not fall over 10 points and in some rises 10 mm. of mercury and remains there during the operation. In the very aged patients we give a glucose infusion during the operation along with the other drugs as indicated.

Relaxation of the abdominal muscles is more complete than with any other type of anesthetic. The intestines become contracted, peristalsis is arrested and the necessity of forcibly packing away the intestine is avoided. In cases of ruptured viscera such as gangrenous appendix, perforated peptic ulcer, and in traumatic rupture of the intestine the procedure may be carried out with minimal dissemination of the infected material.

Major surgery becomes possible in many cases where inhalation anesthesia is contraindicated, such as pulmonary infections, asthma, empyema, bronchitis, pneumonia, and tuberculosis.

Industrial and emergency surgery is made possible even when a trained anesthetist other than the surgeon is not present. The surgeon gives his own anesthetic and proceeds with the operation.

The post operative course is much easier. This enables the patient to go home sooner. Usually the patient has no vomiting or nausea. He rarely has to be catheterized and is able to take fluids soon after the operation and thus prevent dehydration and acidosis.

The mortality is greatly reduced. Babcock³ reports 6000 cases given spinal anesthesia without a death attributed to the anesthesia. Evans⁴ reports that the mortality is less than with general anesthesia varying in different statistics from 1 to 500 to 1 in 10,000 cases.

Our technic for giving the anesthetic is as follows:

Morphine sulphate, gr. $\frac{1}{4}$, is given 20 minutes before the operation. Ephedrine sulphate, one or two cc. containing 50 or 100 mgs. of ephedrine, 10 minutes before operation, the dose depending on the amount of sympathetic involvement. For perineal operations and lower extremities the injection of novocain is made below the sympathetic chain, second lumbar vertebra, the dose of ephedrine being 50 mgs. In upper abdominal work the injection of novocain is made higher and the dose of ephedrine given is 100 or 150 mgs.

The patient is turned on his side, preferably the right, and the back is prepared with alcohol and iodine. We prefer the lateral position because the patient's spinal fluid in the lumbar

region and the cisternal region are under the same pressure. Bower, Clark, Wagoner, and Burns² have shown by simultaneous cisternal and lumbar punctures that the spinal fluid pressure sitting up is greater in the cisternal region than in the lumbar, and that the pressure is the same while the patient is lying on his side. A perfect anesthesia is more nearly secured when the spinal fluid is at the same pressure at all levels. Then, too, the habit of having the patient on his side makes the puncture easier while handling patients with fractures of the pelvis and lower extremities.

The site of puncture varies with the height of the anesthesia desired. For low pelvic work we inject between the third and fourth lumbar vertebrae. For upper abdominal work usually between the twelfth thoracic and the first lumbar vertebrae. The average dose of novocain for appendectomies, laparotomies, and extremities is 150 mgs.; for perineal and rectal work 75 to 100 mgs. are given.

A wheal is made over the site of puncture with a one per cent solution of novocain. It is not necessary to infiltrate the deep tissues. We use a size 20 spinal needle. This allows the flow of the spinal fluid through the needle at the right rate. The fluid is caught in the small bottle of crystals and they are dissolved by aspirating through a needle and syringe. This is slowly reinjected into the spinal canal. We do not practice barbotage and do not forcibly draw out the spinal fluid. We rarely have a post-operative headache. Adhesive plaster is placed over the site of puncture and the patient turned over and prepared for the operation. The patient may be left flat on the table or put in the Trendelenberg position. We usually put the patient in a modified Trendelenberg position because it facilitates operating.

This anesthesia usually lasts one hour. First the perineal area becomes anesthetised with gradual ascent to the upper abdomen. It wears off inversely with the perineal region being anesthetised for one or two hours.

There is no difference in the reaction of the male and female patients. Children stand the anesthetic unusually well. They are not nervous at all as all the lower stimuli are blocked. All the patients are calm and perfectly

conscious. This is advantageous especially in obstetrical surgery.

Our series includes patients with blood pressure ranging from 80 mm. of mercury systolic to 185 mm. systolic. It includes children with very flexible veins and arteries and very aged with hard calcified arteries. We think that it is the anesthetic of choice for the aged patient for the reasons stated above. The patient may be raised to Fowler's position four hours after the operation. All physiologic functions are resumed completely at the end of the second hour after the anesthetic has been injected.

In a few operations that require longer than one hour for completion the patient may be given ether or gas at the end of the hour. The patient takes this anesthetic well without turning on the table and it only requires about 10 minutes before proceeding with the operation. The majority of operations can be completed in one hour. There are several preparations on the market that are said to last longer than one hour. These, like many other phases of this anesthetic, have still to be worked out. However, already the technic and the safety of spinal anesthesia has reached the point where it is the anesthetic of choice for all surgery below the diaphragm.

The greatest contra-indication to spinal anesthesia is an infection around the site of puncture. Cases with central nervous system diseases do not stand the anesthetic as well as others. We have had no serious complications from spinal anesthesia. This type of anesthesia, as any other part of the operation, must be carefully and judiciously performed. Someone once asked Whistler how he mixed his pigments to obtain the wonderful colors of his canvas and he replied "With brains." So the administration of any form of anesthetic must be done "with brains."

REFERENCES

1. Cosgrove S. A.: Spinal anesthesia in obstetrics. *Current Researches in Anesth. & Analg.* 9:71, 1930.
2. Bower, Clark, Wagoner, and Burns.: Spinal Anesthesia. *Surg. Gynec. & Obstet.* 54:882-897, 1932.
3. Babcock, W. W.: Spinal Anesthesia: an experience of twenty-four years. *Am. J. Surg.* 5:571, 1928.
4. Evans, C. H.: Spinal Anesthesia, New York, 1929.

DISCUSSION

Dr. J. K. Avent (Grenada): I enjoyed this paper because the more I study and the more I watch spinal anesthesia, the more I realize it is not a sinecure. No fellow uses it that is not scared of

it, and I have had lots of them to ask me if I would take it. Yes, I would take it myself, but I have a little boy and a little girl, and I would not give it to them.

There is so much to this spinal anesthesia. If I take up this one little phase of it, maybe I can discuss this part of it, which to me is the most important part, that is your drop in blood pressure. There has been some research work lately to find out just what causes this drop in blood pressure. If you have a high blood pressure it takes more novocain than if you have a low pressure. If you have a patient in shock, give them about half as much novocain and you will get as good anesthesia as you would in a normal person. In injecting this anesthetic watch your patient for these things. If the fluid goes no higher than the sixth intercostal nerve you are in the safety zone, but when your patient begins to say, "Doctor I can't breathe good," you had better watch out, because you are passing the danger zone. You are getting up near the fourth intercostal nerve and you have paralyzed your muscles of respiration by paralyzing your nerve,—you have stopped the diaphragm from working. What happens then? That is exactly the physiological section at that time. By opening up the chest and watching it, and giving this anesthesia to dogs and other animals—their anatomy is similar to a human being's—the research laboratory has declared this to be the thing that happens at this time. Take the blood pressure in the inferior vena cava and superior vena cava—they have never noticed any fall or rise of blood pressure in the inferior vena cava. In the superior vena cava they have noticed a decrease in the blood pressure and then the right auricle fills up and the right ventricle becomes dilated—the whole heart becomes somewhat dilated—the blood goes into the lung and you have a paralysis of your muscles of respiration and it can not force the blood out of the lungs. The left auricle hasn't very much blood left—the left ventricle hasn't much blood—you get a fall in your pulse rate. That is the alarming thing when you begin to get this fall in your pulse rate. The heart hasn't got the blood to pump there. If you will use a little spirometer that you use to test the amount of air the patient is breathing in and out, and notice a diminution of this you had better watch out. You have already given everything you can think of but there is one thing that is a specific in this line. First, use artificial respiration and that will help the heart to pump the blood over into the left auricle so it can be pumped out through the system. Tell the patient to breathe if he can, use your artificial respiration for five minutes until your blood pressure gets back up; then put him in a Drinker

respirator and in a few minutes you will see the patient begin to breathe a little by himself.

As far as catheterizing is concerned, I have to catheterize more in spinal anesthesia cases than in any other anesthesia, and that is just contrary to Dr. Whittington's statement. I do not know about giving a patient who has 240 blood pressure, spinal anesthesia. I really find that this type of patient has better anesthesia than the other, which is contrary to the rules. I have been foolish enough to try it out and I find it works better than a general anesthesia in that type of patient.

Dr. L. B. Otken, (Greenwood): I enjoyed Dr. Whittington's paper very much, also Dr. Avent's discussion. After five years' use of spinal anesthesia I wish you would just let me make a few little comments on this. They brought out some points I want to take up again, some perhaps they did not take up. First, let me say that in my opinion spinal anesthesia like many of the surgical procedures got swept up on a popular wave, and it got carried on into uses where it was never intended. To just say indiscriminately that spinal anesthesia is the anesthesia of choice is not good surgery in my opinion. It is a valuable adjunct to the surgeon's armamentarium, used in carefully selected cases. I would never give spinal anaesthesia to a person with a systolic blood pressure of 80 or of 100. If they did not have a systolic blood pressure of 120, why I would use some other anesthesia, nor would I use spinal anesthesia on a moribund patient, or a patient in severe shock, nor do I see any indication for spinal anesthesia on a young adult in reasonably good condition where the operation is not expected to last over 15 to 25 minutes. That includes the young adults—the children with appendectomy and such operations where you expect to get through in 15 to 25 minutes. I can not see the good surgery of giving spinal anesthesia to such a patient when we can use a general anesthetic and get along so nicely. Nor would I use spinal anesthesia for perineal repair, for cystoscopy or for dilatation of stricture in the male urethra, when a sacral can be used, with so little danger to your patient. For the aged and infirm, say the old folks 80 years old, with a ruptured appendix, or an acute appendix, or a strangulated hernia, don't you think it would be much safer to give that patient a good big dose of morphine and then under a straight local anesthesia do your operation? Dr. Avent spoke about the danger signs where the respiration begins to get shallow, and then as Dr. Hendon spoke this morning, the symptoms of impending death. I do not imagine there are very many Drinker respirators in the state of Mississippi, so not many of us have a chance to push our patients into that high priced apparatus. You had better select your patients a little more carefully and not use spinal anesthesia if you think you are going to get into

that trouble, but right there when that patient first says that he has a certain distress about breathing if you will stop your operation and talk to your patient a few moments and tell the patient to suck hard way down in his lungs, your blood pressure will come back and in a majority of cases he will have no more trouble.

As to what he said about the use of adrenalin, novocain and ephedrine: they are all in my technic. I use all of them. Now as to success, he didn't say how many failures he had. I did not hear him say as to whether he had any failures in his series of 500 cases. Most of the men who have written have reported some failures. I have had some failures; I am frank to say so. I think your failure in your spinal anesthesia it faulty technic. Personally I dissolve my novocain crystals in 6 cc of spinal fluid; I hook on my syringe, inject it down to 3, draw it back up to six, inject it down to two, draw it back to four, and carry it home. If the spinal fluid does not come back freely into the syringe you can expect either a failure or a partial failure. I can tell about my patient, whether I am getting a successful anesthesia before I ever turn them over on their backs. If I can drive it home, I know that I have thoroughly washed that cord and the nerves in that novocain, I know I am going to get an anesthesia. I turn the patient over and let my assistant prepare him for operation while I prepare myself.

Dr. A. E. Gordin (Jackson): I just got up before Dr. Darrington does because he can out-talk me everytime. He is going to make everybody laugh, and he is going to make that spinal anesthesia look ridiculous. I came down here to report 300 cases of spinal anesthesia. When I heard that Dr. Culley said he had 2000, I decided to raise mine to 750, but I have not had that many cases since spinal anesthesia has been used. I want to say this about spinal anesthesia, it has been abused because when you mention the spine you have killed a patient. I mean the patient does not like that. If you could call it induction anesthesia or something else, it would be better. It is bad on the patient. I used it in 300 cases, I have probably used it in more than 300, and I don't guess I got paid for any of them, but anyhow I have had 300 cases of spinal anesthesia. Spinal anesthesia has been condemned here by Dr. Barkedale and Dr. Avent. In our hospital—they say I am the spinal man, one is the medical man and one the ether man, and spinal anesthesia would be all right if you would not call it spinal. But here is what you get in spinal anesthesia—you are going to get about five per cent of your cases that get no anesthesia. You can give a second dose if you have nerve enough that will give you anesthesia. If you happen to get blood in your spinal fluid there is some chemical reaction.

I do not know what it is, that when you draw out blood in your spinal fluid, when you inject it back, it will not give you an anesthesia. Why it is I do not know, but it is true. You can give another dose and get anesthesia, but if you get blood in your spinal fluid you are not going to get an anesthesia.

About five per cent of my cases get no anesthesia. I use the novocain crystals. I use them because I am used to it. I used the spinocain for a while but it will not give you a satisfactory anesthesia as far as the umbilicus. It is all right for some work but it just doesn't do. I think these other solutions are all right.

What complications do we get with spinal anesthesia? In my opinion spinal anesthesia is the safest anesthesia that you can give; you avoid ether pneumonia, you avoid vomiting, but spinal anesthesia may give you some complications and anybody that says it doesn't never has used it. Spinal anesthesia will give you headache; in some cases it will give you the most severe abdominal pain you have ever seen; in some cases it will give you a headache for a week, just like a spinal puncture. It is not an argument against it, but spinal anesthesia relaxes the abdomen and gives you the most satisfactory results.

Some doctor here just before me says, "I would give it to myself, but I would not give it to my daughter." I would not give anything to humanity that I would not give to anybody, and that I would not have given to me.

I have operated on most of the nurses at the hospital and they all say, "Give me spinal anesthesia". It is safe. It is sound. It is the anesthesia of choice. There is no danger in it; you avoid complications. There are a few cases in which it won't work, but, gentlemen, I am telling you in over 300 cases that I have on record I have used it; I would rather have it used on me, on my family than anything else. It has got a bad reputation. You are going to get symptoms from it, you are apt to get headache and leg symptoms.

Dr. John Darrington (Yazoo City): There is one thing I haven't any patience with, and that is the old doctor who is ready to condemn everything that is new. What we want is simply the truth whatever that may be. You know it looks as though everything in this world goes in cycles. We have fads and fancies and they pass away and then come around again, and the same old thing is brought forward. I guess I am in a position to give you just about as fair an opinion on this subject as any man in this audience because I have been through all the stages.

Back in the early days Dr. Matas of New Orleans, in 1900, was using cocaine in the spine with great success. Cocaine being so toxic it fell into disrepute and then for a number of years we heard nothing of spinal anesthesia, and a few years ago

it was brought forward again and has been swept into general use by a wave of enthusiasm.

Now if that is the ideal anesthetic we would like to know it, and the only way you can know about it is to take the information that you can receive from a large number of surgeons. No man's limited experience is sufficient for you to form a positive opinion as to the merits and safety of this type of anesthesia. I went to the trouble to look up results of other surgeons, not just taking my own cases. I was rather enthusiastic about it and am still provided it is used in properly selected cases. Any man who starts out to use it as a routine measure is necessarily making a great mistake. Why? Because it is not the safest anesthesia available, and our object is to relieve patients of disease with the least mortality. That is our idea. Now every man that we kill with an anesthetic we have failed to cure him from the operative procedure. He is just as dead as he would be any way, so we must keep an eye on the welfare of the patient. That must be in the mind of every man—what is the best for this particular case on the table? The statistics of the country, involving more than 100,000 cases will show that in the hands of the larger hospitals, because I had no report from the smaller operators, but the larger hospitals—their experience in the use of anesthesia—it means experienced men in the use of anesthesia—it means competent assistants to aid in the resuscitation of that patient, and what results do they get? The death rate in spinal anesthesia has been one in seven hundred. What is the death rate with ether? It has been one in 7000. That should end the discussion right there. If a man is in good physical condition, if he has not some special disease that prevents the use of ether, he is very much safer under ether than under spinal anesthesia. There are other cases, however, where spinal anesthesia would be much safer than ether,—your kidney cases, lung cases, etc., so what I would like to emphasize is do not get the impression that you can throw your ether can in the garbage barrel and pick up your needle and go operating on every case with spinal anesthesia. Don't do it unless you have a special plot in the graveyard of considerable capacity. The essayist had a splendid paper, and reports 500 cases with no deaths which is splendid, and Dr. Culley reports 2000 cases and no trouble—beautiful, but all I want to say to you two is to look out in the future because the chances are you have about used up all your good luck.

Dr. J. Gould Gardner (Columbia): I am very glad to see these young men using spinal anesthesia. I have previously presented several papers on this subject. My experience dates back to my internship in the New Orleans Charity Hospital in 1912 and 1913 when Dr. Dulap was doing so much of that work. Some of you men here today

no doubt are acquainted with his work. Since that time I have been using spinal anesthesia in selected cases but more generally in a larger number of patients the past few years.

I am not going to discuss the technic except to say I am glad Dr. Whittington is administering his spinal anesthesia with the patient lying comfortably on the table. Dr. Whittington advocates giving one-quarter grain of morphine before the operation. This may be all right; however, we have read so much in the literature of the depressing effects of morphine on the vital brain centers that we resort to other sedatives. This brings to mind the importance of having certain things ready for an emergency—adrenalin and ephedrin, also a sterile solution ready for intravenous use. There are several other things I would mention—we do not operate upon a patient with spinal anesthesia where the operation can be done in fifteen minutes or less; herniotomies, as recommended by the essayist, we do almost entirely with local anesthesia; cystoscopy and similar work can be done more safely by sacral block.

Perhaps the greatest draw-back to spinal anesthesia is the dread which the general public has for it. Personally I am convinced there is a useful, wonderful field for spinal anesthesia in selected cases with a perfected technic.

Dr. J. A. Crisler, Sr. (Memphis, Tenn.): The question of spinal anesthesia as expressed in Dr. Whittington's splendid paper has been open for discussion for the past several years. Those of us who have had the least experience with it and who have the most fear of it and know perhaps the least about it, are generally those who delight in discussing it.

There are some brilliant young Mississippi surgeons in this audience, several of whom use spinal anesthesia almost routinely. They must be satisfied with it and their results must be excellent, otherwise they would be more hesitant in its use.

I understand from Dr. Avent of the Grenada Clinic and Dr. Culley of the Oxford Clinic and several other capable surgeons in this audience, that they have very little fear in adopting this mode of anesthesia almost universally in their work. I see Dr. Hendon of Louisville in the audience. "The Rankin County lad who has made good in the city" and who is a particularly keen observer on all things surgical. I hope that we may have the pleasure of hearing from him on this very mooted subject.

I think we will all agree with our good friend, Dr. George Crile of Cleveland, Ohio, who tells me that spinal anesthesia is particularly dangerous in high blood pressure cases and that in low pressure cases, before using this method, he would certainly give the low blood pressure patient a good blood transfusion. He seems to have no doubt in his mind

that it is always dangerous in the high blood pressure case, regardless of what is done.

From my own clinic, we sent one of our best trained young surgeons to Jersey City and to Brooklyn, to observe its use by Pitkin and others, over a period of weeks and he came back more afraid of the procedure than he was before he left on this mission.

It is rather refreshing now to hear these young surgeons of the Mississippi State Medical Association tell us about the use of spinal anesthesia in their own hands, without much fear or reservation as to its dangers. That possibly, however, becomes more of a personal equation and the back-fire from an unexpected death would cause them more pain and remorse than would possibly come to the average surgeon in the great surgical centers like New York, Cleveland and Chicago. To "be sure that you are right and then go ahead" is a time honored, very precious old adage and I greatly hope that our brilliant young Mississippi surgeons feel sure of their ground and if they suffer no remorse or ill consequences, we should look with pride and pleasure upon their success.

It is certain that no anesthesia that has ever been used, causes such perfect repose and relaxation as does the spinal type, and in cases of intestinal obstruction from whatever cause, it is certainly gratifying in producing the right and only kind of anesthesia that one could desire. I hope that I can live to see the day when it can be perfected to such an extent that it can be used freely, safely and routinely without "fear and trembling". I thank you.

Dr. G. F. Carroll (Biloxi): I am a little surprised that so little has come out of the discussion in that so little has been said about proper technic. I have not had 1000 cases, but have had a rather extensive experience personally and in different large clinics in this country and if men like Babcock and LaBat can do 10,000 or 15,000 without a very great mortality, the old saying "50,000 Frenchmen can't be wrong" certainly applies. I do not think any of us will doubt that ether is probably the safest anesthetic. Most any doctor will give ether to patients on the least provocation, with no preliminary examination or training whatever and get by with it. That is due to the safety of the ether. In the proper administration of spinal anesthesia, it is not the simple procedure a lot of people think. Technic, gentlemen, if you please is the sine qui non of properly executed spinal tap, whether you are securing a specimen or whether you are giving spinal anesthesia. When you fail to obtain spinal anesthesia, it is your fault. There is no question about it. It is faulty technic. There is no place in surgery where it is more important to have the proper surgical conscience, the proper selection of your case and above all the proper

equipment. Don't take an 18 gauge needle and stick it in somebody's back and draw fluid out and shoot something in and expect good results, it can't be done. You will have fatalities—you will have headaches and other sequellae. I have seen quite a few hundred cases given without headache, without a single condition afterwards that wasn't perfect. I have seen cases sit up in bed immediately, take fluids freely with no vomiting and no nausea, and you men who have operated under spinal anesthesia know what a surgical paradise the abdomen offers, especially in your big fibroids, your deep adhesions, intestinal obstructions, etc. Now spinal anesthesia is no more the proper or common anesthesia in all cases than a cesarian section is the modern method of delivering a baby, but gentlemen, there are cases in which it is a God-send to humanity. That has been demonstrated in thousands of cases.

Another thing, spinal anesthesia is being used as a parachute with which to alibi a lot of poor surgery. Ether supposedly never kills anybody. How many cases have you seen three or four days later? Of course it was an "inter—or concurrent disease or condition that caused death, not the anesthetic." Had it been spinal anesthesia the spinal anesthetic was the "probable cause". I am not at all satisfied with the statistics on this. I do not think they are accurate. There is too prone an idea to—I want you older men to get this too—knock that which is new. We know that spinal anesthesia was in very bad repute in the beginning. Why? It was the type of equipment used, inexperienced technicians and unsuitable chemicals. A man should not attempt to do spinal anesthesia until he has had proper training in the method no more than he should attempt to give ethylene gas. You have given chloroform with impunity—many of you still do it. I have done it myself, but I would not do it today. The average physician or surgeon has no more business giving a spinal anesthesia until he has had the proper understanding and proper training in the technique and understanding of the drugs being employed than he has to sit down and take hold of a machine and give ethylene, something he knows no more about than a mule knows about Christmas.

There are numbers of cases where we are giving anesthesia that gives us one hour to one hour and forty-five minutes, the prettiest you ever saw—your patient talking to you all the time.

As to catheterizing your patient. I have never had to catheterize a male patient. We have had to catheterize a few of the females in operations where deep pelvic surgery has been done, about the same proportion as with ether.

The main point that I want to impress is the process of proper understanding of what to do. It is not a simple procedure. Anybody who thinks that they can do a spinal anesthesia without ade-

quate knowledge, understanding, experience, proper equipment and a perfected technic is simply wrong, and will have failures, unpleasant and some times fatal sequellae.

Dr. G. A. Hendon (Louisville, Ky.): Like Dr. Crisler says, I know nothing about spinal anesthesia and for that reason I could say a great deal. I have never permitted it to be administered to one of my patients. Perhaps that is just due to prejudice, but I have had other prejudices that I sought to reject and afterwards found out they were saner than any attributes I could acquire.

I would like to defend Rankin County against the implication that Dr. Crisler laid upon it concerning the trivial circumstance of my own origin. I think Rankin County has enough to answer for that lies within the facts. I want to place the responsibility of my nativity on Scott County where it belongs, Homewood, to be precise, or if it should happen to make any difference.

To inject a little levity into the occasion, I started out like all other young fellows with a lot of vaulting ambitions and when the fight got hot and the way got long and steep, and more difficult, I began to discard one after the other until I wound up with only one left and I am still clinging to that and I thought I had achieved it, but I was sadly disappointed in hearing my friend, Dr. Crisler, refer to me as Dr. "Herndon". I hoped I would some day become well enough identified for people not to use "Rs" in my name, but I find I have still got some work to do along that line.

Dr. Whittington (closing): I am very grateful for these many discussions, especially for having my former teacher, Dr. Hendon of Louisville, Ky., to say something about my paper. There has been a great variation in these discussions with nearly all the important points well discussed. I too think that spinal anesthesia cannot be used on every patient brought to the operating room. I also think that the majority of failures are due to faulty technique in the administration of the anesthetic. I think that the majority of doctors do not know how to get in the spinal canal. I practiced on cadavers for a considerable time before learning how to get into a spinal canal. I have placed a needle in a spine and dissected down on it in order to find exactly what I had gone through. If any blood comes back through the needle with the spinal fluid you have not gone directly into the spine and you are not going to get a good anesthesia. In answer to Dr. Avent I will say that I do not think a pulmotor is necessary. In our series and in the cases referred to in my original discussion there never has been any indication for a pulmotor. Also I will say that I do not think that spinal anesthesia should be practiced routinely on children; however, in cases with pulmonary infections they can take this anesthetic very safely. I think that all

the other points have been sufficiently discussed. I will close by stating that with the use of novocain as the anesthetic agent and by following the principles advocated in the original discussion the safety and comforts of operative patients are greatly increased, and that by the use of spinal anesthesia the mortality of modern surgery is much less than with any other anesthetic.

THE DANGERS OF THE PROMISCUOUS USE OF SPINAL ANALGESIA*

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NEW ORLEANS

The title of this paper will undoubtedly be objectionable to many.

Many physicians consider the performance of a spinal puncture a harmless procedure. Properly performed, it is devoid of actual danger. When due technical care is not exercised it becomes potentially serious.

The risks of spinal analgesia are not alone due to faulty methods in the technic of the puncture, but also, the character of the drug used, the quantity introduced, the caliber of the spinal needle, posture of the patient; a complete understanding of the patient from the standpoint of his medical status, psychic makeup and neurological state is important.

The trauma associated with the improper introduction of a spinal needle in the spinal canal is accompanied by harmful results in most instances. Of these, the outstanding probability is injury to the cord substance itself. Appreciating the immediate response of nerve tissue to injury, you can comprehend the development, if not immediate, at a later period, of a post-punctural complication. This, in my opinion, produces the damaging effects of spinal analgesia.

Surgeons appreciate that an equal amount of spinal fluid should be withdrawn to compare with the quantity of analgesic drug introduced in the spinal canal, yet there are occasions, no doubt, in which through carelessness or oversight, too great an amount of drug is injected, thereby damaging the cord substance from pressure.

In understanding the medical and neurological condition of the patient who is to receive spinal anesthesia, it is of great importance to know definitely that the cerebrospinal system is free from disease.

A patient presenting a surgical problem is considered most of the time from the standpoint of his complaint only on many occasions. For example: A possible appendectomy is studied up from the viewpoint of his appendix status alone. A routine urine, blood pressure, blood Wassermann, heart and lung examination usually completes the study. If these are normal it becomes a common practice to assume that the patient is a good operative risk, and he is placed in the spinal analgesic group as a method of analgesia.

It is possible that such an individual may at this time have a symptom free, subtentorial neoplasm. It is again feasible to imagine that he has an early cerebrospinal syphilis, an incipient multiple sclerosis, some type of blood dyscrasia, a spinal cord tumor, and many other cord pathological states.

It is only natural to assume that if any of the above should exist, the aftermath of spinal analgesia will probably be disastrous to the patient.

Time does not allow me to go into the subject of the delicacy of structures comprising the cerebrospinal axis. I assume all of you are aware of the immediate effects, pathologically, on nervous tissue to either chemical or physical trauma; that on occasions this is manifested immediately, and that in other instances, it is delayed months or even years. There is sufficient knowledge in the medical profession to account for the sudden deaths at times due to spinal analgesia, when the preceding possibilities are overlooked and when spinal anesthesia is used indiscriminately.

Though the immediate mortality from spinal analgesia does not appear to be high, yet, when one considers the numerous neurological syndromes which are presenting themselves from a too enthusiastic use of this method, it is important that great care should be exercised in deciding the proper subject for spinal analgesia.

It is difficult for me to comprehend the necessity for this method of anesthesia in opera-

*Read before the Orleans Parish Medical Society, October 9, 1933.

tive work, except for selected cases when the mortality in general anesthesia is not to be seriously considered as an objection.

The literature reveals more and more complications, post-operatively following the use of spinal analgesia.

In my practice I have seen several cases of serious neurological complications.

Dr. A. E. Bennett of Omaha, reports several deaths following spinal punctures. At the autopsy table, cerebellar hernias were found, and in one instance, a cerebellar cyst associated with a pressure cone in the foramen magnum was seen. Dr. Lewis H. Loeser, reports five cases of peripheral neuritis following spinal analgesia. Nonne, Demme, Spielmeyer and others report clinical and postmortem changes in the central nervous system following the use of spinal anesthesia. These changes in practically all instances were of a degenerative nature, such as demyelination and atrophy with evidence of glial reaction, with a varying degree of meningeal reaction. Wossidlo in experimental work on the toxic effects of spinal anesthesia on the central nervous system found definite changes in the ganglion cells of the spinal cords of his experimental animals. Davis and his associates in a thorough study of the subject reports various changes in the central nervous system, including first, hemolytic and myelolytic action of the various drugs on the spinal cord. Second, varying degrees of meningeal inflammation was a constant finding. Third, changes in the ganglion cells. Fourth, swelling and fragmentation of the axis cylinders with degenerative changes in the fiber tracts.

It may thus be seen that changes in the central nervous system following spinal anesthesia have been clearly recognized. Other writers, Blatt, Anderson and Klein have mentioned the presence of lancinating pains, anesthetics and trophic changes, ascribed to changes within the spinal cord itself.

In *conclusion* there is sufficient evidence to warrant the objection to the routine or promiscuous use of spinal analgesia. As time passes it becomes obvious that spinal anesthesia is associated often with fatal results, either immediate, sometimes even in death, and in others, remote tragedies disabling the victim for life.

It is my sincere hope that the seriousness of spinal analgesia has been brought out in this brief paper, and that the method is to be recommended only in selective cases.

DISCUSSION

Dr. H. B. Alsobrook: I think that Dr. Unsworth's paper is very timely due to the fact that every man that is doing surgery, every interne that is helping in operating, or every assistant, are giving spinal analgesia. There is no analgesia that is fool-proof, and as long as you have promiscuous use of spinal, given by everybody, you are going to have a certain amount of complications as reported by Dr. Unsworth.

However, I think the technic of spinal is of the utmost importance. He spoke of cord damage from spinal analgesia due to trauma. It is ridiculous to go that high to give any spinal. Personally, (and I hope that you will pardon me for referring to myself,) I never go higher than between the first and second lumbar vertebra. As you know, the cord does not come down this far; I think it is impossible to damage any cord from trauma from the Pitken needle. The selection of needles and the selection of technic for spinal is of utmost importance. I have the highest regard for the spinal column and its contents, so much so that there are only a few people I would allow to give me spinal. I respect it so highly that in my private work I use my own spinal needles and my own spinal set. I have that in Charity Hospital known as my spinal set, and I am going to show in a few minutes indications for that.

As far as drugs are concerned, in the early days, cocaine, which is highly toxic, was used. Now novocaine and procaine dissolved in spinal fluid of the individual gives the best results. In regard to the results Dr. Unsworth has spoken of, Pitken and Loubat have probably done as much spinal as anybody in the country and they do not report central nervous system lesions as one of the complications.

As to the manner and height of analgesia, in my technic I do not depend on the height of my puncture as to the height of my analgesia and when we go through some institutions and see them making spinal punctures between the seventh and eighth thoracic vertebra, naturally we expect some cord damage. In listening to a discussion a few years ago, a thought that I have often mentioned that these men practically universally used a large needle to make the spinal puncture between the seventh and eighth thoracic vertebrae, get fluid, are not satisfied, push the needle further, then put in the anesthetic selected. A few days later, they get paralysis from the waist down in the patient. That naturally would cause cord trauma. Another illustration that I have often

repeated. Some three years ago in a private institution, scrubbing up for operation a doctor said to an interne "Doctor, give the spinal for me." The interne said "I have seen only three spinal given in my life." The doctor said "I have never given spinal, but this patient has to have spinal." As long as we are going to have this promiscuous use of spinal, we are going to have failures and the analgesia is going to fall into disrepute. What if every man doing surgery in New Orleans was going around with a gas machine, but we have men specialized in that type of work and it is certainly much more gratifying than to have every man giving every other man's anesthetic.

CHRONIC PEPTIC ULCER*

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One of the most prevalent diseases of the digestive tract which the doctor is called on to relieve is chronic peptic ulcer. It is not within the scope of this brief paper to deal with peptic ulcer in all its phases, but mostly to stress an early diagnosis and treatment.

The most important consideration of any disease is its etiology, and then some means of satisfactory treatment soon follows. Like cancer, the cause of chronic peptic ulcer is not known, but its behavior is as well known as cancer. Peptic ulcer makes its appearance in the great majority of cases in the stomach and duodenum, but it may be present in the jejunum and ileum; especially if there be present aberrant gastric or duodenal tissue.

All that part of the digestive tract as far as the papilla of Vater is derived from the fore-gut; below this, as far as the splenic flexure of the colon, is derived from the mid-gut; and the remainder is derived from the hind-gut. The enzymes which have to do with digestion are secreted in organs derived from the fore-gut. Further digestion and absorption occur lower down in the small intestines, and in that part of the large intestine which is included in the mid-gut. The lower part, or that which is derived from the hind-gut, has to do mostly with elimination.

When a surgeon is fortunately enough situated to be associated with a competent internist, or diagnostician, or both in one, who can help work out these cases, it is much easier. But the majority of these cases are seen first by the general practitioner, and then by the surgeon, who has to make his own diagnosis, often without the aid of a diagnostician or internist.

We get these cases often late, when obstruction may have started, or even be complete; or perforation may already have taken place. We have to be diagnostician, internist, and surgeon all in one.

As the exact cause is unknown, it would be impossible to prevent peptic ulcer; however, we do know the predisposing causes, and we can attack it from that angle. We find it in almost all walks of life. Occupations do not seem to exempt anyone. We find it most prevalent in the white race; at least in this country, and at least three times in men to one in women. Gastric ulcer compared to duodenal ulcer is rare, being probably twenty-five of the latter to one of the former. Among the reputed causes of peptic ulcer may be named excessive hydrochloric acid, eating coarse, rough food which is swallowed without thorough mastication, foreign bodies which are swallowed, infection from remote depots of the body, and infection of the blood vessels of the lining of the stomach.

The predisposing causes may be named as sex, age of patient (mostly appearing in young adults), worry, over-work either physical or mental, improper diet, surface burns, nationality, and probably, over-stimulation of the hydrochloric glands, by what Crile speaks of as the power-house, or suprarenal glands.

In the diagnosis of peptic ulcer, a thorough-going history should first be taken. This is to be followed by a thorough physical examination, and finally by roentgen ray, which should be done both by visualization, and by skiagram. When possible or practicable, it is always better to have this part of the diagnosis done by an expert roentgenologist. However, many of us must do our own roentgen ray work.

Typical cases of ulcer of duodenum or stomach are diagnosed mostly by positive symptoms,

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 9, 1933.

but partly by the process of elimination. They are to be differentiated from gastric ulcer, cholecystic disease with or without stones, gastric cancer, extrinsic conditions, such as bands of adhesions binding the stomach, and more especially, from neuroses. So-called chronic appendicitis is considered by some to be a disease, the symptoms of which are in common with many of those of peptic ulcer. This depends a good deal on what one would call chronic appendicitis. It is doubted by some of our best authorities whether there is such a thing as primary chronic appendicitis. Of course, we are all aware of recurrent attacks of acute appendicitis which give a pathology in the appendix, and which bring about many symptoms in common with cholecystitis, renal colic from any cause, and chronic peptic ulcer.

First, we should expect to find duodenal ulcer in young adult males, three to one instead of females, who complain of chronic digestive disturbance, which comes on mostly by seasons, such as spring and autumn, and with certain definite and regular symptoms with food relation. The symptoms are not constant, but come by paroxysms of pain followed by periods of rest. The flareup probably lasts six weeks, and then a remission sets in for a time probably much longer than that. The pain comes two to four hours after meals, and usually with a definite cycle; food, comfort, pain; food, comfort, pain. This continues regularly through a certain period until the flareup of the ulcer has passed. Almost any kind of food, or even water, which only dilutes the gastric contents, gives relief for a certain period of time, and one almost invariably obtains relief by the use of alkalies. One almost always feels more comfortable with food in the stomach than when empty.

This is not the case with gastric ulcer, cholecystic disease or the neuroses. With gastric ulcer the rhythm would be different. As Moynihan gives it; food, comfort; pain, comfort. When the stomach is empty, there is ease; but on taking food, pain begins in an hour, or an hour and a half to be followed by ease when empty. The pain in gastric ulcer is more constant; there are not so many spells of rest; it

is more severe, and the patient is afraid to eat on account of the pain that follows.

With duodenal ulcer, one often awakes at night, or early in the morning, with pain in the epigastrium, which is relieved by taking food, or an alkali. On the other hand, we all have some cases come in with perforation who had never been heard to complain of pain of any kind along the digestive tract; however, a complaint of indigestion can usually be elicited by a careful and painstaking history. Vomiting is not a special symptom of duodenal ulcer, unless, of course, obstruction is taking place, and when this does occur, relief is not so prompt as in cholecystic disease, or as in gastric ulcer.

Just as jaundice is not essential in the diagnosis of cholecystitis, so is vomiting not essential in the diagnosis of duodenal ulcer. It is not even a common symptom of duodenal ulcer, occurring in only about one-fourth of the cases, and it then often means a beginning pyloric obstruction. And just as we cannot afford to wait for jaundice in gall-bladder disease, neither should we wait for vomiting in peptic ulcer cases.

It is not uncommon for a hemorrhage to be the first sign to the patient that something serious is wrong. Often without any special symptom of warning one is taken in the night with a feeling of weakness and of distress in the stomach and bowels, and finds in the bowel action a lot of tarry discharge, followed probably by a fainting. One often feels a weakness and faints prior to the hemorrhage. This is often followed by vomiting blood, and often so in gastric ulcer. One is sometimes warned by a feeling of fulness and tenderness on pressure in the epigastrium. The bleeding is sometimes excessive, but very seldom does one die from the direct effect of it.

The three most important things that may happen to complicate a peptic ulcer are: first, pyloric obstruction by the gradual encroachment on the pyloric ring of the ulcerated mass, gradually closing the lumen; second, hemorrhage, which may be both in the form of hematemesis and melena; and third, perforation. The first is diagnosed by vomiting, gradual emaciation and dehydration following the train of symptoms spoken of above, and finally, and

most important of all symptoms of a confirmative nature is the skiagram.

Before the time of the roentgen ray, the stomach was mapped out by giving the patient seidlitz powder and marking the outline with a blue pencil; also by the splashing of fluids in the stomach we were enabled to ascertain to some extent whether the stomach was dilated; and then by hemorrhage, which was by hematemesis or melena, we were able to add evidence to our case. Yet we know now that there are several things which could cause this form of hemorrhage besides peptic ulcer; still, we must rule out this disease in most cases of hemorrhage of stomach or bowels.

Perforation comes by sudden onset of cramping and pain in the epigastrium followed immediately by extreme rigidity of upper abdomen, the patient often falling prostrate. This condition is accompanied by shock, sweating, pain, which often radiates to the right lower quadrant, following the course of the stomach or intestinal secretion by gravity down the outline of the colon and by vomiting which gives no relief. There is a tendency for the patient to remain perfectly quiet, not tossing and restless as in other pain of similar magnitude. The pulse for the first few hours ranges around normal, the respiration is shallow, and the facies pinched. The temperature is often below normal. The pulse gradually picks up after a few hours, and by the injection of enough opium for relief, one would be inclined to believe he could be mistaken in the diagnosis.

We must not allow ourselves to be misled by this change and permit the time to pass by hours without interference. A perforated peptic ulcer makes one of the most extreme abdominal catastrophes, and requires diagnosis and operation within the first few hours if one expects to keep the mortality down as low as ten per cent. The prognosis after operation during the first few hours is excellent, but after twelve hours, the tendency toward mortality rises by leaps and bounds.

The management of hemorrhage is quite a different story. It is very seldom necessary, if ever, to operate during the attack of hemorrhage, but much safer to wait until all bleeding has ceased, and the patient in much better con-

dition. Keep the patient quiet with opium, keep the stomach empty, and give fluids by hypodermoclysis and transfusion in small amounts when the symptoms become urgent.

There is one disease, with which we come in contact almost every day, a disease which simulates peptic ulcer in many ways, and which must be ruled out in many cases. This is a chronic nerve exhaustion. A large percentage of patients who complain of the neurotic syndrome lay more stress on the stomach symptoms than on any others. They have gas on the stomach and colon, heartburn and burning in the stomach, tenderness on palpation in the epigastrium, sometimes vomiting, often loss of weight on account of being afraid to eat, constipation, palpitation of the heart and insomnia together with a whole train of symptoms, the multiplicity of which itself should cause us to steer clear of error.

By following the true train of symptoms of peptic ulcer, such as hunger, pain two to four hours after meals, relief by eating almost any kind of food, feeling better with the stomach full rather than empty, which is always the reverse with nervous dyspepsia, and accompanying these symptoms, the complications such as vomiting with pyloric obstruction, hemorrhage, and sometimes, perforation, we should not be led away from the true symptoms of peptic ulcer. Of course, we know it is not at all impossible to have both peptic ulcer, and nervous indigestion in the same person. In fact, we know it is not very uncommon, but we should be guided by the real symptoms of peptic ulcer, and be very guarded in our diagnosis. The percentage of hydrochloric acid in duodenal ulcer is usually rather high; in gastric ulcer, nearer normal; but in nervous indigestion, it is usually normal, or below normal.

We usually make no mistake in diagnosing acute cholecystitis with stones, as the onset in that case is rather sudden with cramping pain in the epigastrium which radiates around the right costal border, and often to the right shoulder blade. There is usually vomiting with relief for a while, and the pain comes more or less by paroxysms, which require an opiate for relief. There are often certain articles of food which bring on the attacks of cholecystitis, and there

is no certainty when these attacks may come on, as far as the seasons are concerned. Usually the pulse is somewhat accelerated during the pain, and the temperature is practically normal. When a paroxysm suddenly passes off, and the soreness has disappeared, the patient feels as well as usual until another attack comes on.

It is quite different in chronic cholecystitis, which must be ruled out in a diagnosis of peptic ulcer, for the former has many symptoms in common with the latter, such as a great deal of gas formation with belching, hydrochloric acid about normal, or slightly above, with no special regularity of food relation to pain and with more often a syndrome of reflex symptoms.

The roentgen ray is worth a great deal in the diagnosis of peptic ulcer. It may be either positive or negative. It is not worth so much in the diagnosis of cholecystitis; however, since the Graham-Cole method of examination has come about, the percentage of diseased gall-bladders has been found much higher than before. Some stones in the gall-bladder show rather clearly on a flat plate; but probably not over ten per cent of these do. The negative pictures of cholecystography are, of course worth a great deal.

A retrocecal and very high lying appendix and one often in contact with the gall-bladder gives us another example of the difficulty in differentiating peptic ulcer. It is often difficult, and even impossible to make a diagnosis in an acute abdomen with a perforated appendix retroperitoneal or up under the liver, and a perforated gall-bladder, or a perforated peptic ulcer. The history of the case beforehand gives the best indication for a final diagnosis. Stones in the kidneys, renal colic without stones brought about by strictures in the ureters, must be thought of in connection with perforated peptic ulcer.

The treatment of peptic ulcer may be divided into medical and surgical, whether it be gastric or duodenal. It is found that the medical treatment for gastric ulcer really is more to be depended on for relief than that of duodenal; and even both may be relieved, and if not too far advanced, permanently so, by this means.

By early diagnosis, one is enabled to use medical treatment, which includes, of course, not only drugs of different kinds, but also

proper diet, physical and mental rest, probably change of occupation, and whatnot. It is found, that the alkalies give most relief, and this is by the dilution of the acids of the stomach which are usually too high, and have a tendency to erode the ulcerated area of the mucous membrane. Moreover, by off repeated meals, not allowing the stomach to become entirely empty, one is again able to dilute the acids, and keep them so.

When a chronic ulcer is advanced enough to become complicated with obstruction or hemorrhage, then the chance for medical relief or cure is greatly lessened. Even a mild obstruction, when seen in time, may by proper diet and alkalies, be relieved to a great extent by lessening the inflammatory process of the ulcerative area; however, obstruction with repeated hemorrhage usually requires some form of surgery before permanent relief may be expected. Medical treatment for perforation complicating peptic ulcers is usually without benefit, except for relief of pain.

Surgical relief of chronic peptic ulcer divides itself mostly into gastroenterostomy and resection. In this country, the former is used in the great majority of cases. In the eastern countries, owing to a different form of chronic ulcers, which are chiefly multiple rather than single, resections are done in a much greater percentage of cases than in this country.

The ideal case for gastroenterostomy is pyloric obstruction; however, relief may be obtained in all kinds of chronic peptic ulcer, in probably ninety per cent of cases in this country, especially in chronic duodenal ulcer. In the hemorrhage type, especially, when the patient is in active hemorrhage, we treat him expectantly and symptomatically by the use of pantopon, perfect quietude, empty stomach, colonic injections, either intravenous use of glucose and saline, or by hypodermoclysis (the latter is usually preferred, unless the case is urgent); and finally, by blood transfusions using not over 300 c.c. at a time, repeating as often as necessary. When the patient has fully recovered from the attack, he can then be subjected either to

the medical treatment for temporary relief, or to surgery, which would usually mean gastroenterostomy, posterior short loop operation.

The treatment of perforation is first by prevention, which should be by early diagnosis and treatment, either medical or surgical. When this catastrophe does happen, it is known by the symptoms stated above. We first give morphine or pantopon to bring relief, and prepare at once for operation. On opening the abdomen, we usually find the contents of the stomach and the duodenum, which is often some of the food just eaten, bile, and the other natural secretions of the stomach. The perforation in duodenal ulcers is usually found on the anterior and upper aspect of the duodenal cap just outside the pylorus, and usually, one half inch to one inch from it. There is always a lot of induration, and this makes the closure rather difficult; but by using a purse-string suture, lemberting the closure, and finally stitching a tag of fat of the omentum over the closure, we get a good means of support. After this, a gastroenterostomy is either done or not done, according to the condition of the case, the length of time since the perforation, and the ideas of the surgeon.

It is very important after operations on the stomach and duodenum to have the patient follow a strict diet over a long period of time, giving the stomach and duodenum and adjacent organs plenty of time to adjust themselves to the new situation.

DISCUSSION

Dr. H. A. Gamble (Greenville): As it is now getting late, and Dr. Sutherland has already gone extensively into the subject, I am only going to take a few minutes for my discussion. There are a few points that I feel that possibly more emphasis should be laid upon. The first is that in the treatment of ulcer, it is generally conceded by all that a large proportion of ulcers of the duodenum and many of those of the stomach will recover under medical treatment; possibly not more than 10 per cent will have to undergo surgical measures for relief. In the medical measures indicated I desire to emphasize especially the removal of foci of infection. I am strongly of the opinion that a large proportion of these ulcers are directly due to focal infections, particularly of the

mouth, sinuses, and throat, and until these are cleared up, there will be repeated recrudescences or recurrences, it matters not what dietetic measures are employed. The removal of these foci, combined with proper dietetic measures, and the use of alkalis over a prolonged period of time will cure a large proportion of simple ulcers, and before a simple ulcer should be considered operative, it ought to undergo at least two months medical treatment. At the end of this period of time, if the ulcer is improving, my advice would be to continue the treatment. It may be a matter of months before the patient is cured, and he will probably have to be on a restricted diet for a much longer period of time. But when one operates on the stomach, the anatomical relations and physical functions are usually changed, and one can't always be assured as to what the results will be. The operative results are never 100 per cent perfect, even in the best of hands.

Dr. Sutherland, in speaking of the various types of indigestion in which you have to make a diagnosis, referred to nervous indigestion. Personally I have come more and more to regard these cases of nervous indigestion as suffering from allergic reactions. In a great many of them, if an allergic study be made, it will be found that they are eating some food which is the source of the trouble. Eliminate the food and they get over the symptoms. These patients often have subjective symptoms which are suggestive of ulcer, but upon a thorough physical examination are entirely eliminated as ulcer suspects.

I have been digressing from the subject, but I felt that when you are dealing with the subject of ulcer of the stomach and duodenum, that it is well to come down to these other causative factors or symptoms, which imitate ulcer. As to the operation, there are three definitely absolutely positive indications. They are: 1st, perforation; 2nd, obstruction; and 3rd, continued hemorrhage. The 4th includes those patients who do not respond to medical treatment and dietetic measures, or who might be subject to recrudescences from time to time. There are many types of operations. All, however, have for their object two purposes. The first is to cure the ulcer, and the second to promote drainage, and the very fact that there have been so many operations advised for the treatment of these conditions indicates that no one of them has been 100 per cent successful. The physical condition of the patient, or the pathology found upon opening the abdomen, will largely determine the type of operative procedure adopted. In some cases a gastro-enterostomy may be definitely indicated, and will give the most satisfactory results, and others may demand a pyloroplasty or a third condition may respond better to a resection of the stomach. There is no

question that resection is a more formidable operation of the three, but taking all factors into consideration, it has given us more satisfactory results than any other type of surgical intervention. One is certain of the complete removal of the ulcer, and the ulcer-bearing area of the stomach. We usually prefer some modification of a Bilroth I operation, as this changes less the anatomical relations and the physiologic functions of the stomach, than any other major operation. It is not adaptable to every case, but in those in which it is indicated, the results are usually eminently satisfactory. The longer I have employed gastro-enterostomies in the treatment of ulcers of either type, the more convinced I have become that in many cases the patients were symptomatically relieved without a cure of the pathology present, as they would continue to have bleeding from time to time, and the roentgen ray examinations would continue to show ulcer defects. Another feature of the treatment on which emphasis should be laid is that a patient who has been operated upon for ulcer is just as much in need of careful medical and dietetic attention afterwards as before. You have not guaranteed a cure, because you did a gastro-enterostomy or resection. A certain proportion of these cases do have recurrences, and some patients seem to have a definite predisposition toward the development of ulcers in this region. Immediately following operations complications are liable to develop. Gastro-enterostomies do not always drain as we would like them to. I don't doubt that any man who has done any considerable amount of gastric surgery has not had some untoward developments in his work. Sometimes a patient has been getting along all right for a week or ten days, he develops some disturbance of nutrition, which I believe is sometimes suggestive of a scurvy or pellagra, which we feel is secondary to a change in the physiologic functions of the stomach, and which we have found occurs more often following a gastro-enterostomy than resection.

In view of the fact that excepting the type of cases specified, that is, those of obstruction, perforation, and continued hemorrhage, that most ulcer patients will recover without operation, it is our usual plan to treat them medically and dietically, and give them every opportunity to recover under such measures.

A few words about the surgical treatment of hemorrhage. It is said that two per cent of the cases of duodenal or gastric ulcers which are bleeding will die as a result of the hemorrhage if left alone, and about 30 per cent will die if surgery is invoked. As a general thing, when one sees a hemorrhage of the stomach, it is in the patient who has not been under treatment, and

it is often a question as to what the pathologic condition is, and one is not justified in subjecting the patient to an examination that will reveal the nature of the lesion. Hemorrhage from the stomach may be caused from ulcer, cancer, varicose veins, diseased spleen, or from a cirrhosis of the liver. It is a very difficult matter to open the stomach, not knowing the pathology present, and locate a bleeding point. It is often like locking for a needle in a hay stack. The measures indicated in this condition are: First, absolute rest of the stomach, with transfusions as may be indicated; after the hemorrhage has stopped, the use of glucose continuously, intravenously, is a most useful measure in obtaining complete rest to the organ.

We are of the opinion that where hemorrhages are massive in character and continue to recur, that one is justified in making an exploratory operation immediately following a transfusion.

Dr. G. A. Hendon, (Louisville, Ky.): I should not get up at this inauspicious moment, but for the fact that on yesterday at the meeting of the Southwestern Kentucky Society at Paducah, I reported a series of 25 peptic ulcers involving both gastric ulcer and duodenal ulcer treated by venoclysis. In the series there were 8 cases of massive hemorrhage, two cases of perforations. I lost two cases on account of the fact that they had bled to death by the time they got to the hospital. There were two more that I have just discharged from the hospital a week ago, and that would leave us 21 cases cured. The oldest one was 4 years and five months and had had a gastro-enterostomy three years previous that failed to relieve. I cured 21 cases and by that I mean all the symptoms are gone; some have gained from 30 to 50 pounds in weight. I cured them by putting the stomach at complete rest and feeding with venoclysis during periods varying from 10 to 15 days, using 10 per cent solutions of dextrose Ringers solution.

I submit this report from anything you might think it is worth. The treatment will control gastric or duodenal hemorrhage with a promptness that is startling. There is no question or argument about that.

Dr. D. T. Brock, (McComb): I would just like to ask Dr. Gamble about those cases of posterior gastro-enterostomy for obstruction,—if he got results and whether he had any trouble with his gastro-enterostomy; also those cases who did have ulcer but had no obstruction of pylorus, did he tie off the duodenum and give rest in those cases?

Dr. Gamble: Well there was not a complete obstruction. I think gastroenterostomy treatment which is simply a treatment of simple ulcer has satisfactory results, but the patients were not

relieved as readily as otherwise. I have not used the method of tying off—that has been attempted by some men for the last 12 years I think, but with varying degrees of success. I feel, as I said in my discussion that the object in treating ulcer, either duodenal or pyloric, is the removal of the lesion and the promotion of drainage. When you do a resection you do away with the pylorus.

ARTHRITIS*

CLYDE BROOKS, M. D.

NEW ORLEANS

Arthritis is an extremely ancient malady of both man and beast. This is shown by fossils of earliest prehistoric man and of still more remote prehistoric animals.

At present, though the death rate is low, the number of cases is very large, constituting a major source of production of disability.

Heretofore the outlook for the arthritic has not been very cheerful; but recent advances in knowledge of the physiology of joints, of the mechanism of production of arthritis, and of new principles of treatment of arthritis, have brought, not only a clearer vision of the nature of arthritis, but also better success in treating it. So at present no case should be regarded as hopeless. A well ordered regimen carried out by a skilled physician who has had adequate experience in the modern treatment of arthritis, and an intelligent, earnest patient will usually bring successful results.

A knowledge of the applied physiology of the joint is important in arthritis, for it enables the physician to use the great powers of the joint for adaption, repair, and regeneration, thereby securing a movable, usable joint for the patient, instead of a fixed joint—which is a failure.¹

Weight bearing and movement not only keep the joint from becoming rigid, but they increase the process of repair and healing by greatly stimulating the circulation of blood,

synovial fluid, and tissue fluid, throughout the joint tissues.

Since there are no blood vessels to the central superficial part of the joint cartilage, this portion of the joint is only supplied by nutrient tissue fluids and synovial fluid which are squeezed in and out, back and forth, through the cartilage. So motion and weight bearing are important helps in repair of joints in arthritis. An injury to the central superficial area, either by trauma or degeneration, is slow of healing. The result is compensatory proliferation of the surrounding marginal tissues of the cartilage, where the blood supply makes healing more rapid. This compensatory hypertrophy is characteristic of osteo-arthritis (or hypertrophic arthritis).

Some arthrologists immobilize the arthritic joint, placing it in a plaster cast, holding the view that the acutely inflamed joint needs absolute rest, that this is essential to recovery, that any movement is fraught with dire consequences, and that after the inflammation has passed the joint will be found to be in perfect order. Some orthopedic surgeons appear to use a plaster cast on an arthritic joint for too long a time. It may be they are impressed with the idea of artificial mechanical correction of deformity, not trusting the natural forces for repair and recovery. But often the poorer patient, who must work and keep moving and cannot wear a cast nor brace, is better off in the long run than the well-to-do patient who has the benefit of the orthopedic specialist, for the poor patient will have a movable, usable joint, even with some deformity, whereas the well-to-do patient will have straight limbs, but stiff joints.

Of course the orthopedic surgeon is indispensable in arthritis in keeping the members straight, but he should not use the plaster cast and the brace to the extent that a rigid joint is the result.

The joints are formed in the embryo by differentiation of mesenchyma. So in arthritis it is quite common to witness the transformation of connective tissue into cartilage, and cartilage into bone, or the reverse process; any one tissue being readily transformed into any other. And under certain conditions the tissues are stimulat-

*Read before the Orleans Parish Medical Society, October 9, 1933.

ed to proliferation and over-growth, while in other conditions degeneration and wasting of tissues occurs.

So in atrophic (rheumatoid) arthritis, over-growth of connective tissue pannus, spreading from the periphery inward over the articular surfaces of the cartilages, chokes the joint structure underneath, causing atrophic processes; whereas in hypertrophic (osteo-arthritis), degeneration of the central superficial area of the articular cartilage, where there are no blood vessels, is the initial lesion which results in a compensatory hypertrophy at the periphery, where the blood supply is adequate.

So circulation of blood, lymph, and tissue-juices is all important in the physiology and pathology of joints, and in arthritis.

Absorption of water-soluble substances from the joint is normally quite rapid, the solutions being taken up by the blood stream. Colloids are absorbed much more slowly by the lymphatics. Movement and weight bearing greatly facilitate the absorption of both kinds of substances.¹ So it is a good practice each day to move the arthritic joint passively, if it is too tender to be moved actively, gently and slowly carrying the motion through its full arc, if feasible, using gentle persistent pressure, of course not over-doing it, which might cause increased inflammation.

After the acute inflammation has somewhat subsided, increased passive movements can be made, and some active movements started. Later on, more vigorous, steady pressure can be used in passive movements, slow, firm pressure being better than sudden jerky movements. Weight bearing is introduced when the patient can endure it. For example, in a case of spondylitis, where the acute inflammation has passed, but much stiffness of the neck and head remains, a heavy bag of sand, salt, or grain placed on top of the head brings pressure on the whole spinal column. Then the patient exercises by bending his head slowly forward and backward, to one side and the other, with a steady straining movement. For exercising arthritic fingers it is a good plan to have the patient use a large ball of modeling clay, or putty, kneading it and working it with the finger tips. This not only stretches the connective tissue which is limiting

the joints, but it tends to smooth out the surfaces of the cartilage and bony parts of the joints, and brings alternating pressure and release on the tissues, thereby squeezing the nutrient fluids through and through the joint tissues; aiding absorption of fluid, aiding regeneration and repair, and restoring function of motion to the joints.

Certain types of arthritis are of well known or well accepted etiology, such as: traumatic, luetic, gonococcal, pneumonic, tuberculous, etc. But there are two large groups which we classify as rheumatoid (atrophic) arthritis, and osteo- (hypertrophic) arthritis, the etiology of which is by no means so well known nor so well accepted. Nevertheless for these too it is becoming more and more apparent that they are essentially microbic in origin, and furthermore that streptococci are the chief causative organisms, especially for the atrophic type of arthritis, and perhaps staphylococci for the hypertrophic arthritis. However, other conditions are so important and enter so definitely into the etiology of arthritis, that many arthrologists regard arthritis as a malady of multiple origin. For example, Millard Smith² has called attention to the importance of ischemia in bringing on arthritis. And the allergic state apparently contributes the essential soil for the development of certain cases of arthritis³. Degenerative processes apparently play a decisive role in the etiology of certain types of arthritis, particularly osteo- (hypertrophic) arthritis. Other conditions of importance in the etiology of arthritis are: the state of balance between the two great divisions of the vegetative nervous system: the para-sympathetic and the sympathetic nervous systems; or the degree of immunity existing at the time when exposure, fatigue, or malnutrition, or other such unfavorable conditions, make infection more easy.

The absorption of toxic substances from sluggish putrefactive gastro-intestinal tract; or the entrance of micro-organisms from foci of infection; and other conditions: mental, environmental, and nutritional—all, no doubt, influence profoundly the process of production of arthritis. So in any particular case of arthritis, it may be a difficult problem to determine just how many conditions, and to what degree each

condition enters into the essential etiology of that case of arthritis.

Since the microbic theory seems to be gaining ground, and since the streptococci seem to be the most important family of organisms concerned in the etiology of arthritis, ^{4, 5} the following table of rheumatic diseases is presented as a basis for the further classification of arthritis itself :

RHEUMATIC DISEASE
(Streptococcal)

1. Mucous—Tonsillitis, pharyngitis, laryngitis, bronchitis, cold, gastro-enteritis, appendicitis, etc.
2. Dermal—Erythema nodosum, erysipelas, scarlet fever, impetigo, furunculosis, pyoderma, etc.
3. Connective—Fibrositis, lumbago, cellulitis.
4. Fatty—Panniculitis.
5. Muscular—Myositis.
6. Cardiac—Rheumatic heart disease.
7. Nervous — Peripheral — neuritis, sciatica. Central—chorea (Sydenham's).
8. Glandular—Inflammations of the kidneys, thyroid, etc.
9. Ocular—Inflammations of the eye.
10. Otic—Inflammations of the ear.
11. Articular—Still's disease, acute rheumatic fever, rheumatoid arthritis.

Then attempting to classify arthritis on the microbic theory of its etiology, giving streptococci their place as suggested above, the following classification is ventured :

ARTHRITIS
(Microbic)

- | | |
|--|---|
| | Still's disease |
| A. Streptococcal
(Streptococci) | Acute—Acute rheumatic fever
Rheumatoid arthritis
Chronic—Rheumatoid arthritis |
| B. Staphylococcal
(Staphylococcus
albus and au-
reus) | Acute—(not yet clinically dif-
ferentiated) Chronic—Osteo-
arthritis |
| C. Neisserian
Gonococci) | Acute—gonorrhœal arthritis
Chronic—gonorrhœal arthritis |

D. Tuberculous (Tubercle bacilli)	Acute—tuberculous arthritis Chronic—tuberculous arthritis
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E. Luetic (Spirochaeta pallida)	Acute—Syphilitic arthritis Chronic—Charcot's joint
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There are other joint disorders not included in the above classification such as: gout, hydrops, traumatic knee, Kohler's disease (os navicularis pedis), etc. They are omitted because their etiology and treatment is quite different from that of the arthritidae included in the present consideration.

Chronic arthritis, other than luetic, gonorrhœal, tuberculous, pneumonic, etc. is divided into two groups: A, and B, of course with a good deal of mixing of the two types. Type A is called rheumatoid or atrophic arthritis; Type B is called osteo- or hypertrophic arthritis.

Type A occurs most frequently in rather young people beginning with the spindle-shaped painful finger joint and progressing to chronic multiple arthritis with emaciation and severe crippling.

Type B is seen most often in middle aged or older patients, especially heavy-weight women. It often begins in a single large joint such as one knee, and gradually produces proliferation, grating with painful, swollen joints, but with little impairment of the patient's general health.

There is evidence indicating that Still's disease, seen in children; acute rheumatic fever in young adults; and rheumatoid arthritis in rather young adults, are all manifestations of essentially the same process at the various ages, perhaps all due to streptococcal infection.⁵ On the other hand, osteo-arthritis is most frequently found in persons of middle age or older, who have degenerative processes going on, with an infection, probably of staphylococcus as the essential pathological mechanism. But there are many cases of mixed type, making it difficult to classify cases as they present themselves in the clinic. Even the gonorrhœal or the pneumonic types of arthritis simulate the above types, and if it were not for the known history or concurrence of pneumonic or gonorrhœal infec-

tion, the etiology would be quite obscure. Fortunately the exact differential distinction of these two types of cases is not essential to treatment, for there is not a wide difference in general treatment of the two types, except in the use of specific vaccines.

The best opportunity for a case of arthritis is in the arthritic clinic where team work with the bacteriologist, roentgenologist, orthopedic surgeon, and the nose and throat men, as well as the men of other specialties, may all be marshalled making it possible to gather special diagnostic data, and to apply special treatment when indicated, as well as to carry on the ordinary routine general treatment. However, this whole program should be most wisely planned and carried through. It is quite possible for a patient who is extremely anxious to get quick relief, in agonizing over her condition and under her urgent demand for the doctor to "do something," to over-persuade her physicians and specialist to remove teeth, tonsils, gall bladder, uterus, appendix, etc., all with no favorable result on the arthritis. This kind of a patient usually has been the rounds of many clinics and has tried to do all that has been suggested, striving desperately, but rarely achieving good results.

Probably most of such cases would have done better by delaying the various operations designed to remove foci of infection, except where the etiologic relation is quite obvious—such as: removal of apically abscessed teeth, infected tonsils, etc. But even here it is a good plan to wait for some subsidence of the acute inflammation, because stirring up the case by radical operations might cause flare-up of the arthritic condition which might be long continued and permanently crippling as the end result. It is better to begin treatment and secure some improvement, after which, cautious conservative removal of foci will be beneficial, without the dangers of more radical surgery done during the more acute stage.

However, the completely organized arthritis clinic is not available to most of the cases.

The following simple plan of treatment is applicable, not only as the foundation routine for the arthritis specialist, but also may be widely employed in general practice by the family

physician. The simple regimen which I have been using for a number of years consists essentially in the use of non-specific hemo-protein which I have developed and prepared and have been perfecting for the past seventeen years.⁶ Using the hemo-protein, I have been able to secure complete recovery, or marked improvement, in a large proportion of cases. This protein is of very low toxicity,⁷ but with marked antigenic action, as revealed by blood changes, titre, and other laboratory results, as well as clinical results on patients.⁸

The plan of administration is to make the injections intravenously, intramuscularly, or subcutaneously, beginning with small doses often repeated, and increasing the dose and the interval between doses, until sufficiently large to give optimum clinical results, but avoiding at all times the production of general reactions, or "protein shock".

It has been heretofore generally believed that the whole value of non-specific protein therapy is to be found in this "protein shock" (a severe general reaction, chill, fever, etc. such as follows the injection of typhoid triple vaccine and other non-specific proteins). But I have for some years past urged that this is a misconception, and that "shock" is not only useless, but harmful or dangerous.

So in using hemo-protein, if there is any general reaction whatever (such as drowsiness, malaise, nausea, slight chilliness followed by warmth), it is regarded that *the dose was too large*.

Instead of the old principle: "*no reactions, no improvement*," we now advocate; "*avoid all general reactions for they are useless and dangerous*."

In general it is preferable to employ smaller doses and wait for results rather than to try to crowd the case with large doses. Some physicians, after giving a very few injections of non-specific protein, have reported to me: "That stuff is no good, it is just like so much water. No results whatever." Let it be understood that in treating chronic arthritis it is often slow business. If a case starting treatment in June shows no very noticeable improvement until August that should not cause the physician or the patient to give up hope. But in September,

or October, or November, the case will very likely show satisfactory improvement. So persistence and patience are prerequisites to fullest success in management of the case.

From theoretical grounds the intravenous route should be most potent, for this is the route used by all who wish to produce anti-bodies in the preparation of therapeutic sera. So the intravenous method should be preferred, especially if the results are not satisfactory with the subcutaneous or intramuscular method of injection. Also the intravenous route is less painful than other routes.

The main objective is to find the optimum dose. This can be determined by trial and careful observation and analysis of results.

The following schedule of doses may serve as a point of departure, but should be altered to suit each case. This schedule is particularly adapted for chronic cases:

First day, first dose	.1 cc.
Second day, second dose	.2 cc.
Third day, third dose	.3 cc.
Fifth day, fourth dose	.4 cc.
Eighth day, fifth dose	.5 cc.

Then continue .5 cc. twice a week, so long as indicated.

The following schedule may be used in more acute cases where there is no indication of supersensitiveness or allergy.

First day, first dose	.2 cc.
Second day, second dose	.4 cc.
Fourth day, third dose	.6 cc.
Sixth day, fourth dose	.7 cc.
Ninth day, fifth dose	.8 cc.
Twelfth day, sixth dose	.9 cc.
Fifteenth day, seventh dose	1.0 cc.

Then continue 1.0 cc. twice a week so long as indicated.

The above schedule may be used in acute inflammatory rheumatism or acute painful arthritis with rather sudden onset and much swelling and tenderness of the joint.

As a general rule the acute cases will do better on somewhat larger doses than the chronic cases. However, exceptional cases are encountered, both acute and chronic, which are quite sensitive, showing focal reactions even after small doses. In such cases the intraven-

ous route, with very small doses, should be used, with something like the following schedule:

First day, first dose	.05 cc.
Third day, second dose	.10 cc.
Fifth day, third dose	.15 cc.
Seventh day, fourth dose	.20 cc.
Ninth day, fifth dose	.25 cc.
Eleventh day, sixth dose	.30 cc.

Continuing .3 cc. twice a week so long as indicated, but after a time larger doses may be better tolerated without reactions, and with good clinical improvement.

Along with the hemo-protein, of course, it is a good plan to use all other measures which will be helpful to the case. The removal of foci of infection should by all means be done, choosing the best time and using caution in not stirring up troublesome flare-up of the arthritic condition. Heat, sunlight, physio-therapy, hydro-therapy, colonic flushings, allergic desensitization, massage, diet, general hygiene—all are valuable. The above plan of treatment is used in atrophic and hypertrophic arthritis, and acute rheumatic fever, Still's disease, in gonorrheal arthritis, in pneumonic arthritis, tuberculous arthritis. It is not effective, of course, in luetic arthritis.

In suitable cases which do not, after sufficient time, show satisfactory improvement, the use of vaccines is in order. The same principles should be employed in giving the vaccines as in giving the non-specific protein. Injections are made preferably intravenously and in such small doses that no general reaction: no shock, results. Stock vaccines are generally useful, and simpler to use. And in those cases which do not improve with hemo-protein, nor with stock vaccines, the attempt is then made to isolate an organism of high agglutination titre which organism is used to prepare an autogenous vaccine, which is used in the same way as the stock vaccines, as described above.

Employing the above scheme of treatment, and persisting in the same, it has been found that there are few cases which do not finally show complete recovery or very marked improvement.

BIBLIOGRAPHY

1. Fisher, A. G. *Timbrell. Chronic non-tubercular arthritis.* New York, 1929.

2. Smith, Millard. On the nature of atrophic arthritis and its treatment. *American Medicine*, 25:622, 1930.
3. Swift, Homer. Pathogenesis of rheumatic fever. *Jour. Exper. Med.*, 29:497, 1924.
4. Small, J. C. Role of streptococci in rheumatic disease. *Jour. Lab. and Clin. Med.* 14:1144, 1929.
5. Cecil, R. L., Nichols, E. E. and Stainsby, W. J. Etiology of rheumatoid arthritis. *Amer. Jour. Med. Sci.* 181:12, 1931.
6. Brooks, Clyde. Non-specific hemo-protein antigen in arthritis. *New York Medical Journal*, 109:452, 1919.
7. Brooks, Clyde; Goode, Henry; and Pack, Geo. T. Further studies on the physiological action of non-specific antigens prepared from shattered hemo-proteins. *Pro. Biol. and Med.*, 21:321, 1924.
8. Brooks, Clyde. The effect of shattered hemo-protein on the colorless blood corpuscles. *Amer. Jour. Physiol.* 49: No. 1, 1919.

DISCUSSION

Dr. O. W. Bethea: Arthritis is an exceedingly interesting subject, and, like the poor is always with us. Any suggestion or new weapon to combat it is therefore always welcome.

I am very much impressed some time ago with Dr. Brooks' earnestness and enthusiasm in pursuing his studies. I decided I needed Pember-ton's last book on arthritis; Major's didn't have it—it was off the market awaiting a new edition; I appealed to the Library and they didn't have it, and I could not find it anywhere. Dr. Brooks happened to hear I was trying to get the volume and was kind enough to lend me his. It was blue pencilled, black pencilled, inked, dog-eared, handled and worn, much like an old family Bible in a real good home. I rather got the impression that Dr. Brooks would be able to speak with a certain amount of authority when he began to talk of the literature on arthritis, particularly if he had many such books and had used them as well.

In the subject Dr. Brooks has chosen there is quite a good deal that we do not know with certainty and most of the rest he has covered thoroughly. I do not think there is any disease about which there is more confusion in classification than there is in arthritis. There are three outstanding classifications: one, of Nichols and Richardson, one of the English Committee on the Control of Arthritis, and one of the American Committee on the Control of Arthritis. Nichols and Richardson used proliferative and degenerative as the two classes of the chronic disease. The English group use rheumatoid arthritis and osteoarthritis and the Americans atrophic and hypertrophic arthritis. In a recent review of text books in preparing an article on this subject, it was interesting to find that the various authors almost without exception mix their nomenclature—for example four English and four American. It would seem to me quite a logical suggestion that we confine ourselves to the classification of the American Committee on the Control of Arthritis, headed by our own great Dr. Pember-ton, and let

our English brethren, if they will, use their own classification.

Now, in regard to treatment, I am very much in hopes that hemoprotein will give something of definite value. In one of the recent text books on treatment, there were 86 drugs and therapeutic measures recommended for the treatment of chronic arthritis. This multiplicity leads to confusion, and it is a sad commentary on the fact they had not found the real thing so far.

Dr. Brooks' work is fairly recent. In my own private practice, I have had the chance to carry it out completely in only one case but with exceedingly good results. The man is back to activity, with some enlargement of the joints but otherwise normal. The enlargement will probably be permanent because he has that kind of arthritis.

Dr. McIlhenny has emphasized very strongly that these cases are usually mixed hypertrophic and atrophic, and therefore, he feels that the plan of therapy must be analyzed accordingly.

Dr. D. L. Watson: I have nothing to say about Dr. Brooks' paper except to compliment it. This hemoprotein is a splendid product and I use it quite freely. There was one point in his paper that did not seem to be stressed as strongly as I would like to stress, and that is Neisserian infection. I believe that the major portion of chronic arthritides is due to gonococcal infection, frequently many years previously. The gonococcus is not self limited in its course like the staphylococcus or streptococcus. I treat these cases with a course of emetine hydrochloride intravenously, followed by increasing doses of the iodine of sodium on an empty stomach. After ten doses of emetin given on alternate days the Hemoprotein (Brooks) should be given as directed over a long period of time in conjunction with the iodine.

Dr. E. A. Bertucci: One point that Dr. Brooks brought out in regard to the etiology of arthritis in general was the particular stress laid on the streptococcus organism, as the causative bacteriological factor. It has been found and experiments have been made by a number of workers, that in the foci of infection the streptococcus hemolyticus was the predominating organism that was isolated. They have also corroborated this fact by finding streptococcus hemolyticus agglutinins in the blood of these patients in a high percentage of cases.

I prefer the classification of the American Committee on the Control of Arthritis because I believe it is easier to understand, namely the atrophic and the hypertrophic form.

I think we should not lose sight of the fact in regarding the etiology of this disease, the peculiarity in which atrophic arthritis and hypertrophic arthritis exist in these individuals, that is you will find the artrophic form in those between the ages of 16 and 30, and the hypertrophic form between

the ages of 40 and 60, that is after 40. There seems to be some other etiologic factor in the causation of arthritis besides infection, and I refer to some endocrine dysfunction. There seems to be a definite relation between the kind of arthritis and the relative diminution of secretions of the endocrine system after 40. Here you will have the degenerative type of arthritis which occurs as the hypertrophic form with the throwing out of calcified tissue. There seems to be some difficulty in calcium metabolism. In most of the cases of the hypertrophic form you will find also a diminution of the B. M. rate test, and therefore, means a lowering of the function of the thyroid gland. Thyroid extract has been tried on cases of hypertrophic arthritis with good results, in a good many cases, the administration of ovarian extract in women and testicular extract in men, caused amelioration of symptoms and a gradual loosening up of the joints. I don't say a great deal, but anyway a certain amount.

Dr. Clyde Brooks (In conclusion): Dr. Bethea's very enlightening discussion I am sure is deeply appreciated by all and is so thorough and complete on the points covered as to need no further comment from me at this time.

Dr. Watson says he does not get his knowledge from books nor the laboratories; but from the patient. In this he reminds me of Paracelsus.

Regarding the question of the etiology of arthritis, some of our most recent writers and researchers hold that arthritis is not essentially a microbial disease. Dr. Millard Smith has set forth his views that it is essentially due to ischemia; but more recently has stressed the lack of vegetative nervous balance as the most essential factor. (Of course he regards the ischemia as due to lack of nervous control or balance). Others hold it is due to endocrine deficiency; and others to allergic conditions. The whole question is still unsolved; but there seems to be a strong drift toward the microbial theory at the present time.

POSTOPERATIVE ASEPTIC FEVER: REPORT OF CASES

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and
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NEW ORLEANS

During the past summer several cases have come under our observation showing high post-operative temperature in the absence of any detectable infection. In seeking to explain such conditions we reviewed the physiology of heat regulation, and there we believe lies the key to the understanding of these aseptic fevers.

The maintenance of a constant body temperature is the result of an established equilibrium between heat production and heat elimination. Body heat is derived from the oxidative changes occurring in the muscles and from all metabolic processes in the organism. In severe exercise the amount of thermal energy generated may rise to 200 per cent or 300 per cent of the basal level. In fevers, however, it never attains such heights, the maximum recorded during a malarial chill being 137 per cent. It can be said that excessive heat production as a factor in the genesis of clinical fever is of minor importance, except possibly in such rare instances as the so-called "ether convulsions" that occur sometimes during the course of an operation. An efficient eliminative apparatus can keep pace at all times with heat generation and holds temperature at a normal level. Heat elimination, itself, is accomplished by radiation, conduction, and evaporation from the skin and the lungs. It can be increased by cutaneous vasodilation, which exposes a greater volume of blood to the lower temperature of the environment, and by increasing the secretory activity of the glands, which induces greater evaporation.

The generation and dispersion of heat are not independent processes but rather two phases of activity of a regulatory and integrating nervous agency, the peripheral portion of which is part of the sympathetic, and the central, a so-called "physiologic thermostat", localized by some in the tuber cinereum and by others in the hypothalamus. Thus we know that tumors and hemorrhage in this encephalic region result in hyperpyrexia. The poikilothermal experimental animal fails to respond to thermogenic agents, such as bacteria and foreign proteins, because its cervical cord has been severed or because portions of its hypothalamus have been ablated. It is Cramer's contention, nevertheless, that temperature regulation is more intimately connected with the function of the thyroid and adrenal glands, which respond reflexly to environmental temperature, and there is no doubt that physiologic fever can occur from hyperactivity of these glands.

Elevations of body temperature can result, therefore, from the effect of bacterial or chemical toxins on the central "thermostat", from

glandular over-activity, and from inadequate heat elimination.

If the cooling function of the skin is impaired, pyrexia will result. Such event may issue from one of the following factors:

1) A uniformly unusually high environmental temperature, which reduces heat loss by radiation and conduction.

2) A relatively high humidity, because it decreases evaporation of perspiration.

3) Poor ventilation, because it creates an insulating layer of air next to the skin, diminishing loss of heat in all three manners.

4) Dehydration, because it is associated with increased viscosity of the blood, a sluggish cutaneous circulation, inhibition of perspiration, a disturbance of the blood electrolytes and colloidal phenomena. This is classically exemplified in the fever of the newly born. Schamberg reports fever of 105 degrees from experimental continuous exposure to an elevated temperature with excessive perspiration. As is well known a limited fluid intake, vomiting, diarrhea, and excessive diuresis can also induce dehydration. It might be well to recall that only insensible perspiration has a cooling effect; sweat, in profusion, collecting in beads or drenching the bed clothes, depletes the body of fluids and electrolytes and may effect a temperature disturbance.

During August we had occasion to witness a very dramatic occurrence in one of the operating rooms at Hotel Dieu. The day was extremely hot and it was the noon hour. During the course of an appendectomy the patient abruptly developed convulsions that lasted twenty minutes and his temperature rose steeply to 105 degrees. The operation was hurriedly concluded, the ether anesthetic discontinued, and the patient treated for heat stroke. Fortunately, through the excellent work of the surgeon and the anesthetist, he reacted and finally recovered.

REPORT OF CASES

Case 1. (H3501) Mrs. H. H., white female, aged 27 years, gravid one, admitted to hospital July 29, 1933. Delivered July 30, 1933.

Fever 103 degrees thirty-six hours post partum without apparent cause; after administration of antipyretic treatment temperature fell to normal within three hours and remained so until discharge, August 8, 1933.

Case 2. (H 3231) Mrs. F. F., white female, aged 50 years, obese (217 pounds), had palpable thyroid and girdle fat, admitted to hospital July 13, 1933. Appendectomy July 15, 1933.

Fever on day of operation continuing irregularly between 99 degrees and 102 degrees with some days of remission for the next two weeks. Incision opened, no infection found and the skin edges were reapproximated with adhesive. Urine negative, chest clear. Patient complained of heat a great deal and had to be moved to another room with northern exposure. Antipyretic treatment instituted; temperature gradually returned to normal. No cause for fever other than atmospheric conditions could be found.

Case 3. (H 3207) Mrs. J. E., white female, aged 39 years, had palpable thyroid. Appendectomy July 13, 1933.

Fever ranging between 99 degrees and 102 degrees present for ten days, beginning on the day of operation. Wound clean. Responded promptly to antipyretic measures and had normal temperature last five days of stay in hospital.

Case 4. (H 3487) Mrs. L. B., white female, aged 30 years, obese, thyroid palpable. Appendectomy July 29, 1933.

Starting on day of operation the temperature stayed between 99 degrees and 101 degrees F. On the fourth postoperative day the temperature fell to normal and remained so until discharge.

Case 5. (H 2915) Mr. W. D., white male, aged 23 years, admitted to hospital on June 28, 1933. Appendectomy June 29, 1933.

Fever of 100 degrees to 101.6 degrees for forty-eight hours after operation. On the third day the temperature was normal and continued so until discharge.

Case 6. Miss J. S., white female, aged 20 years, admitted to hospital September 1, 1933, with diagnosis of chronic cholecystitis. Cholecystectomy, September 2, 1933.

Temperature rose on day of operation and fluctuated between 99 degrees and 101 degrees for eight days. It then fell to normal and remained so until the fourteenth day when it went up to 103 degrees for a few hours; this recurred on the sixteenth day but after was normal until discharge. Incision clean. At no time was there any evidence of infection nor other disturbance intrinsic to the patient that we could point to as the cause. Treatment directed as in the previous cases resulted in control of the fever. Convalescence uneventful.

Case 7. (H 3543) Bro. C., white male, aged 36 years, thyroid palpable, good nutrition, admitted to hospital July 31, 1933. Bilateral herniorrhaphy, August 1, 1933.

Fever from first to sixth postoperative day varying from 100 degrees to 102 degrees. Fever

subsided entirely upon administration of fluids. Convalescence proceeded without further trouble.

Antipyretic treatment consisted of the administration of fluids in abundance, intravenously and subcutaneously when necessary, accompanied with proper attention to elimination, repeated doses of atropin for profuse sweating, and the maintaining of a constant circulation of cool, fresh air by keeping the windows and doors open; this was further effected by the use of electric fans under the beds or at the transom level, the fans always being directed away from the patients. Beds were moved not less than three feet from the windows. In only one instance was it necessary to move the patient to a room with a different exposure.

The above measures were supplemented, when necessary, by a mild antipyretic usually aspirin with caffeine. Ice, caps and cool sponges were used as indicated.

COMMENT

In no case was there any active infection either in the operative wound, the urinary tract, or elsewhere that we could discover. Consequently one looks to other sources for a cause of the fever.

The summer climate of New Orleans is warm and the humidity is high. From Weather Bureau Reports for the months of July, August and September of this year, we find that the mean temperature was 82.5 degrees F. and the humidity averaged 70 per cent. On most days the temperature was around 90 degrees for several hours, and the humidity in the evenings between 75 per cent and 80 percent. The average daily temperature for September was the highest for the past sixty-two years.

Several of our patients were in wards where most or all of the beds were occupied and had an exposure to the hot afternoon sun for six or seven hours. The room patients who showed postoperative fever had rooms with the same exposure, the bed being about three feet from the window.

Case 6 was the only one whose ward had exposure to the morning sun. In this instance fever occurred on the hottest days of September.

Five of the series had palpable thyroid glands although there was no evidence of increased thyroid activity before the operation or during convalescence.

Three patients were obese, the others underweight.

There were two male patients in the series.

No patients had arterial hypertension or other evidence of adrenal dysfunction.

All of the group were good surgical risks as determined by a careful pre-operative examination. There were no emergencies.

The severity of the operation played no part as a cause. Three of the operations were simple appendectomies where no other pathology was found. No operation was of longer duration than forty-five minutes. Nearly all of them were done under ethylene-oxygen anesthesia.

From the foregoing one would conclude that in a certain percentage of cases presenting postoperative aseptic fever, glandular action, sex, anesthesia, the type of operation and other factors intrinsic to the patient or the surgery performed are relatively unimportant as causative agents in the disturbance of the heat ratio between heat genesis and heat dissipation with resultant postoperative fever. Rather one must deduce that it is due to atmospheric conditions of temperature and humidity.

INTERPRETATION

We realize that this series is too small from which to draw positive conclusions, nevertheless, the observations herein recorded in our opinion have definite value, satisfactorily explain and offer a solution for many high postoperative temperatures that occur during the summer months.

ARTERIO-VEINUS FISTULA OF THE LEFT INTERNAL CAROTID ARTERY AND JUGULAR VEIN

D. R. McINTYRE, M. D.
SHREVEPORT, LA.

This case is reported because of the extreme rarity of arterio-venous fistula especially in this region; also, because of absence of history in the case to account for its occurrence.

CASE REPORT

R. H., white male, aged 54 years, American lawyer, consulted me March 6, 1933, on account of a blowing, pumping, steam-like noise in the left ear, together with extreme nervousness, anxiety, headache and easy fatigue.

The noise in his left ear began in February 1928 with a sudden onset while at ease reading in his library. Having just recovered from otitis-media in the right ear his first thoughts were that possibly a like condition was making its appearance in the left ear. He consulted an ear specialist and nothing abnormal was found. There had been no noticeable change to him in the noise heard but he had progressively become more uneasy about his condition until he had reached the stage bordering on a nervous breakdown. There was no history of syphilis; blood and urine were normal.

Physical Examination.—The patient was a well developed and fairly well nourished white male. There was some swelling on the left side and the external veins of the face on that side appeared congested; palpation revealed nothing. There was no abnormal pulsation but on auscultation a blowing, pumping, hissing-like noise, very similar to

that heard over an aneurysm could be heard extending upward from below the tip of the mastoid process to the top and right side of his head. Blood pressure at first examination was 180/90; heart appeared normal.

The patient was instructed how to promote collateral circulation through the circle of Willis and, also, advised concerning rest and diet so as to lower his blood pressure. In March, at the first examination, he could only stand for the circulation to be stopped by pressure less than ten seconds over the left internal carotid. By repeated and frequent efforts, after three months he is now able to withhold the circulation by pressure more than three minutes and appears to be much improved physically as well as mentally. Blood pressure to date is 135/85. If the collateral circulation continues to improve ligation of the carotid artery will be done.

NEW ORLEANS
Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

ORGANIZED MEDICINE AND SOCIAL MEDICINE

A consideration of the very remarkable metamorphosis in the life of the average human in this country and the changes in the social structure of the country during the past few years bring to mind more strongly than ever the thought that state medicine is closer on the horizon than it has

ever been in the past. With state banking, state sugar refining, state steel making, state railroading, and virtually every industry subservient to the beneficent autocrats of Washington, it seems reasonable to suppose that the professions will soon be drawn into the web of generalized socialism. As a matter of fact, the medical profession has already been drawn in to a greater or less extent. The United States Government is giving medical care to a very considerable group of the citizenry of the United States, and this medical care is being supplied by doctors who are suffering because they are not thoroughly organized. This statement can be particularly emphasized because of the unsuccessful efforts of the officers of organized medicine in Louisiana to secure a fair deal for the physicians of the State in dealing with the wards of the government.

There can be no question, it would seem, that, were the medical profession organized one hundred per cent, the difficulties that Dr. C. A. Weiss and his executive officers have had in securing a fair, just, and equitable arrangement for the care of the Emergency Relief Administration beneficiaries would not have presented such difficulties. Only about fifty-five per cent, 1,100 of the 1,976 registered doctors in this State, are represented by the State Medical Society and its officers. The federal authorities know that there is a large group of physicians who have not been willing to cooperate with their fellow practitioners. They know, furthermore, that these men can be called upon to take over the care of the Louisiana peoples if organized medicine can not get what they consider a fair treatment, and they are taking advantage of this self evident fact.

The obvious lesson is that all practitioners of medicine should belong to organized medicine, but as it is an utter impossibility to reach those who do not belong to the organization through the regular channels of organized medicine, the most logical method of getting these men in as members of the Parish and State Societies would be through the individual efforts of the men who know personally the doctors who do not belong to

organized medicine. These men will not see this editorial section of this Journal and this appeal, but they can be contacted by the doctors in their community. They can be reached this way only, and only by reaching them can they be apprised of the dangers of the present situation and of the future. One of the prime duties of the doctors who belong to medical societies would seem to be the recruiting of the medical friends, or even of their mere acquaintances, who do not belong to the parish society, to membership in that society.

CINCHOPHEN CIRRHOSIS

From time to time articles have appeared in medical literature reporting the occurrence of jaundice or other symptoms of liver damage apparently as a result of the ingestion of cinchophen. A recent pertinent article is that of Weir and Comfort*, who have collected 98 cases of toxic cirrhosis arising from cinchophen poisoning, and who record 19 cases that have been seen in the Mayo Clinic. That this condition of toxic cirrhosis is a severe one is illustrated by the fact that 61 of these 117 patients died and many others were seriously ill.

The cause of the toxic symptom is not known. A variety of hypotheses have been advanced to explain the reasons for the liver involvement, none of which has been substantiated by experimental methods. It seems reasonable to state that a certain number of individuals have an idiosyncrasy to cinchophen, and that is about all that can be said.

The symptoms that arise with the onset of toxic effects of this drug are usually referred to the gastro-intestinal tract and include anorexia, nausea, vomiting, heartburn, belching, and diarrhea. Itching of the skin and urticaria are also observed from time to time, definite warning signals to the attendant doctor who is administering the drug. In the more severe cases jaundice occurs, usually

painless, though a certain degree of pain may be present, and retaining its maximum intensity for several days. In the more severe cases jaundice persists, pruritus becomes most irritating, and ultimately, in a few cases, ascites develops with other comparable symptoms of cirrhosis of the liver.

The diagnosis, according to Weir and Comfort, in the severe cases suggests acute or subacute yellow atrophy of the liver. The nonfatal cases resemble catarrhal jaundice or other conditions associated with toxic hepatitis. Diagnosis usually is dependant upon a story of previous treatment with cinchophen or from the knowledge of the doctor himself that he has administered cinchophen.

A mortality rate of 51 per cent following poisoning from a drug indicates very definitely that this drug has a high potency. It does not necessarily imply that the great majority of people who are given cinchophen are going to develop the disease, toxic cirrhosis of the liver, but it does indicate very definitely indeed that it is essential when ordering cinchophen to be extremely wary in its use. Particularly important is the necessity of being on the alert for symptoms of intoxication. Equally important is the questioning of the patient who apparently presents an acute jaundice of undetermined cause as to whether he has taken any one of the number of patent medicines which contain this preparation. Given such a lead the drug should be stopped immediately, a very high carbohydrate diet should be given, fluids should be forced, and dextrose and sodium lactate given intravenously, combined with calcium lactate by mouth and duodenal drainage.

It is a moot question whether or not this drug should be used for the ordinary analgesic affects that have made it a comforting synthetic drug. Certainly with other drugs that are equal or almost as efficacious it hardly seems advisable to subject a patient with various types of rheumatic conditions to the possible toxic effect of this powerful substance. Furthermore, there can be no question whatsoever that the public should know and should be warned against patent

*Weir, James F. and Comfort, Mandred W.: Toxic cirrhosis caused by cinchophen. Arch. Int. Med. 52:683, 1933.

medicines which contain this preparation. Most assuredly, to generalize, patent medicines should not be dispensed freely under any circumstance, but it is almost criminal to allow patent medicines of high potency to be dispensed here, there, and everywhere.

THE NEW ORLEANS DEATH RATE FOR 1933

The death rate for the fifty-two weeks in the year 1933 in the City of New Orleans shows quite an improvement over the rate of 1932. This year it was 15.6, as contrasted with 16.3 in 1932. The death rate for the white population was 12.9, which compares very favorably with the death rates throughout the country. There are a few cities that have a rate which is smaller than these figures, which would be probably materially lower were it not for the deaths that take place in the Charity Hospital, representing in

most instances individuals who are non-residents of the City.

The colored death rate remains high. It is somewhat lower than 1932 when the rate was 22.8, the year 1933 being 22.2. These figures are almost double the rate among the white population in the City of New Orleans, but they likewise are just about the same as in other cities where the colored rates and white rates are differentiated. These figures illustrate very well indeed that the high mortality rate among the negroes is due to economic, racial, and educational reasons. Little can be done about the first, nothing can be done about the second, but the third can be controlled by teaching the colored man the necessity of taking care of his body. Syphilis and tuberculosis, both preventable diseases, are grim harvesters in the colored race. By education, and by precept, eventually the colored race may be made aware of the dangers and of the necessity of prompt treatment for these diseases.

Relation of the Number of Medical Graduates to the Public Need.—In fact, there are those who question whether the professions should be limited numerically. There are some who deny that the door to a professional career should be closed to anyone who aspires to enter. It is argued that no one can determine who should or who should not become a lawyer, or a doctor; that the only reliable test is the test of experience; that individuals with natural aptitude and thorough training will succeed while those less fit will be forced through failure into other vocations. Let it be granted that no process of selection can be perfect, and that mistakes must inevitably be made. It is still true, especially in medicine, that the cost of the process of selection by failure is too heavy to be borne. For the individual, the investment of time and money is great; at the end of the long period of training he finds himself largely unfitted for another vocation. For his own sake he should have been diverted to another career at an earlier date. Medical education is costly not only to the in-

dividual, but also to society. Medical schools depend very largely on funds derived either from taxation or private philanthropy. Can society afford to spend such large sums in training persons who will never be able to make any use of what they have acquired?

It must be admitted, then, that there is need of a process of selection; that not everyone who aspires to a professional career has a God-given right to receive a long and highly technical training at public expense. During the last six or eight years, we have had experience in selection medical students. Recently only half, or less than half, of those applying have been accepted, but the number which it could effectively teach, without any regard to the needs of the profession or of the country as a whole. If my postulates are correct, the time has come when we must still further limit the enrollment of our medical schools in accordance with the real interest and future needs of the commonwealth.—William D. Cutter, Secretary, Council on Medical Education and Hospitals of the American Medical Association, Chicago.

HOSPITAL STAFF TRANSACTIONS

CHAMBERLAIN-RICE HOSPITAL STAFF MEETING

Natchez, Miss.

The regular meeting of the staff of the Chamberlain-Rice Hospital was held on the night of January 10, at six P. M. All members were present. The topic for discussion was hoarseness in an adult male, aged 63 years, which had been present for the past eight months without pain or discomfort of any kind but with 25-30 pounds loss of weight. Patient was referred to Dr. Raymond T. Smith for laryngeal examination. On examining the larynx with mirror (direct method) there was no evidence of any pathology. At this point stereoscopic and lateral roentgenograms of the chest were taken showing evidence of a mass in the upper mediastinum in the mid-line. The mass was quite large being greater in size than a large orange. Under the fluoroscope the possibility of aneurysm was ruled out. The Wassermann was two-plus. The remainder of the physical examination was negative. The patient was given a therapeutic dose of roentgen ray and a saturated solution of potassium iodide. He was asked to return for check-up in four to six weeks.

The diagnosis unanimously agreed upon was mediastinal growth which in all probability was malignant.

The meeting adjourned until the next monthly meeting.

Raymond T. Smith, M. D.

Natchez,
January 13, 1934.

GREENVILLE KING'S DAUGHTERS HOSPITAL STAFF MEETING

The King's Daughters Staff held its regular meeting at the hospital 7:30 P. M. January 3, Dr. C. P. Thompson presiding.

Dr. G. W. Eubanks and Dr. A. G. Payne presented the records of two cases of thyroid disease.

Case 1 was a white woman, aged 36 years, housewife, and mother of three children. The family history and personal previous history had no important bearing upon her present condition. For the past three months she had grown increasingly nervous, irritable and apprehensive; a complete reversal of her habitual disposition. She was sleeping poorly, complained of her heart beating rapidly, of a choking sensation, and enlargement of the left side of her neck. She weighed 136 pounds, having recently lost seven pounds. The physical examination was negative except for

blood pressure 160/110; pulse 110; temperature 99°F.; a fine tremor of the extended hands, and enlargement of the left side of the thyroid gland, which extended below the level of the clavicle. The laboratory findings were not of significance except for the basal metabolic rate, which was plus 39 per cent.

She was given a period of treatment with Lugol's solution until the metabolic rate become normal. Surgical removal of the thyroid was then advised and accepted. Under ethylene anesthesia the left side of the thyroid gland was removed. Recovery was uneventful. The tissue removed was 37x30x20 millimeters, and the pathologist's report was thyroid adenoma with cystic and hemorrhagic degeneration.

Case 2 was a white woman aged 52 years, a housewife, and the mother of one child. Her family history was not of significance. Her personal past history showed nothing of note except appendectomy several years earlier and a chronic skin eruption on the face, which was of several years' standing. Her present condition began several months ago with loss of weight which has amounted to 30 pounds, increased nervousness and irritability, and an enlargement of the left side of the neck, with some difficulty in swallowing and a sensation of choking.

The physical examination was entirely negative, except for the tumor of the neck, which was very hard, extended well below the clavicle and displaced the trachea. The laboratory findings were of negative significance, the basal metabolic rate being minus 19 per cent. It was feared that the thyroid tumor might be malignant, but surgical removal was advised, and was performed under ethylene anesthesia. The tumor proved to be composed mainly of a large cyst 56x45x38 millimeters, partly surrounded by colloid goiter tissue, undergoing calcareous and cystic degeneration. The walls of the large cyst were densely fibrous, with some round cell infiltration, but contained no thyroid tissue. The patient's recovery has been satisfactory, with relief of her more distressing symptom of choking.

Discussion of these interesting examples of thyroid disease was entered into by Drs. J. B. Hirsch, H. A. Gamble and A. G. Payne.

Dr. D. C. Montgomery briefly presented two cases illustrating some of the difficulties of differential diagnosis of post nasal conditions. Both cases presented a large painless lymph-glandular tumor just below and behind the ear. Dr. Montgomery said that this gland is the one most likely to become involved by drainage of the postnasal

region, as shown by the excellent researches of Mullin of Cleveland, Ohio.

The first case was a boy, aged 19 years, having no symptoms whatever except the enlarged gland which had been noticed for only three weeks. On inspection with the naso-pharyngoscope, a pea sized tumor was seen, without ulceration, in the fossa of Rosenmuller. This proved to be a highly malignant epithelioma, the gland in the neck representing a very early and bulky metastasis. The prognosis, of course is very grave.

The second case was that of a man having a similar enlarged gland. In addition there was impaired hearing, and some paralysis of the levator palati on the same side. Inspection of the postnasal space showed a small ulcer. The Wassermann reaction was the deciding factor in this case as it was distinctly positive after a provocative dose of neo-salvarsan. Appropriate antisyphilitic treatment resulted in cure of the postnasal ulcer and disappearance of the enlarged gland.

J. A. Beals,
Secretary.

Greenville,
January 8, 1934.

MISSISSIPPI BAPTIST HOSPITAL STAFF
MEETING

Jackson, Miss.

The staff met in the dining room for dinner with twenty-six members and two visitors present.

The minutes of the previous meeting were read and the program entered into.

The superintendent, Mr. Alliston, made a short talk and explained the marvelous situation that the hospital happens to be in at the present.

Dr. H. F. Garrison, Sr., made a report to the staff of his trip to the Southern Medical Association at Richmond which was of a great deal of interest to all. He made further remarks on his trip to Washington, Baltimore, and New York City, where he visited the various clinics in each place. He talked further on some recent observations at these clinics, on diphtheria, scarlet fever and anes-thesia.

Dr. L. W. Long made a report of a case as follows:

Mrs. D.—White female, aged 48 years, complaining of pain in lower abdomen with a bearing down feeling on standing. The past history was of no importance. Twelve normal deliveries. Present illness: Since last child was born, has had irregular menses with pain and soreness in lower abdomen and with a sensation as though something was going to fall out on standing. Lately the menses have been profuse and frequent. Examination: Large white female, very fat who was in no acute pain. The positive findings were as follows: (1)

Tenderness on pressure over Morris's point; (2) enlarged uterus; (3) laceration at posterior fourchet.

Diagnosis: Chronic endometritis with possible early malignancy of cervix and lacerated perineum.

The patient was advised to have a hysterectomy and perineorrhaphy done. It was thought advisable to do a vaginal hysterectomy at first, but since the enlarged uterus was considered, it was thought best to explore abdomen which was well. In so doing two things of interest were encountered, that is, a very long gall bladder which contained two stones cylindrical in shape, one and one-half inches long and one and one-quarter inches in diameter, which were removed and a vestigial appendix, which was a mere pouch about one-quarter inch in length (slides were shown). The uterus and cervix was removed in toto.

Conclusion: (1) Plea for exploratory laparotomy when possible; (2) Unusual absence of appendix with vestigial remains; (3) Large stones (two) encountered in gall bladder.

The committee on the Courtesy Division of the Staff reported and presented the following list of names which were accepted by the staff: Dr. G. H. Ramsey, Collins; Dr. C. L. Green, Utica; Dr. W. H. Holyfield, Brandon; Dr. D. T. Brock, Jackson; Dr. Willis Walley, Jackson; Dr. C. L. Jones, Madison; Dr. K. P. Wood, Lena; Dr. W. S. Guiton, Pickins; Dr. R. C. Elmore, Durant; Dr. J. P. Ainsworth, Florence; Dr. J. W. Howell, Durant; Dr. N. C. Womack, Jackson; Dr. J. W. Barksdale, Jackson; Dr. F. E. Werkheiser, Jackson; Dr. W. L. Little, Wesson; Dr. J. R. Robertson, Brandon; Dr. L. H. DeBerry, Hazelhurst; Dr. C. G. Eubanks, Crystal Springs; Dr. W. H. Watson, Pelahatchie; Dr. E. L. Green, Carpenter; Dr. Joe C. Dodson, Carthage; Dr. R. L. Hagaman, Raymond; Dr. C. W. Bonney, Sartaria; Dr. R. E. Austin, Forest; Dr. H. J. Flowers, Kilmichael; Dr. H. E. Edmondson, Edwards; Dr. W. W. McBryde, Ethel; Dr. D. T. Langston, New Hebron; Dr. Eugene Anderson, Forest; Dr. McKee, Hazelhurst; Dr. Percy Hudson, Utica; Dr. Alsobrook, Bolton; Dr. G. W. McGowan, Bolton; Dr. Smith, Crystal Springs; Dr. A. M. Ragan, Edwards; Dr. Ralph Marquette, Brookhaven; Dr. Oseston, Harperville; Dr. Mack Causey, Raleigh.

Dr. Brock, a recent newcomer, was proposed for associate membership on the staff.

L. W. Long,
Secretary.

Jackson,
January 12, 1934.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on January 10 with Dr. L. J. Clark presiding. Reports from the

Records department and analysis of the work of the hospital were presented. Dr. F. Michael Smith, Director, Warren County Health Department, presented a report of vital statistics for the month.

From the Cancer Clinic, the following cases were discussed:

Adeno-Carcinoma of Cervix Uteri (Grade II).—Dr. J. A. K. Birchett, Jr.

2. Epithelioma of Nose.—Dr. G. M. Street.

Special Case Reports:

1. Transurethral Prostatic Resection.—Dr. A. Street.

2. Carcinoma of Cervix Uteri Noted Three Weeks Postpartum.—Dr. J. A. K. Birchett, Jr.

3. Hyperinsulinism.—Dr. L. J. Clark.

Three Minute Reports of the Literature of the Month:

Dr. A. Street.—Deep Roentgen Ray Therapy, Fractional Method, in Malignancies.

Dr. L. S. Lippincott.—Leukocytes in Malignancies.

Dr. J. A. K. Birchett, Jr.—Barbiturates and Hypnotics in Pregnancy.

Dr. L. J. Clark.—Exophthalmic Goiter with Heart Block.

Dr. Sidney W. Johnston reported five cases of strangulated inguinal hernia reduced by aid of morphine given intravenously.

Selected radiographic studies were presented as follows: Fractures of First Lumbar Vertebra; Pulmonary Tuberculosis (2 cases); Cholelithiasis. The meeting closed with a lunch.

The next meeting of the staff will be held at the Sanitarium Monday, February 12 at 6:30 P. M.

Leon S. Lippincott,

Secretary.

Vicksburg,

January 14, 1934.

Abstract.—Transurethral Prostatic Resection.—Dr. A. Street.

Patient.—White male, aged 70 years; married and the father of eight children. Admitted to the Vicksburg Sanitarium on November 11, 1933. Present Complaint.—Urinary obstruction. History of Present Complaint.—Began about one year ago. First there was small dribbling urinary stream, then frequency and nocturia, and then complete obstruction. Suprapubic cystostomy was done nine months ago for the obstruction. The same Pezzer catheter introduced at this operation is still in place and still provides fair drainage. Condition has greatly improved since the cystostomy; gained weight and strength; edema of legs which was formerly present, has now been relieved. Physical Examination.—Well developed and fairly well nourished elderly man, only slightly feeble. Blood pressure 130/80. General physical examination showed nothing remarkable. The local examina-

tion showed suprapubic scar which is snugly healed around the edges of a No. 24 F. Pezzer catheter. By rectum prostate shows enlargement, grade II. Blood examination showed nothing abnormal; blood Wassermann, Kline and Young, and Kahn tests, negative. Urine showed 1 per cent albumin (by volume), a few finely granular casts, some pus and some blood; no sugar; specific gravity 1.023. Blood urea nitrogen 21.95 mg. per 100 cc.

Procedure.—On day of admission, suprapubic wound region was infiltrated with 0.5 per cent novocaine solution, a uterine dilator introduced alongside the catheter and the tract dilated enough to permit withdrawal of the catheter. A No. 20 F. Pezzer catheter was then placed through the tract into the bladder.

Nov. 8, blood urea unchanged being 21.4 mg. per 100 cc.

Nov. 9, under caudal anesthesia the resectoscope was introduced. Observation showed marked enlargement of the lateral lobes. There was very little enlargement of the median lobe but there was considerable growth at the anterior (or superior) margin of the bladder orifice. Tissue was then resected until an apparently adequate channel was made. The lateral lobes were resected easily but removal of the excess tissue placed anteriorly was rather difficult on account of having to work with instruments in the inverted position. The Pezzer catheter was left in the suprapubic wound. At the end of one week it was clamped to test the ability of the patient to urinate and the obstruction was found not sufficiently relieved.

Nov. 21, under caudal anesthesia, more tissue was removed through the resectoscope and at the end of one week voiding was good and the patient was discharged. Pezzer catheter was still left in place until two weeks later when he returned to the office for its removal. The suprapubic wound was closed and dry within ten days. Patient returned for observation January 1. He was voiding well and free of symptoms. There was one ounce of residual urine.

Remarks.—All of our patients who have presented themselves for relief of prostatic obstruction during the last two years have been operated upon by the transurethral method. While it is too soon to come to anything like a final decision, results so far are definitely favorable to this method. Many cases are fairly simple, requiring only a short time for investigation and preparation and only a week or two of hospitalization. Others who have neglected their condition and have foul bladders, poor kidney function, kidney infection and other complicating factors, must be as carefully prepared as for other methods of doing prostatic surgery.

Abstract.—Carcinoma of Cervix Uteri, Noted

Three Weeks Postpartum.—Dr. J. A. K. Birchett, Jr.

Patient.—White female, aged 28 years, married, one child, no miscarriages. Present Complaint.—Ulceration of cervix. History of Present Complaint.—On November 6, 1933 was delivered of 7½ pound male child, forceps delivery with episiotomy. There was moderate amount of bleeding following delivery. Convalescence was uneventful, patient being discharged on the twelfth day of puerperium after check up of cervix and uterus which gave evidence of usual findings of postpartum uterus and pelvic outlet; episiotomy incision healed; cervix not remarkable. She again reported to clinic as instructed three weeks later and at that time a granulation was noted on the right border of cervical lip. Tissue from this area was taken for biopsy; bled freely after removal. This tissue showed carcinoma Grade II. The patient was not told that she had cancer but that she had an ulcer that needed treatment and she, therefore, presented herself for treatment. Past History.—Usual childhood diseases, tonsillectomy when a child; appendectomy in 1926; fracture of scapula two years ago following fall from horse, no ill effects. General health excellent. Menstrual history normal. The prenatal period was normal, no nausea, no headaches, no increase in blood pressure and no urinary disturbance. About fifth month developed vaginal discharge without any cervical irritation, which promptly cleared up after using soda douches although no trichomonas were found in smears and no specific organisms. Family History.—No tuberculosis, no cancer; father living and well; mother living and well, three sisters living and well. Physical Examination.—Well developed and nourished. Examination essentially negative, oral hygiene good; thyroid, heart, lungs, abdomen and skin negative. Pelvic examination showed moderate relaxation of pelvic floor because of recent delivery, episiotomy incision through left labia healed. Cervix small, slight tear on right with granular ulcerated area the size of a ten cent piece. This area was the source of biopsy specimen. Uterus completely involuted, firm and in good position; adnexa normal. Laboratory Examination.—Blood picture normal; no anemia; urine normal. Wasserman, Kline and Young, and Kahn tests, negative.

Procedure.—This patient was given 1200 milligram hours of radium in the cervical canal. We feel that this will cure the early evidence of malignancy. There will be possibly some amenorrhea for several months because of the effects of the radiation but we feel that she will be able to go through normal parturition without any danger of any after effects of radium such as stricture or destruction of the cervical canal and the most gratifying fact is that this condition was noted

early, adequate treatment instituted and a cure may be expected. However, this case will be examined every three months for the next year and if she becomes pregnant later on the cervix will be watched carefully for erosion and the patient warned about early reporting of any vaginal discharge.

TOURO INFIRMARY

The annual meeting of the medical staff of Touro Infirmary was held Wednesday night, January 10, 1934, at 8:00 o'clock. Drs. Rodick and Silverman presented "The Gallbladder Mechanism: an Experimental Study". Dr. Silverman presented the results of study carried out on this problem over a period of several years, and augmented his discussion with a lantern slide demonstration of the roentgenographic studies of the case made by Dr. Rodick.

A most unusual case presented as "A Case of Lipid Metabolism Disturbances with Xanthomatosis Multiplex and Melanoderma in a Non-Diabetic Female of Fifty-seven" was discussed by Dr. A. L. Levin. Lantern slides of photographs of the patient were shown.

Following this scientific portion of the meeting, Dr. B. C. MacLean, Superintendent of the Hospital, spoke briefly upon hospital affairs.

There then followed the annual election to the Executive Committee of two representatives from the staff. Drs. Reed and Maes were unanimously selected.

Willard R. Wirth, M. D.

CHARITY HOSPITAL MEDICAL STAFF

The regular monthly meeting of the Charity Hospital Medical Staff was held January 16, 1934, Dr. P. H. Jones, presiding.

The first order of business was the demonstration of some interesting autopsy material by Dr. Connell, pathologist. The cases shown were: 1. Pyloric stenosis in a child three months of age. 2. The brain of a case of influenzal meningitis in a child 11 months of age. 3. A peculiar pulmonary condition involving the apexes of both lungs, not as yet sectioned and undiagnosed. 4. A primary hepato-cellular carcinoma of the liver.

Dr. L. F. Monte showed the roentgenograms of three cases of lung abscess. The first case involved the upper left lobe; the second case was one of multiple abscesses. Both these cases recovered with postural drainage. The etiology was undetermined. The third case was one apparently the result of a previous tonsillectomy, and was at present under treatment in the hospital. All measures including bronchoscopy had been of no avail, and artificial pneumothorax was being considered

as the next therapeutic measure. These cases were discussed by Dr. Jamison.

A case was shown and discussed by Dr. I. L. Robbins. This patient, a colored male, showed several unusual features, chief of which were an enlarged heart, with evidence of congestive failure, a chronic racking cough, a leukocytosis of 30,000 to 40,000, and eosinophilia of 30 to 40 per cent, a marked anemia, an enlarged palpable liver, palpable spleen, and no other lymph gland enlargement. The possible diagnoses suggested were Hodgkin's disease, atypical pernicious anemia, and eosinophilic leukemia. The case was discussed by Drs. Turner, Levin, Jones, and Jamison.

HOTEL DIEU

The regular monthly meeting of the Hotel Dieu Staff was called on December 18, 1933, at 8 o'clock P. M., by the President, Dr. P. B. Salatich, with the Secretary, Dr. Ruth Aleman at the desk.

The scientific program included a talk by Dr. D. N. Silverman on "Gallbladder Function."

Dr. D. N. Silverman: Prior to the advent of cholecystography, some valuable work had been done on the gallbladder, namely: on its concentrating power, by Rous and McMaster, and its emptying power in animals by Boyden. However, gallbladder visualization initiated a new interest in gallbladder study and since that was accomplished, numerous investigators have produced valuable data.

The visualization method of Graham and Cole was a beacon to students of gallbladder physiology. As a result of their work, for the first time in unanesthetized humans, experimental proof of gallbladder emptying was brought out by Menville and the speaker. That the normal human gallbladder did empty was confirmed by Boyden, who used a meal of fat. He first pointed out that egg yolk will cause bile to disappear from the gallbladder of the cat. Others showed that fats affect the cholecystographic shadow.

Ivy suggests several possible explanations of the changes:

(1) Local stimulation by distention or by pungent bile.

(2) Nervous reflex stimulation from various portions of the gastro-intestinal tract.

(3) Long nervous reflexes from the higher brain centers.

(4) Humoral agents.

(5) All of these may be factors.

(1) Indirect evidence to the contrary, "The facts that the gallbladder wall contains ganglia, that spontaneous contraction or evacuation has been observed, that distention of the isolated viscus will cause a slight contraction, and that a certain optimum distention and pressure are required for a

maximum response to a stimulus, indicate that local stimulation of the gallbladder may be a factor."

(2) By analogy with other portions of the gastro-intestinal tract, inhibition or excitation of distant parts may be expected to affect the gallbladder. It has been shown that the pyloric antrum, when stimulated electrically, contracts slightly. The same stimulation of the intestine, particularly of the cecum, causes the gallbladder to relax. The gallbladder may contract against a contracted sphincter. This idea, first suggested by Meltzer, is of considerable pathologic importance, since it has been experimentally shown that chemical duodenitis and duodenal stasis delay the rate of emptying the gallbladder. It is disappointing, therefore, that there should be disagreement over the suggestion.

(3) Psychic contractions of the gallbladder have been observed as well as changes upon excitation of the vagi and splanchnic nerves. Failures, too, have been reported.

(4) Secretagogues, which are present in food or arise from the digestion of food and act both locally and by being absorbed into the blood, and a hormone, histamine-like in nature, which has a specific effect on the gastric glands, are known to be concerned in causing gastric secretion. By analogy, it is possible that the gallbladder may be caused to contract following the ingestion of a fatty or protein meal, either by the absorbed fatty substances, or by a hormone produced by the action of fatty substances or acid chyme on the gastro-intestinal mucosa.

In 1928, Denis and the speaker demonstrated that the ingestion of fats produces appreciable emptying of the gallbladder, that nonemulsified fat (olive oil) has practically no effect on the gallbladder shadow, and that there is no significant change in the blood fat after ingestion of the fat meal. Higgins and Wilhelmj obtained no evacuation by injecting various emulsified fats intravenously. Ivy says: "We have found that egg yolk intravenously does not cause gallbladder contraction." Whitaker observed that intravenous injection of emulsified olive oil resulted in some evacuation of the gallbladder, but questioned the physiologic nature of the response because emulsified liquid petrolatum produced the same effect intravenously.

Recent observations have disproved the idea that digestion plays any part in the mechanism of gallbladder emptying. This fact was established by exclusion of pancreatic secretion from the intestinal canal. A deficient pancreatic digestion is not a particular inhibitor to proper function of the gallbladder.

Gallbladder evacuation following the ingestion of fat is not dependent upon the stimulating power.

er of the fat resulting from its contact with the duodenal mucosa. While severe disease may exist in the duodenum and perhaps destruction of the hormone response in that segment, experiments in which fat was placed directly in the jejunum proved that the mechanism may still remain intact in spite of disease of the stomach and duodenum, such as is found in gastric duodenitis or in chronic duodenitis, now recognized as a clinical entity.

Pancreatic disease with impairment of pancreatic digestion does not promote an inhibition of gallbladder evacuation on the ingestion of fat and, therefore, does not predispose the individual to gallbladder stasis and its sequelae.

Duodenitis, infectious, which is recognized as a clinical entity, or duodenitis of a chemical nature, does not preclude the normal response of the gallbladder to the ingestion of fat, which may and does stimulate the mechanism as far down as the upper part of the jejunum.

Dr. L. Levy: From a surgical standpoint, the

use of egg yolk should be of value in the detection of gallbladder disease and an improvement over the use of fats. This paper is a beginning of a new approach to certainty in diagnosis; Dr. Silverman seems to be on the way to contributing a valuable factor in diagnosis and treatment of gallbladder disease. He is to be congratulated for his painstaking experiments and his excellent paper which was so well received at the Richmond meeting and I am sure appreciated by the Hotel Dieu Staff.

Dr. M. O. Miller presented a case of gallbladder disease. This was discussed by Drs. Levy and Nix.

Dr. H. T. Simon discussed the usage of sodium oleate in the treatment of arthritis.

The following members were elected to serve during the year of 1934:

Dr. P. B. Salatich, President; Dr. E. H. Walet, Vice-President; Dr. Frank Chetta, Secretary-Treasurer. Members of the Board, Dr. Ruth G. Aleman, Dr. Maurice Couret, Dr. R. H. Fisher, Dr. Val H. Fuchs, Dr. L. A. LeDoux, Dr. W. J. Otis, Dr. John Smyth.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

February 2—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 2—Eye, Ear, Nose and Throat Club, 8 P. M.

February 7—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

February 7—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

February 9—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 9—French Hospital Staff, 8 P. M.

February 12—ORLEANS PARISH MEDICAL SOCIETY, dispensed with.

February 14—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

February 14—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

February 14—Touro Infirmary Staff, 8 P. M.

February 15—Eye, Ear, Nose and Throat Club, 8 P. M.

February 16—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 16—I. C. R. R. Hospital Staff, 12 Noon.

February 16—Mercy Hospital Staff, 8 P. M.

February 19—Hotel Dieu Staff, 8 P. M.

February 20—Charity Hospital Medical Staff.

February 21—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

February 21—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

February 21—Charity Hospital Surgical Staff.

February 23—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

February 26—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

February 27—Baptist Hospital Staff, 8 P. M.

February 28—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

February 28—Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

During the month of January, beside the joint meeting of the 1933 and 1934 Boards of Directors, the Society held the Annual Installation Meeting and one regular Scientific Meeting.

At the Installation Meeting Dr. Edward L. King presented an address as Retiring President, Dr. Waldemar R. Metz his Inaugural Address.

Dr. Theodore Diller of Pittsburgh was the orator of the evening, and gave a very interesting talk on Human Credulity as Illustrated by Witchcraft.

Following the addresses, the officers for 1934 were installed.

This meeting was exceptionally well attended, the Auditorium being filled to capacity. Following the meeting there was dancing and refreshments through the cooperation of the Woman's Auxiliary to the Orleans Parish Medical Society.

A dinner of the Society was held at the Chess, Checkers and Whist Club on Saturday, January 13, marking a resumption of the Annual Dinners.

On January 22 a regular Scientific Meeting was held, and the following program was presented.

A Case of Multiple Bone Cysts Associated with Hyperparathyroidism, by Dr. Dudley M. Stewart.

The Relationship Between the Private Practitioner and the Tuberculosis Movement, by Dr. Kendall Emerson, Managing Director of the National Tuberculosis Association, New York City.

Annual Report for 1933 of the Secretary, Treasurer and Librarian, special and Standing Committees were read at this time.

The Society approved the action of the Board of Directors endorsing the erection of a new Hospital for Mental Diseases and a new Isolation Hospital.

Final action on the new Food and Drug Act was taken.

The Fee Schedule under the ERA plan was again considered.

The members of the Society were again reminded that they were not to sign or enter into any agreement for group medical services until such services were endorsed by the Orleans Parish Medical Society.

The Society endorsed the action of the Board of Directors of having the office hours appear in the Telephone Directory.

Dr. Philip H. Jones has been appointed Chairman of the Scientific Essays Committee for 1934. All members desirous of appearing on the program are requested to submit titles of their papers to him within the next month.

TREASURER'S REPORT

ACTUAL BOOK BALANCE 11/29/33.....	\$ 834.57
Credits	1,043.71
TOTAL CREDITS	\$1,878.28
EXPENDITURES:	1,040.92
ACTUAL BOOK BALANCE: 12/29/33.....	\$ 837.36

LIBRARIAN'S REPORT

During December, 53 books were added to the Library, all by means of binding of current journals, so many of which are completed at this season of the year. Material has been collected by members of the staff on the following subjects:

Relation of physician to patient and physician's responsibility to patient in serious illness or operation.

Bacillary dysentery.

Facts about cancer for talk to laymen.

Treatment of furunculosis by autogenous vaccines.

Anthelmintics.

History of medicine in the French language.

Use of dyes in treatment of urinary tract infections.

Methylene blue.

Drugs causing skin eruptions.

Asthma in heart disease.

Eschitin.

Guha.

Ficus in helminthiasis.

In this connection, a brief resume of the work of the Library during 1933 is in order. In this period, 1242 books have been added to our collection of which 679 were received by gift, 370 by binding, 63 by purchase and 130 from the New Orleans Medical and Surgical Journal. New accessions of recent date have been listed each month in the Journal.

There are on December 31, 1933,—19,677 volumes in our Library. We receive currently, by subscription and by gift approximately 250 current medical periodicals.

The reference service given in this Library to the profession, by members of the staff, is worthy of particular mention, since this is a field entirely omitted in many medical libraries, doctors being required to compile all their own references. Our Library staff during 1933 has collected material on 242 different subjects, at the particular request of physicians, all of this in addition to calls for specific titles and for needs which could be filled at once by books or by use of the card catalog.

This Library and that of Tulane University School of Medicine have circulated to doctors alone, 9,091 volumes during 1933, or approximately 19 to each member of the Society. It should be noted that books are taken from the Library by doctors for two weeks, subject to a renewal of that period in case the books have not been called for by another. Almost every book circulated is in use away from the Library for from 7 to 21 days. This record is entirely exclusive of books loaned to students for overnight use. It is also exclusive of the great use of material in the Library.

Miss Marshall represented your Library at the annual session of the Medical Library Association, for the seventh consecutive year, thereby being enabled to establish interlibrary relations of inestimable value to our own Library.

Owing to our diminished income no book purchases have been made since March and only such routine expenditures as current binding of journals, have been made.

Our experience has been that of libraries all over the country, the past year has seen the most intensive use of Library resources in the period of smallest income.

Frederick L. Fenno, W. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

CONTINUATION OF THE
SYNOPSIS OF THE STATUS OF THE ACTIVITIES OF THE EXECUTIVE OFFICERS OF THE LOUISIANA STATE MEDICAL SOCIETY IN REGARD TO MEDICAL SERVICES UNDER THE EMERGENCY RELIEF ADMINISTRATION

The following letter was received by Dr. C. A. Weiss, President of the Louisiana State Medical Society under date of December 22, 1933, from Mr. Harry J. Early, Executive Director of the Emergency Relief Administration:

Dear Doctor Weiss:

It is beginning to look as if we must limit our parish offices in the matter of medical fees. There is at present a tendency to overcharge.

Are you willing for us, without your approval of the schedule itself, to broadcast to our relief director flat rates which we can pay, pending an agreement with you? In order to make services available at these rates, it may be necessary to circularize the doctors in each of the parishes and ask them if they are willing to make their charges accordingly.

We have been hopeful that you would agree to a temporary use of the schedule. Even that would be better than the present indefinite arrangement, from both your and our standpoint, I believe.

Sincerely yours,

H. J. Early, Executive Director.

Dr. C. A. Weiss, President,
Louisiana State Medical Society,
Baton Rouge, Louisiana.

c.c. Dr. P. T. Talbot, Secretary,
Maison Blanche Building,
New Orleans, La.

Dr. Weiss' reply to Mr. Early under date of December 24, 1933 follows:

Mr. Harry J. Early, Executive Director,
Emergency Relief Administration,
1409 Canal Bank Building,
New Orleans, Louisiana.

Dear Mr. Early:

Referring to your letter of 22nd inst; I had hoped that this matter would have been settled before now. In fact felt certain that our fee schedule being a just and fair one to all concerned, would be promptly accepted, and we would all be working harmoniously together.

The physicians throughout the State, who are members of organized medicine have been informed of all the details involved in the matter of fee schedule for treating the indigent sick under the

E. R. A. They have not been biased nor influenced, on the contrary the subject was brought to their attention through their respective Parish or District Society and fully discussed during regular meetings, allowing them to draw their own conclusions and to decide the matter for themselves. The results have been an almost unanimous refusal to accede to the fees suggested and offered by the E. R. A. through your administrative office.

The steps you suggest in your letter do not require the sanction or consent of the Louisiana State Medical Society, however, I beg to again remind you that with the cooperation of the Louisiana State Medical Society, you will be assured of the best medical and surgical care of the indigent sick under your directorate. Without this sanction and support, the members of organized medicine throughout the State may not be inclined to manifest a very deep interest in the matter.

A Director from the Bureau of Medical Economics of the American Medical Association recently appeared before the component Parish, District and State Medical Societies of Louisiana, stated that the economic conditions of many of the physicians in the Southern States is deplorable. That the physicians were really worse off than the recipients of relief, due to the fact that they have given their all to the support of the relief of the indigent sick, and were too proud to apply for relief for themselves and their dependents. This sad condition exists in some of the States in which the physicians had agreed to accept the lower fee schedules.

A temporary acceptance of the fees submitted by you, without a specific time limit, gives us no assurance as to how long the physicians will have to make the sacrifice and will only complicate matters by setting an extremely bad precedent. It is just such a precedent which is causing such hardships to the doctors in the States alluded to above.

Now, Mr. Early, we have placed the facts fairly and squarely upon the table. I am certain that you are anxious to do justice to both sides in this controversy always holding of paramount importance the securing of the best medical and surgical care for the indigent sick under your care, commensurate with fair compensation for such services rendered. Organized medicine stands ready and willing to do its part in helping you carry out this part of the program and asks only a fair consideration.

Yours very truly,

C. A. Weiss, President,
Louisiana State Medical Society.

Mr. Early replied under date of December 30, 1933 as follows:

Dear Doctor Weiss:

Thanks for your letter of the 24th. It looks like one of us is in on one side of a stone wall and one on the other and we will have to climb to the top to get together.

My suggestion is that we, the Medical Society and the Emergency Relief Administration, agree to put the schedule recently revised by us into effect January 1st for a ninety day period, with the express understanding that the rates are temporary and that if a higher schedule can be adopted for the whole southern area, of which Louisiana is a part, we will revise the temporary rates to the higher schedule, and change to become effective on the first day of the month following the adoption of the higher or permanent schedule.

It looks to me like this is the only practical solution of a knotty problem.

Awaiting your pleasure, I am,

Sincerely yours,

H. J. Early, Executive Director.

Dr. C. A. Weiss, President,
Louisiana State Medical Society,
705 Reymond Building,
Baton Rouge, Louisiana.
c.c. Dr. P. T. Talbot, Secretary,
Maison Blanche Building,
New Orleans, Louisiana.

Subsequent to the receipt of the above communications, telephone communication between our President and Mr. Early resulted in Mr. Early taking the position that he would not authorize any medical schedule other than that which he had submitted.

ANNUAL MEETING SHREVEPORT

The following committees and chairmen have been appointed for the approaching meeting of the Louisiana State Medical Society in Shreveport, April 10, 11, and 12, 1934, House of Delegates on April 9.

Advisory Committee, Dr. J. M. Gorton, General Chairman, Dr. S. C. Barrow, Dr. J. M. Bodenheimer, Dr. B. C. Garrett, Dr. J. A. Hendricks, Dr. A. A. Herold, Dr. J. E. Knighton, Sr., Dr. J. C. Willis, Sr., Dr. W. S. Kerlin, President, Shreveport Medical Society, Dr. Paul D. Abramson, Secretary, Shreveport Medical Society; Committee on Banquet, Dr. C. R. Gowen, Chairman; Committee on Commercial Exhibits, Dr. Harold Quinn, Chairman; Committee on Entertainment, Dr. G. A. Caldwell, Chairman; Committee on Finance, Dr. D. R. McIntyre, Chair-

man; Committee on Golf, Dr. Milton Smith, Chairman; Committee on Hotels, Dr. W. R. Browning, Chairman; Committee on Lanterns, Dr. C. P. Rutledge, Chairman; Committee on Luncheon, Dr. W. J. Norfleet, Chairman; Committee on Publicity, Dr. Frank Walke, Chairman; Committee on Registration and Badges, Dr. O. C. Rigby, Chairman; Committee on Scientific Exhibits, Dr. W. P. Butler, Chairman; and Committee on Signs and Decorations, Dr. A. J. Thomas, Chairman.

AVOYELLES PARISH MEDICAL SOCIETY

The Avoyelles Parish Medical Society held its first 1934 meeting at Cottonport, Louisiana, Wednesday, January 10, at 7 p. m. Besides ten members of the local unit who answered the roll call, the Society was honored by the presence of Dr. J. T. Cappel, Councilor of the District, Dr. M. H. Foster and Dr. Noel Simmonds, of Alexandria.

The principal feature of the meeting was the election of officers for the ensuing year and the collection of dues. Twelve physicians qualified at this meeting. Dr. Albert Bordelon of Cottonport was elected President, Dr. Philip Jeansonne of Plaqueville, Vice-President, Dr. S. J. Couvillon of Moreauville, re-elected Secretary-Treasurer, Dr. Walter Couvillon, Delegate to State Society, House of Delegates and Dr. Remy Ducote, Alternate. The next meeting will again be held at Cottonport, the second Wednesday in March. The meeting will be held at the President's home and is to be recognized as the "President's Night" a traditional practice of the Avoyelles medicos.

The matter of the medical agreement with the physicians and the Emergency Relief Administration Director, Hon. Harry J. Early was re-opened and the tender made to the State Executive Committee with reference to fees in the handling of indigent practice, was ignored by the physicians of Avoyelles parish. With all respects to humanity and the depressing times, the medical men of the local unit are not disposed to establish an uncontrollable precedence with reference to their charges and they have shelved the proffer of the Government to render professional services at prices fixed by laymen and ridiculously low, when with other businesses such as the grocer, fruit vendor, and such commodities, the Government never interferes for the sake of the people coming under relief protection.

There being no further business the Society adjourned to meet March 14th with Dr. A. M. Abramson of Marksville as the essayist and Dr. R. L. Cope, Marksville to open discussion.

S. J. Couvillon, M. D.,

Secretary.

ST. TAMMANY PARISH MEDICAL SOCIETY

The annual meeting of the St. Tammany Parish Medical Society was held at the Southern Hotel, Covington, La., January 12, 1934, with an almost full membership present.

The officers elect were installed, as follows:

Dr. Fenwick F. Young, President; Dr. H. E. Gautreaux, Vice-President; Dr. H. D. Bulloch, Secretary and Treasurer; Dr. Roland Young, Delegate to the State Association meeting with Dr. John K. Griffith, Alternate.

The Society was honored with the presence of the following:

Dr. C. A. Weiss, President, State Medical Association, Dr. J. H. Slaughter, Vice-President, State Association, and Dr. P. T. Talbot, Secretary and Treasurer, State Association.

After the business of the Society was disposed of, the meeting adjourned to the dining room where every body did justice or injustice to the inner man after which the Society was addressed by the officers of the State Society who outlined to us the "ups and downs" in their various capacities in attending to our Organization affairs. The meeting was thoroughly enjoyed by every body.

F. F. Young, President,

H. D. Bulloch, Secretary.

MADISON, EAST CARROLL, AND WEST CARROLL TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its annual business meeting for the election of officers in Lake Providence, Tuesday, January 2 at 7:30 p. m. in the Community Club on Lake Providence. Dr. G. W. Gaines of Tallulah was elected President to succeed Dr. W. H. Hamley of Lake Providence. The society has made splendid progress during its first year, the membership being unanimous from the four parishes which it embraces. Dr. Gaines is considered to be the dean of practitioners of Northeast Louisiana, and the society is fortunate in having a leader so capable for its second year.

The other officers for the coming year are: Dr. W. K. Evans, Vice-President from East Carroll Parish; Dr. H. C. Sevier, Vice-President from Madison Parish; Dr. B. L. Bailey, Vice-President from West Carroll Parish; Dr. Joseph Whitaker, Vice-President from Tensas Parish; Dr. E. S. Freeman, Secretary and Treasurer from Madison Parish.

Following the business meeting a banquet and fellowship hour was held in the club room.

WEBSTER PARISH MEDICAL SOCIETY

Webster Parish Medical Society met at Minden Sanitarium, Tuesday, December 12, 1933 at 8 o'clock.

The following officers were elected for 1934: Dr.

Wilkins McDade, President; Dr. C. S. Sentell, Vice-President; Dr. B. A. Norman, Secretary-Treasurer; Dr. B. A. Norman, Delegate to the Louisiana State Medical Society and Dr. C. M. Baker, Alternate, all of Minden.

Dr. C. S. Sentell read a very interesting and instructive paper entitled "Indications and Contra Indications of Whole Blood Transfusion", which was discussed by Drs. Longino, Baker, Sumner, McDade and Norman.

Dr. B. A. Norman,
Secretary-Treasurer

SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society met in Crowley on December 14, 1933, at 7:30 p. m. Dr. Martin O. Miller of New Orleans read a paper. Dr. Daniel N. Silverman, of New Orleans, Councilor of the Second Congressional District, attended the meeting and read a paper on "The Diagnosis and Treatment of Certain Forms of Dysentery." Dr. Roy DeLaHoussaye of New Orleans read a paper on "General Discussion of the Thymus." Dr. Claude A. Martin, Councilor of the Seventh Congressional District, made an appeal to the doctors of the District to join up with organized medicine. Following the scientific program there was a banquet at the Egan Hotel.

TANGIPAHOA PARISH MEDICAL SOCIETY

At a special meeting of the Tangipahoa Parish Medical Society held at Hammond, Louisiana, on January 11, the following named doctors of the Society were present: Drs. J. H. McClendon, President; A. J. Newman, Vice-President; A. L. Lewis, Secretary-Treasurer; V. J. Gautreau, L. L. Davidge, Carroll S. Overton, Robert A. Davis, L. D. McGehee, E. J. Kevlin, and R. A. Corbin.

The meeting was held to dispose of the question of a schedule of fees proposed by the E. R. A. to physicians of the Louisiana State Medical Society for services rendered to E. R. A. employees.

By invitation Mr. Walter L. Cradock, in charge of E. R. A. for Tangipahoa Parish, met with us. After a discussion of these fees, by all members present, it was unanimously decided to reject this schedule of fees for the following reasons: 1. The E. R. A. is most probably of short duration. 2. The fees are not fair. 3. The Society goes on record as not accepting fees so far below the minimum schedule as submitted by the Louisiana State Medical Society and the Tangipahoa Parish Medical Society.

Alfred L. Lewis, Secretary-Treasurer.

PARISH SOCIETY OFFICERS 1934

Officers for 1934 have been elected by the following Parish Medical Societies:

Acadia Parish—President, Dr. H. L. Gardiner, Crowley; Vice-President, Dr. J. P. Parrott, Church Point; Secretary-Treasurer, Dr. A. B. Cross, Crowley.

Caddo (Shreveport) Parish—President, Dr. W. S. Kerlin, Shreveport; First Vice-President, Dr. C. P. Rutledge, Shreveport; Second Vice-President, Dr. J. G. Yearwood, Shreveport; Treasurer, Dr. D. R. McIntyre, Shreveport; Secretary, Dr. Paul D. Abramson, Shreveport; Delegates, Drs. W. P. Butler, G. A. Caldwell, P. R. Gilmer, M. D. Hargrove, T. P. Lloyd, and I. B. Rougon.

East and West Feliciana Bi-Parish—President, Dr. C. S. Toler, Clinton; Vice-President, Dr. J. B. Stanley, Jackson; Secretary-Treasurer, Dr. E. M. Toler, Clinton; Delegate: Dr. E. M. Robards, Jackson; Alternate, Dr. C. S. Toler, Clinton.

Natchitoches Parish—President, Dr. J. C. Parrott, Montrose; Vice-President, Dr. Joseph Bath, Natchitoches; Secretary-Treasurer, Dr. W. W. Knipmeyer, Natchitoches; Delegate, Dr. J. B. Pratt, Natchitoches; Alternate, Dr. R. S. Roy, Natchitoches.

Ouachita Parish—President, Dr. A. E. Fisher, Monroe; Vice-President, Dr. Irma Jones, Monroe; Secretary-Treasurer, Dr. D. M. Moore, Monroe; Delegate, Dr. C. P. Gray, Sr., Monroe; Alternate, Dr. J. E. Walsworth, Monroe.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending December 16, there were reported 156 deaths in New Orleans, divided 96 white and 60 colored, with a death rate for the groups as a whole of 16.9; for the white 14.6, and for the colored population 22.4. The infant mortality this week was 135, due to a mortality rate among the negro infants of 169. The report for the week ending December 23 was not received. For the week ending December 30 the total deaths were 141, with a rate of 15.3. The total white deaths were 88 and in the colored 53, giving a rate for the former group of 13.4 and for the latter 19.8. For the week ending January 6 the total deaths numbered 159, with a rate of 17.2. There were 99 white deaths, with a rate of 15.1 and 60 colored with a rate of 22.4. The negro infant mortality rate obtained the astonishingly high figures of 163.

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. For the fifty-first week of the year, there were reported the following diseases in double figures: Forty-three

cases of malaria, 42 of syphilis, 39 of cancer, 33 of tuberculosis, 30 of pneumonia, 23 of diphtheria, and 10 of septicemia. Six cases of typhoid fever were reported from six different parishes, and 3 cases of smallpox from Catahoula. For the last week in the year there were no unusually large number of cases of any one disease reported. Diphtheria, with 49 cases, was above the five year average. There were also reported 39 cases of pulmonary tuberculosis, 37 of cancer, 29 of scarlet fever, 20 of malaria, 17 of chickenpox, and 16 of pneumonia. A case of poliomyelitis was reported from Ouachita, and a case of leprosy from Orleans Parish. The first week of the year was characterized by the report of 89 cases of malaria, but 80 of these were delayed reports. A surprisingly small number of other reportable diseases is shown in the list, there being reported 27 cases of pneumonia, half of the five year average, 26 of diphtheria, 23 of tuberculosis, 11 of measles, 19 of cancer, and 10 of scarlet fever. Two cases of poliomyelitis were reported from Franklin Parish, and the same number of cases of tularemia from St. Landry Parish. The second week of the year on a whole was also excellent. The following diseases were reported in double figures: Thirty-seven cases of syphilis, 34 of pneumonia, 31 of pulmonary tuberculosis, 27 of malaria, 22 of gonorrhoea, 21 of diphtheria, 28 of scarlet fever, and 14 of cancer. There were 3 cases of cerebrospinal meningitis reported from three different parishes, 2 cases of tularemia from Orleans Parish, and 5 cases of undulant fever from several parishes.

SOUTHERN SURGICAL CONGRESS

The Southeastern Surgical Congress will hold its fifth annual assembly in Nashville, Tennessee, March 5, 6 and 7. The Andrew Jackson Hotel will be hotel headquarters and the lectures and exhibits will be in the War Memorial Building.

The following doctors will occupy places on the program: Fred H. Albee, New York; W. Wayne Babcock, Philadelphia; S. O. Black, Spartanburg; Vilray P. Blair, St. Louis; Frank K. Boland, Atlanta; J. B. Brown, St. Louis; D. B. Cobb, Goldsboro, N. C.; George W. Crile, Cleveland; T. C. Davison, Atlanta; John F. Erdmann, New York; P. G. Flothow, Seattle; Seale Harris, Birmingham; M. S. Henderson, Rochester, Minn.; Arthur E. Hertzler, Halstead, Kansas; Chevalier Jackson, Philadelphia; Walter C. Jones, Miami; Dean Lewis, Baltimore; Joseph F. McCarthy, New York; C. Jeff Miller, New Orleans; A. J. Mooney, Statesboro, Ga.; John J. Moorhead, New York; Edward T. Newell, Chattanooga; Fred Rankin, Lexington, Ky.; Paul H. Ringer, Asheville; Stewart Roberts, Atlanta; George H. Semken, New York; Phil C. Schreier, Memphis; Arthur M. Shipley, Baltimore; H. E. Simon, Birmingham; A. O. Singleton, Gal-

veston; J. R. Young, Anderson, S. C.; Waitman F. Zinn, Baltimore.

For information write to Dr. B. T. Beasley, 1019 Doctors Building, Atlanta.

FIFTY YEARS AN EDITOR

One of the most astounding records in American medical journalism is that which is being celebrated by the *Annals of Surgery* and Dr. Lewis S. Pilcher. It might be said that the *Annals of Surgery* has had the same editor for a period of fifty years. No such record exists or has ever been made of which we are aware. This journal has produced a celebration number which is quite remarkable.

The *American Journal of Medical Science*, in a period of over one hundred years, had only six editors, but the record of the *Annals of Surgery* and Dr. Pilcher outdistances this by many years.

NEWS ITEMS

Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, was guest speaker on January 17, at a joint-meeting of the New York Division of the American Urological Association and the Section of Genito-Urinary Surgery of the New York Academy of Medicine. He spoke on "Clinical Evaluation of Dye Therapy in Urinary Infections."

The American Public Health Association announces that its Sixty-third Annual Meeting will be held in Pasadena, California, September 3-6, 1934. The Western Branch of the American Public Health Association, with a membership of more than 1,200 from eleven western states, will hold its Fifth Annual Meeting at the same time.

UNITED STATES PUBLIC HEALTH SERVICE NEWS

Boards of commissioned officers convened to meet at various places on February 12, 1934, for the purpose of examining certain Surgeons and Senior Surgeons for promotion to the next higher grade in the Regular Corps of the Public Health Service.

Detail for the Board:—sub-board—New Orleans, La.

Surgeon T. B. H. Anderson, Chairman.

Surgeon W. Y. Hollingsworth, Member.

Passed Assistant Surgeon H. L. Skinner, Recorder.

Passed Assistant Surgeon H. G. Foster has been relieved from duty at Marine Hospital, New Orleans, La., and assigned to duty at the Quarantine Station, New Orleans, La.

Lecturer Roscoe C. Brown, has been directed to

proceed from Washington, D. C., to New Orleans, La., and return, for the purpose of participating in conferences with health officials and others interested in venereal disease control work among negroes.

Passed Assistant Surgeon G. H. Faget, has been relieved from duty at New Orleans, La., and assigned to duty at the Marine Hospital, Norfolk, Va.

Assistant Surgeon R. C. Arnold, has been directed to proceed from New Orleans, La., to Dayton, Ohio, and return, in connection with studies of the venereal diseases.

Assistant Surgeon D. C. Elliott, has been relieved from duty at Key West, Fla., and assigned to duty at the Marine Hospital, New Orleans, La.

Medical Director L. L. Lumsden, has been directed to proceed from New Orleans, La., to Los Angeles, San Francisco and to such points in San Diego County, Calif., as may be necessary, and return, in connection with field investigations of public health.

COMMUNICATIONS

Sunset, La., December 14, 1933.

New Orleans Medical and Surgical Journal,
New Orleans, Louisiana.

Gentlemen:

To keep the record straight: I notice in looking over my files of the Journal, I find in the June issue "Transactions of the business meeting of the Louisiana State Medical Society," in speaking of the repeal of the License Tax at the 1932 Session of the Legislature, page 922. I want to say that I as a Senator from St. Landry and Acadia Parishes introduced the bill and sponsored the repeal of the tax, without any request or consultation by any one. I want to say that I received the cooperation of everyone after the movement was initiated by me. Drs. C. Grenes Cole and Roy B. Harrison gave me wholehearted support. I have always contended the doctor should not have to pay a License Tax.

Yours truly,

Dr. C. A. Gardiner.

WOMAN'S AUXILIARY NEWS

The Orleans Parish Auxiliary held its usual monthly meeting on January 10. A large and enthusiastic group of members and guests enjoyed the animated and efficient manner in which each problem was handled or discussed by the chairmen of the various committees and the members thereof.

The Indigent Physician Fund is growing; the Red Cross work has been started; and move for

beginning the periodic health examinations of the doctors' wives is on; and the committees for all other good works report splendid results to date.

Mrs. A. D. Tisdale from Ouachita Parish sent in the following interesting report:

"As is our custom each year at this time our meeting was in the form of a luncheon with the Valentine idea carried out in detail. During the luncheon the business was conducted and then the program carried out.

"Several matters of importance came up and we voted to do the following things: 1. A committee was appointed to find if there were any indigent doctors in Ouachita Parish and if so something would be done to take care of them. 2. A public relations chairman was appointed to sponsor the program of periodic health examinations of the doctors' wives, and the health program which is to be given during health week. 3. Copies of *Hygeia* have been placed in three schools more than formerly. 4. An entertainment in the form of a cabaret for the entertainment of the doctors and their families is to be given on January 29th. The Morehouse Auxiliary has been invited to this affair.

"The Year-Book was presented to the Club for its approval. Some of the interesting things which we are to do for the next year are: Book Reviews; a Tea for Nurses; a Musicale; a Barbecue for the Doctors and their Families; a Coffee Hour for the Doctors and their Families; and three Luncheon Programs with the Childrens Code for our study.

"The program rendered at the January meeting consisted of: a musical number, a paper on "A Diet for the Prevention of Colds", and a Current

Topic on the Number of Undernourished Children in the United States."

Let me again appeal to ALL the Auxiliaries to let us have the benefit of their meetings through the publication of them in this Journal. Send in all reports before the twentieth of each month.

Mrs. Wiley R. Buffington, Chairman.

PICARD, MICHEL SHELLY, Shreveport: Born at Dutchtown, Ascension Parish, on July 20, 1879. After receiving his early education in Ascension parish and in New Orleans, Dr. Picard matriculated at Louisiana State University for pre-medical work. He graduated from Tulane University in 1903. Dr. Picard specialized in pediatrics, was a member of the American Medical Association, Louisiana State Medical Society, and Shreveport Medical Society. Although he had been in retirement the past two years on account of ill health, his death on December 31, 1933, was unexpected. He is survived by his wife, a son, and a daughter.

SANDERS, JAMES WOFFORD, New Iberia, La.: Born in Franklin, La., September 2, 1876. Graduated from Tulane University School of Medicine in 1899. He served at the Louisiana State Insane asylum at Jackson for two years, later moving to New Iberia, where he has since been a practising physician. Dr. Sanders died on January 14, 1934. He is survived by his widow, two sons, two brothers, and three sisters. He was a member of the Iberia Parish Medical Society and the Louisiana State Medical Society. He was also a member of the Elks Lodge and a physician for the Southern Pacific railroad in New Iberia.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

TAXES AND THE PROFESSION

The collecting of toll, duty, tributes, and taxes, has been inseparable from all governments of the world; such collections have been made either through volunteer or coercive measures. The question of the justice or injustice of the payment of such has arisen in every period of history.

Taxes are said to be part of the price we pay for protection and for the advantages of society. If it were possible to base taxes on services received or benefits derived, would it be wise to do so? Is it not to the general interest of society that each and everyone irrespective of taxes paid enjoy the full benefits of police protection, public health services, public schools, fire protection, the parks, the playgrounds, courts of equity, records of deeds, and other legal transactions official statistics, etc.?

So, in view of these fundamentals in government, taxes are levied by simply putting the heaviest burden on those able to pay. This philosophy of taxation, that a citizen of a state should be taxed according to his ability to pay, was first enunciated by Adam Smith in 1759 and was the first of his four canons on taxation. Now, inasmuch as this principal of taxation has been accepted by practically all schools of political thought, inasmuch as taxes cannot be assessed on services or benefits derived, the medical profession, in my judgement, accepts with grace this dictum and governmental practice and asks that only one principle be adhered to in levying taxes on the private doctor, that is that no tax burden be imposed that is unjust.

Now let us briefly consider a legal requirement made of the doctor which in our judgement is unfair, that is the law that requires the doctor to

pay a privilege license, city, county, state or otherwise. By compelling a doctor to pay a privilege license you are compelling him to class his professional service more or less as a commercial transaction. Should the practice of medicine be in the commercial catalogue of barbering, plumbing, contracting, merchandising, etc.? And without any desire of making an invidious comparison, should the practice of medicine which deals with life, bouyant and hopeful life, expiring life, and expectant life be catalogued with the practice of law and equity which deals only with human affairs, personal and property rights? Or would it be entirely just to catalogue the practice of medicine with the practice of dentistry which deals more nearly entirely with mechanical service to human beings? The doctor should not ask to be exempted from his prorata of essential taxes; he should and would spurn the exemption practices of feudal European society that exempted the clergy, the nobility, the favored aristocracy; he is entirely willing to meet the canon of Adam Smith which says each citizen should pay taxes in proportion to his ability to pay, but whether his taxes be more or whether they be less he questions the justice of the privilege license. Why so? Because his services are different. The teachers in the public schools and colleges are not required to buy a privilege license. Higher education now requires the teachers' unquestioned competency. And the noble service they render to the youth of the land makes them an invaluable asset to our society and in justice they do not nor should not be required to pay a privilege license to teach, to dispel ignorance and establish culture. All that is justly required is a license to teach based upon intellectual attainments.

Now is the analogy not self evident? When a doctor graduates in medicine from a reputable college, when he is licensed to practice medicine in a state by an official examining board and conclusively demonstrates intellectual ability and capabilities, where his mission among the citizenship is preservation of health, eradication of disease, lengthening of life, safeguarding expectant life, and sympathetically and tenderly caring for expiring life, is not such a service a privilege that the people should have and demand without the doctor having to pay privilege tax for rendering such a service? It is not the paltry sum of dollars expended in buying the privilege license, but the gigantic lack of appreciation and recognition of the inalienable prestige inherent to the medical profession throughout the ages, the stupendous effrontery of incarcerating the ideals of the profession, its spirit of altruism, within the beggarly garb of commercialism. To what extent the individual doctor is responsible for this apostacy or fallen state of his noble profession would be a matter of conjecture

but we fear his oftentimes greater consideration of the little things, an irresistible desire for the almighty dollar, the petty jealousy of his fellow physician who may seem to be getting along a little better in possessing material things, has contributed no small part in prostituting the noblest calling that man is privileged to follow, the most beneficial and sacred service that mankind is privileged to receive. Whatever the cause or causes it is a wrong that might well be righted.

The doctor must pay his taxes, he will pay all taxes justly imposed, for he proposes to be the type of citizen Woodrow Wilson had in mind when he said: "Every man in a free country is, as it were, put upon his honor to be the kind of man such a polity assumes its citizens to be." However, "There is nothing in the mechanism of American government which the people cannot change, provided they go the right way about it."

F. Michael Smith.

Vicksburg,

January 9, 1934.

MEMBERSHIP

Secretary T. M. Dye reports that in the last month of the year of 1933, three new members were added to the roster of the Mississippi State Medical Association. The Harrison-Stone-Hancock Counties Medical Society added two members for the outstanding total gain of the year—26.47 per cent; the Northeast Mississippi Thirteen Counties Medical Society added one member. The final figures for the year of 1933 are given below. Reports from county editors and all sections of the State this month indicate a decided awakening of interest in organized medicine and it is confidently expected that when the secretaries' reports are in on February 1, as required by law, a definite gain in membership for the year of 1934 over that of 1933 will be shown.

	No. of Members	Per Cent
1. Harrison-Stone Hancock	34 43	9 26.47
2. Winona District	36 42	6 16.67
3. Issaquena-Sharkey-Warren ..	40 45	5 12.50
4. East Mississippi	76 85	9 11.84
5. Central	106 116	10 9.43
6. Homochitto Valley	32 35	3 9.38
7. Tri-County	23 26	2 8.70
8. South Mississippi	70 76	6 8.57
9. Northeast Mississippi	107 116	9 8.41
10. Delta	83 87	4 4.82
11. Claiborne County	6 6	0 0.00
12. Clarksdale & Six Counties...	44 44	0 0.00
13. DeSoto County	8 8	0 0.00
14. Jackson County	11 11	0 0.00
15. Pike County	28 28	0 0.00

16. Tate County	9	9	0	0.00
17. North Mississippi	44	44	0	0.00
TOTALS	757	817	63	8.32

1. Pike County	30	28		93.33
2. Jackson County	14	11		78.57
3. Homochitto Valley	45	35		77.78
4. Issaquena-Sharkey-Warren	58	45		77.59
5. Tate County	13	9		69.23
6. Harrison-Stone-Hancock ..	64	43		67.19
7. Claiborne County	9	6		66.67
8. Central	178	116		67.19
9. East Mississippi	139	85		61.15
10. Tri-County	43	25		58.14
11. Clarksdale & Six Counties ..	77	44		57.14
12. DeSoto County	14	8		57.14
13. Northeast Mississippi	212	116		54.72
14. Delta	169	87		51.54
15. Winona District	88	42		47.73
16. North Mississippi	89	41		46.07
17. South Mississippi	165	76		46.05
TOTALS	1,407	817		58.07

STANDINGS BY DISTRICTS

1. Eight—W. H. Frizell.....	118	88		74.58
2. Ninth—D. J. Williams.....	78	54		69.23
3. Fifth—W. H. Watson.....	245	167		68.16
4. Sixth—H. L. Rush.....	139	85		61.15
5. Third—M. W. Robertson..	212	116		54.72
6. First—J. W. Lucas.....	246	131		52.44
7. Second—L. L. Minor.....	116	58		50.00
8. Fourth—T. J. Brown.....	88	42		47.73
9. Seventh—J. E. Green.....	165	76		46.05
TOTALS	1,407	817		58.07

CALENDAR
SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 p. m.

CHICKASAW COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

CLAIBORNE COUNTY MEDICAL SOCIETY:

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Alcazar Hotel, Clarksdale.

DELTA MEDICAL SOCIETY: April, Cleveland.

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July, and October, Herando, 10 a. m.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December, Meridian, 3 p. m.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY: First Wednesday of each

month, Bay St. Louis, Pass Christian, Gulfport or Biloxi, 7:30 p. m.

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July and October, Natchez, 2 p. m.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, Vicksburg, 7 p. m.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, Pascagoula, 7:30 p. m.

MONROE COUNTY MEDICAL SOCIETY: Second Tuesday of each month, alternates between Aberdeen and Amory.

NORTH MISSISSIPPI MEDICAL SOCIETY: **NORTHEAST MISSISSIPPI MEDICAL SOCIETY:** Third Tuesday of March, Pontotoc.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 p. m.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March, and June: alternates between Hattiesburg and Laurel, 3 p. m.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 p. m. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, Wesson, Tylertown, Monticello or Brookhaven, 12:30 p. m.

WEBSTER COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

WINONA DISTRICT MEDICAL SOCIETY:

MISSISSIPPI STATE MEDICAL ASSOCIATION: May 8, 9, and 10, Natchez.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The American Hospital Association has informed its members that the joint committee for the American Hospital Association, the Catholic Hospital Association and the Protestant Hospital Association, was officially informed on January 4, that under Regulation 81, Article 32, hospitals are entitled to a refund of the processing tax on commodities in proportion to the charitable service they render, the amount of charity to be computed on the basis of the per diem per capita cost to the hospital. With this information was transmitted the method of computing the percentage of refund which the joint committee devised and approved. The commodities on which the processing tax is now imposed are those processed from wheat, cotton, pork, rubber, etc.

Further details may be obtained by members of the Mississippi Hospital Association by writing to its secretary.

The American Hospital Association is employing, this year, a representative to watch hospital interests in Washington. This is an experimental procedure as far as the American Hospital Association is concerned and requires funds to carry out this type of work. Mississippi hospitals are reminded that they should forward their contributions to the American Hospital Association at Chicago.

Clarification of or amendment to existing relief laws so as to authorize the Federal Relief Administrator to reimburse hospitals for care given the unemployed and destitute patients is being asked.

MISSISSIPPI STATE BOARD OF HEALTH
Mississippi Physicians Who Died During 1933

DOCTOR	Age	Date of Death
E. M. Anderson, Forest	26	August 29, 1933
W. C. Anderson, Forest	57	August 23, 1933
S. H. Anderson, Kiln	53	May 5, 1933
A. S. Applewhite, Raymond	62	June 6, 1933
M. H. Bell, Vicksburg	52	February 1, 1933
Wm. H. Boone, Puckett	73	February 24, 1933
W. L. Britt, Jackson	61	October 19, 1933
W. A. Carnes, Memphis	61	November 20, 1933
W. M. Carson, Stovall	62	December 19, 1933
C. M. Coker, Eden	65	September 10, 1933
B. L. Culley, Jackson	80	July 19, 1933
J. A. Donaldson, Okolona	55	March 27, 1933
A. C. Enoch, Oklahoma City	74	May 17, 1933
J. H. Giles, Ripley	76	July 16, 1933
W. W. Gore, Cadaretta	79	July 14, 1933
H. E. Griffin, Coffeeville	56	August 12, 1933
Wm. H. Hardin, Calhoun City	81	January 20, 1933
E. F. Howard, Vicksburg	59	June 9, 1933
J. J. Howell, Kilmichael	56	July 23, 1933
J. S. Jackson, Belzoni	69	October 23, 1933
J. M. Jinkins, Crenshaw	60	May 21, 1933
J. P. Kennedy, Greenwood	40	August 6, 1933
J. A. King, Forest	60	December 6, 1933
R. S. Kirk, Amory	72	February 15, 1933
H. S. Lewis, Bay St. Louis	65	March 1933
M. J. Lowry, Meridian	77	December 20, 1933
J. C. McNeil, Gloster	83	August 12, 1933
W. L. Patton, Trenton	78	June 11, 1933
J. E. Quidor, Vicksburg	53	January 5, 1933
J. C. Robert, Centerville	50	October 2, 1933
B. L. Robinson, Meridian	61	November 20, 1933
J. P. T. Stephens, Vaiden	56	April 29, 1933
C. R. Stingily, Meridian	54	June 24, 1933
J. P. Stovall, Sardis	76	February 15, 1933
E. L. Summers, Hattiesburg	52	October 5, 1933
F. E. Thompson, Bruce	52	May 11, 1933
C. E. Tynes, Summit	47	February 10, 1933
J. W. Wheeler, Meridian	51	November 20, 1933
A. F. Whitehurst, Iuka	65	December 19, 1933
T. F. Willson, Arcola	54	September 23, 1933
C. G. Wright, Brooksville	50	April 27, 1933
J. W. Young, Grenada	86	February 15, 1933
E. T. Barron, Pattison	70	November 29, 1933

Dr. B. E. Vowell of Carthage has been notified that the Commonwealth Fund has awarded to him a four months' fellowship for graduate study at Tulane University. On January 8, Dr. Vowell joined fifteen other Mississippi physicians who are on fellowship, studying at Tulane Graduate School of Medicine.

The State Hygienic Laboratory, during the year 1933 examined 116,944 specimens, manufactured and distributed 665,950 cc. of typhoid vaccine, made 1,490 rabies treatments, and made for distribution to doctors and midwives 57,286 ampules of silver nitrate solution.

Miss Aimee Wilcox, technician with the U. S. Public Health Service, Washington, D. C., was in Jackson during December and spent several days in the State Hygienic Laboratory.

Award of a scholarship by the Commonwealth Fund of New York to Miss Kathleen Robuck, staff nurse of the Lauderdale County Health Department, has been announced. Miss Roebuck will go to Vanderbilt for four months study.

Felix J. Underwood,
Jackson, Executive Officer.
January 12, 1934.

ADAMS COUNTY

Dr. and Mrs. J. W. D. Dicks spent the holidays with their children in Tennessee. Dr. Dicks is especially interested in his grandson, one of the coming M. D.'s of Mississippi.

Quite a number of our doctors and wives attended the Yuletide dances at the Eola Hotel, and had a most enjoyable time. They need this diversion, as all work and no play, well you know the rest.

The Homochitto Valley Medical Society met on January 11 at the White's Cafe. After dinner, Dr. Lewis, president, called the meeting to order. There were 23 members, with many out-of-town physicians present.

Dr. W. K. Stowers read a splendid paper on Traumatic Brain Injuries, which was freely discussed. Dr. J. W. D. Dicks, president of the State Association, brought before the Society, "Treatment of Indigent Sick Under the Federal Emergency Relief Plan," after which there was a round-table discussion.

Lucien S. Gaudet,
Natchez, County Editor.
January 12, 1934.

CHICKASAW COUNTY

Drs. W. J. Aycock and J. A. Hardin of Derma have moved their offices to Calhoun City, and will continue their practice at that place.

Dr. J. M. Hood of Houlika was elected president of the Northeast Mississippi 13-County Medical Society at its meeting December 19 at Tapelo.

Sherman Edmondson, J. R. Priest, Jr. and J. M. Kellum, students at Ole Miss and Emory Medical Schools, visited their home people at Vardaman and Houston during the holidays.

Dr. F. L. McGahey of Calhoun City left for New Orleans Sunday, December 31, to do post graduate study as a student of the Commonwealth Foundation. He will be away four months.

Instead of the regular December Staff Meeting of the Houston Hospital the doctors of Chickasaw County met at the hospital for the organization of a Chickasaw County Medical Society, said society being a part of the Northeast Mississippi 13-County Medical Society, and proceeded as follows:

CHICKASAW COUNTY
STATE OF MISSISSIPPI
December 27, 1933.

We, the undersigned licensed, resident physicians of Chickasaw County, Mississippi, met in Houston, Mississippi, on the 27th day of December, 1933, and proceeded to organize a County Medical Society, which is a part of the 13-County Medical Society and the Mississippi State Medical Association, and being a member of the County Medical Society entitles us to membership in the 13-County Medical Society and the State Medical Association of Mississippi.

After organizing and electing Dr. V. B. Philpot chairman and Dr. J. M. Hood secretary of the Society, we proceeded to adopt the following schedule of fees for the care of the indigent sick in Chickasaw County, said fee schedule, as we understand it, conforms to that made by representatives of the Mississippi State Medical Association and the executive committee of the State Board of Public Welfare, Jackson, and agreed to accept the minimum fee as agreed upon by the representatives of the Mississippi State Medical Association and the Executive Committee of the State Board of Public Welfare, which schedule is as follows:

Office Calls	\$ 1.00
Bedside Calls, \$1.50, with 50 cents per mile additional	
Obstetrical Calls	\$15.00
Major Operations	25.00
Minor Operations	5.00

It was further agreed to be governed by all the conditions set out in National Bulletin No. 7.

The following named physicians were selected to act in the capacity of an Advisory Committee, said committee to represent the Chickasaw Medical Society and its members in any controversies that may arise between said members and the local relief workers: Dr. J. W. Williams, Houston; Dr. J. M. Hood, Houlka; Dr. D. P. Morgan, Okolona.

At said meeting we paid our \$6.00 dues to the Northeast Mississippi 13-County Medical Society and the Mississippi State Medical Association, it being positively understood by us that no doctor

in said county shall participate in the relief money mentioned above without being a member of the Medical Society of this district and of the Mississippi State Medical Association, and his name signed to this document.

It was further agreed by all doctors present that a copy of this document shall be furnished all field workers, and they are hereby requested to make it thoroughly understood to all patients seeking medical aid under this program that said patients are to select their own doctor from the list signing this document, or should said patients desire a doctor from an adjoining county they shall have the right to select said doctor provided the doctor selected is a member of the County Society and State Medical Association from the county in which he resides.

It is hereby requested to the various field workers that they shall not suggest any particular doctor to any patient but to leave this matter solely with the patients themselves, and should for any reason any member of this organization be authentically informed that any field worker attempts to suggest any particular doctor to patients with whom they make contact, said member shall report same to Advisory Committee, who in turn will take the matter up with the chief welfare worker of this county and with the state organizations and request that said field worker shall be dismissed from the service.

It was further agreed that hereafter the membership of this organization will when possible employ or suggest only graduate and registered nurses to serve their patients; a list of the nurses available being in the hands of Miss Dolly R. Dalton, R.N., Chairman of the Committee of the Re-employment of Nurses, Houston, Mississippi, who will furnish each doctor a list.

It was further agreed that the Chickasaw County Medical Society will hereafter be a permanent organization, and its regular meetings will be held the last Thursday night in each month jointly with the Houston Hospital Staff meetings at that institution.

A. F. Wicks, M.D.
D. F. Morgan, M.D.
J. M. Hood, M.D.
T. W. Peden, M.D.
B. D. Van Hansell, M.D.
V. B. Philpot, M.D.
J. R. Priest, M. D.
Chas. D. Davis, M.D.
G. F. Darracott, M.D.
Wm. C. Walker, M.D.
G. G. Armstrong, M.D.
J. S. Evans, M.D.
E. K. Guinn, M.D.
J. R. Williams, M.D.
R. E. Priest, M.D.
Douglas D. Baugh, M.D.

The following Doctors are members in good standing from adjoining counties: W. P. Webster, E. B. Young, F. H. Crumby, S. K. Gore, T. D. Houston.

The next meeting of the Chickasaw County Medical Society will be held at the Houston Hospital jointly with the Pontotoc, Calhoun and Webster County Medical Societies the last Thursday night in January.

W. C. Walker,
Editor.

Roulka,
January 9, 1934.

DESOTO COUNTY

At a recent meeting of the DeSoto County Medical Society the following officers were elected to serve during 1934:

President, Dr. A. J. Weissinger; Vice-President, Dr. J. M. Wright; Secretary and Treasurer, Dr. L. L. Minor; Editor, Dr. L. L. Minor; Censor, Dr. A. V. Richmond.

Every physician in the county should be a member of his local medical unit, in fact, it is practically indispensable. One gets the benefit of the medico-legal fund. He gets annually the New Orleans Medical and Surgical Journal and other practical benefits.

Mrs. Kountz, wife of Dr. Wm. B. Kountz, of St. Louis, returned to her home, after spending the holidays with her parents, Dr. and Mrs. A. J. Weissinger of Hernando.

Dr. and Mrs. C. W. Emerson with their charming baby girl visited Mrs. Emerson's father, Dr. L. W. Dotson in West Point during the holidays.

Dr. A. L. Emerson, county health officer, was in Jackson recently on professional business.

Sallie Starre, daughter of Dr. and Mrs. L. L. Minor, is visiting in Knoxville, Tenn.

Drs. L. W. Dotson and J. E. Ellis of West Point visited in the home of Dr. and Mrs. C. W. Emerson during Christmas season.

The North Mississippi Medical Society had an unique and interesting meeting at Batesville on December 27. Hunting morning and evening, lunch and a business meeting in the middle of the day. A goodly number enjoyed this choice entertainment.

L. L. Minor,
County Editor.

Memphis, Tenn.,
Route 4,
January 9, 1934.

FRANKLIN COUNTY

Friends of Dr. L. Costley, Meadville, report that he has been on the sick list for the past few days.

The doctors of this county met at Meadville on

January 6 and organized for the purpose of meeting the requirements of the Federal Emergency Relief Association. The following were present: J. L. Coleste, Hamburg; L. Costley, Meadville; C. E. Mullins and J. C. McGehee, Bude; and S. R. Towns, Quentin. We organized by electing Dr. Costley, Chairman, Dr. Towns, Vice-Chairman, and Dr. Coleste, Secretary. We then adopted the following fee schedule: \$2.00 for office calls, \$3.00 for town calls and those within 1-1/2 miles of town, plus an additional fee of 75 cents per mile thereafter. (These to be subject to a discount of 50 per cent. Obstetric fee was \$15.00 and not subject to discount).

S. R. Towns,
County Editor.

Quentin,
January 9, 1934.

GRENADA COUNTY

Another year has become history and with it has gone its joys and sorrows, its successes and disappointments, its fruitions and failures. May we forget its defects and treasure its victories. Locally we face the coming year with plans and purposes cheered by improved conditions and with renewed hopes of other things.

Our doctors are well and at their posts but not very busy. We are exceptionally free from sickness at this time.

It may be of interest to doctors of this vicinity that the personal of the Grenada Clinic has been by mutual consent changed by retirement of Dr. Clanton who will continue to practice individually. Drs. Avent, Hill and Sharp retain their connection with the clinic. They are all good fellows and we wish for them success in their new relation.

The family of Dr. Clanton has had a sad bereavement in the recent death of their youngest daughter, Catherine, aged 12 years.

I had the pleasure in May at Jackson of hearing Dr. W. A. Evans in his oration on Dr. John W. Monette and have reread it in the November Journal. I do not wish to provoke a controversy with such an eminent authority as Dr. Evans but in a spirit of doing justice to heroes of the long ago—as he was doing in this eloquent address I respectfully suggest that he is in error in one statement. He says that Dr. Benjamin Rush was the only physician to sign the Declaration of Independence. My teaching of the history of that period is that there were four doctors who signed that memorable document and have been called the "Accoucheurs of the Nation." Those in addition to Dr. Rush were Lyman Hall, Matthew Thornton and Josiah Bartlett. The latter is said to have been so distinguished a citizen as to be Governor of his State and Chief Justice of the Supreme Court.

When a boy I had access to and read with great pleasure "The Lives of the Signers." I suppose the book is out of print. I do not remember the author or publisher.

As I said before I do not mention this in a spirit of criticism or controversy but as an invitation to have my own knowledge of it corrected if I am in error. I shall be glad to hear from anyone who cares to take the trouble to get me straight on it.

Enough for this time.

T. J. Brown,
County Editor.

Grenada,
January 8, 1934.

HINDS COUNTY

The staff of the Baptist Hospital held its meeting the second Tuesday in December with a good attendance. The dinner and program were immensely enjoyed by all. Dr. Garrison, Sr., gave a most interesting talk on his recent trip to the Southern Medical Meeting at Richmond, and to New York.

The staff of the Jackson Infirmary held its December meeting in the dining hall where a splendid meal was enjoyed and then in the library where a most interesting program was enjoyed.

Dr. Van Dyke Hagaman has recently reopened offices in the Lamar Building for the practice of eye, nose and throat. Dr. Hagaman has just returned from Memphis where he spent the last few months in the clinics there.

Dr. and Mrs. Robin Harris are the proud parents of a fine little girl who was born December 13. It was almost a Xmas present.

Dr. Harris attended the field trials at Brookhaven January 30 and 31. He was very fortunate in winning five ribbons in the trials; so many first places, so many second and so many third places! Hurrah for Dr. Harris!

The Central Medical Society met at the R. E. Lee January 2 with a good attendance and program.

W. F. Hand,
County Editor.

Jackson,
January 8, 1934.

LEAKE COUNTY

I have been so busy as local committeeman for Leake County C. W. A. work that I failed to report for Leake County in December.

I am reporting few items for this month. I have no real medical happenings to report.

Dr. I. A. Chadwick of Carthage had the misfortune of having his office destroyed by fire December 8. He has already started to replacing same.

The following doctors attended the meeting of the East Mississippi Medical Society from Leake County December 22, and reported good program and lively annual election of officers: Dr. W. S. Martin, Carthage; Dr. I. A. Chadwick, Carthage; Dr. J. M. Barnette, Ofahoma; Dr. A. L. Thaggard, and Dr. F. L. Brantley, Madden.

Dr. J. C. Dotson, Carthage, has been appointed medical examiner for Veterans Administration, for Leake County.

Dr. A. L. Thaggard has been down in bed for the past week on account of a nice case of measles. Hope he will soon be able to resume his practice.

The following officers were elected by the Mississippi Medical Society, December 22, to represent Leake County for 1934: Dr. F. L. Brantley, Madden, Vice-President; Dr. I. A. Chadwick, Delegate to Mississippi State Medical Association; Dr. T. V. Horne, Edinburg, Alternate Delegate; Dr. W. S. Martin, Censor.

F. L. Brantley,
County Editor.

Madden,
January 8, 1934.

LEE COUNTY

Lee County acted as host to the Thirteen County East Mississippi Medical Society which was well attended and had a splendid program.

The Lee County doctors hold the monthly meeting Tuesday night, January 9. A splendid program has been arranged and full attendance is expected.

The county organization for physicians' relief work was organized and Dr. W. A. Toomer, president, Dr. J. A. Stacy, secretary and all but two or three of active doctors have paid dues and there will be a nice report for Lee County at our next state meeting for we have run a low percentage in membership for some years.

I am a great believer in organized medicine and if it was not for the organization we would be stepping backward instead of making such wonderful progress.

We certainly hope when this is read every legal physician will contact his representatives and senators for his support of the bill sponsored by the Committee of the State Medical Association for hospital relief for the indigent sick in local hospitals. Just a word or two in a nice letter will do lots of good and don't fail to mention the sales tax bill that our State Association is sponsoring. Damn if I can make enough to pay sales tax and pay surtax, sin tax, income tax, out come tax, excise tax, poll tax, road tax state tax, county tax, district tax, city tax and a durn big lot of others and only three things left to spend money for that is tax free (Hell I forgot gas tax) and that is pay preacher, medical society dues, and snoot

craps. We use to *git likker* tax free but it is too late now.

Well after all this I am happy, for I can see a new day for doctors. Our future is much brighter than the past has been and I am glad I am living. Whatever my bit in life it is for my profession to make it better in anyway it can. When we all pull the same way things will move our way and move fast.

Wishing every doctor a happy and prosperous 1934.

R. B. Caldwell,
County Editor.

Baldwyn,
January 8, 1934.

LEFLORE COUNTY

Dr. T. Y. Ashford of Clinton, and Dr. W. R. Wallace and family of Memphis spent a few days during the holidays with Mr. and Mrs. Richard Denman of this city.

Dr. Stirl Rule of Helena, Ark. and Dr. Tate Carl of Memphis visited in the home of Mr. and Mrs. A. S. Carl Xmas week.

Dr. R. D. Dickins of Monticello, Ark. spent Sunday and Monday of Xmas at the home of his father and mother.

Dr. and Mrs. F. M. Sandifer were delighted to have their son, Dr. Fred Sandifer of the University of Chicago, and also their two daughters, Miss Lizette, who teaches at Tchula and Miss Louise who is a member of the faculty of Inverness school, to spend the holidays here.

Dr. S. L. Brister, Jr., wife and daughter, spent the holidays in Tuscaloosa, Ala.

Dr. George Baskervill spent Xmas with his sister at Alexandria, La.

Dr. J. C. Adams visited his old home in Attala County near Kosciusco a few days before Christmas, and Dr. G. Y. Gillespie went to see his father and family at Duck Hill.

Dr. L. H. Hightower of Itta Bena was delighted to have his son Jesse at home from Tulane during Xmas.

Dr. T. R. Montgomery of Memphis visited his sister, Mrs. Jones, here a few days after Xmas.

President W. M. Keithley and family of Delta State Teachers College at Cleveland, spent the holidays in the home of Dr. E. W. Hunter.

Dr. and Mrs. W. A. Burkhalter were delighted to have their brother Sam and his two sons over from Atlanta, Ga. for the holidays.

Dr. Benj. F. McNeal of Moorhead was a visitor to Greenwood, January 3.

Dr. Gwin Mounger of Hotel Dieu, New Orleans, spent a few days the latter part of December with his mother at this place.

Leflore County has forty doctors, 21 located in Greenwood—Dr. Edger Giles, who lives at Avalon,

just over the line in Carroll, also practices in this county and Grenada County, and Dr. W. S. Mhoon of Phillipp just over the line in Tallahatchie also has patients in Leflore. Dr. E. R. Shurley is at Money, Dr. W. M. Duke at Sunny Side, Drs. T. Y. Fleming and J. D. Sweaney at Minter City. At Schlater are Drs. W. D. Wilson, H. A. Portwood, and J. E. Dunlap; at Berclair Dr. A. F. Charlton, and at Itta Bena the "three H's," Harper, Hightower and T. B. Holloman. Morgan City has two, Drs. F. M. Holloman and P. R. Polk. Swirtown has three doctors, Drs. M. M. Hall, T. M. Riddell, and J. S. McNeal; Sidon, Drs. T. C. Kelly and A. M. Gill.

W. E. Dickens,
County Editor.

Greenwood,
January 5, 1934.

MONROE COUNTY

Well, another year with its joys and sorrows, its pleasures and its pains, its fruitions and its disappointments, its profits and its losses has ended. Perhaps it would be well for us, all, to forget everything that might bring sadness to our hearts and face the days and weeks with renewed courage and hope for even better things than have been our lot during the year just gone. On the whole, however, I suspect that 1933 has brought us much for which he might rejoice. For me the knowledge of the fact that I have friends, both tried and true, who still remember and love me, brings joy and happiness, strength and courage to fight on until "finis" shall be written across the scroll. But besides all this that is strictly personal, when I see that thousands of men were reduced to want and penury, until they were forced to accept alms (none too gracefully I will admit)—when I see that most of these men are now getting work at a living wage, I feel that a just God still reigns in his Heavens, and can raise up prophets as He did in olden days. All honor to our great leader and those who follow his leadership. May each of you, my friends and readers, have a happy and a prosperous New Year.

The Tupelo meeting was a great meeting— not over large as to attendance, it is true. But the program was complete. Every essayist was there on time. Dr. Sellers of Tulane, our guest essayist, did not tarry after he read his paper, or delivered his lecture—we regretted this very much. But we appreciated his coming to us and thoroughly enjoyed his fine talk. It was simple and timely and will be of much benefit to our membership days to come. We had some friends from Memphis and Dr. James S. McLester of Birmingham was with us, much to our delight. He came on special invitation from me and was my special guest. The

banquet, given by the Tupelo doctors and graced by many fair ladies was very fine indeed—the entertainment provided in way of songs, monologues etc., could not have been better or more enjoyed.

One day last week, I visited with my good friends, the staff of "Crisler Clinic" in Memphis. They are all princely fellows and are doing a great work in a great way. From one P. M. until five, I sat and "swapped lies" with J. A. Crisler, Sr. We talked on things past, present and yet to come. Among other unmentionable topics discussed was dear old John Darrington and his love for his dogs. But I did not fail to remember and praise his splendid wife. To my great joy I met Dr. Julius Crisler of Jackson, there. I was so glad to see him looking so well and cheerful. I had not seen him since his bereavement and his serious sickness some months ago. I shall not soon forget his hand clasp as we parted and neither shall I forget that he said to the wife of another doctor friend, "we all love Dr. Bryan down our way".

Again, I say thank God for friends.

Dr. C. E. Boyd of Amory, R. F. D., left yesterday for New Orleans. He goes to take a four months' post graduate course given by the Commonwealth fund. No better or more deserving man could have been selected for this fellowship. He will profit by it and will bring the benefits back to a deserving clientele. Dr. Boyd's fine wife underwent an appendectomy just before Christmas—she got along splendidly and is quite well again.

Monroe has organized a county society as requested by our great president. We have enrolled one hundred per cent for the coming year. We will never backslide from this enrollment. We expect to hold monthly meetings alternating between Aberdeen and Amory. The next meeting to be held at Aberdeen on second Tuesday night. Our organization meeting was held here at Amory. All doctors in good standing invited to meet with us at any time. Our quarterly meetings of the Thirteen Counties Society will be kept up as in the past. "Come one! Come all!"

Dr. I. P. Burdine, Jr., an Amory reared boy but now of the Sanatorium Staff, was a visitor in the family of his father, Dr. I. P. Burdine, Sr. during the holidays. We are always glad to have him come back home even for a short visit. Another Amory product of whom we are justly proud is Dr. W. Carey Cheek of Springfield, Missouri—he, too, was a Christmas-time visitor in his mother's home in Amory.

My splendid young friend, Dr. Ward of Aberdeen, has more to thank Santa Claus for than any of us; for a seven pound bit of sweetness in the form of a daughter was left as a Christmas gift. Both mother and daughter prospering. May there be

many returns of the season for Dr. Ward and his young wife.

I extend my heart and hand together with hearty good wishes to every loyal member of Mississippi State Medical Association.

G. S. Bryan

Amory,
January 9, 1934.

NEWTON COUNTY

Dr. Dudley Stennis, staff member of the Newton Infirmary, ex-president, East Mississippi Medical Society, member of State Board of Health, has been awarded a fellowship by the Commonwealth Fund and left Tuesday, January 2, to begin work in Tulane Medical College.

Newton County has been specially honored as this is the second person to whom the Commonwealth Fund has been granted, Mr. M. L. Flynt, Jr. having been awarded a four-year scholarship and is also now in Tulane Medical College.

One hundred and fifty-six men went to work under the malarial control program in Newton which is one of the most beneficial projects of our community.

Mrs. Scottie Kemp,
Secretary,
Newton Infirmary.

Newton,
January 9, 1934.

PANOLA COUNTY

Panola County physicians were delighted to have the North Mississippi Medical Society meet in Batesville on December 27. Hope they will come again. Several of the physicians went duck hunting although it wasn't such a good time for ducks. However, as a great deal of the pleasure in hunting and fishing trips is the anticipation they were not entirely robbed of a good time.

On December 24, Dr. H. R. Elliot and wife celebrated their 25th wedding anniversary by entertaining a large number of relatives and friends. All had such a good time they hope the doctor and wife will not wait twenty-five years for another anniversary celebration.

We are all hoping for more business, more news, and more money this new year.

G. H. Wood,
County Editor.

Batesville,
January 8, 1934.

PONTOTOC COUNTY

New Year's Greetings!

Northeast Mississippi Thirteen County Medical Society met in Tupelo, December 19, with a good attendance and a splendid program. After the

scientific program we were invited to the Hotel Tupelo and were royally entertained by the Tupelo doctors. Dr. J. M. Hood of Houlika, was elected president for this year.

On December 17 the doctors of Pontotoc County met and organized the Pontotoc County Medical Association. R. P. Donaldson was elected president, Dr. E. B. Burns, vice-president, Dr. T. H. Rayburn, secretary; Advisory Board: R. P. Donaldson, T. H. Rayburn and O. F. Carr.

On January 1, the Pontotoc County Association met with a full attendance. We have 16 active physicians in the county and all members have paid their dues. We have two retired physicians that were voted in as honorary members.

The next meeting of the Northeast Mississippi Thirteen County Medical Society will be in Pontotoc the third Tuesday in March. I have been a member of my local society for thirty-two years and this is the first time that we have had all doctors in the county belonging to our society.

Miss Dewese Dunavant, daughter of Dr. and Mrs. A. P. Dunavant, has returned to Athens, Ala. after spending the holidays with her parents.

Mr. Knox Reid of Memphis spent the holidays with his father and mother. Dr. and Mrs. W. H. Reid of Toccopola.

Am glad to report that there is very little sickness in Pontotoc county at this time.

R. P. Donaldson,
County Editor.

Pontotoc,
January 8, 1934.

SIMPSON COUNTY

Getting in readiness to give a noon meal to all underweights, undernourished and indigents, white and black in every school in this county has kept some of the doctors busy weighing, classing, etc., and especially our efficient county health officer. We didn't dread it, however, as all of us are doing our part, and then we have had the time as very little sickness has been in our county in the past three weeks. Doctors all seem a bit optimistic over the fact that we feel that we will get a little money out of this F. E. R. A. Don't know exactly what this means unless it is "Forever Roasted Again."

All cases of obstetrics are interesting, but one that I attended last month is especially interesting to me. This was a white lady, aged 44 years multipara, poorly nourished and extremely nervous. Went into labor at 5 A. M., pains at five minute intervals, increased in severity for about two hours when the membranes ruptured. Pains ceased for about twenty-four hours, when I was called. Upon examination I found dilatation about half complete, baby living and in L. O. A. position. By forcible

dilatation I succeeded in starting pains which occurred at three to five minute intervals and lasted for thirty minutes. At this time I gave pituitrin, 5 cc., which produced a tonic contraction that lasted ten minutes. I waited half an hour or longer for pains to return and as no evidence of any pains occurred I began again forcible dilatation and succeeded in delivering this lady of a ten-pound boy. The interesting feature in this case is the fact that this lady would have no pains unless brought about by manual interference. Now, gentlemen, all the home-made remedies had been tried before I got there, such as pepper, tea, walking, sitting stooping over a table pressing the abdomen against it, etc. Comments will be appreciated.

E. L. Walker,
County Editor.

Magee,
January 8, 1934.

TISHOMINGO COUNTY

Tishomingo County has a medical society with almost 100 per cent membership, something that has not happened here before in many years.

Dr. N. C. Waldrep of Tishomingo and son made a flying trip to Iuka during court week here.

Dr. J. W. Barkley of Cotton Plant was at the Dr. Whitehurst funeral in Iuka on the 21st.

Dr. and Mrs. C. Cromeans spent Saturday with Mr. and Mrs. Finley in Red Bay.

Dr. and Mrs. K. F. McRae had Mr. J. S. Bishop of Clarksdale with them as visitors on New Years.

Dr. Haney has moved his office to his Hubbard Heights home and has a very nicely equipped office. Miss Dorothy Skipp of Calhoun City is here working in conjunction with the Health Department and C.W.A. making health surveys of school children preparatory to putting on a nutrition program in this county.

I hear of many doctors contemplating coming to Iuka to take the place of the late Dr. Whitehurst. None can take his place. He was 35 years building his practice here and was raised here and had legions of relatives all of whom used him as their doctor. I know of no other A. F. Whitehurst.

Dr. D. B. Blake, District Supervisor, T. V. A., C. W. A., Health Projects, is here working in cooperation with the health department to try to get some sanitary toilets built around here.

T. P. Haney, Sr.,
County Editor.

Iuka,
January 5, 1934.

WARREN COUNTY

"Happy New Years and the best of good health and prosperity" were the cheery greetings from

our venerable old friend, Dr. H. B. Wilson, as he in his jovial manner saluted his many friends on the New Year Day. Dr. Wilson will celebrate his one hundredth birthday about thirty years hence, and when that happy day arrives the doctor would rather hear or tell a good story than to be physician to the President.

We are reliably or otherwise advised that our punctilious and alert Secretary of the State Medical Society, Dr. T. M. Dye, fears he is a victim of "Amnesia", inasmuch as he cannot recognize the name and identity of some of his friends and acquaintances of a lifetime.

We extend our sympathy to Dr. A. J. Podesta in the loss of his mother, Mrs. Mary E. Podesta, who had lived to the mature old age of 78 years. She died December 22, 1933, and was carried to her old home in Natchez, for interment.

The annual meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, December 12, 1933. A good luncheon was provided and members and guests present had a most delightful time. The County Medical Society for the three counties holds a meeting monthly and during the past calendar year there was a meeting with a good program and excellent attendance each month. We count the past year a successful one in many respects, for our Society, and this success was due in no small part to the interest and efficiency of our now retiring president, Dr. Preston S. Herring, plus the unbridled tenacity and "ever atness" of our secretary, Dr. Leon S. Lippincott.

On December 26, in the city of Vicksburg, "love found its way" once again, when the marriage of Miss Miriam Seward to Robert James Moorhead was solemnized. Miss Seward is the daughter of Doctor and Mrs. Doyle Seward, of Yazoo City. Prior to her marriage she was attending the Sophie Newcomb College of New Orleans, La. R. J. Moorhead worked as a technician in the Vicksburg Sanitarium laboratory, and is a graduate of Mississippi College, having taken a pre-medical course or a course with the study of medicine in view. We are advised that this young couple will shortly go to Memphis, Tennessee, for their future home, and that R. J. will enter the University of Tennessee to complete his course in medicine. Best wishes attending.

When these lines shall have come to your desk the Old Year will have passed, save its lingering presence that will abide in memory. And as Ye Editor pens these lines there comes a reminiscence that awakens in turn sentiments of sorrow and sentiments of gladness—and silent unspeakable

memories. Looking from a window to the west of us we behold the Mighty Mississippi, the Father of Waters, in his never ending journey to the sea, we seem to hear him say, "He don't plant taters, he don't plant cotton, and them that do are soon forgotten, but Old Man River, he just keeps on rolling, he just keeps on rolling along." And we are reminded that throughout the year men of many races on either side of this "Great Divide" have worked and played, have planned and builded, produced and manufactured, "planted taters and planted cotton" and have been forgotten—and Old Man River rolls on. In our reminiscence we pause in profoundest respect and request each member of the Mississippi State Medical Society to pause with us when he reads these lines, out of respect and to the memory of our late Dr. Ewing Fox Howard, a Mississippi doctor, a former president of our State Medical Association, who spent his entire life in Mississippi and served unusually well his people and his profession. It is not ours to write a eulogy of our friends, this great servant and savant of medicine, our appreciation would prompt it but our words would not permit it, but in this busy world we are reminding you of your loss and our loss who knew him best, and to recall that in his departure June 9, 1933, he must have said, "To you from failing hands we throw, the torch, be yours to hold it high." "Old Man River just keeps on rolling along," and our friend and fellow physician has laid himself down for his eternal sleep on the banks of the Mighty Mississippi, and its waters shall cease their majestic rippling ere they sing of a more courageous and heroic spirit than his.

The calendar year of 1933 records the passing of another of Vicksburg beloved physicians, Dr. Mace H. Bell, who on February 1, 1933 answered his Pilot's call and "crossed the bar" to that unexplored country "from whence no traveler ere returns." He, too, at the journey's end laid himself down for that long and restful repose "by the river's side" and "Old Man River just keeps on rolling along," but the murmuring whispers from his running waters will never tell of a life more gentle and kind than the life of Dr. Mace H. Bell.

It was early in the year that the Grim Reaper first thrust out his scythe into the field of our membership and took from us on January 5, 1934, our highly esteemed and loved Dr. John E. Quidor, who had come to us from the Wonder State, his native Arkansas. Loving friends bore him back to the hallowed scenes of his yesterday years to sleep in peace near the banks of the Mighty Arkansas whose ever flowing waters joins the Mighty Mississippi in an eternal passage at the feet of Vicksburg his adopted city, and the cadence from these mingling waters will bring memories of

Quidor, while "Old Man River just keeps on rolling, just keeps on rolling along."

Dr. H. T. Ims,
County Editor.

Vicksburg,
January 5, 1934.

WASHINGTON COUNTY

Dr. W. P. Shackelford, Hollandale, has been appointed to a post graduate course as a award from the Commonwealth Fund of New York. He has received his appointment from the State Board of Health as one of the sixteen in the entire state to be honored. Dr. Shackelford left on January 1 for New Orleans where he will study general medicine for four months at Tulane Medical College, after which he will return to his general practice in Hollandale. Dr. Shackelford's many friends throughout the county are happy over the honor that has been shown him.

Dr. and Mrs. T. B. Lewis, Greenville, spent the Christmas holidays with their son and daughter, Mr. and Mrs. Rhae Blake of Bluefield, W. Va. They also visited Mr. and Mrs. W. A. Lucas of Huntigton W. Va., and spent several days in Louisville, Ky.

Dr. and Mrs. K. L. Witte, Leland, enjoyed having their daughter Miss Virginia Witte with them during the Christmas holidays. Miss Witte is a member of the faculty at M. S. C. W.

Dr. and Mrs. R. C. Finlay, Glan Allen, entertained their charming daughter, Miss Nell Finlay, with a dance during the Christmas holidays.

Dr. H. A. Gamble, Greenville, attended the meeting of the Southern Surgical Association at Hot Springs, Va., December 11 to 16.

Dr. and Mrs. S. L. Lane and children, Hollandale, visited in Memphis a few days before Christmas.

Dr. J. C. Pegues, Greenville, visited his parents in Scottsboro, Ala. the week before Christmas. He was met in Memphis by his wife and children where they spent several days shopping before motoring home.

Dr. and Mrs. D. C. Montgomery, Greenville, entertained extensively during the Christmas holidays at their home Montbury, for their house guests Mr. and Mrs. Devere Dierkes of Hot Springs, Ark., and Kansas City, Mo.

Dr. J. G. Archer, Greenville, had as his guest for the Christmas holidays his nephew George Archer, Jr. George graduates in medicine this June at Vanderbilt. He has made quite a record having made Phi Beta Kappa in college and Alpha Omega Alpha in medical school. He ranks among the three non-graduates of the University of Pennsylvania who have been appointed to a two years

internship at the University of Pennsylvania Hospital, Philadelphia, Pa.

Dr. and Mrs. A. G. Payne, Greenville, have enjoyed a visit from their daughter, Miss Ethel Payne of Jackson. Miss Payne holds the responsible position of chairman of State Women of Mississippi.

Dr. L. C. Davis, Greenville, entertained the officers of the Kiwanis Club at a dinner during the Christmas holidays.

John G. Archer,
County Editor.

Greenville,
January 9, 1934.

WEBSTER COUNTY

The physicians of Webster County have been very busy for sometime with measles.

Our doctors are 100 per cent in cooperating with the Mississippi State Board of Public Welfare as shown by the following resolutions, every physician in the county signing the resolutions:

State of Mississippi
Webster County
January 3, 1934

We, the undersigned licensed, resident physicians of Webster County, Mississippi, met in Eupora, Mississippi, on the 3rd day of January, 1934 and proceeded to organize a County Medical Society, which is a part of the Winona District Medical Society, and the Mississippi State Medical Association, and being a member of the County Medical Society entitles us to membership in the Winona District Medical Society and the State Medical Association of Mississippi.

After organizing and electing Dr. W. H. Curry, President and Dr. J. D. Turner, Secretary of the Society, we proceeded to adopt the following schedule of fees for the care of the indigent sick in Webster County, said fee schedule as we understand it conforms to that made by representatives of the Mississippi State Medical Association and the Executive Committee of the State Board of Public Welfare, Jackson, and agreed to accept the minimum fee as agreed upon by the representatives of the Mississippi State Medical Association and the Executive Committee of the State Board of Public Welfare which schedule is as follows:

Office Calls	\$ 1.00
Bedside Calls	1.50
With 50 cents per mile additional	
Obstetrical Calls	15.00
Major Operations	25.00
Minor Operations	5.00

It was further agreed to be governed by all the conditions set out in the National Bulletin, No. 7.

The following named Physicians were selected to act in the capacity of an advisory Committee, said committee to represent the Webster County Med-

ical Society, and its members in any controversy that may arise between said members and local relief workers: Dr. W. H. Curry, Eupora; Dr. E. F. Arnold, Bellefontaine; Dr. J. D. Turner, Eupora.

At said meeting it was positively understood by all that no doctor in said county shall participate in the relief money mentioned above without being a member of the Medical Society of the District and of the Mississippi State Medical Association and his name signed to document.

It was further agreed by all doctors present that a copy of this document shall be furnished all field workers and they are hereby requested to make it thoroughly understood to all patients seeking medical aid under this program that said patients are to select their own doctor from the list signing this document, or should said patient desire a doctor from an adjoining county, they shall have the right to select said doctor, provided the doctor selected is a member of the county society and State Medical Association from the county in which resides. It is hereby requested to the various field workers that they shall not suggest any particular doctor to any patient but to leave this matter solely with the patients themselves, and should for any reason any member of this organization be authentically informed that any field worker attempts to suggest any particular doctor to patients with whom they make contact, said member shall report same to the Advisory Committee, who in turn will take the matter up with the chief welfare worker of this county and with the state organization and request that said field worker shall be dismissed from the service.

It was further agreed that hereafter the membership of this organization will when possibly employ or suggest only graduate and registered nurses to serve their patients; a list of the nurses available being in the hands of Miss Dolly R. Dalton, R. N., Chairman of the Committee of the Re-employment of Nurses, Houston, Miss., who will furnish each doctor a list.

It was further agreed that the Webster County Medical Society will hereafter be a permanent organization, and its regular meetings will be held the last Thursday night in each month jointly with the Houston Hospital Staff meeting at that institution.

Field workers are requested to supply each doctor with list of indigent people. This list is to be revised and sent every two weeks.

S. L. Taylor, M. D.
 J. H. Stennis, M. D.
 R. L. Dent, M. D.
 J. H. Brown, M. D.
 H. P. Crumbry, M. D.
 W. H. Curry, M. D.
 S. K. Gore, M. D.
 E. F. Arnold, M. D.

J. D. Turner, M. D.
 V. E. Fox, M. D.
 W. A. Berryhill, M. D.

W. H. Curry,
 County Editor.

Eupora,
 January 8, 1934.

WINSTON COUNTY

The Winston County Medical Fraternity was honored by one of the most elaborate dinners of the season December 29, by Dr. W. W. Parks and his good lady. The members present were Drs. T. F. Kilpatrick, H. B. Watkins, E. L. Richardson, L. T. Parks, S. W. Pearson, W. B. Hickman and the writer. This magnificent spread of turkey, ham and other good things together with that extreme hospitality of his good lady and two daughters, Mrs. Roy Lancaster and Mrs. Snow Owens, made the evening most pleasant.

After dinner was served Dr. Parks, president of the Fraternity called a meeting to discuss medical aid and cost of drugs, the matter that has been passed by the Mississippi State Medical Association and approved by the State R. F. C. Board. The doctors all mutually agreed to make a sacrifice of legitimate charges to co-operate with the work locally and assist in taking care of the indigents.

A committee was appointed by the president to serve as the local Medical Advisory Board to render any assistance possible to the local board in carrying out the program. Drs. W. B. Hickman, L. T. Parks and the writer were appointed on this committee.

All our doctors seemed to have a happy Christmas and seem to be inspired with great optimism over the future outlook.

M. L. Montgomery,
 Editor.

Louisville,
 January 7, 1934.

CENTRAL MEDICAL SOCIETY

The Central Medical Society held its first meeting of the new year on the Roof Garden of the Robert E. Lee Hotel, January 2. At 7:10 P. M. the meeting was called to order by the president, Dr. E. L. Green. The minutes of the previous meeting were read by the secretary and approved. Dr. D. W. Jones was given permission by the president to explain to the Society the error made in the New Orleans Medical and Surgical Journal in signing his name to the report sent in by the Central Medical Society.

First, on the scientific program was Dr. W. K. Stowers of Natchez. Dr. Stowers presented a well prepared and interesting paper on "Management

of Acute Cerebrocranial Injuries." Dr. Stowers was guest speaker of the Society and it usually is not customary to discuss the guest speaker's paper, but Dr. Green, the president asked for open discussion for he thought that Dr. Stowers had presented such a good paper that it should be discussed. Dr. J. P. Wall commented on the excellence of Dr. Stowers' paper and also spoke of the method of treatment used in cranial injuries by Dr. Harvey Cushing of Johns Hopkins University and Dr. Sykes of Barnes Memorial Hospital.

Second, on the program was a paper delivered by Dr. F. E. Werkheiser, Jackson. The subject of his paper was "Ascaris Lumbricoides Producing Intestinal Obstruction." His paper was discussed by Drs. Walker, J. P. Wall, Barksdale, and Werkheiser, closing. Dr. Walker wanted to know if Dr. Werkheiser's patient had been given santonin and calomel before the obstruction developed—the answer was patient had been given two grains of santonin and calomel the day before the obstruction developed, but the worm was alive and happy when removed. Dr. Wall spoke of an 11 year old negro who had been stabbed just above the iliac area in the ileum and the jejunum had come out. It was decided to operate on the patient and a worm crawled out in every opening. He (the patient) had never showed any symptoms of parasites, but nine worms crawled out and his temperature went to 106° and it looked as if the patient would die. Patient had not been allowed to drink water, but he bit a hole in the ice cap and drank all of the water, and he got well just the same. Dr. Barksdale had case with gunshot wound and upon operation found worms inside that had been shot in two.

Dr. R. C. O'Ferrell, Jackson, was not present to give his paper on "Cervical Caesarean."

Dr. M. L. Batson, Jackson, presented a case report of melanosaarcoma of the conjunctiva. (1) Case No. 1 Eye protruding more and more each day. Diagnosis was made of tumor behind the eye. The eye was removed—diagnosed as melanosaarcoma. Patient given radium after removal of eye, but died a few months later. (2) Negro man troubled with his right eye. Eye looked malignant so the eye was removed under local anaesthesia by dissection. The mass removed was so large that the bone had to be cut into to remove the entire mass. The specimen was sent to the laboratory and proved to be melano-sarcoma. Dr. Batson stressed the importance of surgery in the first stages if any good is to be derived from it at all.

Dr. Lauch Hughes stated that melano-sarcoma is a very rare disease of the eye and when a case presents itself that there are usually others present at the same time.

Dr. Simmons of Hazelhurst, a visitor, spoke of his delight in being with the Society and the good that he always gets out of the papers that are given. He told the Society of an interesting case where a child six years of age had swallowed a safety pin. The pin was lodged in the stomach. A Lyons tube was introduced under ether and through the fluoroscope, the tube was seen to slip into the stomach. The child was then carried back home and seemed to be in good condition. Family got upset over child and carried her to Dr. Shands. He found that the pin was present but was giving no trouble and refused to operate on the child. Dr. Garrison was consulted about the advisability of an operation and he was of the same opinion that surgery was not necessary. Child was later carried to noted surgeon in New Orleans, operated on and died. Dr. Garrison had child who had swallowed a safety pin and on 32nd day passed the pin, the tip of which had been eaten off.

Dr. Simmons spoke of another child who had sucked a pin into the bronchial tube and at the time thought it did not amount to anything. Later in 1931 child moved to Jackson and developed pneumonia. Family doctor was called and child was so sick another doctor was called in consultation. Child got well. Family moved to Hazelhurst, where the child first came under Dr. Simmons' observation. Child developed pneumonia again, but got well. Then she spat pure blood, about a dram, frequent chest examinations were made and parents were told that something was wrong in the right bronchial tube. Parents still had not told Dr. Simmons of past history. T. B. test was given—negative. Developed whooping cough and coughed up pin about the size of a match—pin was corroded and covered with pus. Child was resting well the day this was reported to the Society. Had roentgenograms been made this could have been found out before. The pin, of course, was responsible for all of the trouble the child had. Dr. Garrison said that he well remembered when the child was brought into Dr. Shand's office for examination and it had been his experience that if foreign bodies are let alone for a reasonable length of time that they usually take care of themselves. Dr. L. W. Long, had a case where a pin was embedded in the stomach of a child. The child had been watched for 29 days, gave history of ulcer forming, temperature watched carefully, roentgenogram made often. The pin did not move for 12 hours and this did not seem as though it would pass so operation was performed and the pin was found to be hooked into the posterior wall of the stomach. The pin was formerly bright, but was brassy looking when removed. The child is seen often and is in good condition. Fluoroscopic examinations with barium show the child to be in good condition also.

There were 36 members and one visitor present at the meeting. Adjournment at 9 o'clock.

L. W. Long,
Secretary.

Jackson,
January 11, 1934.

ISSAQUENA-SHARKEY-WARREN COUNTIES
MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Hotel Vicksburg, January 9, 7 P. M., with 19 members present. After a supper, the meeting was called to order by President W. H. Scudder and the following program presented:

1. Business Methods and Prompt Collections.—Drs. E. H. Jones, Vicksburg, and E. A. Pettit, Vicksburg.

Discussed by Drs. H. H. Johnston, G. M. Street, L. S. Lippincott, G. W. Gaines and W. A. Smith. Dr. Jones closed.

2. Medical Care of the Indigent Under Federal Emergency Relief.—Drs. W. H. Scudder, Mayersville; H. S. Goodman, Cary; S. W. Johnston, Vicksburg.

Discussed by Drs. L. S. Lippincott, H. S. Goodman and F. M. Smith.

3. The Public Suffers Even More Than the Profession When the Importance of Prompt Payment for Medical Care Is Not Recognized.—Drs. W. H. Parsons, Vicksburg and G. M. Street, Vicksburg.

Discussed by Dr. H. S. Goodman.

4. Taxes and the Profession.—Drs. F. M. Smith, Vicksburg and W. A. Smith, Panther Burn.

Discussed by Drs. L. S. Lippincott, G. M. Street, W. H. Parsons, S. W. Johnston, G. W. Gaines, and W. H. Scudder. Dr. F. M. Smith closed.

The resolutions adopted by the Mississippi State Medical Association at its last meeting and respectfully petitioning the Mississippi Legislature to exempt the medical profession from the operation of that part of the sales tax law which levies a tax on the income of physicians and further that the state and county privileges taxes for physicians be reduced fifty per cent, was again discussed and every member of the Society was urged to write personal letters to their senators and representatives urging careful consideration of the bill embodying the petitions of the State Association.

The secretary's report for the year of 1933 showed 47 members; 11 regular meetings; average attendance at meetings, members, 21 (49.6½), guests, 6, total average attendance 27; 20 members presented papers during the year (42.6½); 10 papers were presented by guests; physicians within society jurisdiction and non-members: Issaquena County, 0; Sharkey County, 5; Warren County, 10.

Six members of the Society had attendance of 100 per cent for the year; 12 members had attendance above 90 per cent.

The treasurers' report for the year of 1933 showed no financial difficulties.

The president appointed the committee on Public Health and Legislation as follows: Dr. A. Street, Chairman, Vicksburg; Dr. J. B. Benton, Valley Park; Dr. W. C. Pool, Cary.

The next meeting of the Society will be held at the Hotel Vicksburg, Tuesday, February 13.

DR. A. F. WHITEHURST

The Northeast Mississippi Thirteen County Medical Society assembled in Tupelo has just received the sad news of the sudden death of Dr. A. F. Whitehurst of Iuka, which came as a great shock. He was a beloved member of our association and a most active soldier in the ranks of our profession in general practice. He had been in the service about thirty-five years and he never even nodded at the stretch. He was sixty-seven years of age. He was a native of Prentiss county, we believe. He graduated from Sewanee, Tennessee. He was active as a member of the Methodist church, a Master Mason, and a progressive citizen.

He believed that his profession was a God-given ministry. He was as devoted to it as a minister to his church. It is said that he never turned down a call because the patient did not have any money. His heart was always full of gratitude. He loved his friends, he would do favors for the sake of friendship. In the delivery of babies he led the state in 1931 with one hundred and eighty-one. He was active to the last.

He leaves a wife and three adopted daughters.

Now be it resolved by this association assembled that we express our sincerest regrets and deep sorrow at this sudden death and that we offer our heartfelt sympathy to the family.

Be it further resolved that the family be furnished a copy of these resolutions, that one be spread on the minutes of the society, one be sent to the Mississippi Doctor, and one to the New Orleans Medical and Surgical Journal.

(Signed) J. Rice Williams,
J. R. Hill.

December 20, 1933.

A TRIBUTE TO DR. A. F. WHITEHURST

In a small obscure village in extreme northeast Mississippi there died December 20 one who in his devotion to what he considered his duty and his services to his fellowman typified the Great Physician, as much as it could be given mortals to typify Deity; such a man as Leigh Hunt had in mind when he wrote Abou Ben Adhem who said, "Write me as one who loves my fellowman."

Dr. Alfred Franklin Whitehurst of Iuka, died at the bedside of one of his humblest patients, in a poor little unceiled shack where under the most primitive conditions he had performed without assistance of either hospital or nurse a most painful operation. Just as he completed the operation and started to turn from the bedside he said, "Wait a minute," and slumped to the floor dead. Died just as he would have wished, still ministering without any hope of reward to those in need.

Amid the hills which he loved so well and where as a barefoot boy he had played he was laid to rest, December 22, while a whole section over which he had ministered nearly a half century mourned as one great family. Funeral services for this great man were held in the historic Iuka Methodist Church of which he had been many years a member, were held by his two friends and neighbors, Revs. Ashmore and Palmer of the Methodist and Baptist Churches. Thousands attended the funeral; hundreds being unable to enter the church stood outside with bared heads and streaming eyes. All business of every kind in the town and much throughout the county was suspended to pay the last tribute to the beloved physician.

He was buried with Masonic honors, Masons of high authority coming from far distant places to pay the final tribute to one who in his life exemplified the highest attributes of their fraternity.

For more than forty years Dr. Whitehurst had labored among his own people refuting the saying, "A prophet is not without honor save in his own country and among his own people," for those who knew him best loved him best. Born, reared, living and dying in the same county, he spent his useful life in doing good to all, the poorest receiving the same measure of attention as those who were glad to pay for his skillful care. With a practice of almost unbelievable proportions he ministered to the sick and suffering of three counties in three states, Tishomingo in Mississippi, Colbert in Alabama, and Hardin in Tennessee.

Before the days of automobiles and good roads it is said that Dr. Whitehurst hardly knew what it was to sleep in a bed, practically all his sleeping being done as he drove through rain, snow and sleet in his old buggy when he gave the reins to his faithful horse.

With a deeply inquisitive mind he was a student of psychology as well as medicine. How and when he had time for his deep reading no one ever knew. He brought to the sick room besides his medical skill a never failing fund of anecdotes for those who needed cheering or a quaint philosophy and none ever knew what helped the most.

Though he was of that fast disappearing pro-

fession, the family physician, confidant of all your woes and secrets, no confidence was ever betrayed; he was father confessor to a good part of the county. And although he practiced in a small town he kept abreast of all the advances in the medical world, attending state and national associations and bringing back with him the latest treatments and appliances. Whenever it became necessary for his patients to receive hospital treatment the great surgeons rarely found a wrong diagnosis or treatment and they had the profoundest respect for his abilities.

In the field of obstetrics in which he specialized he was particularly successful and only last year won state and national recognition both on account of the large number of cases which he had attended but also on account of the few fatalities which attended these cases. He was known as the "Stork Doctor of Mississippi," having averaged a case every other day throughout a period of two years, this in addition to his general practice and this also in addition to the number of cases he attended in Alabama and Tennessee. He was a marvel to the medical profession in this field.

One of the regrets of his life was his inability to register with the medical corps for service in France during the World War, he being past the age. For a long time he was very unhappy over this but when the whole world was scourged with the flu and he saw his services as much needed at home as abroad, this sorrow was forgotten in the splendid manner in which he handled the situation among his own people and finding time between times to give some aid to the industrial centers of Muscle Shoals and Sheffield where, on account of lack of medical attention and supplies by the government the men were dying like flies.

Dr. Whitehurst was 65 years of age, having been born at Jacinto, the county site of old Tishomingo County, July 16, 1868. When a young boy he moved to the Mount Gilead Community between Iuka and Burnsville and here he was married when only 17 years of age to Miss Lina Robinson. Had he lived three days longer he and Mrs. Whitehurst would have celebrated their 48th wedding anniversary.

With the exception of the years he studied medicine at the University of Tennessee at Memphis, his entire life was spent in Tishomingo County. In early life he taught school in the country schools, later he clerked and merchandised in the town of Iuka. Before moving to Iuka to engage in the practice of medicine with Dr. F. T. Carmack of blessed memory, he practiced in Burnsville, Miss.

Mrs. Lyla Merrill McDonald.

Iuka,

January 2, 1934.

NORTH MISSISSIPPI MEDICAL SOCIETY

The quarterly meeting of the North Mississippi Medical Society was held at Batesville, December 27. At 4:30 a. m., members and guests desiring to hunt met at the office of Dr. W. C. Lester and proceeded in quest of ducks. Luncheon was served at noon at Newton's Cafe, after which the following program was carried out:

Address.—Dr. E. R. Nobles, Rosedale, Vice-President, Mississippi State Medical Association.

Factors Influencing the Control of Cancer.—Dr. Shields Abernathy, Memphis.

At 3 p. m., there was more duck hunting.

Your correspondent did not attend this meeting on account of obstetrical case coming into the hospital that morning. I understand Dr. Abernathy had an excellent paper on cancer. The duck hunters had the usual luck—no ducks.

Best wishes for a prosperous New Year.

E. S. Bramlett,
County Editor.

Oxford,
January 5, 1934.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The program of the South Mississippi Medical Society as given in the Journal last month was carried out in full. There was an attendance of about forty doctors. The Woman's Auxiliary had a meeting at the same time and the two organizations enjoyed a most delightful banquet at the close of the scientific programs. It was moved that the dues of the Society be reduced from \$6.00 to \$5.00 for the year 1934. This motion was unanimously carried. As this was the last meeting of the year the following officers were elected for the year 1934: Dr. T. E. Ross, Jr., President; Dr. J. H. Newcomb, First Vice-President; Dr. T. R. Beech, Second Vice-President; Dr. F. T. Bower, Secretary and Treasurer. They take office at the June meeting.

J. P. Culpepper, Jr.,
Secretary.

Hattiesburg,
January 11, 1934.

THE WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. Van Alstine, Jackson.
President-Elect—Mrs. Henry Boswell, Sanatorium.

Secretary—Mrs. Adna Wilde, Jackson.

Treasurer—Mrs. E. C. Parker, Gulfport.

Press and Publicity Chairman—Mrs. Leon S. Lippincott, Vicksburg.



MRS. W. H. FRIZELL

Brookhaven

President, 1927-1928

Bessie Crosby Frizell was born at Brookhaven, Mississippi, in 1881. She was graduated from Whitworth College in 1900.

In 1902 she was married to Doctor W. H. Frizell, also a resident of Brookhaven, and they have continued to make this beautiful little town their place of residence.

Mrs. Frizell served as Councilor of her district and was then elected President of the state auxiliary for the year of 1927-1928, presiding over the convention at Meridian in May, 1928.

The outstanding work of her administration was the large amount of work done in the flood relief, and the expenditure of the money given the auxiliary for this purpose by the Mississippi State Medical Association.

HISTORY OF THE WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

(Continued)

The fifth annual convention of the Woman's Auxiliary to the Mississippi State Medical Association was held in the Lamar Hotel, Meridian, May 9, 1928, with the president, Mrs. W. H. Frizell, presiding.

Dr. Henry Boswell brought the auxiliary a message on the need of preventive work in tuberculosis, and asked the continued cooperation for the Health Camp which had been moved from Biloxi to the Sanatorium grounds.

The high point of the auxiliary work for the year was the report of flood relief given by Mrs. Dan J. Williams, state chairman of the flood relief committee. The work having been done in the spring and summer of 1927, started during Mrs. S. W. Johnston's administration and continued during the first months of Mrs. Frizell's term of office.

A change in the constitution at this time provided for four vice-presidents instead of two.

The following officers were elected:

President—Mrs. Harvey F. Garrison, Jackson.

First Vice-President—Mrs. T. E. Ross, Jr., Hattiesburg.

Second Vice-President—Mrs. H. N. Mayes, New Albany.

Third Vice-President—Mrs. A. C. Bryan, Meridian.

Fourth Vice-President—Mrs. W. L. Little, Wesson.

Recording Secretary—Mrs. Henry Boswell, Sanatorium.

Treasurer—Mrs. G. D. Mason, Lumberton.

Parliamentarian—Mrs. Dan J. Williams, Gulfport.

A MESSAGE FROM OUR STATE PRESIDENT
Dear Auxiliary Members:

The holiday rush is past with all its joys and family parties, and we next look forward to our professional family party at Natchez, May 8, 9, 10.

Our program is not quite complete, but some items of importance to every doctor's wife will be discussed by Dr. Dicks, and others. The Woman's Auxiliary to the Homochitto Valley Medical Society is planning some entertaining features, and we are looking forward to the fellowship time of the convention.

In looking over past records there are so many names listed that we seldom have with us now, and I believe it would help greatly if each member would do a little personal work in the form of an invitation to any former members she may know who has dropped her attendance, whether a member now or not.

Natchez is an old place full of interest to every one, no matter how familiar it may be, and has the deserved reputation of "Hospitality of the Old South," so let us show our appreciation by having the largest attendance of any Auxiliary Convention yet held.

Let us all plan to attend!

Jackson, Mrs. Frank L. Van Alstine.
January 9, 1934.

THE WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

The Edwards Hotel was the scene of much gaiety Thursday night as the Woman's Auxiliary entertained the Jackson doctors at a dinner.

Auxiliary officers and chairmen of committees received their guests informally and ushered them into the dining room where small Christmas trees and red tapers in silver holders decorated the cross-shaped table. At each cover an attractive folder of Christmas design set forth the program.

Mrs. Harvey F. Garrison, president, following an address of welcome, introduced several outstanding guests, among them, Dr. E. L. Green of Carpenter, president of the Central Medical Society. Dr. Green gave a most interesting and instructive talk on the aims of his organization.

Mrs. William E. Noblin presided as toastmistress and gave a glowing description of the doctor of the past. Mrs. F. L. Van Alstine presented cooperation and friendship, and concluded by explaining the ways in which the auxiliary can be the assets of the doctor of today, the necessity for of assistance to the Medical Association. Mrs. Noel Womack then gazed into the crystal and saw conditions as the doctor would like to have them.

Miss Lois McCormick assisted at the piano while the doctors were advised that happy days are here again and to pack up their troubles in their old pill bags and smile, smile, smile.

Mrs. Temple Ainsworth,
Jackson, Press and Publicity Chairman.
January 8, 1934.

JACKSON SOCIAL NOTES

Dr. and Mrs. Ewing Gordin returned shortly before Christmas day from a delightful three weeks Carribean Cruise, stopping at Havana and points of interest in Central America.

Dr. and Mrs. Robin Harris are receiving congratulations on the arrival of a daughter, Nancy Ann, December 14.

Dr. and Mrs. F. L. Van Alstine with their daughter and son-in-law, Mr. and Mrs. Claude M. Tyler of Shawnee, Oklahoma, enjoyed a trip to New Orleans and the Gulf Coast. Mr. and Mrs. Tyler remained in Jackson for a few days' visit to the Van Alstines.

Christmas brought quite a number of "Medical Children" home for the holidays: Bill Noblin, a senior medical student at Emory in Atlanta, and John, a freshman at Ole Miss., both sons of Dr. and Mrs. W. E. Noblin; Fred Rehfeldt, son of Dr. and Mrs. F. E. Rehfeldt, who is working on his A.B. degree at Southwestern in Memphis; Jack McDill, son of Dr. and Mrs. John E. McDill, who is working on his B.S. degree at Ole Miss.; Nugent Shands, a junior at Vanderbilt, and Harley Shands, a soph-

omore at Tulane, both sons of Dr. and Mrs. Harley Shands; Lucy Rembert, from M. S. C. W., daughter of Dr. and Mrs. G. W. F. Rembert.

Mrs. Harley Shands and Coupre have returned to Colorado Springs to be with Dr. Shands.

The monthly auxiliary luncheons will be resumed the first Tuesday in February.

Mr. and Mrs. Bill Lawson and two children of Gastonia, North Carolina, and Mr. and Mrs. W. G. Humphries and two children of Greenwood, spent Christmas with their parents, Dr. and Mrs. J. W. Barksdale.

Mrs. Temple Ainsworth,
Jackson, Press and Publicity Chairman.
January 8, 1934.

WOMAN'S AUXILIARY TO THE HOMOCHITTO VALLEY MEDICAL SOCIETY

The Homochitto Valley Medical Society Auxiliary met at the Eola Hotel, Natchez, at 2 p. m., on January 11, with seventeen members present. Following a delightful luncheon the meeting was called to order by the president, Mrs. E. Benoist. The minutes of the last meeting and the financial report for the old year were read and approved.

The first meeting of the New Year was a social one. No program had been planned and only a short business session. The H. V. M. S. Auxiliary accepted an invitation extended by the Cooperative Club to join them.

Plans for the Convention to be held in Natchez in May were discussed with much pleasure.

Those in attendance at this meeting were: Mrs. Edwin Benoist, Mrs. W. H. H. Lewis, Mrs. A. J. Kisner, Mrs. J. G. Logan, Mrs. Loren Wallin, Mrs. J. W. Chisholm, Mrs. Raymond Smith, Mrs. McDonald Watkins, Mrs. J. D. Shields, Mrs. R. S. Towns, Mrs. J. W. D. Dicks, Mrs. Marcus Beekman, Mrs. C. A. Everette, Mrs. J. C. McGehec, Mrs. Lucien Gaudet, Mrs. Wm. K. Stowers, Mrs. C. E. Mullins.

Mrs. Wm. K. Stowers,
Natchez, Press and Publicity Chairman.
January 12, 1934.

THE WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The January meeting of the Woman's Auxiliary will be held on January 16 at the Hotel Vicksburg.

The members are anticipating a very successful year with Mrs. H. S. Goodman of Cary, as president. A large attendance is expected as the cooperation of the entire auxiliary is assured our new officer.

Mrs. B. B. Martin is hostess, and Mrs. W. C. Pool of Cary, is leader, for the interesting program, "Animal Experimentation." Since so much work

is being done in this field the members are eager to learn more about the subject of such vital importance to medical science.

VICKSBURG NOTES

Friends of Dr. Benson Martin, Jr., are delighted to learn of his appointment as house physician at the Baptist Hospital in New Orleans.

Miss Polly Street, daughter of Dr. and Mrs. Geo. Street, was a guest at a house party in Texas after Christmas.

Mr. Chas. Edwards, Jr., of Little Rock, Ark., is visiting his parents, Dr. and Mrs. C. J. Edwards.

Mrs. Laurence J. Clark,
Vicksburg, Press and Publicity Chairman.
January 10, 1934.

HONOR ROLL

The following have contributed to the Mississippi section of your Journal this month:

COUNTY EDITORS—Lucien S. Gaudet; W. C. Walker; L. L. Minor; S. E. Towns; T. J. Brown; W. F. Hand; E. S. Bramlett; F. L. Brantley; R. B. Caldwell; W. B. Dickins; G. S. Bryan; G. H. Wood; R. P. Donaldson; E. L. Walker; T. P. Haney, Sr.; H. T. Ims; John G. Archer; W. H. Curry; M. L. Montgomery—19.

SOCIETIES—Central Medical Society, L. W. Long; Harrison-Stone-Hancock Counties Medical Society, E. A. Trudeau; Issaquena-Sharkey-Warren Counties Medical Society; Northeast Mississippi Thirteen Counties Medical Society, J. Rice Williams and J. R. Hill; North Mississippi Medical Society, E. S. Bramlett; South Mississippi Medical Society, J. P. Culpepper, Jr.—6.

HOSPITALS—Chamberlain-Rice Hospital, Raymond T. Smith; Greenville King's Daughters Hospital, J. A. Beals; Mississippi Baptist Hospital, L. W. Long; Vicksburg Sanitarium—4.

WOMAN'S AUXILIARY—Mrs. Leon S. Lippincott; Mrs. Frank L. Van Alstine; Mrs. Temple Ainsworth; Mrs. William K. Stowers; Mrs. Laurence J. Clark—5.

OTHERS—T. M. Dye; F. Michael Smith; Felix J. Underwood; Mrs. Scottie Kemp; Mrs. Lyla Merrill McDonald—5

Grand total—39. Thank you.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY

The January meeting will be held at the Biloxi Hospital, Biloxi, Wednesday, January 3, at 7:30 p. m. Installation of Judicial and Legislative Needs.

E. A. Trudeau,
Biloxi, Secretary.
January 2, 1934.

BOOK REVIEWS

Gastric Anacidity: By Arthur S. Bloomfield, M. D., and W. Scott Pollard, M. D. New York, N. Y. The Macmillan Company, 1933. pp. 188. Price \$2.50.

The authors of this brief monograph have contributed much to the subject, and their past papers appearing in the *Journal of the American Medical Association*, *Journal of Clinical Investigation* and *Bulletin of the Johns Hopkins Hospital* form the foundation of the book.

The subject is completely covered, and chapters on Methods of Testing Gastric Acidity, History and Classification of Anacidity, and the various clinical conditions characterized by a lack of acid, are all freely discussed. One cannot refrain from complimenting the easy style of the authors nor can one help but commend the spirit in which the information is presented, that is, free from any personal theories or preferences.

The brief discourse is rich in sane clinical remarks, as for example, "Cases in which an anacidity is discovered accidentally and in which no digestive symptoms or disturbances of nutrition is present, no special therapy seems necessary and it may be wiser not to direct the patient's attention to the defect. Many an essentially normal person has been badly scared or even precipitated into a neurosis by being told he has no acid in his stomach."

The authors claim that the term "achylia gastrica," in contradistinction to simple lack of acid, is meaningless because the ferments are not present in the absence of the acid. This view is not the one held by the profession at large but the evidence presented by the authors is logical.

The bibliography is one of the most valuable features of the monograph. It is most complete.

The critic thinks this monograph represents a valuable contribution to the subject and recommends it heartily to anyone interested in the problem.

SIDNEY M. COPLAND, M. D.

The Science of Radiology: Authorized by American Congress of Radiology, Edited by Otto Glasser, Ph. D. Springfield, Ill. Charles C. Thomas. 1933. pp. 450.

"The Science of Radiology" is the result of painstaking work on the part of many carefully selected contributors, appointed by Dr. Byron H. Jackson, Chairman of the Committee on History and Education of the American Congress of Radiology. Dr. Otto Glasser, Ph. D., of the Cleveland Clinic, was elected as the editor, and this splendid book stands

as a testimonial of his skill and patience. It, further, serves as a substantial proof of the wisdom of the Committee in selecting such a splendid editor.

This book is a review of the marvelous progress of radiology, beginning with the discovery of the roentgen ray by Dr. Wilhelm Conrad Roentgen in 1895, and radium by Pierre and Marie Curie in 1898, up to the present time. There are twenty-five chapters, four hundred and fifty pages of text, with numerous interesting and instructive illustrations. The physics of the roentgen ray and radium rays are discussed at length, also an explanation of the progressive stages in the manufacture of roentgen ray tubes. The application of the roentgen ray in the diagnosis of diseases occupies a large and important part of the book. The use of the roentgen ray and radium rays in the treatment of diseases is discussed thoroughly, beginning with the first application of these agencies as used in the early period of radiology, down to the present time, with the use of modern apparatus of tremendous voltages, and large amounts of radium used in "packs" and also in emanation form.

To those interested in radiology this book represents an historical review of the achievement and the progress of this comparatively new science. Much has been omitted, either as a result of lack of space, time, or knowledge. This is particularly true of the modern accomplishment of radiology in the field of research, experimental medicine, and biology. It is unfortunate that a more thorough search of the radiological literature was not made. If this had been done, this book would have included many important radiological discoveries which are not mentioned. The omission of these must be looked upon as a serious mistake, as it will no doubt be a long time before another edition of this book will be presented to the medical profession.

LEON J. MENVILLE, M. D.

Food, Nutrition and Health: By E. V. McCollum, Ph. D. and J. Ernestine Becker, M. A. Published by McCollum and Becker. East End Post Station, Baltimore Md. Price \$1.50. pp. 146.

The third edition of this excellent little book has been rewritten and revised with a thoroughness that one would expect from E. V. McCollum. All the latest information on nutrition and diet has been incorporated. Much of this is such as has been gained from the author from first hand experience and experimentation. The book is a fas-

cinating exposition of a subject which should appeal to every thoughtful layman who eats!

J. H. MUSSER, M. D.

Infections of the Hand: By Ailen B. Konavel, M. D., Sc. D. 6th ed. thoroughly revised. Philadelphia, Lea & Febiger, 1933. pp. 552. Price, \$6.00.

In this the sixth edition of a work already recognized as an important volumn in medical literature the author presents a radical revision of the Fifth Edition published in 1925. There has been a rearrangement in the presentation of the subject, devoting more space to the anatomy of the hand and to the author's experimental work illuminating the anatomic basis for the development and propagation of infections of the hand. These anatomic studies clearly presented and conclusive serve as a *sine qua non* for an intelligent knowledge of the development and manner of spread of infections of the hand. The clinical studies of infections are beautifully correlated with the anatomic.

The author has added a chapter dealing especially with infections resulting from bites, and other chapters on the injuries from indelible pencils, cattle hair and more detailed information on gangrenous infections.

Not the least noticeable of the improvements in the edition is the replacement of some of the old illustrations by new ones done by Tom Jones and the addition of some new illustrations.

It is not necessary to commend this volumn. It already stands with the best of informative surgical literature. However, this edition with its changes and new material merits still further praise for the author.

HOWARD R. MAHORNER, M. D.

Manuel of Diseases of Nose, Throat & Ear: By E. B. Gleason, M. D., LL. D. 7th ed. rev. Philadelphia, W. B. Saunders Co. 1933. pp. 651. Price \$4.50.

This is an excellent book intended to supply students and general practitioners with the essential facts of Rhinology, Laryngology and Otology in as concise a form as possible. The more important facts of the anatomy, physiology and pathology of the upper respiratory tract and ear have received careful consideration. This volume is sufficiently complete for study or reference by undergraduates or general practitioners taking a post-graduate course in Rhinology, Laryngology and Otology.

The illustrations are excellent and treatment of cases is ably described. In short this is an excellent book on this specialty for the student and general practitioner.

F. E. LEJEUNE, M. D.

Diseases of the Chest: By George William Norris, A. B., M. D., & Henry R. W. Landis, A. B., M.

D., Sc. D. 5th ed. rev. Philadelphia, W. B. Saunders Co. 1933. pp. 997.

This new edition is designed to bring the subject up-to-date. There has apparently been no major revisions, but many details have been changed. The book still remains of the utmost importance to those engaged in that branch of medicine.

I. L. ROBBINS, M. D.

Red Medicine: Socialized Health in Soviet Russia: By Sir A. Newsholme, K.C.B., M. D. and J. A. Kingsbury, LL.D. New York, Doubleday Doran & Co., Inc. 1933. pp. 324.

This book is destined to become one of the most talked of on this subject. The high standing of the authors in their respective fields of endeavor must ensure the honesty and integrity of its contents. Protagonists and antagonists of this vital subject of social medicine will be forced to reckon with the facts that the authors have gathered in their study of medicine in Soviet Russia. It is not my intention to engage further in any discussion of the facts as they found them. One thing however, is certain. We cannot shut our ears and eyes to the fact that a tremendous upheaval has occurred in medicine and that the reverbrations, whether for good or bad will yet be heard around the world. The book is presented in a scientific and yet most entertaining manner and a good index with several charts and pictures of value are noted as an interesting feature.

I. L. ROBBINS, M. D.

Hygiene of the Mind: By Baron Ernst von Feuchtersleben.

In 1838 this splendid article appeared. The present volume is a translation. It belongs to the category of mental hygiene. It is to the great credit of this old philosopher-physician but that for minor revisions this small volume might readily find a place in any treatise devoted to mental hygiene today. It is charming.

I. L. ROBBINS, M. D.

Public Health Nursing in Industry: By Violet H. Hodgson, R. N. New York, The MacMillan Compasy. 1933. pp. 249. Price \$1.75.

As indicated in the preface the purpose of this book is to indicate the potential field of public health nursing in commerce, trade and industry. It has been prepared as a guide for the graduate nurse engaged in industrial nursing.

The book is clearly written and presented in a very readable manner. Sources from which the material is drawn are given in foot notes.

It is divided into two parts, the first of which deals with the relationships existing between the nursing service and company organizations. The various activities with which the nurse comes in

contact are briefly discussed and the scope of the health program is outlined. Part two describes the principles, practices and procedures of industrial nursing.

One very commendable feature of the book is the emphasis placed on the preventive aspects of industrial nursing. The volume should be a very valuable addition to the library of employers of nurses as well as of nurses themselves.

C. C. DAUER, M. D.

History and Source Book of Orthopedic Surgery:

By Edward M. Bick, M. A., M. D. New York,

The Hospital for Joint Diseases. 1933. pp. 254.

One is impressed by the great amount of research necessary to compile a history of Orthopedic Surgery, and by the care and diligence which the author exhibits in his most interesting book. The material is presented by epochs beginning with the practices of primitive man, and the course of bone and joint surgery is interestingly traced throughout the ages to the present time. Although the text is typewritten and reading is somewhat difficult, the excellence of presentation does not allow the attention to be distracted.

DUDLEY M. STEWART, M. D.

A Review of Obstetrical Nursing: By Carolyn Conant Van Blarcom, R. N.

The introduction emphasizes the necessity for good obstetrical nursing, and to substantiate this opinion statistics of maternal and fetal death rates are given. The duties of the obstetrical nurse are not limited to the time of delivery, but prenatal and postnatal services are needed as well. The necessity of asepsis is stressed, and in general the whole ideal of the book is outlined.

Part I deals with anatomy and physiology of the female generative tract. The description of the pelvic bones and the organs is concise, clear and easily understood. Technique for pelvimetry, including Jarcho's roentgen ray procedure is included. The definitions of the various terms describing menstruation and its abnormalities are clear, and their relationship to the ovarian function is brought out.

Part II considers in brief the growth and development of the embryo from fertilization through the fetal stage to term. Formation of the membranes, placenta, description of the fetal circulation, before and immediately after birth, and character of the fetal skull are considered in the first chapter. Chapter two includes the signs and symptoms of pregnancy divided into the three groups. Normal changes in the maternal organs are discussed.

Part III takes up prenatal care in a general way, office visits, clothing, B. P., urinalysis, diet, exercise, sleep and points on general hygiene of the expectant mother as given. Complications and accidents incidental to pregnancy are also included, such as premature labor, ectopic pregnancy, anteparturial hemorrhages, intercurrent diseases, toxemias, etc. Notes on cause and treatment as well as the nurse's duties are given.

Part IV deals with the position and presentation of the fetus, course and mechanism of labor, with the nursing duties in detail. Technique for scrubbing and preparing patient, as well as nurse is emphasized. The last chapter describes various obstetrical operations, including procedures for induction of labor.

Part V deals with the puerperium outlining nursing care. Special mention is made of various puerperal complications. Mention is also made in this division of the book of the proper diets for various conditions occurring during the puerperium.

Part VI gives special attention to the management of obstetrical cases in the home. Pictures including the nursing layout and setup for the home lying-in room are shown.

Part VII considers the special care of the new born babe both as to nutrition, dress as well as care of the cord. Various disorders and abnormalities of early infancy are considered under a separate chapter.

The book is very comprehensive and well illustrated. The style is clear and the presentation of material is orderly. Certainly a book of this character should improve the obstetrical nursing knowledge of most any obstetrical staff.

JOS. W. REDDOCH, M. D.

PUBLICATIONS RECEIVED

Charles C. Thomas, Springfield: Neurology, by Roy R. Grinker, M. D.

The MacMillan Company, New York: The Foundations of Nutrition, by Mary Swartz Rose, Ph. D. Food Products, by Henry C. Sherman, Ph. D., Sc. D. Third Edition. Mental Hygiene in the Community, by Clara Bassett.

J. B. Lippincott Company, Philadelphia: Treatment of the Commoner Diseases, by Lewellys F. Barker, M. D.

Doubleday, Doran & Company, Inc., New York: A City Set on a Hill, by C. E. A. Winslow, Dr. P. H. Robert M. McBride & Company, New York: Birth Control in Practice, by Marie E. Kopp, Ph. D.

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New Orleans Medical

and

Surgical Journal

Vol. 86

MARCH, 1934

No. 8

ETIOLOGY AND PATHOLOGY OF BACILLARY DYSENTERY*

CHARLES W. DUVAL, M. D.
NEW ORLEANS

The term bacillary dysentery implies the infection of the bowel with the specific bacillus which was discovered by Shiga in 1898,¹ who isolated and proved its casual relationship to the disease by positive agglutination reactions with the blood of the patients. Shiga's discovery was first confirmed by Kruse² in Germany, Flexner³ in the Philippines, Vedder and Duval⁴ and Duval and Bassett⁵ in the United States.

It is recognized today that bacillary dysentery is not caused alone by the bacillus originally isolated by Shiga but by a number of bacilli that, though racially different in certain biological respects, belong to one and the same bacterial species. While all members of the group are pathogenic and cause what is known clinically as bacillary dysentery, the Shiga strain is regarded nowadays as the exciting cause of the more severe clinical form of the infection, including the type seen in epidemics. On the other hand, the sporadic type of the disease is caused commonly by some one of the other bacilli of the group.

Bacillary dysentery may manifest itself as an acute, sub-acute and chronic infection of the lower bowel that clinically is characterized by fever, leukocytosis and diarrhea. The disease occurs in all climates but is more prevalent as we approach the tropics. It affects all ages but particularly the very old and the very young. It is

the cause of the infectious type of "summer diarrhea" in infants. In this connection I might say that bacillary dysentery is the greatest factor in high infant mortality. For this reason the protection of babies against the disease is of the utmost importance.

Bacillary dysentery is met with under a wide variety of conditions. It is not a disease of any one locality, though we see more cases, and those of greater severity in the cities than in the rural districts. It occurs as an acute primary infection of the bowel; as a subacute infection without previous acute symptoms; and coincidentally with or following other infections of the intestine, but especially amebiasis. It is often seen as a terminal infection in old people and in children suffering from extreme malnutrition or marasmus.

The disease may occur as a mild intestinal disorder with little or no symptoms; as a colitis accompanied by marked local symptoms of great severity, yet with very little fever; and lastly, the infection may be very severe with both local and constitutional symptoms.

In bacillary dysentery it is noteworthy that in some patients where the infection is slight, the digestive disturbance is severe. The two conditions bear a general but by no means a constant relation to each other. Again it is remarkable, that certain cases recovering from acute bacillary dysentery pass into the chronic form of the disease without experiencing any subjective symptoms, and the infection lasting for months, even years. It is this type of case that is so difficult to cure with immune serum.

While the dysentery bacilli usually disappear from the stools in 2 to 3 weeks after an attack of acute dysentery, they may persist in the mucosa of the bowel for a much longer period. This fact explains relapses which occur months

*This, and the three following papers were presented as a symposium on dysentery before the Orleans Parish Medical Society November 27, 1933.

after the primary attack of the disease. It also explains many of the chronic cases that give a history of exacerbations of the intestinal process which has remained without symptoms during the interims. Many of these cases have been wrongly considered "re-infections". Furthermore, it should be remembered that dysentery bacilli may be present in the bowel wall in mild cases of non-infectious catarrhal colitis and in cases of intestinal amebiasis. In these instances the dysentery bacilli are playing the role of secondary invaders that often initiate a "terminal infection".

The excitant of bacillary dysentery is spread through the dejecta, as in the case of typhoid, Asiatic cholera, paratyphoid and amebic infections. For this reason it is included in the so-called water-borne diseases. Commonly responsible for the outbreaks of acute bacillary dysentery is the water supply. The bacilli leave the body by way of the dejecta, pass into the external world, and ultimately find their way into the intestinal tract of others indirectly through water or dairy products and food-stuffs contaminated with polluted water. In thickly populated communities epidemics of bacillary dysentery are usually water-borne infections mainly because of the too intimate connection between sewage disposal and water supply. Polluted milk is sometimes the source of urban epidemics. Cow's milk is undoubtedly the chief factor in the spread of that form of the infection known as summer diarrhea. The common house fly, as a mechanical carrier, is also responsible for the spread of the disease. So also may the convalescent and ambulatory patient spread the disease. Persons who have completely recovered from the infection may harbor for months the specific bacillus in their intestinal tract. Such individuals are true "carriers", and an important factor in the spread of the disease. The method of spread and the prevention of bacillary dysentery are an exact counterpart of those of typhoid fever.

Bacillary infection with the dysentery bacillus is associated with almost every sort of intestinal disturbance that is accompanied by diarrhea. The most characteristic clinical type of the disease is the acute febrile form with stools containing much mucus that is streaked

with blood. There are all degrees of severity, the mildest and the most severe, the acute, the sub-acute and the chronic. The infection may be a primary and a secondary disease. As a secondary disease it is often terminal, particularly in infants suffering with some non-infectious form of intestinal disorder. As a secondary and terminal infection it is second only to bronchopneumonia.

In regard to the pathology in bacillary dysentery it is essentially an acute inflammatory process of the large intestine which is characterized by mucosal ulcerations and necrosis. Almost always it is the large gut that presents the lesions, which primarily are at the various flexures. Sometime the lower part of the small intestine is the seat of the inflammatory process but always associated with the large bowel involvement. Occasionally the lesions occur as far up as the pylorus of the stomach. In the milder cases the early lesion appears as an intensely red, edematous swelling of the mucosa, but particularly at the sigmoid, hepatic and splenic flexures. From these situations the acute inflammation may spread to other parts of the gut, until the entire mucosa of the large bowel is involved. In the more severe type of the infection, the early characteristic pathology is focal necrosis of the solitary and agminated follicles of the large bowel mucosa. It is this necrosis of the mucous coat that gives the appearance of a false-membrane. The capillaries in the necrotic areas become thrombosed and the thrombi extend down to the exit of the vessels from the sub-mucosa. Sloughing of the necrotic tissue creates the familiar superficial denudations that are termed ulcers. At this time small hemorrhages are likely to occur because of the unplugging of the thrombosed capillaries that are now exposed in the floor of the ulcers.

Blood streaked mucus may be found in considerable quantities in the gut content, which accounts for the muco-bloody diarrhetic stool so common in bacillary dysentery. Fatal acute hemorrhage is rare and perforation of the bowel is almost unknown in this disease.

The mesentery lymph nodes are moderately enlarged but never are they hemorrhagic or necrotic as in typhoid fever. Multiple miliary abscesses of the liver sometimes occur as a re-

sult of the metastasis of *B. dysenteriae* by way of the portal circulation. With the exception of toxic degenerative changes to the parenchyme of internal organs, lesions that are extra-intestinal are unknown.

Bacillary dysentery, unlike typhoid, does not give rise to a septicemia. The bacilli remain, except in rare instances, throughout the course of the disease in the intestinal mucosa.

In some chronic forms of the disease ulcers may persist as deep excavations with heaped up craters and over hanging edges. This condition is often associated with a thickened gut wall due to the formation of cicatricial tissue in the sub-mucosa.

In conclusion, I wish to say a word about specific therapy in bacillary dysentery. The favorable cases for serum treatment are, of course, the acute, before ulcerations of the bowel have deepened, and in the case of infants, before the general nutrition has been impaired. Immune serum to be effective must be used in repeated large doses, one a day and continued for several days. Serum therapy is of little or no value in sub-acute and chronic bacillary dysentery either in the adult or child, where the symptoms relate much more to the functional disturbance of digestion than to the infection per se. In this type of case vaccine therapy is indicated, preferably the autogenous vaccine. It is admirably stood by the patient and, of course, there is no fear of inducing a protein hypersensitiveness from its repeated administration.

REFERENCES

1. *Centralbl. f. Bakter. u. Parasiten*, 23:599, 1898.
2. *Johns Hopkins Bul.*, Feb. 1900.
3. *Deutsche med. Woch.*, 27:370, 1901.
4. *Jour. Exper. Med.*, 6:181, 1902.
5. *Amer. Med.*, 4:417, 1902.

CLINICAL FEATURES OF BACILLARY DYSENTERY*

DANIEL N. SILVERMAN, M. D.
NEW ORLEANS

Prior to 1925, bacillary dysentery was a disease rarely diagnosed in the far South. At that time, it was well known that many of the dysenteric infections were caused by *Endamoeba*

histolytica, but it undoubtedly appeared that a considerable number of cases did not have this protozoa as the etiologic factor. This fact was recognized by Boyd,¹ who in 1921, found *B. dysenteriae* in two instances occurring in the State of Texas. At the suggestion of Doctor Duval, the writer instituted a study of bacillary dysenteric infections and up to the present has accumulated a series of 125 sporadic cases, the largest number ever reported in the United States.

In 1926, in the Medical Clinics of North America,² the author reported a small group of cases originating in Louisiana and caused by the Flexner bacilli. In a subsequent paper,³ several additional cases, both acute and chronic, produced by the bacilli of Shiga and of Flexner were noted. It was our opinion that bacillary dysentery was endemic in the South. This opinion was later concurred in by Higgins, who observed, in 1928,⁴ that bacillary dysentery occurred in the mountainous sections of Virginia in rather severe form. He reported a series of six cases and concluded the disease was apparently on the increase in that state. In 1930, we analyzed several additional cases⁵ of bacillary dysentery which came to our attention. All of these were due to the same organisms previously noted, the bacilli of Shiga and of Flexner. Zinsser, in 1931, and again in the spring of the same year, Feemster, Harris, and the writer,⁶ reported many more cases of bacillary dysentery which had been recently investigated and some of which were due not alone to the same strains of bacilli previously found, but also to the lactose fermenter originally discovered in 1904, by Duval^{7, 8} when he isolated the organism from infants during an epidemic occurring in the eastern part of the United States. This organism had not been known to exist in the South, nor had it been recognized as the etiologic factor in cases of acute and chronic dysentery occurring in sporadic form. Simultaneously with our studies, Nelson⁹ investigated an epidemic of acute bacillary dysentery due to the lactose fermenter, which occurred in the Boston Children's Hospital, reporting thirty-two cases. Like several other students of the disease, he erroneously termed the organism "Sonne bacillus," when in reality, the bacillus

*Read before Orleans Parish Medical Society, November 27, 1933.

is that discovered by Duval, prior to Sonne's work in 1915.

It is noteworthy that, following our last report, we have had referred to us several additional cases of Shiga bacillus dysentery in both the acute and chronic forms. This organism is generally considered of epidemic origin and is rarely found as the etiologic factor in sporadic cases of the disease.

CASE REPORTS

These unusual clinical features of bacillary dysentery are exemplified by the following cases:

Case 1. M. H., a white male, age 22 years, for three weeks prior to admittance to the hospital, had had a diarrhea and occasional abdominal pains. There were four or more watery stools each day. There was evacuation once or twice during the night. The patient's appetite had dwindled, although he had been a hearty eater. He gave a history of a diarrheal attack a year earlier. Physical examination revealed nothing of note but a tender sigmoid. Proctoscopic inspection revealed wet and slightly granular mucosa but no ulcers. There was strong positive agglutination with the organism isolated, Harris-Flexner strain. Under hospital treatment, irrigations and vaccine therapy, the abdominal pain disappeared and the diarrhea ceased. Three months later, the patient reported pain in the lower abdomen of twenty-four hours' duration, especially on exertion, but no nausea, fever, nor vomiting. There was localized tenderness over the cecum. Subsequent proctoscopic inspection showed many ulcers.

As revealed by the foregoing history, this case represented a remission of symptoms with, however, the persistence of active pathology.

Case 2. L. E., a white male, age 52 years, was admitted complaining that for six days pain had been present in the left side, radiating to the lower left quadrant and the midline. The onset of symptoms was acute. Apparently the pain, which the patient described as "heavy, sharp, and stabbing," seemed to bear some relation to food ingested. Enemas had given relief once or twice. Although the urine had been highly colored and cloudy, there had been no blood. Proctoscopic examination revealed ulceration in the rectum, about 5 cm. in diameter, with a mucopurulent exudate. The grayish membrane was of an angry red base throughout. The purged stool showed many *Trichomonas hominis*. The prostate was normal, except for a slight hardness. The urologist reported that the temperature, which was consistently above normal, rising as high as 102.6°F., was not due to disease of the prostate.

Blood agglutinations made on July 23, showed no agglutinating power against Hiss, Duval, Flexner, or Shiga, in dilutions of 1-40, 1-80, and 1-160. On July 25, a culture of the stool revealed among other organisms a gram-negative, non-motile bacillus, which morphologically, serologically, and culturally was *B. dysenteriae* Shiga. On August 2, serum agglutination showed positive reaction in dilution of 1-80 with the organism isolated from the bowel. On August 6, culture revealed a variety of organisms, predominant among which was *B. coli*, but none of the typhoid or dysentery group was present. On August 17, bacterial allergens showed positive reactions to two Shiga strains intradermally injected. On August 26, cultures from scrapings from the colon ulcer showed no organisms of the typhoid-dysentery group. At this time, the arm became red, swollen, and tender, but as no local reaction took place immediately, allergy was eliminated.

The temperature was constantly high the first week; the second week, it was almost consistently subnormal, going to 97°F. the third week, there was intermittent high fever, as high as 104°F., but the temperature shortly dropped to 98°F. From then on, the temperature was normal or a bit below; only once did it rise to 100°F.

To be noted in this case is that while the diagnosis was positive for *B. dysenteriae* of the Shiga type, at no time during the course of the illness was there diarrhea.

Case 3. Miss O. J., a white female, age 24 years, said that three years previous to the present examination she had noticed a small amount of dark blood in the stool. From that time, blood as well as mucus was present almost constantly. She gave no history of diarrhea, constipation, or pain. About two years after the onset of symptoms, intermittent attacks of epigastric pain, relieved by food, set in. There had been a good deal of flatulence. At that time, proctoscopic examination showed numerous small, punctate ulcerations in the last 11 cm. of rectum. The diagnosis was ulcerative colitis.

When she was referred to me, the woman presented the same symptoms. The intradermal skin reaction with the staphylococcus bacilli was negative. With the Flexner-Harris and stock of Flexner bacilli, the findings were negative. With the Shiga-E (Case 2) bacilli, the findings were positive, and there was much redness at the site of injection. Of particular interest in this case is that when the patient was injected with Shiga-J (autogenous) culture, there was a positive reaction with intense erythema. At the end of twenty-four hours, some tenderness and swelling were still

apparent. To my knowledge, this is the first time that a bacterial allergy in bacillary dysentery has been reported.

A comparison may be made between this case and that of Moriwaki, in which there was fatal intestinal bleeding. Fortunately for Miss J., therapy was instituted when she noted the hematochezia. She had been receiving treatment for more than three years, first for an ulcerative colitis and later for bacillary dysentery, so that, on discharge, her condition was very much improved.

Case 4. J. E., a white male, age 17 years, took cold March 17, 1932. For several days he was up and about, but the temperature rose to 103°F. and he was taken to a hospital in the northwestern part of the state. Here he had a hard chill and the temperature rose to 105°F. He was very toxic. Diagnosis of bacillary dysentery was made and antitoxin Lederle serum given. The patient left the hospital and was apparently well until March 28, when his temperature rose to 103°F. After administration of serum, a severe reaction set in, accompanied by a temperature of 104°F. and chills. He was sent to Touro Infirmary, New Orleans, in a very toxic condition.

There had been frequent desire to urinate, accompanied by tenesmus. At the time of examination, the patient complained of vague pains over the body, chills, fever, and diarrhea. On April 2, the patient's blood serum agglutinated bacillus Shiga strongly at 1-100 dilution, and slightly at 1-200 dilution. It did not agglutinate the other dysentery bacilli or the typhoid group of organisms. Blood count revealed a leukocytosis of 15,000 to 20,000, and neutrophils 80 per cent to 90 per cent. On April 7, stool culture showed gram-negative motile bacilli, *Bacillus typhosus*. Findings from stool culture, made on April 23, were the same.

On April 4 and 5, the patient was given 50 c.c. of serum. After the first injection, there was itching, redness, and a rash over the entire body, and the eyes were very red. After the second injection, a somewhat slighter reaction was noted and the temperature rose to 104°F. The first week, the temperature was almost consistently above normal, running as high as 105°F. The second week, the temperature did not rise above 102°F.; the third week, there was intestinal hemorrhage, but with apparently no effect upon the patient. The temperature was generally normal, and did not rise above 100°F. Stool cultures made May 12, 14, and 16 were negative for typhoid bacilli; the blood serum showed no agglutinating power for Flexner, Shiga, Hess, or Duval strains

of bacillary dysentery, and the patient was discharged much improved.

In this case, we note the appearance of typhoid bacilli about a month after the onset of bacillary dysentery, an unusual complication of the disease.

DIAGNOSIS

Bacillary dysentery announces its presence by acute symptoms, without regard to the intensity of the infection. From the acute, the disease progresses to the chronic stage in approximately two weeks, if cure is not effected. During the acute stage, death may occur; this is especially true in the very young. The bacillus incubates for from one to ten days, then there are abdominal pain, listlessness, sometimes nausea and vomiting, frequent stools, accompanied by a varying rise in temperature which may be as high as from 103°F. to 104°F. If the patient does not recuperate from the acute attack, the chronic stage sets in with continued, or at times, intermittent diarrhea. A soft, mucoid, or mucopurulent stool, perhaps with some blood, continues to appear.

The symptomatology produced by the Flexner bacillus is mild. But the Shiga bacillus, previously most often encountered in the tropics, but sometimes identified in temperate zones, produces a violent symptomatology. Even in mild cases, the stools number from fifteen to twenty-five daily, and there is much rectal tenesmus. Intestinal griping is followed by a stool containing blood, pus, and mucus. Night evacuations are quite frequent. The abdomen is tender and rigid over the cecum and sigmoid. Bladder tenesmus and polyuria may be a symptom. The effect of toxemia on the heart and pulse has been mentioned by others.

Microscopic examination of the fresh stool is the clinical procedure for differentiation between amebic and bacillary dysentery. The two forms may be coexistent; different characteristics of both may be recovered from one specimen. The proctoscope is an adjuvant to diagnosis and valuable in ascertaining the extent of improvement in the intestinal pathology. In the acute case, the mucosa is extensively but superficially ulcerated. The ulcers bleed and the surrounding mucous membrane is highly inflamed and granular in appearance. In the

chronic case, although there may be no ulcers, there is granulation tissue replacement and much hyperemia. Pain is experienced on passage of the proctoscope. Manson-Bahr¹⁰ believes this is diagnostic of bacillary dysentery in contrast to amebic ulceration, which is almost non-sensitive.

In acute bacillary dysentery, the mucus stool shows pus cells and some blood. Many large phagocytic cells, resembling amebae, but non-motile, with vacuoles, are present. At lowered temperature, the motile ameba becomes inactive, therefore, in order to make the differential diagnosis, emphasis must be laid on the necessity of examining the stool while it is warm. The presence of pus cells and endothelial cells is a valuable diagnostic sign of bacillary dysentery. Stitt¹¹ reports the smear from bacillary dysentery shows 75 per cent polymorphonuclears, presenting such signs of degeneration as swelling and ring type nuclei; however, the smear may show these cells simulating a fresh pus smear.

The finding of *Ameba histolytica* containing red blood cells is diagnostic of endamebic colitis.

Infection with the bacillus of dysentery in chronic cases does not follow a uniform course. The same applies also to the late sequelae of the disease, a large percentage of which have the aspects of chronic, relapsing gastro-enteritis, or of gastro-enterocolitis. The colonic symptoms generally predominate. The diarrheal form may be for the most part painless, but the spastic form is often extremely painful. In such aberrant form, the differential diagnosis of dysenteric enterocolitis is frequently difficult, because the disorder often simulates such conditions as gastroduodenal ulcer, cholecystitis, appendicitis, and even pancreatic disorders. These known facts account for the recovery of different strains of the dysentery bacilli from so-called normal bowels of individuals who come to a digestive clinic.

COMPLICATIONS

The arthritis seen in the acute epidemic form of dysentery is rarely met with in the sporadic case reported in the United States. When it does occur, this complication usually comes late

in the course of the dysenteric symptoms. In addition to the arthritis, neuritis is sometimes seen in bacillary dysentery, in Shiga bacillus infections, and iridocyclitis is sometimes encountered. Stitt has reported the gangrenous bowel as a fatal complication of bacillary dysentery. This complication is usually seen in epidemics. Perforation rarely occurs in sporadic cases and was noted only once in our present series, when the offending organism was the Flexner-Harris bacillus. In one of our cases of acute bacillary dysentery, due to the Shiga organism, typhoid fever followed in the wake of the dysenteric symptoms one week after they had subsided. In another case, due to Shiga bacillus, blood from the mucous membrane in the non-ulcerated bowel was thought to be due to bacterial allergic phenomena. In the fourth case of unusual findings, an acute infection of the bowel with the Shiga bacillus was attended by the complete absence of diarrhea.

TREATMENT

The handling of a case of bacterial dysentery will depend on whether the case is acute or chronic, and, to a lesser extent, upon the type of infection dealt with. In all acute cases, complete rest in bed is essential until all symptoms have subsided; while in the chronic stage, ambulatory treatment is quite often effective.

With reference to bacillary dysentery, which forms the greater number of bacterial dysenteries, the Shiga organism is more virulent and produces more violent symptoms, but it is more amenable to antitoxin serum treatment. The polyvalent anti-dysenteric sera should be given intravenously every day in doses of 60 to 80 c.c. for the first four days, and then in accordance with the severity of the symptoms (Graham).

In the acute cases, an initial dose of castor oil will expel the retained feces and allow for elimination of the inflammatory exudate. Some authorities favor the regular administration of a daily saline for the same purpose.

Specific bacteriophage has been used with excellent results by d'Herelle and others. Up to the present time, however, treatment with this substance is impractical because of the difficulty in obtaining the specific bacteriophage in

sufficient quantity to combat an infection with bacilli of dysentery.

CONCLUSIONS

Bacillary dysentery in sporadic form is of common occurrence in the southern states. In fact, the disease is endemic and appears to be increasing in frequency.

Several types of bacilli have been recognized in this area, but principally the Shiga, Flexner, and Duval are observed.

The most satisfactory means of treating the chronic cases seems to be reliance on vaccine therapy.

BIBLIOGRAPHY

1. Boyd, Mark F.: *Texas State Jour. Med.*, 17:261, 1921-1922.
2. Silverman, Daniel N.: *Medical Clinics of North America*, 9:4, 1167, Jan. 1926.
3. Silverman, Daniel N.: *New Orleans Med. & Surg. Jour.*, 782-784, May 1930.
4. Higgins, Wm. H.: *Va. Med. Mo.*, 55:20, April 1928.
5. Silverman, Daniel N., and Feemster, R.: *Southern M. Jour.*, 24:504-507, June 1931.
6. Silverman, Daniel N., and Harris, Wm. H.: *Am. Jour. Surg.*, 15:515-522, March 1932.
7. Duval, C. W., and Schorer, E. H.: *Bacteriological and Clinical Studies from the Rockefeller Institute for Medical Research*, 1904.
8. Duval, C. W.: *J. A. M. A.*, 43:381, 1904.
9. Nelson, R. L.: Bacillary dysentery caused by *Eberthella para-dysenteriae* Sonne, 32 cases. *J. Bacteriol.* 20:182-201, 1930.
10. Manson-Bahr: *Manson's Tropical Diseases*. Ninth Edition, p. 393, 1929.
11. Stitt, E. R.: *Diagnostics and Treatment of Tropical Diseases*, Ed. 5, Phila., Blakiston, 1929.

THE DISTRIBUTION AND DIAGNOSIS OF AMEBIC ENTERITIS IN THE SOUTHERN UNITED STATES*

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INTRODUCTION

Amebic enteritis is an infection of the human bowel with *Endamoeba histolytica*, and includes the categories of acute, chronic and carrier cases. Any and all levels of the large intestine may be involved, as well as the lowermost few inches of the ileum. The primary focus is most commonly in the cecum. Prepon-

derance of clinical and experimental evidence indicates that the etiological agent is always a tissue pathogen, although the degree of penetration of the bowel wall varies with the individual patient and possibly also with the virulence of the strain¹ as well as the presence of secondary organisms.² Man is the optimum host, although dogs,³ kittens⁴ and monkeys⁵ may serve as incidental reservoirs.

EPIDEMIOLOGY OF THE INFECTION IN THE UNITED STATES

Early records of amebiasis in the United States were based on clinical and postmortem findings on acute cases (i. e. those with frank amebic dysentery). These included the classical pioneer work of Osler (1890),⁶ Stengel (1890),⁷ Musser and Willard (1892),⁸ and Councilman and Lafleur (1891).⁹ For the South the reports of Parker in Virginia (1884-1885),¹⁰ Patterson in South Carolina (1895),¹¹ Ashton in Texas (1895),¹² and Simon (1909)¹³ and DeBuys (1914)¹⁴ in New Orleans were outstanding contributions.

The significance of the cyst as the inoculative stage of *Endamoeba histolytica* was first clearly demonstrated by the experimental studies of Walker and Sellards¹⁵ on human volunteers in the Philippines (1911-1913). Although two decades have passed, the medical profession is still not awake to the dangers of "cyst passers", who, in most cases, are at the time free of clinical symptoms. Previous to the World War amebiasis was believed to be a disease of the tropics. The studies of various investigators during and immediately following this period indicated the presence of the organism in the endemic populations of Europe and North America in amounts sufficient to constitute a public health menace. Among such surveys may be mentioned the studies of Sistrunk (1911),¹⁶ Giffin (1913),¹⁷ and Sanford (1916)¹⁸ in the Northwestern United States, Kofoid and Swezy (1921)¹⁹ on returned American troops, Craig (1921, 1927)^{20, 21} on army and civilian patients, Boeck and Stiles (1923)²² on hospitalized and institutionalized individuals and Magath and Brown (1930)²³ from the North Central States.

Surveys of the non-clinic and non-hospitalized population of the Southern States have

*Read before the Orleans Parish Medical Society November 27, 1933.

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been much more recently undertaken. The work was initiated by the writer in 1928 (1930)²⁴ in the Western part of Virginia and has been continued for the past five years in metropolitan New Orleans (1931, 1933).^{25, 26} Meanwhile Meloney (1930)²⁷ and Milam and Meloney (1931)²⁸ have made very extensive studies on the epidemiology of this disease in Tennessee. The writer²⁴ found that random samplings of 463 white persons in Wise County, Virginia, revealed an incidence of 45.4 per cent infection, while Meloney recorded an incidence of 34.6 per cent in examination of 4,987 persons from rural Tennessee. It is significant that the Tennessee population consisted of white school children and their families, a group long resident in the area and isolated from tropical or Southeastern European contacts. The New Orleans surveys will be considered presently. Recently Daugherty (1933)²⁹ inquired into the amount of amebiasis in the hospital population of thirteen Southern cities and found a diagnosed incidence of five per cent. Undoubtedly many positive cases in this group without suggestive symptoms had not been studied. Daugherty concluded that the infection is much more widespread than had previously been surmised.

On the basis of information in hand it may be conservatively estimated that in relatively well-sanitated areas of the United States 5 per cent of the population carries *E. histolytica*, while in unsanitated regions the incidence may reach 40 per cent or more.

The surveys of the writer in New Orleans now include more than 4000 cases carefully examined and checked. The patients include 983 children from institutional homes, nearly 1,500 children from the out-patient clinics, and the pediatric, medical and obstetrical services of Charity Hospital. In the first place it may be stated that the institutionalized children were more heavily infected than those in the Charity and Welfare Clinics, and that the obstetrical ward had a higher incidence than the female medical ward. With this in mind the age incidence is instructive. Children in the 1-5 group had a diagnosed incidence of approximately 5 per cent; those from 6 to 10 years, of 15 per cent, while the peak of the infection was reached

in early adult life (25-30 years) with a maximum of 42 per cent. No clinical cases were observed in the 420 children of 5 years or under and only 3 in the two groups up to 15 years of age (563 cases). This agrees with DeBuys' statement¹⁴ that clinical amebiasis is not common in New Orleans children. In one asylum (163 children ranging from 3 to 16 years) an incidence of 20 per cent was recorded in 1931. Children who had been in the institution three months or less were only 5 per cent positive, while those who had lived there 4 to 5 years had a 26.6 per cent index. The corresponding increase of *E. coli* from 10 per cent to 53 per cent and of *Endolimax nana* from 4 per cent to 23 per cent suggests very definitely the opportunity of contracting the infection with continued residence in the institution. In 1929 an examination of the boys in Hope Haven revealed a 12.5 per cent infection with *E. histolytica*. All these cases were symptomless carriers. In the writer's 1931 report²⁵ Dr. Foster M. Johns kindly allowed the inclusion of data based on his examination of 181 medical students, of whom 8.27 per cent harbored the parasite. In the obstetrical service of Charity Hospital for the year 1929-1930 Faust and King³⁰ found 59 cases of amebiasis in mothers at or near term (17.7 per cent of 333 cases). Thirty-two (54.3 per cent) of the positive cases had an active or chronic colitis and 27 (45.7 per cent) were carriers.

These data when examined carefully indicate (1) that amebic infection is widely distributed throughout the United States in appreciable amounts, although it is more common in the South than in the North and more common in unsanitated than in well sanitized areas; (2) that the incidence increases with age to early adult life, when it begins to decrease, and (3) that clinical cases are more likely to be found in adults than in children. It is suggested that any condition such as pregnancy or an intercurrent infection is likely to increase clinical manifestations.

The recent outbreak of acute amebic enteritis in Chicago is not an unexpected development. With a realization that the infection has been present in Chicago as in other regions of the Northern States, and that food

handlers were incriminated in the lesser 1927 epidemic³¹ as well as in the present one^{32, 33} and with the tremendous crowds from all over the country who were undoubtedly exposed to contaminated food, not only in the hostelrys especially incriminated but in many eating places less carefully supervised, it is remarkable that more cases have not been reported. Undoubtedly many carriers at present symptomless have acquired their infection in Chicago and will be heard from later. However, it is equally probable that 5 per cent or more of the visitors in Chicago had amebiasis before leaving home and some of the reported cases may be of this type. The epidemic merely stresses the clinical and public health importance of the infection which has been too lightly considered in the past.

DIAGNOSIS

Diagnosis is based on finding *Endamoeba histolytica* in the active (trophozoite) or encysted stage in the feces of the suspected individual. Cysts are present in formed feces; the active stage in diarrheic, dysenteric or semi-formed specimens or in flecks of bloody mucus passed with formed stools. Cysts may be diagnosed safely within twenty-four hours after a formed stool is passed, although the characteristic features can be most satisfactorily identified in a fresh specimen. Trophozoites should be looked for only in a fresh specimen, preferably immediately after the stool is passed and is still warm. The technic which every physician or laboratorian with sufficient experience can use satisfactorily is as follows:

A fleck of the specimen to be examined is thoroughly mixed on the slide in a drop of physiologic saline solution. This is streaked across two cover glass widths and a cover glass placed over one-half of the film. A small drop of Donaldson's iodine solution* is then mixed with the uncovered portion of the film and covered with a second cover glass. The film is first examined with the 16 mm. objective and any suspicious objects then studied with the 4 mm. lens. On the unstained side active stages (trophozoites) and cysts will be found in their natural hyaline color; on the iodine stained side these organisms will be stained so that the

chromatin material stands out in light relief against the yellowish brown cytoplasm. In other words, the picture with the iodine staining is essentially the reverse of that obtained by the iron hematoxylin technic. The iodine also stains the glycogen masses a more or less deep mahogany brown.

A 2 gram portion of each formed or semi-formed specimen is also diluted with 20 c.c. of water, strained through gauze and centrifuged. This frequently yields cysts where the undiluted film is negative. At least three separate specimens and preferably six are requested for examination before a diagnosis of "negative" is finally entered. Freshly passed specimens (not over thirty minutes old) are most satisfactory. Specimens containing oil of any kind are practically worthless for examination and one passed after a saline purgative is almost as unsatisfactory.

Occasionally (perhaps in 5 per cent of the cases), it is desirable to check the temporary iodine films with a Schaudinn-fixed iron-hematoxylin-stained preparation. But experience with over 50,000 fecal examinations has shown that the one method is as dependable as the other, and the simplicity of the former leaves much to be said in its favor. However, in case hematoxylin stained preparations are desired, the following technic is recommended:

1. Smear fecal material on slide evenly and not too thick.
2. Place slide in Schaudinn's fluid* heated to a temperature of 60° C. Leave in two minutes.
3. Transfer to 70 per cent alcohol, two minutes.
4. Transfer to 70 per cent iodine alcohol, two minutes.
5. Transfer to 70 per cent alcohol, two minutes.
6. Transfer to 50 per cent alcohol, two minutes.
7. Wash in running water two minutes.
8. Transfer to 2 per cent aqueous iron alum solution at 40° C., two minutes.

*Schaudinn's fixing fluid. Prepare the solution as follows: Saturated solution of mercuric chloride in distilled water, 200 c.c.; 95 per cent alcohol, 100 c.c.; glacial acetic acid, 15 c.c. (The acid should not be added until the fluid is to be used).

*Saturated solution of iodine in 5 per cent aqueous potassium iodide.

9. Wash in running water three minutes.
10. Transfer to $\frac{1}{2}$ per cent aqueous hematoxylin, two minutes. (This time may vary according to the strength of the stain).
11. Wash in water two minutes.
12. Destain in cold 2 per cent aqueous iron alum.
13. Wash in running water ten to fifteen minutes.
14. Run through 50 per cent, 70 per cent, 80 per cent, 90 per cent, and 100 per cent alcohol, two minutes each.
15. Xylol two minutes.
16. Mount in balsam or euparal, using a No. 1 cover glass. At least three separate stools should be examined before the patient is pronounced free of *Endamoeba histolytica*.

This method of examination may be supplemented by culture of the organism^{34, 35, 36} or by the complement-fixation technic of Craig,³⁷ although in the writer's opinion nothing can take the place of direct fecal examination.

Endamoeba histolytica requires differentiation from the other intestinal amebae (*E. coli*, *Endolimax nana*, *Iodamoeba bütschlii*, *Dientamoeba fragilis*, etc.) as well as from intestinal flagellates and Blastocystis. More than twenty years' experience in teaching medical students, physicians and laboratory workers has demonstrated that accurate diagnosis can not be expected from an individual who has had less than three months' intensive training in the subject, in a locality where adequate fresh material is available for study.

Proctoscopic and sigmoidoscopic examination of the patient are helpful adjuvants to examination of passed fecal samples, but it must be remembered that not more than 40 per cent of the isolated lesions in amebic enteritis occur in the rectum and lower colon.^{38, 39} The roentgen ray may also help to localize the infected sites but interpretation of the film should be made by a physician familiar with the type of lesion produced and the finding checked by fecal examination. The most difficult diagnosis to make is one involving the cecum or appendix, where a chronic infection of long standing may have produced shaggy sloughing atonic ulcers with secondary involvement. In some of these cases the feces must be examined many times in

order to find living amebae. In such patients there may be a leukocytosis, whereas in uncomplicated amebic enteritis there is little if any alteration of the blood picture. This chronic type is also least likely to give a positive complement-fixation test. Surgeons who have patients with suspected chronic appendicitis should definitely rule out amebiasis before operation, since appendectomy is more likely to aggravate than to relieve an amebic involvement of the area. Finally, it must be remembered that a fulminating bacillary infection may be superimposed on a carrier or chronic stage of amebiasis.

REFERENCES

1. Meleney, H. E. and Frye, W. W., *Am. Jour. Hyg.*, 17:637-655, 1933.
2. Frye, W. W. and Meleney, H. E., *Am. Jour. Hyg.* 18:543-554, 1933.
3. Faust, E. C., *Am. Jour. Trop. Med.*, 12:37-47, 1932.
4. Kessel, J. F., *Am. Jour. Hyg.*, 8:311-355, 1928.
5. Hegner, R., Johnson, C. M., and Stabler, R. M., *Am. Jour. Hyg.*, 15:394-443, 1932.
6. Osler, W., *Johns Hopkins Hos. Bull.*, 1:53-54, 1890.
7. Stengel, A., *Med. New., Phil.*, 57:500-503, 1890.
8. Musser, J. H. and Willard, DeF., *Univ. Med. Mag., Phil.*, 5:525-530, 1892.
9. Councilman, W. T. and Lafleur, H. A., *Johns Hopkins Hosp. Repts.*, 2:395-548, 1891.
10. Parker, W. T., *Va. Med. Monthly*, 11:207-213, 1884-1885.
11. Patterson, E. L., *Trans. S. Carolina Med. Assn.*, 45:63-65, 1895.
12. Ashton, L., *Trans. Texas Med. Assn.*, 27:115-125, 1895.
13. Simon, S. K., *Jour. A. M. A.*, 53:1526-1532, 1909.
14. DeBuys, L. R., *Jour. A. M. A.*, 63:1806-1811, 1914.
15. Walker, E. L. and Sellards, A. W., *Philippine Jour. Sci. (B)* 8:253-331, 1913.
16. Sistrunk, W. E., *Jour. A. M. A.*, 57:1507-1509, 1911.
17. Giffin, H. L., *Jour. A. M. A.*, 61:675-678, 1913.
18. Sanford, A. H., *Jour. A. M. A.*, 67:1923-1926, 1916.
19. Kofoid, C. A. and Swezy, O., *Am. Jour. Trop. Med.*, 1:41-48, 1921.
20. Craig, C. F., *Jour. A. M. A.*, 77:827-833, 1921.
21. Craig, C. F., *Jour. A. M. A.*, 88:19-21, 1927.
22. Boeck, W. C. and Stiles, C. W., *Bull. 133, Hyg., Lab. U. S. Pub. Health Serv.*, 1-202, 1923.
23. Magath, T. B. and Brown, P. W., *Am. Jour. Trop. Med.*, 10:113-136, 1930.
24. Faust, E. C., *Am. Jour. Hyg.*, 11:371-384, 1930.
25. Faust, E. C., *Am. Jour. Trop. Med.*, 11:231-237, 1931.
26. Faust, E. C., *Jour. Pediatrics*, 2:53-59, 1933.
27. Meleney, H. E., *Jour. Parasitol.*, 16:146-153, 1930.
28. Milam, D. F. and Meleney, H. E., *Am. Jour. Hyg.*, 14:325-336, 1931.
29. Daugherty, M. S., Jr., *Am. Jour. Trop. Med.*, 13:317-326, 1933.
30. Faust, E. C. and King, E. L., in *Fetal, Newborn and Maternal Morbidity and Mortality*, pp. 78-94. D. Appleton-Century Co., N. Y., 1933.
31. Kaplan, B., Williamson, C. S. and Geiger, J. C., *Jour. A. M. A.*, 88:977-980, 1927.
32. Bundesen, H. N., Rawlings, I. D. and Fishbein, W. I., *Jour. A. M. A.*, 101:1636-1638, 1933.

33. Tonney, F. O., Hoefft, G. L. and Spector, B. K. Jour. A. M. A., 101:1638-1639, 1933.
34. Boeck, W. C. and Drbohlav, J., Am. Jour. Hyg., 5:371-407, 1925.
35. Craig, C. F., Am. Jour. Trop. Med., 6:333, 461-464, 1926.
36. Craig, C. F. and St. John, J. H., Am. Jour. Trop. Med., 7:39-48, 1927.
37. Craig, C. F., Am. Jour. Trop. Med., 7:225-240, 1927.
38. Clark, H. C., Am. Jour. Trop. Med., 5:157-171, 1925.
39. Faust, E. C., Am. Jour. Trop. Med., 12:37-47, 1932.

CLINICAL ASPECTS OF AMEBIASIS*

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In a recent paper Lund and Ingham,¹ in describing four fatal cases of amebiasis originating during the Chicago epidemic, say: "The senior author was consulted by the physician and family of patient 1, and never once (during the life of the patient), thought seriously of amebiasis as the diagnosis, having been trained to think of amebiasis as a disease found for the most part in the tropics."

This statement well epitomizes the position of the general medical profession of this country as regards knowledge of amebiasis and also explains why the various aspects of this infection are so constantly overlooked or wrongly diagnosed. The symptoms of amebiasis are protean in character, frequently simulate those of other disease conditions, and are never so pathognomonic that a diagnosis is justified unless the causative organism, *Endamoeba histolytica*, can be demonstrated.

In discussing the clinical aspects of amebiasis the writer will confine himself to his personal observations based upon over thirty-five years experience with both the laboratory and clinical sides of the subject, and it may be well to state that these observations are also based upon cases in which the causative organism was demonstrated and in which the dysentery bacilli were excluded. This statement is necessary because mixed infections with *Endamoeba histolytica* and the dysentery bacilli sometimes occur in which the symptomatology may be very confusing and atypical.

Clinically, infections with amebiasis can be

divided into "carriers" of the parasite who present no symptoms of the infection (so-called "healthy carriers"); those who present mild diarrhoea and other indefinite symptoms; those who have definite attacks of diarrhoea of considerable duration, unaccompanied by blood or other dysenteric manifestations; and those who present unmistakable symptoms of acute dysentery, which may be relapsing in character.

Before discussing the clinical aspects of these different classes of amebic infection, the writer would urge that the old conception that amebic dysentery is a disease entity be forgotten and that the symptom complex to which this name has been given should be regarded as a part of the clinical picture of amebiasis. This conception is to blame for the little attention the subject of amebiasis has received from the medical profession of the United States as a whole, for it is true that the severe symptoms of amebic infection known as amebic dysentery are comparatively seldom observed in this country, although cases have occurred in every part of the United States. It is in the tropics that we most frequently see dysentery caused by *Endamoeba histolytica*, but, as the writer has urged for many years, amebic dysentery does occur in the United States and is frequently confused with bacillary dysentery, while thousands of cases of diarrhoea and other symptoms caused by this parasite occur annually throughout this country.

It is unnecessary to say anything about the "carriers" who present no symptoms. These probably number at least 40 to 50 per cent of amebic infections occurring in this country, in the writer's experience, and are discovered only during a routine examination of the feces or during surveys to determine the prevalence of this parasite in different localities. While these individuals do not suffer from any symptoms caused by the infection, it is most important that they be treated, for one can never say that symptoms may not develop and, still more important, these individuals are potential sources of infection, especially if they are food handlers.

The second class of cases are those in which there are no symptoms of severe diarrhoea or of dysentery but in whom other symptoms oc-

*Read before the Orleans Parish Medical Society November 27, 1933.

cur which are caused by the parasite. These symptoms are largely confined to the gastrointestinal tract and the nervous system and are often so slight as to escape the attention of the patient or have not been considered of sufficient importance to lead him to consult a physician. Many of these individuals complain of constipation and it may be stated here that mild infections with *Endamoeba histolytica* are characterized much more frequently by constipation than by diarrhoea, a fact which has led to innumerable mistakes in diagnosis.

The onset of symptoms is insidious, the first noticed being lassitude; loss of appetite, or a capricious appetite; muscular weakness, especially in the legs; a coated tongue; persistent dull frontal headache and flatulence after eating. Anorexia is sometimes present, occurring at irregular intervals, and abdominal colic frequently occurs, the pain being most marked in the right iliac region or low in the abdomen. Pain, of a dull, aching character, in the lumbar region is frequent and a sense of discomfort, or even of dull pain, is sometimes noted in the hepatic region. Constipation is the rule in these mild infections but, in the vast majority, attacks of diarrhoea lasting a day or two only, occur at intervals of days, weeks or months. These transient diarrhoeal attacks very often occur in the night, the patient being awakened by a severe colic, and passes a large amount of material with absolute relief of symptoms for a day or two, or the diarrhoea may persist for a day or two, after which a period of constipation ensues. The stools do not contain blood and little, if any, mucus and the diarrhoeal attack is usually considered by the patient as being caused by some indiscretion in diet. Severe pain is sometimes noted in the umbilical region and in many patients there is marked gaseous distension of the abdomen after eating accompanied by slight colicky pains and a feeling of marked discomfort.

Symptoms connected with the nervous system are sleepiness or disturbed slumber; neuralgic pains in the arms and legs; a weak and irritable heart action; and flushings of the skin accompanied by profuse localized perspiration, especially of the palms of the hands and the soles of the feet. One of the most common

symptoms complained of by the patient is a dull aching in the muscles of the legs upon first awakening in the morning, together with a feeling of exhaustion and lack of energy.

The physical signs in these mild infections are a gradual loss of weight, or a markedly fluctuating weight; a weak, irritable pulse; a sallow appearance of the skin; distension of the abdomen especially in the right iliac region or over the descending colon; tenderness on deep pressure over the region of the cecum, appendix, or ascending or descending colon; and a thickened and palpable cecum or descending colon. In some patients there may be tenderness upon pressure over the liver and in these a slight fever may occur at intervals not exceeding 100° F. In these patients one should always think of a possible amebic hepatitis and, in the writer's experience, such symptoms have been followed by an amebic abscess of the liver in several cases. There is frequently present a slight anemia, the red blood cells numbering about 3,500,000 to 4,500,000 per cu. mm., with a normal leukocyte count. A slight leukocytosis varying between 10,000 to 12,000 per cu. mm. is not infrequently observed in those patients who have fever.

It should be remembered that all of the symptoms enumerated do not occur in every mild amebic infection but some of them will always be found in the so-called "carriers" presenting definite symptoms of infection.

The symptoms noted in the third class of cases, i. e. those having definite enteritis of several days duration, are those noted in the class already described plus recurrent attacks of severe diarrhoea lasting for several days followed by a period of constipation, or the diarrhoea may become chronic, lasting for weeks or months. The diarrhoea is usually accompanied by colicky pain, especially in the lower abdomen, and the passage of much gas, but it may be painless. The stools are fluid or semi-fluid in consistence, greenish or yellowish in color and may contain mucus but no visible blood.

During the interval between attacks of diarrhoea the patient is usually constipated but the bowel movements may be normal. This condition of alternating attacks of diarrhoea and con-

stipation may persist for months or years; may eventuate in a frank attack of amebic dysentery; or recovery may occur. Symptoms which simulate chronic appendicitis frequently occur in both this class of patients and the milder infections, and the writer has observed cases in which an operation for appendicitis disclosed amebic ulceration in the ileo-cecal region and a normal appendix. However, it should be remembered that amebic infection causing inflammation and ulceration of the appendix has been repeatedly observed and it is probable that appendicitis caused by the invasion of the appendix by *Endamoeba histolytica* occurs much more frequently than is believed at the present time.

The symptoms which we recognize as those of amebic dysentery differ markedly in different individuals, and in some they assume a fulminating character followed by death in a few days. Usually the symptoms are quite characteristic, the patient, who may or may not have had some of the symptoms enumerated above, being suddenly seized with severe abdominal pain, nausea or vomiting, and a marked desire to defecate. The first stools passed may be formed or semi-formed but they rapidly become diarrhoeal in character and contain mucus and blood. As the stools increase in frequency the quantity becomes smaller and finally small amounts of material composed almost entirely of shreds of the mucous membrane of the intestine; mucus and blood are passed with marked tenesmus. The patient becomes rapidly exhausted, complains of great weakness in the legs, a dull aching pain in the lumbar region, and is mentally depressed. The number of bowel movements varies from six to eight in the mildest cases, to as many as 30 to 35 or more daily, the average number being 15 to 20 during the twenty-four hours. Fever is not present in the milder attacks but may be present in severe attacks and is always present in the so-called "fulminating" cases. These cases are rare and are characterized by extreme prostration; fever; an excessive number of bowel movements, the stools containing large amounts of blood and mucus together with sloughs of the intestinal mucous membrane; and evidence of severe toxæmia. Death may occur in from five to ten

days after the onset of the symptoms and is due to exhaustion and toxæmia. The writer believes that all such infections are mixed infections with one of the dysentery bacilli or other bacteria.

The physical signs present during an attack of amebic dysentery are not diagnostic as they may be simulated by other intestinal conditions. There is usually tenderness of the abdomen, especially in the right iliac region and over the ascending, transverse or descending colon. Slight jaundice may be present, the skin has a very sallow appearance, and there may be rapid emaciation in the severe cases. The tongue is coated with a brownish-yellow fur, the breath is foul, and there may be labial herpes if fever is present. There is frequently tenderness on deep pressure over the liver and this always indicates an acute hepatitis and the possibility of commencing abscess formation, especially if fever is present.

Spontaneous symptomatic recovery is the rule after the first attack of amebic dysentery and complete recovery may occur, but the vast majority of patients, after a period of constipation accompanied by some of the symptoms mentioned as occurring in the milder cases of infection, have an exacerbation of the dysenteric symptoms, and this condition of alternating constipation and dysentery, known as chronic amebic dysentery, may last for many years and results in chronic invalidism. It is in these chronic cases that one finds, upon palpation of the abdomen, the thickened, doughy colon which may sometimes be felt for almost its entire course in the abdomen. At autopsy the colon may be found so thickened that it resembles a rubber hose with practically all of the mucous membrane replaced by dense fibrous scar tissue.

The writer would call attention to the fact that definite and marked ulceration may be present in the intestine even in cases showing no symptoms of amebic infection and all who have had an extended experience with this infection will recall instances in which numerous ulcerations caused by *Endamoeba histolytica* were found at autopsy, although during life the patient had never presented symptoms of severe diarrhoea or dysentery. It should also be

stressed that there are numerous instances on record of amebic abscess of the liver occurring in individuals who had never suffered from diarrhoeal or dysenteric attacks. Within the past five years the writer has seen four cases in which amebic abscess of the liver was present in patients who stated that they had never suffered from even slight diarrhoeal attacks but, on the other hand, had suffered from constipation. It is thus evident that this parasite may cause very serious damage to the tissues and consequent danger to life without producing symptoms which would arouse a suspicion of its presence in the intestine.

The diagnosis of amebiasis must rest upon the demonstration of *Endamoeba histolytica* in the feces, other exudates, or tissues. It is very evident that the symptoms which have been enumerated, even those which accompany an acute dysenteric attack, produced by this parasite are not pathognomonic, but may be simulated by other intestinal conditions and infections. The writer does not hesitate in saying that even the most typical attack of amebic dysentery cannot, with certainty, be differentiated from some types of bacillary dysentery, except by a study of the stools and the demonstration of *Endamoeba histolytica* in the stools. This statement is based upon the study of hundreds of cases of both amebic and bacillary dysentery, and attempts by clinicians to differentiate amebic and bacillary dysentery by clinical symptoms alone has, in the past, rendered our statistics of the relative incidence of these infections of no value whatever. It is notorious that statistics of the incidence of these infections in most regions have become reliable only since the World War, after which time it was recognized that any diagnosis of amebic dysentery was worthless unless the parasite could be demonstrated in the exudate from the bowel. It should also be remembered that amebic and bacillary dysentery may coexist, or that patients suffering from bacillary dysentery may also harbor *Endamoeba histolytica*.

As regards treatment the writer can say little here owing to lack of time. Treatment varies with the character of the infection and embraces the treatment of "carriers" without symptoms; those with mild symptoms; and those present-

ing attacks of severe diarrhoea or dysentery. At the present time there are several very excellent drugs available for the treatment of amebiasis but the writer has found that emetine hydrochloride and Chiniofon (Anayodin or Yatren) have given the best results in his hands. In symptomless "carriers" and in those having mild symptoms of amebiasis, Chiniofon alone should be used, the course of treatment consisting in the administration of 3 or 4 pills, each containing 0.25 gram (4 grains), three times a day for a period of eight or ten days. After completion of the treatment the feces should be examined and if amebae still persist, the course may be repeated after a two weeks interval. In practically all cases amebae will have disappeared by the end of the course of treatment but feces examinations should be made at intervals of a month for at least three months and if the amebae reappear the course of treatment should be repeated.

In the treatment of cases having severe diarrhoea or those with acute amebic dysentery, symptoms should be controlled by the subcutaneous injection of emetin hydrochloride in doses of 0.065 gram (1 grain) daily for a period not to exceed 12 days. Usually by the end of the eighth or ninth day the diarrhoeal or dysenteric symptoms will have disappeared and then a course of chiniofon should be administered in the manner and dosage recommended above. The writer believes that emetin hydrochloride should never be given to "carriers" or those having mild symptoms of amebiasis, but should be used only to control the diarrhoeal or dysenteric symptoms present in the more severe cases of infection with *Endamoeba histolytica*. The wide-spread use of this drug in the treatment of mild or "carrier" infections should be condemned as it has resulted in numerous cases of emetin poisoning and, in addition, really cures very few infections when used alone. In the writer's experience, over 80 per cent of patients, treated with emetine hydrochloride alone, relapse sooner or later, and repeated courses of treatment with this drug frequently fail to cure. At the present day there are several available drugs that are safer and more specific and they should be used in preference to emetine hydrochloride in

the treatment of amebiasis, reserving that drug for use in selected cases and then only to control symptoms.

In closing the writer² would again call attention to the importance of amebiasis as a public health problem in the United States and to the recognition and proper treatment of those infected with *Endamoeba histolytica*, especially if such individuals are food handlers in hotels, restaurants and other public eating places.

REFERENCES

1. Lund, C. C. and Ingham, T. R., J. A. M. A., 107: 1720, 1933.
2. Craig, C. F., J. A. M. A., 98:1615, 1932.

INFECTION IN THE INNOCENT-LOOKING CERVIX AS A CAUSATIVE FACTOR IN PELVIC LYMPHANGITIS*

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In recent years, gynecologists as a whole have awakened to a new conception of the importance of cervical infection, both because of its possible role in the disturbance of the function of the pelvic organs, and also by reason of its significance as a source of systemic infection. As a result of clinical and laboratory investigation, there has been great improvement in methods of treatment, but in spite of this increased knowledge of cervicitis, the disease is still poorly managed by the profession at large and thus remains one of the most common disorders in gynecology. The cervix is a frequent focus of infection not only in the multipara, but also in the virgin and in the nulliparous woman. Strumdorf has properly referred to the cervix as a "genital tonsil".

The cervix is of cylindrical form, though slightly expanded in the middle of its length, and is divided into a supravaginal and a vaginal portion. The average normal cervix is about

*Read before the Orleans Parish Medical Society, October 9, 1933.

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one inch in length and from a physiological standpoint is only a passive communicating channel between the vaginal and uterine cavities.

The anatomical differences between the lining of the uterine canal and that of the cervix are clinically important because of their direct bearing upon the progress of infection. The endometrium is lined with low cuboidal epithelial cells and consists of simple tubular glands. These glands are highly resistant to infections and, from a practical standpoint, render the endometrium virtually immune to infection.

In sharp contrast to this is the peculiar susceptibility to infection evidenced by the lining of the cervical portion of the uterus. This lining consists superficially of a thin layer of ciliated columnar epithelial cells. Below this epithelium are numerous compound racemose glands with small ducts emptying into the cervical canal. These glands penetrate deeply, down to the basement membrane of the cervix which usually separates the myometrium from the endocervical lining and which is normally from three to six millimeters in thickness. These glands have for their sole function the secretion of mucus.

At the external os of the canal, the ciliated



Fig. 1—From the cervix uteri of a girl of sixteen years, showing the compound racemose cervical glands in section. x 102 (Williams)

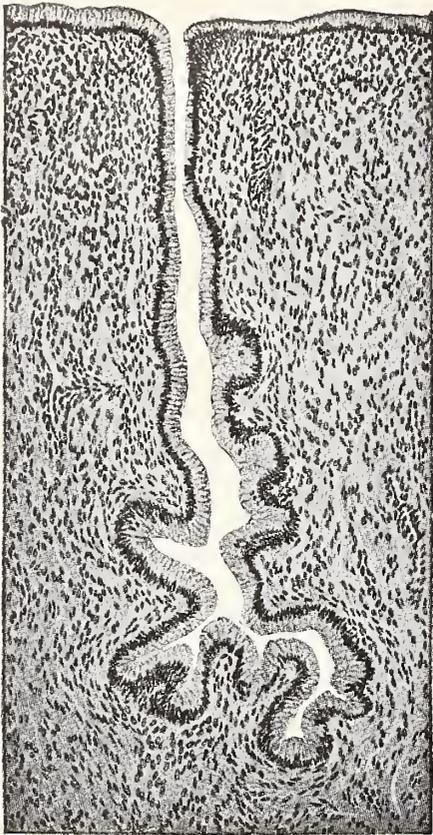


Fig. 2.—A gland of the human cervix uteri in longitudinal section. x 90 (Williams)

columnar cells become graded into the stratified squamous cells which line the vaginal portion of the cervix.

Thus, the variation in immunity and susceptibility of the corporeal and cervical mucosa results in striking differences in the pathological manifestations above and below the internal os.

An understanding of the anatomical distribution of the lymph channels and nodes which drain the cervix and uterine body is necessary for the interpretation of the symptom-complex of cervical infection. According to Poirier and also in agreement with the studies made by Schlink, "the lymphatics of the uterus arise from three capillary plexuses, a mucous, a muscular and a peritoneal. The collecting vessels from the body of the uterus are in three sets: (1) those from the fundus, consisting of four or five vessels, run lateralward through the broad ligament and the suspensory ligament of the ovary and follow the ovarian vessels to the lumbar and preaortic nodes. They anastomose with the lymphatics from the ovary opposite the fifth lumbar vertebra; (2) some small vessels from the fundus follow the round liga-

ment of the uterus and terminate in the inguinal nodes; and (3) others from the body of the uterus pass laterally with the uterine vessels and terminate in the iliac nodes. The collecting vessels from the cervix, five to eight in number, form a large lymphatic plexus just after leaving the cervix. From this plexus run three sets of vessels. Two or three vessels pass lateralward with the uterine cavity in front of the ureter, and end in the external iliac nodes; a second set passes behind the ureter and ends in a node of the hypogastric group; and a third set from the posterior surface runs downward over the vagina, and then backward and upward to end in the lateral sacral nodes and node of the promontory of the sacrum."

Before uniting to form the larger lymph vessels which drain away to their respective nodes, the lymph channels of the body of the uterus, the cervix and the upper vagina intercommunicate freely. Secondary involvement of the lymph nodes, due to this intercommunication, explains how a pan-pelvic lymphangitis may develop in cases in which the infection is limited to one of the above mentioned areas.



Fig. 3.—Lymphatic channels draining the upper vagina and cervix. Note distribution of the lymph nodes. (Copy)

The relation between focal infection in the female genital organs and pelvic lymphangitis has not received the proper clinical consideration. The spread of infection through the lymphatics in other parts of the body has long been recognized, as, for example, involvement of the lymph nodes of the axilla resulting from acute or chronic infection around the hand. In the pelvic region, the deep lymph nodes are in close relation to the sympathetic nerve plexus, the ureters and the peritoneum, and it seems

logical that inflammatory changes should be capable of causing even more discomfort in this region than in the superficial glands of the axilla. Lymphatic involvement may be acute and fulminating in character or of the chronic type, manifesting itself in glandular adenopathy and in varying degrees of local pain and discomfort.

The unusual susceptibility to infection which characterizes the cervical mucosa and the liability of injury to the cervix during parturition and operative procedures, together with the situation of the cervix in the vagina, predispose it to such frequent infection that about seventy-five to eighty-five per cent of all women have varying degrees of cervical infection.

The type of infection which I wish particularly to bring to your attention is that existing in the cervix which I have designated in my title as "the innocent-looking cervix". The clinical findings in such cases are as follows:

- (1) Increase from one half to twice normal size.
- (2) Bluish discoloration of tissue.
- (3) Consistency softer than normal.
- (4) Slight discharge.
- (5) Erosion (not always present).
- (6) Pelvic and constitutional symptoms.

Smears and cultures are not always dependable and may be actually misleading. They may show numerous organisms and yet not reveal the particular organism which is responsible for the diseased condition. This may be due to the fact that the infecting organism is sealed up within the depths of the racemose glands.

The progress of cervical infection is determined by the anatomical structure of the racemose glands. Each gland possesses only one small duct and it is through this opening that the invading organism gains entrance to the gland. The infection causes edema and cell proliferation and the lumina of the ducts become partially, if not completely, occluded. Some of the glands are destroyed by the formation of mucoid cysts due to mechanical obstruction of the duct; in other cases, the gland itself becomes infected; some of these may remain for a long period of time as foci of infection, thus favoring lymphatic absorption;

others may from time to time rupture into the cervical canal and infect any remaining ducts.

The ascending lymphangitis which develops from lymphatic absorption may manifest itself in any of the following conditions:

- (1) Disturbance of the uterine function.
(Through involvement of the perimysial sheaths).
- (2) Lymphangitis of the bases of the broad ligaments and of the utero-sacral ligaments.
- (3) Pelvic lymphangitis.
- (4) Peri-salpingo-oophoritis.
- (5) Peri-ureteritis.

These conditions are capable of producing the following local and constitutional symptoms: discharge, dysuria, pruritus, lumbo-sacral backache, pains in the lower abdomen, dysmenorrhea, menorrhagia, metrorrhagia, frigidity, dyspareunia, sterility, headache, mental depression, extreme nervousness, endogenous puerperal infection, spontaneous post-operative infection, and any local or constitutional symptom of focal infection.

From recent clinical observations, we have come to the conclusion that involvement of the lymph nodes situated around the ureter is secondary to cervical infection and that this involvement may be responsible for peri-ureteritis. Periglandular round cell infiltration is capable of producing ureteral spasm, and the fibrosis which results from the healing process produces scar tissue which may, in turn, cause ureteral stricture. Dr. Hunner has forcibly brought to the attention of gynecologists and urologists the clinical significance of this condition.⁽⁵⁾

The severity of the constitutional symptoms which result from cervicitis depends clinically both upon the virulence of the invading organism and upon the degree of immunity developed by the individual. Thus, even in cases in which the cervix seems only slightly infected, either a particularly virulent organism or an unusually low degree of immunity on the part of the patient may be the causative factor in the production of extensive constitutional symptoms. The late Dr. Sistrunk of Dallas, in his Chaille Memorial Address in New Orleans, reported a large

number of such cases, in which treatment of cervixes exhibiting apparently mild infection resulted in the prompt clearing up of constitutional symptoms.

In the management of endocervicitis, as in other conditions, prophylaxis is, of course, our ideal. The general practitioner and the pediatrician can assist greatly in this prophylactic treatment by instructing the mother in the proper care of the infant, and by recommending the institution of early treatment in all cases of vaginal discharge during infancy and childhood. Routine inspection of the cervix, particularly six to eight weeks after delivery, is most important. Lacerated cervixes, with or without erosion, should receive prompt attention, the v-shaped cauterization of Roblee and Royston

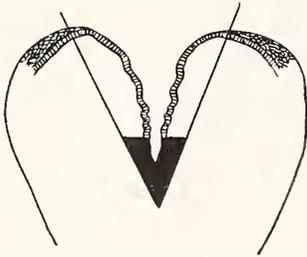


Fig. 4.—Diagrammatic drawing to illustrate v-shaped incision made by thermal cautery in the treatment of lacerated cervixes. (Roblee and Royston)

being indicated for moderate lacerations and trachelorrhaphy for extensive lacerations. Early treatment of cervical conditions will not only prevent endocervicitis, but may also avoid the possibility of a transition to malignancy.

The essential factor in the treatment of endocervicitis is the complete eradication of the infected glands. We recommend for this purpose



Fig. 5.—Shape of cervical canal and shape of instrument recommended by Hyams.

destruction of the glands by means of the thermal cautery or, preferably, removal by conization with the high frequency current. The patient is placed in the lithotomy position and the cervix well exposed by a bivalve speculum, preferably of the non-metallic type. The vulvar orifice is clipped or shaved, the outlet and vault of the vagina painted with four per cent mercurochrome solution and the tissues of the vagina and cervix thoroughly dried. A 5 or 10cc syringe is equipped with an adapter of adequate shank length for reaching the sides of the cervix, and both syringe and adapter fitted with Luer locks. In order to minimize the amount of pain, we prefer to start with a fine hypodermic needle and later change to a two or two and a half inch platinum needle. One half of one per cent novocain solution is injected into the tissue lateral to the cervix to block the nerves before they enter the cervical tissue, and if complete anesthesia is not obtained from this, it is advisable to block the nerves anterior and posterior to the cervical lips. It is wise to withdraw the plunge of the needle each time an advance is made in order to eliminate the possibility of injecting the novocain directly into a vessel. The inactive electrode is placed on the abdomen or under the hips of the patient and the active electrode is held about one eighth of an inch from the cervix until the spark shows that contact has been established. The electrode is then inserted into the cervical canal up to the internal os and the cervical glands are reamed out with a rotary motion of the electrode. If the cervix is unusually large and

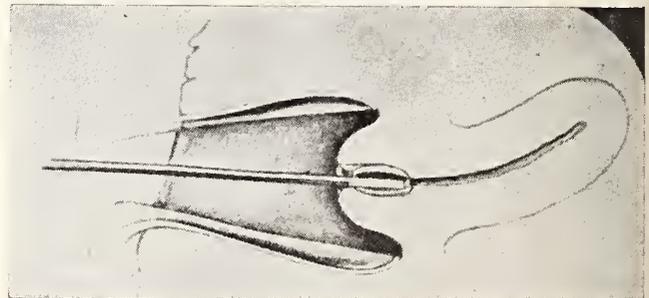


Fig. 6.—Removal of diseased endocervical tissue with rotary motion of instrument. (Hyams)

thick and the desired depth is not secured at the first reaming, the process may be repeated at the same sitting, care being taken, however,

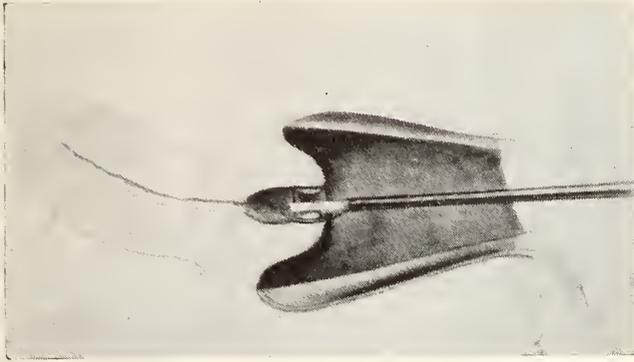


Fig. 7.—Process of conization repeated if necessary with removal of more tissue. (Hyams)

not to injure the myometrium of the cervix as excessive bleeding may thus be encountered. The coagulated tissue is removed by means of forceps and a small gauze pack is placed against

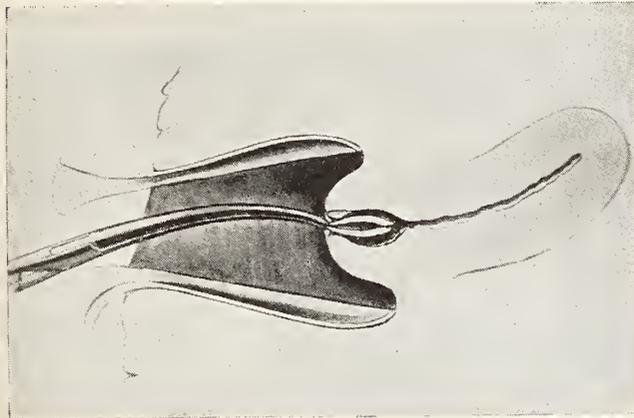


Fig. 8.—Removal of coned tissue with forceps. (Hyams)

the cervix to control the slight oozing which may occur.

It is important to estimate the extent of the infection in order that the infected tissues may be entirely removed. If only the glands adjacent to the external os are cauterized and the upper infected glands allowed to remain intact, the cervix may present a healthy appearance at the outlet and yet be diseased high in the canal. This remaining infection may cause a continuation of the patient's symptoms and, in our judgment, this fact explains why many physicians fail to get uniformly good results from cauterization and conization in the treatment of endocervicitis. When cauterization is employed, it is preferable to cauterize only the four quadrants at the first treatment, re-cauterizing later if necessary. Too extensive cauterization at the first treatment entails the danger of cervical stricture, a complication not encountered in conization.

An irritating watery discharge, which may later become bloody, appears after cauterization or conization. In order to avoid needless worry and fear, the patient should be warned to expect such a discharge. Cleansing douches are not permitted for ten days after the treatment. The patient should also be informed that from three to four weeks are required for the completion of the healing process and about six weeks for maximum beneficial effects.

Conization offers to us several advantages which are peculiar to it. Although hospitalization is preferable for the nulliparous woman and for the nervous individual, the treatment can be given to other patients in the office by any trained gynecologist under local anesthesia with very little discomfort, no loss of time and relatively little expense to the patient. The symptoms are completely relieved with a minimum of scar tissue, the cervix remaining functionally normal; the heat generated during the process assures complete asepsis, and the desired sealing of the draining lymphatics takes place. In addition to this, the procedure may be repeated as often as necessary without injury to the tissue.

Several contraindications to cauterization and conization should be kept in mind, namely, pregnancy or questionable pregnancy; acute or subacute infections of the cervix or adnexa; and the possibility of early malignancy of the cervix. Biopsy should precede cauterization or conization in these cases, especially in patients

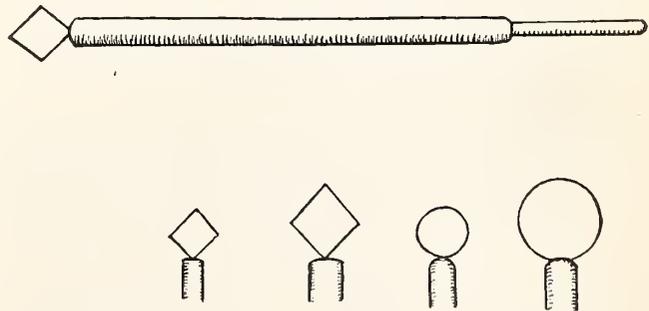


Fig. 9.—Loops recommended by Hyams for biopsy of the cervix.

between the ages of 38 and 50 years. It is also inadvisable to administer these treatments within a few days before or after menstruation.

The frequency of endocervical infection and the severity of the local and constitutional symptoms which result from secondary involvement of the extensive lymphatic system call for

prompt and efficient treatment of this neglected condition. Conization of the diseased endocervix in the "innocent-looking cervix" will result, we believe, in the prevention of many cases of pelvic lymphangitis.

SUMMARY

1. The cervix is a common focus of infection on account of its position in the vagina, its liability to injury, and its peculiar histological structure.
2. The lymphatic vessels of the fundus of the uterus, the cervix, and the upper vagina intercommunicate freely, and infection of any one of these may be responsible for the development of pan-pelvic-lymphangitis.
3. "The innocent-looking cervix" is often a neglected focus of infection which is capable of producing local and constitutional symptoms.
4. The anatomical structure of the racemose glands favors infection of the extensive glandular ramifications and promotes lymphatic absorption.
5. Pelvic lymphangitis secondary to cervical infection explains many symptoms such as uterine dysfunction, pelvic pain, and ureteral spasm and ureteral stricture.
6. Care during infancy and childhood and early treatment of lacerations and erosions constitute prophylactic measures for endocervicitis.
7. Cauterization and conization are the treatments of choice in the management of the "innocent-looking cervix".
8. Conization may be performed in the office with very little discomfort, no loss of time and relatively little expense to the patient.

DISCUSSION

Dr. H. W. E. Walther: In 1926, Benedict Von Lackum and Nickel of Mayo Clinic first demonstrated the relationship between infections of the cervix and certain eye lesions. This was so interesting to the Urological Department of the Clinic that they began immediately a routine study of all cervixes in patients with refractory urinary tract infections, and were very much surprised to note improvement of urological symptoms, and improvement bacteriologically, following sterili-

zation of foci of infection in apparently silent cervixes.

We have been able to follow out their work in chronic infection of the kidneys in women who have had children and a history of years of chronic cervicitis treated in the office without relief.

Hyams conization was practiced and we have gotten some excellent results. I believe it is timely for Dr. Sellers to have brought this matter to our attention. As infection usually produces fibrous infiltration, it is logical to suppose that endocervicitis, indirectly produced its share of ureteral strictures. There are still some men who do not believe ureter strictures exist and some urologists do not have dilating catheters in their armamentarium.

It does not require very much conviction on the part of the clinician, when the patient very frankly tells him that after dilatation she feels better than in years; she has been to other men: bladder has been dilated, given lavage and what not, diathermic heat to abdomen, vaccines and foreign proteins, but got more relief from one dilatation of urethra (up to 9 or 11 French) than from all other treatments combined.

BIBLIOGRAPHY

1. Bath, Thomas W.: Endocervicitis: its etiology, pathology, and treatment, Calif. & West. Med., 34:255, 1931.
2. Brown, Geo. Van Amber: Treatment of chronic endocervicitis, Sou. Med. Jr., 24:122, 1931.
3. Ground, W. E.: Endocervicitis and erosions: their treatment by electro-surgical methods, Wisconsin Med. Jr., 30:722, 1931.
4. Henson, J. W.: Chronic cervicitis and its treatment, Va. Med. Mo. 58:788, 1932.
5. Hunner, Guy: What the gynecologist should know about urology, Am. Jr. Obs. & Gyn. 14:453, 1928.
6. Hyams, M. N.: A new instrument for excision of the diseased endocervix with surgical diathermy, N. Y. State Jr. of Med. 28:646, 1928.
7. Ludden, R. H.: Cervicitis, Wisconsin Med. Jr. 30:903, 1931.
8. Maryan, H. O.: Bacteriology and pathology of chronic cervicitis., Am. Jr. Obs. & Gyn. 23:555, 1932.
9. Matters, R. F.: Cervicitis and its end results, Jr. Obs. & Gyn. of Brit. Emp. 38:833, 1931.
10. Morris' Human Anatomy, ed. by C. M. Jackson, 8th ed., P. Blakiston's Sons, Philadelphia, 1925.
11. Roblee, M. H.: Treatment of cervicitis by cauterization and electro-coagulation, Am. Jr. Obs. & Gyns. 22:64, 1931.
12. Schlink, H. H.: Pelvic lymphangitis, Supp. to Med. Jr. of Australia, Nov. 26, p. 438, 1927.
13. Wilson, K. J.: Cervicitis, Jr. Okla. Med. Assoc. 25:157, 1932.

FRACTURE OF THE HIP IN THE AGED*

G. A. HENDON, M. D.
LOUISVILLE, KY.

This presentation is done more as an act of gratification on my own part than for any other motive. I cannot conceive of any situation more pathetic than the fracture of the hip that occurs in people of advanced life. There is no doubt but what you have all been confronted with situations of that kind, not only in your own practice but often in your own homes, and it has always been a source of considerable grief to me when I would see those unfortunate individuals treated as we have been in the habit of treating them, and on account of that strong appeal to my sympathies, I set about an effort to devise some method by which relief could be offered at a time of life when people need it most. I think I have solved the problem. I have so far as my own satisfaction is concerned, because I have treated a series of fifty-four cases which I think is sufficient upon which to base a conclusion of a definite and determined character.

The method that we employ is very simple and involves a very simple operation, and the operation is absolutely devoid of any perceptible degree of shock regardless of the age of the individual. It permits the patient to lie in bed without any apparatus whatever. It permits him to assume any position in bed that he may find compatible with his comfort and the time he is confined to the bed depends just as much on the strength and durability of the uninjured leg as it does upon the one that is broken, and is usually three weeks. In these 54 cases there were two that we might classify as juvenile, one a boy 14 years old and another a boy 16 years old, but the same technic was employed and the same result obtained in the boys as in the old people.

Here is one film that was brought to me last Saturday by Dr. Waldrop of Alabama, for which I am very grateful. It shows a fracture of the neck of the femur in an old woman 75



1. Shows key in position holding fracture of femoral neck.
 2. Subtrochanteric fracture sustained six months later causing no disturbance of the first fracture or the position of the Key.
- Illustration loaned by Dr. R. W. Waldrop, Bessemer, Ala.

years of age, in which my key was used and she had complete union, and within six months she fell again and produced a fracture of the shaft just about the lesser trochanter without in any way disturbing the original site of the fracture.

We are so accustomed to see these old folks entombed in sepulchres of plaster of Paris or crucified upon the cross of splinting, suspension, and skeletal traction. Those who survive suffer such great torture they wish they had died. The operation we propose can be performed in about 10 or 15 minutes. We make an incision that exposes the base of the great trochanter and a shallow hole is bored through the cortex only at this point. This can be done with a Hudson drill. We then set our bone key and drive it through the neck and into the head of the femur. The key is about $3\frac{1}{2}$ inches long and $\frac{3}{8}$ inch square. It is $\frac{3}{8}$ of an inch at the big end and tapers to $\frac{2}{8}$ of an inch at the smaller end. It is made of beef bone. It is driven with a mallet through the neck into but not through the head of the femur. One can always determine the proper length of the key by laying it on the roentgenogram and getting the exact distance from bone surface to the head. The incision is closed by using silk worm gut

*Read before the Section on Surgery at the Sixty-sixth Annual Session of the Mississippi State Medical Association, Jackson, May 10, 1933.

carried down deep until it grazes the bone and close enough together to hold the soft tissue and eliminate dead spaces, then a dressing is put on the same as you would use for any kind of incision, and the patient is put to bed and from then on all you do is to extend him the ordinary courtesies of invalidism.

I have had seven hospital deaths in connection with this work, but none of them have been attributable to the accident or to the operation. One died with cancer of the uterus during the year, one died with a kidney stone, one died with multiple arthritis, two died with pneumonia. These people can sit up in bed if they so desire and they do not have to be in a horizontal position. Within 10 days most of them can bend the leg to an angle of 45°.

I bring this to show you in the hope that you will adopt this method because it is so simple, yet the most efficient that has been proposed.

We use this method of treatment in all fractures of the shaft of the femur anywhere and we have now one case in the shaft of the femur which had three years and ten months duration of non-union. We obtained a union in four weeks.

What I want to draw your attention to more than anything else is that it is a method by which you can relieve old people and you can use it with the young if you want to.

I am submitting an illustration of Dr. R. W. Waldrop's case which is the best example I have seen of the durability and reliability of this plan of treatment. I wish to acknowledge my obligation to Dr. Waldrop for his permission to use this case.

REPORT OF A CASE OF ALUM POISONING

LOUIS LEVY, M. D.

NEW ORLEANS

White and Wilcox has this to say about the internal use of alum: "In large doses it is emetic acting directly on the stomach and in larger doses, still, it is irritant and purgative. Most, if not all, is passed by the feces, probably in medicinal doses it has no more remote effect on the tissues. Nervous system: Given to animals in large doses it produces paresis, loss of sensation, forced move-

ments, drowsiness, and death from respiratory paralysis." With this description of the toxicosis of alum, one can readily see that alum is a poisonous drug. Only a few years ago the use of alum was discontinued in baking powder on account of its toxic properties.

Since this case had been confused with gall bladder and gastric conditions, and the correct diagnosis cleared the picture, it should be of more than usual interest.

CASE REPORT

On May 31, 1932, Mr. C. W. J. called at my office complaining of severe pains after meals, accompanied with nausea, which lasted most of the time. Loss of weight. "Felt that if he did not get relief he was going to die." History of gastric lavage and many gall bladder drainages with no results. Also treated for hysteria.

General examination: Male about 36 years of age. Height 6 feet 1 inch. Weight 115 pounds. Emaciated, muscles tapered to strings. Glands, negative; chest, negative; lungs, negative; Abdomen, slight rigidity in epigastrium; liver, normal; reflexes, normal. Clinically, with the exception of pain in epigastrium, this patient was negative. Urine, negative in ordinary chemical analysis and microscopical examination. The conclusion of roentgen-ray report was spastic colon. (Drs. Fortier and Gately).

No diagnosis was made and after a few examinations patient was requested to report occasionally after being placed on a bland diet, he having refused to return to a gastroenterologist.

Some days later his brother came in to see me saying that a neighbor had told him: "That the reason Mr. S. could not get well, was that his wife was putting alum in his food with the idea of killing him and leaving no evidence."

Without letting the patient know of this information, I advised the brother to allow him to eat his usual meal, this meal was prepared by his wife, and to bring him to Hotel Dieu for removal of same by stomach tube. He reported promptly after his dinner and the meal was removed. This meal was sent to the laboratories of Dr. Couret and Hauser with the history of the case. The report of the chemist was: "Alum in easily discernable quantity." The urine was also sent, and showed alum in the form of potash alum.

The patient was advised to change his diet and abode without the knowledge of the findings. He did as directed, and with the cooking of a different source he showed gradual improvement. No medication was given, and under the new alum free diet he gained twenty pounds in three months. He is free of any signs or symptoms, as we know now, of alum poisoning.

NEW ORLEANS
Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

WHY NOT ONE HUNDRED PER CENT?

What constitutes the most important and valuable feature of any organization? Undoubtedly the numerical strength of its membership. That being the case the editorial in the February number of the New Orleans Medical and Surgical Journal very truly called our attention to the necessity for augmenting the ranks of the Louisiana State Medical Society by an

increase in its membership. The editorial stated that only 55 per cent of the eligible physicians of our State are members of our State Medical Society. This being unfortunately true, each and every member should ask himself why 45 per cent of the physicians in our State are outside the protecting folds of organized medicine. This is a subject which should occasion grave thought to the personnel of the Membership Committee of the Louisiana State Medical Society, a committee carefully selected and duly appointed for the specific purpose of adding new members by pointing out to these non-members the advantages of affiliation with organized medicine. Increasing the membership of our Society is a most vital question which we should constantly keep before us; an issue which should engage some of the thought, time and effort of each and every member of our Society. None of us has done as much as he might to sell medical organization in our Parish or State Medical Society to the rank and file of the profession.

There can be no denying the fact that an active and energetic Membership Committee has lots of work to do, and can greatly augment the membership of the Society by applying itself to the duties for which it has been appointed. This applies not only to the Membership Committee, but to all other Committees, which were carefully appointed to carry on some specific duty which will conduce to the benefit of each and every member of organized medicine. This is a propitious time for the various committee chairmen to take stock of the activities of their particular committee. Very soon the house of delegates in annual meeting will expect a detailed report from the chairman of each and every committee, and by their activities during the past year will they be judged.

There are many physicians, good and true, who should be in the ranks of organized medicine, helping by word and action to defend the just causes of organized medicine against the encroachment of those insidious forces constantly active, and which are gaining momentum while we tarry. Nefarious political control of our profession, unchecked, will eventually yoke every medical man and woman to the slavery

of socialistic, communal or state medicine. He will become a doctor assigned to care for the surgical and medical needs of a fixed number of the citizenry of a state at a nominal retainer with no regard for individual worth or efficiency, a medical automaton.

United one hundred per cent for our common cause we can demand and secure our just rights; whereas luke-warm, half-hearted, factional attempts to maintain our individualism against constantly growing ill-advised politicalized powers will most certainly doom both members and non-members to a routine of medical and surgical activities wholly devoid of individualism and idealism. If you work in a profession, work for it; if you live by a profession, live for it.

C. A. W.

MEDICAL ECONOMICS

The statistics on the cost of medical care have been published and for some time have been available to the medical profession and to the laity. However, the figures that have been compiled through various sources and then collected and assembled by the Committee on the Cost of Medical Care are wont to be forgotten. They are so definitely informative that it might be appropriate to point out again some of the high spots in these statistics as published. Incidentally, in order to present these figures in popular form, the Rosenwald Fund has published a small pamphlet entitled "The Picture-Book About the Costs of Medical Care," illustrating graphically by tables, charts, and pictures where the money goes that is spent by the individual sick with some one disease or another.

In the first place statistics show that in 1930 more than twice as many people died of cancer as were killed in battle or died of wounds in the World War. There were, in 1931, nearly three times as many infant deaths as war deaths, and approximately one and one-half times as many people died from tuberculosis. Of the minor illnesses which are not usually lethal, respiratory tract infections were nearly triple all other disorders, with accidents and injuries coming next, and followed by digestive

disturbances. Measles leads all other definite disease entities.

The people of the United States in 1929 spent for medical care more than \$3,500,000,000. This sounds like much money, but twice this amount was spent for automobiles and then upkeep, almost the same amount for recreation, while over \$3,000,000,000 was spent for tobacco, candy, ice cream, and soft drinks, and something over \$2,500,000,000 for personal adornment. Of this money spent for the sick man, 30 per cent goes to the doctor, 23.4 per cent goes to the maintenance of hospitals; the public pays 18.2 per cent of the \$3,500,000,000 for medicines and the remainder is spent for dentists, nurses, cultists, and other expenses. Of the money that is spent, 79 per cent comes from patient fees, 14 per cent from the Government, 5 per cent from philanthropy, and 2 per cent from industry.

The well-to-do man spends much more for medical care than does the individual with a small income above the pauper class. This well-to-do man not only spends more because the fees for his medical attendance might be questionably larger than for the less opulent, but he calls upon his physician very much more frequently than does he in the lower economic group. The sickness costs are most uneven. It is the unevenness of these costs that are making many people warm advocates of some type of sickness insurance, whereby the costs of medical care just as the costs of fire, automobile accidents, or other contingencies are diffusely spread, the people as a whole who are insured helping to pay for the costs of the man who has misfortune in his family, in his driving, or elsewhere. Ten per cent of the families bear nearly half the cost of sickness, whereas nearly 60 per cent of the peoples spend only enough to meet approximately one-fifth of the cost of sickness. Only 1 out of 15 people per year go into hospitals, but the cost of hospitalization makes up about half of what a family spends for the care of an illness.

The physician should be interested in this great problem of how to meet the expenses that arise during sickness, because he is the one who must suffer in the great majority of instances as the patient is unable to pay him for his pro-

essional services. As a matter of fact, doctors' incomes are woefully inadequate. In 1929, a year when incomes were very much larger than at the present time, 25,000 doctors in this country had an annual income of less than \$2,000, 68,000 doctors had incomes under \$4,000, and 142,000 practicing doctors received less than \$5,500 as a net income. The costs of practice are high. Approximately 40 per cent of the physician's income is spent for professional expenses, leaving sixty per cent as the net income after meeting the necessary overhead.

The recital of these statistics and the reiteration of them is merely a reminder to the physician of some of the facts concerning medical practice and the costs of sickness. It is not for the purpose of bringing out any fresh information but merely to accentuate the fact that the whole great problem of how to meet costs of medical care, how to recompense the physician adequately, and how to take care of illness in the moderate income group is a problem which is as yet unsolved. Medical organizations throughout the country are testing out various methods to find the solution of the economic difficulties that have arisen in the past few years. Many of them are doomed to failure; they are impracticable and they are unworkable, but sooner or later in the progress of the nation forward there will be a solution of the problem which will only be accomplished as the result of study and trial by physicians themselves.

SPECIFIC TREATMENT OF TULAREMIA

It is rather odd that every known infectious disease except one has been treated at some time or another with vaccines, sera or even chemicals with the view of developing from these modes of therapy a specific destructive effect on the causative organism. The amount of investigative work that has been conducted in the treatment of these diseases caused by parasitic animal or vegetable organisms is more than voluminous; the published reports would fill a small library rather than just a book shelf. The exception to the infectious diseases that have

been treated by so-called specific measures is tularemia. Lee Forshay* writes that a review of the literature shows that there has never been any attempt, or at least no such attempts have been reported, to treat tularemia by specific anti-serum. He then records the rather remarkable results that he has had in the therapy of tularemia with a specific anti-serum which he has prepared from the serum of a goat injected with tularemia organisms. His results really are most amazing. It is true that the number of cases that he lists, 15 in number, is entirely too small a group to draw definite conclusions but nevertheless his results are certainly highly suggestive and that despite the known mildness of the disease, tularemia. The effect was achieved promptly after the injection of varying size doses of the anti-serum. The improvement in all except one case could apparently definitely be linked up with the therapy. The one unfavorable case was a moribund individual with involvement of the lung, liver and spleen who was not affected by the injection.

The serum as judged by intradermal tests apparently is specific, according to the author. It should not be forgotten, however, that skin tests are really not definite evidence of immunity, but show rather a state of allergy which many immunologists contend is not a true indication of the development of immune bodies or substances. It should also be noted that it is decidedly against the usual rule in the infectious diseases to obtain very much effect from an anti-serum which is administered late in the course of the disease. Some of Forshay's cases received the specific serum many days after the initial infection and yet they did equally well as contrasted with those who received the serum reasonably early. These remarks are not made with any idea of criticising Forshay's results, but they should be considered in evaluating any so-called specific measure. Certainly from the point of view of clinical test the new serum holds much promise, a promise which, with the increased prevalence of tularemia, will yield, it is hoped, definite results.

*Forshay, Lee: Tularemia treated by a new specific anti-serum, *Am. Jour. Med. Sci.*, 187:235, 1934.

HOSPITAL STAFF TRANSACTIONS

THE OSCAR ALLEN TUMOR CLINIC OF THE CHARITY HOSPITAL New Orleans

In a series of papers that follow, various phases of the cancer question will be discussed by members of the Tumor Clinic. The subjects will be presented concisely, stressing fundamentals and such matters as will interest especially the profession at large.

The first paper read before the Clinic was offered by Doctor James K. Howles, essayist, the director, Doctor James T. Nix, presiding.

PRECANCEROUS DERMATOSES

This designation is applied to pathological lesions of the skin which are so frequently the origin of cancers that the coincidence must be due to something other than mere accident.

It is practically impossible to classify or define satisfactorily the precancerous dermatoses, because any lesion occurring on the integument, especially in an area subjected to continued irritation, is a potential cancer. Irritation alone does not answer the question, for if that were so then why do not all traumatized lesions become cancers? There are a combination of factors, some of which we are cognizant of, that are responsible for this scourge we know as cancer.

Investigators in an effort to solve this enigma are using every known faculty to aid them in their researches. All manifestations of cancer are not obscure, and from a scientific research point of view it is fortunate that the skin surface offers such an excellent workshop or laboratory wherein these early neoplastic growths may be studied.

The crux of the cancer problem lies in early recognition and early adequate therapy. If cancer began as a painful lesion few would die of malignant growths, but it usually has such an insidious onset that metastasis or at least disfigurement has already occurred before the consultation of a physician is sought. From this standpoint it behooves the medical profession to know the skin cancers and to acquaint themselves with the skin lesions that are considered precursors of cancers.

Skin cancers are important and interesting from a number of points of view. They are external, and therefore are readily accessible for study and treatment; on this account perhaps there is more known about them than there is about any of the other cancers in the body. Skin cancer constitutes about two per cent of all skin diseases. The ultimate explanation of cancer is unknown, but for many skin cancers a very definite predisposing etiological factor associated with cellular hyperplasia has been noted. Striking examples of this

sequence of events, leading to skin neoplasms, are the roentgen-ray cancer, chimney-sweeps', and mule-spinners' cancer of the scrotum, and scar cancer, as well as those varieties attributed to excessive exposure to actinic rays, so commonly seen in sailors and farmers.

In 1912 Yamgiwa and Ichikawa¹ painted rabbits' ears with tar oil, over a considerable period of time, and succeeded in inducing true cancers which invaded the tissues and metastasized. Their work was confirmed by many others, not only for tar but for other types of skin irritants as well.

Again skin cancers are remarkable because of the variety of clinical and morphological forms which have been described. From this multiplicity of types has arisen an imposing array of names, which has cluttered the literature and served chiefly to confuse us in our study of skin tumors.

Except for the extremely malignant melanotic cancers, which are rare, most skin tumors are of relatively low malignancy, that is, they grow slowly, metastasize very late, if at all, and the metastases, when they do occur, are usually confined to the regional lymph glands.

There is at the present time a great discrepancy between mortality and incidence of skin cancer. Pearl and Bacon² believe these skin cancers are more frequently the cause of death than is indicated by autopsy, because a greater proportion of victims of cutaneous cancers die at home. In England and Wales from 1921 to 1925, 7.8 per cent of males and 5.7 per cent of females who died of cancer had cancer of the skin.

The varieties of skin cancers are great, but the commonest are the squamous and basal cell epitheliomas. These epitheliomas are more common in late-middle and old age, and somewhat more frequent in males.³ (There is no sex predominance in the more malignant melanotic tumors of the skin, and they may be found at any time after adolescence.) It has been noted that almost all of the epitheliomas occur on portions of the body which are most frequently subjected to exposure, daily wear and tear and trauma.

As previously stated the ultimate explanation of cancer is at present unknown. It is generally conceded that chronic irritation plays a role in its production in some cases. It may be solely contributory to conditions under which metaplasia may occur. "Yet from the practical standpoint irritation is the important factor, and all other influences, such as heredity, or local predisposition are secondary." The essential change applicable to all cases, the transition of somatic cells into cancer cells, is primarily of the nature of a degenera-

tion; a degeneration which in one class of cases depends upon the existence of a previously isolated group of cells (Cohnheim's theory); in another class, upon lesions in the connective tissue stroma, including subepithelial capillary congestion; and in still a third class, which is by no means a numerically unimportant one, upon metaplastic activity for which the epithelial cells alone are responsible. The development of cancer in these latter cases is unassisted by any change in the connective tissue stroma, and the individuality of the cells is doubtless a determining factor in the beginning of the degeneration in them. Skin cancer arises from previously normal epithelium after a period of overnutrition and overgrowth, during which the subepithelial tissues become altered and less resistant. Lymphocytic infiltration, swelling with mucoid or other forms of degeneration, followed by atrophy of elastic tissue, and chronic edema or fibrosis, usually but not always precede the downward growth of epithelium. Yet the controlling influence must, I believe, be regarded as inherent in the epithelial cell. "All cutaneous epithelium must be considered capable of developing acanthoma, for which it is only necessary to supply the proper conditions."⁴

"Small frequently repeated exposures to certain physical agents—light, x-rays, radium rays, heat and cold—result in the development of carcinomas of the skin fairly regularly in certain individuals and conditions."⁵ In farmers, sailors and outdoor workers the incidence of cancer of the face and hands is well known, as is also the occurrence of cancer after small repeated exposures to x-rays and radium rays. There is a form of cancer known as the Kangri cancer, which occurs in Indian natives of the Andes, who wear hot ovens to keep themselves warm, and the development is beneath these hot ovens worn on their abdominal walls. Sojourners in the colder climates are acquainted with the cancer which occurs after frost-bite. It is generally conceded that mechanical trauma may have similar effects, and it is within the realm of possibility that trauma is one of the important etiological factors, for not infrequently wounds containing foreign bodies give rise to cancer. Certain drugs when given internally, such as arsenic, may lead to epidermal proliferation which produces keratoses or warty growths of the soles and palms. These hyperkeratotic growths often develop into cancers. "Arsenical cancer is usually of the squamous-cell type, although at times the lesions may be relatively inactive, superficial, flat, epitheliomas resembling Bowen's disease, or composed of basal cells."⁵

Continued exposure to the hydrocarbons, such as lubricating oil and paraffin, may cause erythematous itching macules, pigmentations and keratoses, which ultimately become cancerous. Can-

cer has been produced experimentally by coal tar and extracts from coal tar. Some workers believe these substances act as lipoid solvents in inducing a malignant condition. Chimney-sweeps' cancer and mule-spinners' cancer are varieties caused respectively by soot and lubricating oil. Chronic irritation from projecting or carious teeth, smoking or syphilitic lesions of the mouth are predisposing causes of cancer of the tongue and lips, and it is well to remember that cancer of the mucous membranes coexists with syphilis of the same areas more often than is generally believed. These two diseases work synergistically to the detriment of the patient. The prevalence of cancer of the lower lip in inveterate pipe smokers is well known.

There are certain chronic inflammatory diseases of the skin which are frequently the sites of carcinomatous development; well known instances being lupus vulgaris and lupus erythematosus, particularly the former. Syphilis, blastomycosis, and other chronic inflammatory diseases may be followed by neoplastic growths, and leukoplakia, chronic fissures, sinuses and fistulae are often the sites of development of skin cancers.

Warts, pigmented moles, sebaceous cysts and other excrescences may undergo malignant degenerative changes with the formation of carcinoma. Such growths are usually of the squamous cell type. In the case of moles, the tumors are generally malignant melanomas.

The tendency of carcinoma to develop upon certain pre-existing diseases of the skin has led to the recognition of the following conditions as pre-cancerous dermatoses:

Burns (with scar formation).

Lupus vulgaris.

Chronic actinic dermatitis (sailors' and farmers' skin).

Roentgen and radium burns (scars from same).

Xeroderma pigmentosum.

Keratoses (seborrhoeic, arsenic, senile).

Verrucae (vulgaris, acuminata).

Leukoplakia.

Papillomata.

Cutaneous horns.

Pigmented moles.

Cysts.

Chronic fissures, ulcers and sinuses.

Paget's disease.

Syphilis.

Blastomycosis.

Darier's disease.

Bowen's disease.

Chronic occupational dermatitis.

Lupus erythematosus.

The scope of this paper will not permit a detailed discussion of the various theories or hypotheses as to the causative factor in cancer. Some of the more important of these will be taken up in

the remainder of the paper, which will appear in a subsequent issue and which will also include references and bibliography.

MERCY HOSPITAL

The joint meeting of the New Orleans Gynecological and Obstetrical Society with Mercy Hospital Staff was called to order by Dr. De Verges, January 18, 1934. Dr. Zander acted as secretary of the meeting. There were present the following:

Drs. Ph. De Verges, E. L. Zander, J. D. Dicks, Geo. Mayer, L. Fortier, O. J. Burger, G. H. Hauser, R. A. Oriol, N. J. Tessitore, J. Locascio, R. J. Mailhes, J. S. Hebert, G. DeReyna, D. L. Watson, M. Lescale, J. J. Irwin, C. J. Vedrenne, F. Chalaron, H. Ashton Thomas, R. F. Sharp, Mary Gould, W. S. Slaughter, Max M. Green, C. M. Johnson, J. E. Brierre, J. D. Magee, C. L. Cox, J. M. Whitney, E. A. Davison, R. C. Steib, Geo. Haik, C. P. Cabibi, H. B. Alsobrook, J. R. Daboval, S. A. Chapman, Carl Granberry, T. B. Sellers, H. Cummins, C. P. Brown, W. R. Hardy, D. B. Searcy, H. V. Sims, E. L. King, A. H. Gladden and A. Jacobs.

The meeting was then turned over to Dr. Sims of the New Orleans Gynecological and Obstetrical Society to preside over the Scientific Program.

Dr. Hauser read a paper on the pathology of Extrauterine Pregnancy. The paper discussed the embryology of this type of pregnancy, the causes, the types, the usual fate, and the end results.

Dr. Dicks next read two papers—the first on gonorrhoeal arthritis following cervical infection of twenty years' duration; the second on abdominal pregnancy. Dr. Dicks reported this in order to bring out discussion. The case was one in which an old gonorrhoeal history was given in which a hysterectomy had been performed but the cervix left in. The cervix was cystic and infected at the time of the examination, at which time the patient showed an arthritis of the entire body, particularly involving the shoulder joint, from which gonorrhoeal germs were obtained by the syringe method. The patient had been given the usual treatment for arthritis, including Brooks vaccine and typhoid bacilli. The question brought out by Dr. Dicks was whether it was possible that a case of gonorrhoeal infection could have lasted for twenty years' duration or whether the condition was one of reinfection; also whether in a case of gonorrhoeal infection it was wise to allow the cervix to remain in the patient to cause pain and suffering later in life, and whether our present means of treatment, including cauterization and connization, could destroy germs in the cervix. The second case was a case of abdominal pregnancy. He brought out the fact that there were two types, primary and secondary. The case discussed was of the secondary type. The history showed vaginal bleeding, pain on the left side, with previous

history of normal menstruation; operated on because patient was complaining with weakness at the time and general malaise. X-rays taken a few days preceding operation showed mass in the abdomen to be a fetus. Patient was operated on and a full term pregnancy was found in the abdominal cavity, the fetus being dead of only short duration. The placenta was not disturbed in this case and left in the abdomen.

Drs. Hauser's and Dicks' papers were then opened for discussion. Drs. Sellers, Alsobrook and Chalaron all agreed that they did not think the case of gonorrhoeal infection could have endured as long as the history of Dr. Dicks' case and were of the belief that it was a possible reinfection. The case was also discussed by Dr. Geo. Mayer and Dr. E. L. King.

Dr. Cummins discussed Dr. Hauser's paper on the pathology of extra-uterine pregnancy. Dr. Hauser brought out the fact that it was impossible to tell the age of gonorrhoeal germs by smears.

Dr. Geo. Mayer discussed a case of pulmonary embolism following delivery. The case was one following abortion. The embolism was found in the lung and was demonstrated by x-ray evidence. He brought out the point that in Germany the doctors advocate rather early movements in bed with special exercises being given and he suggested that after the third day it would be proper to institute such exercises following delivery or in surgical cases early. He also read another paper on blood pressure in pregnancy. The paper brought out the point if the blood pressure was plotted by curves very often preeclamptic cases could be determined better than by simple readings of the blood pressure. Two cases were demonstrated from case history, one with a high normal and one with a low normal blood pressure, in which the sudden rise of the blood pressure regardless of the reading was of more importance than the high reading with no sudden increase in blood pressure. This was discussed by Drs. Alsobrook and Sellers.

Dr. Walter Levy could not be present so his papers were postponed to a future meeting. This closed the Scientific Program.

The meeting was then turned back to Dr. De Verges, who after a recess of five minutes called the Executive Meeting of the Mercy Staff.

The following recommendations in the report of the Executive Committee were approved:

(1) That the by-laws of the Interns be amended so that request for leave of absence must be in ten days before leave is granted, except in emergencies.

(2) That formal application be made from Interns to Sister Superior of the Hospital, accompanied with grades and recommendations from Deans of their respective schools; the form of application to be drawn up by the Secretary.

The Committee on selection of Interns made the

following recommendations for 1934-1935:

For Internship:

Dr. C. M. Johnson and Dr. J. M. Whitney.

For Externship:

Mr. Charles Edgar Allen, Jr., and Mr. M. Daniel Lang from L. S. U., with Mr. F. E. de Priest as alternate and Mr. Ralph F. Allen and Mr. A. H. Ziemann from Tulane with Mr. D. D. Smith as alternate, and Mr. F. N. Nicholas as pathological Intern.

Edwin L. Zander, M. D.
Secretary.

FRENCH HOSPITAL

A regular meeting of French Hospital Staff was called to order by Dr. M. L. Stadiem, Friday, February 9, 1934. The minutes of the last meeting were read and approved.

The report of the Membership Committee was then read. Four men were appointed to the French Hospital Staff. These are:— Drs. J. C. Bayon, G. H. Butker, F. F. Gambino and J. K. Howles

Dr. J. K. Veal presented a paper on arteriography. Thorium dioxide is used as the radioactive solution in studying circulatory diseases due to arterial diseases. 12 and 20 c.c. ampules are used. The solution is heated to body temperature and injected into the arterial vessel chosen. It takes from three to five seconds for the solution to be visualized in arteriosclerosis. In varicose veins it usually takes 30 seconds for the solution to flow from the femoral triangle to the foot and into the venous vessels. In gangrene of the foot, it is used to determine the circulation above and around the knee before amputation is done. Often it would seem clinically, that amputation below the knee is better but from radiographic pictures amputation is done from above. In order to make this study inject 20 c.c. in the femoral canal, 5 c.c. in the arm and hand and 12 c.c. in adductor canal. Some very interesting radiographic pictures were shown by Dr. Veal; most being of arteriosclerosis and Burger's disease. One case of intermittent claudication was shown in which there was no popliteal artery shown but the vessels above the knee were curled up at the end.

The product is taken up by the reticulo-endothelial system and is excreted through the lungs and gastro-intestinal tract. It causes necrosis of the cells taking it up. It remains in the system a long time. The effect when injected into the tissues is nil. The product however stays there indefinitely as is shown in one case where it remained 8 months and was the same as at the time of injection.

Dr. L. J. Menville cited his experiences with this type of work and related that he and Dr. J. N. Ane were the first to visualize the arterial vessels of the kidney in animals. They are at present

working to find some substance which will give the same results but still will not be toxic. An article written in the Journal of Radiology some three months ago by Dr. Menville states that this drug is potentially dangerous and should not be used.

Drs. A. M. Powe, M. L. Stadiem, and J. N. Tessitore participated in the discussion.

Dr. Veal closed the discussion stating that this type of work needs more study. The dose should not exceed 30 c.c. as it is thought dangerous.

N. J. Tessitore, M. D.,
Secretary.

BAPTIST HOSPITAL

Jackson, Miss.

The meeting of the staff was held at 6 P. M. with a dinner, and 27 members and six guests present.

Mr. Alliston, the superintendent, made a talk on the condition of the hospital and the way the patients are doing so well in handling their bills.

Case Report.—Dr. W. F. Henderson: Patient, Mr. D. W. M., age 53.

Chief Complaint: Pain in left flank and back.

Present Illness: Patient began to have trouble several years ago when he fainted at the table. Suffered from pain in the stomach which was x-rayed five years ago and thought to be a cancer. This was five years ago. He lost some weight, from 137 to 120 pounds and has maintained that weight since. He has nocturia 4-8 times.

Physical Examination: Thin individual with complaint of pain in the left side and back running around the ribs. Palpable mass in upper abdomen. G. I. series used to check the carcinoma of the stomach he was thought to have had five years ago; but no evidence now, however, a large mass in the mediastinum was found and this was a pulsating mass. It seems to go down to the area of the diaphragm and is posterior to the heart. The differential diagnosis is being worked out now.

Dr. H. C. Sheffield discussed the case after examining him neurologically but no definite neurological conclusion could be drawn.

Dr. T. E. Wilson discussed same and thought that there was some cardiac involvement and possibly an aneurysm in the mediastinum.

Dr. Frank Hagaman discussed the mass and thought that deep x-ray might aid with the diagnosis.

Dr. Eubanks who has seen the man recently was present and talked of his recent illness at home and also that an autopsy permit had been obtained in case of death.

Dr. Van Alstine suggested provocative Wassermann.

Dr. Henderson closed the discussion. This presentation brought out a great deal of discussion and

emphasized the fact of not being able to come to a conclusion rapidly and with the assemblance of a goodly number of men in working out the case.

Case Report.—Dr. R. C. O'Ferrell. Patient: W. M., age 52, farmer.

Chief Complaint: Chills and fever and aching and red urine.

Present Illness: Had had chills and fever and been taking quinine for some time and then stopped same and started up again, when fever started back, in so doing became quite yellow and began to pass red colored urine.

Physical Examination: A very sick white male who was yellow and passing red colored urine. He was found to have estivo-autumnal hemoglobinuria and was treated with quinine by hypodermic, atabrine and transfusions, glucose intravenous drips, etc. He developed uremia and no drugs affected this and catheterization of the ureters was done but no results; blood urea and creatinine were steadily climbing; patient died in ten days.

Dr. Ainsworth discussed the fact that at times with uremia it is possible to stimulate the flow of urine by the use of catheters.

Case Report.—Dr. L. W. Long.

Patient: White, female, age 85 years, was seen when vomiting fecal matter and was brought to the hospital and given barium enema when it was found that she had an obstruction at the sigmoid. She had a reducible direct inguinal hernia on the right and a small direct inguinal hernia on the left. Enterostomy was done under a local anesthesia and she died in 36 hours. It was found that she had an attachment of the sigmoid into the left inguinal hernia sac with obstruction and diverticulitis of the colon just above the same.

Dr. Frank Hagaman discussed the direct hernia and mentioned a case in which the bladder (urinary) was incorporated in the sac. After the same was filled with water it was easily seen to be a part of the sac.

Drs. Steen and Wilson were elected to the courtesy division of the staff and Dr. Guy Verner was elected to the active staff.

General discussion of the autopsy problem was entered into and more are to be sought where possible.

L. W. Long,
Secretary.

Jackson,
February 11, 1934.

KING'S DAUGHTERS' HOSPITAL STAFF
MEETING
Greenville

The King's Daughters Staff held its regular meeting at the hospital, at 7:30 P. M., February 7, Dr. C. P. Thompson presiding:

The following officers were elected for the com-

ing year: President, Dr. J. F. Lucas; vice-president, Dr. O. H. Beck; secretary, Dr. J. W. Shackelford; chairman of Section on Surgery, Dr. P. G. Gamble; chairman of Section on Medicine, Dr. F. M. Acree; chairman of Section on Specialties, Dr. J. C. Pegues.

The program consisted of the following:

(a) Dr. J. E. Hirsch presented a report of a case of uterine fibroids.

(b) Dr. H. A. Gamble presented a report of a case of traumatic fracture of the neck of the femur treated by Roger Anderson method.

(c) Dr. L. C. Davis discussed current professional literature.

(d) Dr. J. G. Archer discussed current professional literature.

(e) Dr. J. W. Shackelford presented the monthly health report.

Abstract.—Uterine Fibroids: Dr. J. K. Hirsch.

Fibroid tumors of the uterus have been studied for many, many years. The condition is one that is not considered serious by the layman in that there is no discomfort excepting for the enlargement and the unsightly bulging of the abdomen. The public should be taught of the effect that might result from unmolested their growth. The tumor too often becomes malignant. Almost every individual who has a fibroid runs a hypertension. So frequently do we find hemorrhage, often causing an anemia to that extent that the patient is unable to navigate. In 1900 or about 1903, Kelly and Cullen cited a case of a young girl who was demented as a result of toxemia due to deep generating fibroid. This case that I am reporting today is one of two years' standing and already has begun to undergo malignant changes.

Again I advise that fibroid tumors should be removed when first seen whether small or large.

Traumatic Fracture of Neck of Femur.—Dr. H. A. Gamble.

Dr. H. A. Gamble presented two cases of fracture of the hip. Both are being treated by the Roger Anderson method of skeletal traction, using the well leg as a splint.

He spoke in appreciation of the Whitman cast method, which was a great advance, and is now generally conceded to be the perfect method for treating intracapsular fracture of the femoral neck. However, Whitman's method has the disadvantage that the patient must be encased in plaster from ankles to axilla. While the patient may be turned, the cast method does not avoid pulmonary complications, which are often fatal for aged patients.

The early open reduction methods, using screws (Martin) or a square bone peg (Hendon) to fasten the neck to the head, allow early mobilization of the patient, and have been used by Dr. Gamble with success in selected cases.

In the Roger Anderson method continued trac-

tion on the injured leg is exerted via a Steinman pin passed through the tibia just above the malleolus. This pin is attached by a lever arrangement to a cast on the uninjured leg. This cast extends only to the middle of the thigh. Through this cast the force of traction on the injured leg is exerted as an upward push against the well leg, which tilts the pelvis into the desired position of abduction relative to the injured leg. The apparatus allows any desired degree of rotation of the injured leg. Thus it accomplishes all that Whitman's method can accomplish, i.e. the fragments are immobilized, in apposition, and anatomic relationship. Dr. Gamble prefers the use of local anesthetic for reduction.

Union which occurs in about 55% of intracapsular fractures depends upon the degree of injury to the circulation within the femoral head and is beyond the control of any method which effects reduction and immobilization.

One of Dr. Gamble's patients is a colored man who now has excellent union of a subtrochanteric fracture. The other patient is a white woman, age 59, with intracapsular fracture, too recent for the result to be known, but who has been in a wheel chair every day since her fracture, has remained in excellent general health, and appears to have gained some weight.

J. W. Shackelford,
Secretary.

NATCHEZ SANATORIUM

The annual meeting of the staff of the Natchez Sanatorium was held on Jan. 16, at 7:00 P. M. Luncheon was served in the dining room, after which a business meeting was held.

The following officers were elected to serve for the current year: Dr. J. W. D. Dicks, President; Dr. R. D. Sessions, Vice-President; Dr. W. K. Stowers, Secretary; Dr. Nelkin, Dr. F. S. Dixon, Dr. J. G. Logan, Executive Committee.

Lucien S. Gaudet.

Natchez,
Feb. 8, 1934.

VICKSBURG HOSPITAL STAFF MEETING

The meeting was called to order at the usual time by the chairman, Dr. I. C. Knox.

Analysis was had of the reports from the various hospital departments and the one case of mortality during the preceding month was fully discussed.

Officers for the year 1934 were elected as follows: Chairman, Dr. Thos. P. Sparks, Jr.; Vice-Chairman, Dr. W. Pierre Robert; Secretary, Dr. Willard H. Parsons.

Scientific program was presented as follows:

1. Report of Recent Meetings of the Southern Medical Association at Richmond, Va., and the

Southern Surgical Society at Hot Springs, Va.—Dr. W. H. Parsons.

2. Vulvo-Vaginitis, Specific, General Discussion with Case Report.—Dr. W. Pierre Robert.

3. Review of Current Literature by the staff.

4. Demonstration of X-Ray Films.

Abstract.—Vulvo-Vaginitis, Specific, Case Report.—Dr. W. Pierre Robert.

The patient, a little girl seven years of age, presented herself on Oct. 17, 1933. The chief complaint was the presence of a vaginal discharge.

The mother stated that on the day previous to examination, the child had complained that her undergarments were damp, but stated positively that she had not wet them on urinating. Inspection by the mother showed a discharge coming from the vagina and marked irritation of the surrounding tissue. There has been neither frequency of micturition nor burning during the act.

The personal history and past medical history revealed nothing of unusual importance except that two weeks before admission the patient had been treated elsewhere for "pus on the kidney."

The family history disclosed that the mother had suffered a profuse vaginal discharge for some weeks and several years previously complete hysterectomy had been done; also that one other child, now nine years of age, suffered an acute vaginitis at six years of age. The mother stated that at no time had a colored nurse been employed.

Physical examination revealed a well developed white female child, not acutely ill. The tonsils had been cleanly removed; there was no cervical adenopathy. Examination otherwise of the head and neck, thorax and abdomen disclosed no abnormalities. Inspection of the vulva showed a thick, yellow purulent discharge to be present. The hymen was intact. Vaginal smear showed numerous gram negative intracellular diplococci.

The true nature of the condition was explained to the child's mother and she was advised at once to consult a physician for examination. The necessity of isolation for the patient was discussed and likewise the care necessary to prevent contamination of the eyes. A bland, nutritious diet, with an abundance of fruit juices and other fluids was prescribed. Alkalies were prescribed to be given by mouth.

The external genitalia were cleansed by irrigation with warm normal saline solution. An ointment containing one-half of one per cent nitrate of silver in anhydrous wool fat was slightly warmed and placed in a twenty cubic centimeter syringe. To the tip of this syringe was attached a small, hard rubber catheter. The eye had previously been cut off and the end of the catheter rounded. The tip then was inserted through the opening in the hymen and as the ointment was

expressed the catheter was introduced to the vaginal vault. At this point the labia majora were brought firmly together by an assistant and pressure was made inward and upward. The ointment was pressed into the vagina until back flow occurred in spite of the maintenance of the labia majora in contact. Catheter then was removed, a pad was applied to the vulva and firm pressure was maintained for five minutes. The patient then was allowed to return home with instructions being given to the mother that she should remain in a recumbent position with the hips elevated for a period of two hours.

Local treatment as indicated above was administered daily for seven days after which time one per cent mercurochrome in anhydrous wool fat was substituted for the ointment containing nitrate of silver.

Vaginal smear on Dec. 2 was positive. Several succeeding smears were negative, but on Dec. 22 a few gram negative intracellular diplococci were present. Since that date, all smears have been negative. The vaginal discharge was not noticeable after the child had been under treatment for a period of six weeks.

Comment.—This case history is typical of patients suffering from acute gonorrhoeal vaginitis. Liquid medicaments affect only the surface touched and if applied under sufficient pressure to reach the depths of the accordion-like folds of vaginal mucosa, there is much danger that the solution with organisms present may be forced into the uterine cavity. The anhydrous wool fat base suggested adheres to the vaginal mucosa and remains in contact for a prolonged space of time.

I feel that the hymen should be left intact. It aids mechanically in preventing the outflow of ointment.

The routine described above has been used almost exclusively by men in the management of cases of this type for the past five years and the results have uniformly been good. The average duration of the infection has been from six weeks to three months and no complications have at any time been experienced.

Just as the vaccine enthusiasts held sway years ago, so now the use of theelin is advocated by many. Inasmuch as we have at our command a safe, rational, effective method of handling these cases, I believe that experimental treatment should not be employed until some scientific reasons have been set forth to suggest that it may be of value. Otherwise, it will likely flourish for a space of time, only to be discarded as has the use of gonorrhoeal vaccine.

W. H. Parsons,
Secretary.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff was held on February 12 at 6:30 P. M. with nine members and three guests present. President G. M. Street presided.

Business of the staff and reports from the records department and analysis of the work of the hospital were presented. Dr. F. Michael Smith, Director, Warren County Health Department, presented vital statistics for the month of January.

Cancer Clinic—Squamous cell carcinoma of Nose (Grade II).—Dr. G. M. Street.

Special Case Reports:

Dermoid Cyst of Ovary, Bilateral.—Dr. G. M. Street.

Discussed by Drs. J. A. K. Birchett, Jr., and S. W. Johnston.

Cholecystitis, Acute, with Cholelithiasis, in a Negro.—Dr. J. A. K. Birchett, Jr.

Acute Hemorrhagic Nephritis.—Dr. G. C. Jarratt.
Discussed by Dr. A. Street.

Three Minute Reports of the Literature of the month:

Results of Irradiation Therapy in Hyperthyroidism, and the Cause of Death of Patients with Organic Heart Disease Subjected to Surgical Operations.—Dr. L. J. Clark.

Treatment of Trifacial Neuralgia by Artificial Fever.—Dr. H. H. Johnston.

The following radiographic studies were presented and discussed: Lung Abscess (follow up); Carcinoma of Lungs, Metastatic; Pulmonary Tuberculosis; Foreign Body (Ingested Clay) in Colon.

The meeting closed with a lunch.

The next meeting of the staff will be held Monday, March 12 at 6:30 P. M.

Abstract.—Cholecystitis, Acute, with Cholelithiasis, in a Negro.—Dr. J. J. K. Birchett, Jr.

Patient.—Colored, female, age 50; admitted to hospital Jan. 3, 1934.

Present Complaint.—Began night of Jan. 1 with pain in lower sternal region which later was transmitted to epigastric region and to upper right quadrant. About one hour after onset of pain, became nauseated and vomited several times. Pain was colicky in character and persisted throughout the night; was not relieved though she took soda and large dose of salts; followed by several bowel movements. Pain continued to and throughout Jan. 3 and that night she decided to come to Sanitarium for relief. Has no urinary symptoms, no respiratory or circulatory symptoms.

Past History.—Malaria, several attacks. Usual childhood diseases; operated upon 11 years ago for appendicitis and salpingitis. Attacks of indigestion for past five years with sense of fullness and distention after taking food, especially cabbage or fried foods.

Family History.—Father dead, age 70, blood poisoning; mother living and well; two brothers, one dead, age 20, appendicitis, one living and well, age 40; three sisters living and well. No tuberculosis or cancer in family.

Physical Examination.—Mulatto negro, female, of middle age, apparently acutely ill complaining of acute colicky pain in abdomen. Temperature 101°F., pulse 92.

Head, negative; mouth, tongue coated, few carious teeth; eyes show evidence of jaundice.

Thorax, respiration 20, normal physical findings except for dullness lower right chest, no rales.

Heart, regular, rate 92, no murmurs.

Abdomen, general tenderness to palpation with marked tenderness over upper quadrants and over gall bladder region. No palpable masses. Well healed, lower midline scar, no herniae.

Pelvis, negative findings.

Laboratory.—Blood: Leukocytes 22,900; differential leukocyte count, small lymphocytes 5 per cent, large lymphocytes 1 per cent, monocytes 10 per cent, polymorph. neutrophils, mature 56 per cent, band forms 27 per cent, eosinophils 1 per cent. No malaria. Wassermann test, negative; Kline and Young tests, positive (2 plus); Kahn test negative; Eagle flocculation test, negative.

Urine: Albumin 1/30 of 1 per cent; sugar 1.0 per cent; acetone, trace; diacetic acid, negative. Many finely granular casts; rare pus cells; few leukocytes; few fresh red blood cells.

X-ray showed non-filling gall bladder.

Procedure: We had here an acutely sick patient with a diagnosis of cholecystitis with possibility of stone in common duct. After giving palliative treatment in the form of intravenous glucose, ice packs to abdomen and restricted nourishment and morphine for pain, twelve days after admission general condition was much improved, jaundice had nearly disappeared, temperature was normal. However, pain still was evident on pressure over gall bladder and surgery was advised for relief of trouble.

Under ether anesthesia upper right rectus incision revealed mass of adhesions between lower surface of liver and colon which after separation showed large thickened gall bladder covered with thick fibrous exudate with evidence of gangrene in fundus. The duodenum was firmly adherent to proximal portion and to the cystic and common duct region and bled so freely when attempt at separation was made that exposure of the distal one-third of gall bladder and fundus was only done. In presence of adhesions cholecystectomy was impossible and carried with it grave surgical risk as there was evidence of liver disease. A trochar was plunged into fundus withdrawing several ounces of black purulent streaked bile. Many stones were encountered after the fundus was

opened and 94 were removed with curet and gauze wipe. The fundic portion of gall bladder was removed and a 22 catheter was placed in gall bladder for drainage. Bile drained freely postoperatively and on the 10th day was apparently normal bile, cholecystotomy tube was removed on 12th day. Highest temperature was 103°F. on third post-operative day. There was some purulent drainage from Dakin tube placed along gall bladder but this subsided on the 14th day when patient was put up in a wheel chair. There is no jaundice now and digestion is best in several years. Discharged from hospital on 17th postoperative day.

Comment: It is not common that we see acute cholecystitis in the negro with gall stones as a contributing factor and with involvement of the biliary ducts.

If exposure of the gall bladder and common duct could have been accomplished without the breaking up of adhesions which were so dense, and without infection and inflammation that would have spelled disaster, this step would have been attempted but we decided to drain gall bladder and remove the toxic focus with decompression of the biliary system and later if jaundice and pain recurs then we shall feel more justified in exploring the common duct as the danger of spreading infection over the abdomen from the empyema of gall bladder would not be a factor and the inflammatory adhesions would be easier to handle. Very probably the small stone which had slipped into the duct has passed into the duodenum and the obstruction has been relieved, the return of jaundice and pain will govern the sequence of this case.

Abstract.—Acute Hemorrhagic Nephritis.—Dr. G. C. Jarratt.

Patient.—White, male, age 9, admitted to hospital Jan. 3, 1934.

Chief Complain.—Dark colored urine; swelling of face; headache; nausea and vomiting; convulsions.

Present Illness.—Mother states infant contracted cold three weeks ago and one week later began to cry with pain in right ear and later in left ear. Fever since onset, 98.6° to 103° daily. Two weeks ago noted puffiness of eyelids in morning, several days later continuously, and for past week puffiness of whole face. For past three days has complained of severe headache and for past two days there has been nausea and vomiting. This morning at 2 A. M. had generalized convulsions that lasted for about one hour, followed by drowsiness for one hour. Headache, nausea and vomiting since. For past seven days there has been nose-bleed off and on; profuse this morning.

Past History.—Measles, pertussis, mumps. Has had diphtheria toxoid without Schick test; typhoid vaccine six months ago; no vaccination. "Bright's

disease" at five and seven years of age.

Family History.—Father, mother, and three other children living and well. No tuberculosis contact.

Physical Examination.—Well developed and nourished child with temperature 103.4°F. and blood pressure 150/120. Attempts at vomiting. Marked puffiness of eyelids and face with pitting edema only of legs and feet. Bilateral otitis media with bulging of right tympanic membrane; naso-pharyngitis. Liver and spleen not palpated; no fluid in abdomen. Central nervous system normal except for hyperactive knee jerks and ankle clonus. Heart and lungs not remarkable.

Laboratory.—Blood Wassermann, Kahn, and Kline and Young Tests negative. Blood urea 56.04 milligrams per 100 cc.; uric acid 14 mg.; creatinine 3 milligrams. Hemoglobin 67 per cent; erythrocytes 3,500,000; leukocytes 28,800 with lymphocytes 30 per cent and polymorphonuclears 70 per cent. No malaria.

Urine—Albumin 1/30 of 1 per cent (by weight); acetone marked; numerous hyaline, some coarsely and finely granular, and few pus casts; many fresh and abnormal red blood cells; many pus cells (20 per high power field).

Progress—January 3—Right tympanic membrane incised with drainage of pus; 300 cc. of 20 per cent glucose solution intravenously. Blood pressure 130/100 two hours later. Rest in bed; soft and liquid diet. Magnesium sulphate (50 per cent) one-half ounce three times a day. Treatment for ears and respiratory infection instituted.

January 4—Blood pressure 120/90; no complaint; no nausea and vomiting. Temperature normal; ear draining.

January 5—Blood pressure 116/80; practically all swelling of face gone.

January 6—Blood pressure 130/100. At 9:30 P. M. blood pressure 170/130; began complaining of headache but no nausea or vomiting. Gave 200 cc. of 20 per cent glucose solution intravenously and at 9:45 P. M. blood pressure 155/110 and no headache.

January 7—Blood pressure 130/110; no headache; feels well; no puffiness of face and no pitting edema of extremities. Blood urea nitrogen

48.1 mg. per 100 cc.; uric acid 5.2 mg.; creatinin 2.3 mg. Magnesium sulphate reduced to one-half ounce twice a day. No fever since admission and right ear draining; left ear and respiratory infections subsiding. Urine examinations have shown diminishing amounts of albumin and blood, but still many casts.

January 8—Blood pressure 140/110. No headache; no nausea or vomiting.

January 9—Blood pressure 130/110.

January 10—Blood pressure 126/90. Respiratory infection cleared; ear infections subsiding. Blood urea nitrogen 34.09 mg. per 100 cc.; uric acid 5 mg. per 100 cc.; creatinin 1.5 mg. per 100 cc. Discharge with absolute rest in bed, regular diet, magnesium sulphate, one-half ounce twice a day.

January 24—Seen in out patient department. Blood pressure 120/70; temperature 98.6°F. Father stated child has had no headache, nausea or vomiting and eating well. Physical examination showed nothing abnormal. Advised to continue rest in bed, regular diet and to gradually diminish magnesium sulphate to none.

Urine: Albumin slightest possible trace; no blood; some coarsely granular and few finely granular and rare hyaline casts. Blood: Urea nitrogen 32.2 mg. per 100 cc.; uric acid 7.1 mg.; creatinin 1 mg.

CHARITY HOSPITAL MEDICAL STAFF

The regular monthly meeting of the Charity Hospital Medical Staff was held February 20, 1934, with Dr. P. H. Jones presiding.

Dr. Connell briefly discussed clinical aspects of several cases and presented the pathological specimens of these cases.

Dr. Giles discussed the use of intravenous hydrochloric acid in bronchial asthma. He presented a case in which he had used this method of therapy after all other procedures for the severe asthma had been without benefit. The intravenous hydrochloric acid had apparently helped this patient considerably. This presentation was discussed by Drs. Thiberge, Jamison, and Gardberg.

Dr. Hull presented and discussed two cases of heart disease which had been treated with the surgical procedure of a total thyroidectomy. Drs. Musser, Veal, and Jamison discussed the cases.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

- MARCH 2. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
- MARCH 5. Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.
- MARCH 7. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.
- MARCH 7. Physiology Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.
- MARCH 9. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
- MARCH 9. French Hospital Staff, 8 P. M.
- MARCH 12. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.
- MARCH 14. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.
- MARCH 14. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.
- MARCH 14. Touro Infirmary Staff, 8 P. M.
- MARCH 15. Eye, Ear, Nose and Throat Club, 8 P. M.
- MARCH 16. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
- MARCH 16. I. C. R. R. Hospital Staff, 12 Noon.
- MARCH 16. Mercy Hospital Staff, 8 P. M.
- MARCH 19. Hotel Dieu Staff, 8 P. M.
- MARCH 20. Charity Hospital Medical Staff.
- MARCH 21. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.
- MARCH 21. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.
- MARCH 21. Charity Hospital Surgical Staff.
- MARCH 26. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.
- MARCH 27. Baptist Hospital Staff, 8 P. M.
- MARCH 28. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.
- MARCH 28. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.
- MARCH 30. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

During the month of February the Board of Directors held one regular meeting and the Society one regular scientific meeting and one special meeting. The special meeting was the annual joint meeting of the New Orleans Gynecological and Obstetrical Society and the Orleans Parish Medical Society. Professor E. G. Plass, Head of the Department of Obstetrics and Gynecology of the University of Iowa was the guest speaker, his title being "Gestational Polyneuritis."

The meeting scheduled for February 12 was dispensed with because of conflict with Carnival activities.

The meeting of February 26 was very well attended. The following program was presented: Physiological Preventive Medicine.

By:.....Dr. Allan Eustis
Discussed by Drs. Henry Laurens and W. H. Perkins.

A Consideration of Urinary Stone.

By:.....Dr. Joseph Hume
Discussed by Dr. H. W. E. Walthers.

Complete Prolapse of the Rectum, treated by office methods. By:.....Dr. J. W. Warren

At this meeting the question of fee schedule for ERA Movement was brought up for consideration and final action.

Final action was taken on the plan submitted by the Mutual Benefit Society of Louisiana.

Dr. J. H. Musser spoke on the tuberculin testing of the school population of New Orleans.

The annual meeting of the New Orleans Academy of Sciences will be held Friday and Saturday, March 23 and 24, 1934. Titles for papers should be submitted to Philip C. Wakeley, 348 Baronne Street, New Orleans.

Drs. C. C. Bass, Roy B. Harrison and Urban Maes attended the 13th annual Congress of Medical Education, Licensure and Hospitals, Chicago, February 12 and 13.

Drs. John F. Dicks and H. Vernon Sims attended the Southern Interurban Gynecological and Obstetrical Society meeting at Birmingham.

We regret to report the loss by death of one of our Active Members, Dr. J. Geo. Dempsey.

There has been little activity in the Secretary's office during February. Bills for dues have been sent out and the members are urged to pay their dues for the year in order to facilitate the clerical work in the office.

Attention of the members is called to the fact that Medical Defense in the State Society begins only from the date checks are received.

Dr. Joseph S. D'Antoni was elected to Active Membership.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 12/30/33.....	\$ 837.36
Receipts	1,493.34
Total credits	2,330.70
Expenditures	1,056.68
ACTUAL BOOK BALANCE: 1/31/34.....	\$1,274.02

LIBRARIAN'S REPORT

During January, 123 volumes have been added to the Library. Of these 40 were received by gift, 49 by binding, 16 by subscription, 2 by purchase and 16 from the New Orleans Medical and Surgical Journal. New titles of recent date are listed below.

There have been an unusual number of reference calls on interesting subjects during January. The members of the staff have collected material on the following subjects on request of members of the Society:

Food and drug bills to be submitted to this Congress.

- Group practice.
- Diabetes insipidus.
- Torsion of Fallopian tubes.
- Kidney complications in cholecystitis.
- Statistics on thyroid disease in Cleveland.
- Role of magnesium in cancer.
- Possible relationship of fibrocystic disease to giant cell tumor of bone manifestation.
- Therapy of thyroid disease.
- Filaria volvulus.
- Broder's classification of tumors.
- Dinitrophenol.
- Active immunization against diphtheria.
- Personal bibliography of Dr. Monte Rogers Reid.
- Trypan blue in treatment of tuberculosis.
- Lipofibroma of broad ligament.
- Research of K. Ogino on fertility.
- Houssay-Hypophysis.
- Iodine in labor.
- Gross and microscopic anatomy of lateral ventricles and choroid plexus.
- Fetal membranes.
- Leishmaniasis.

Tularemia.

Agranulocytosis.

Biological inertness of irradiated mycosterols other than ergosterol.

NEW BOOKS

- American Surgical Association—Transactions. v. 51. 1933.
- American Otological Association—Transactions. v. 17 pt. 3. 1927; v. 23. 1933.
- U. S. Army—Surgeon-General's Office—Report. 1933.
- American Pediatric Society—Transactions. v. 45. 1933.
- Association of Life Insurance Presidents—Transactions. v. 27. 1932.
- Brazil—Memorias do instituto Butantan. v. 7. 1932.
- Washington Institute of Medicine. v. 4. 1932.
- Norris & Landis—Diseases of the Chest. 1933.
- Kanavel—Infections of the Hand. 1933.
- Gleason—Manual of Diseases of Nose, Throat and Ear. 1933.
- American College of Surgeons—List of Fellows. 1934.
- Weiss—Manual of Clinical and Laboratory Technic. 1932.
- LeComte—Manual of Urology. 1933.
- American Congress of Radiology—Science of Radiology. 1933.
- Hadfield—Recent Advances in Pathology. 1932.
- Bick—History of Orthopedic Surgery. 1933.
- Mennell—Backache. 1931.
- Winslow—City set on a Hill. 1934.
- Hodgson—Public Health Nursing in Industry. 1933.
- Newsholme—Red Medicine. 1933.
- Feuchtersleben—Hygiene of the Mind. 1933.
- Sydenstricker—Health and Environment. 1933.
- Blarcom—Obstetrical Nursing. 1933.
- Granger—Physical Therapy Technic. 1932.
- New York Academy of Medicine—Maternal Mortality in New York City. 1933.
- Martin—Hospital Medical Statistics. 1933.

FREDERICK L. FENNO, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

ANNUAL MEETING LOUISIANA STATE
MEDICAL SOCIETY

Physicians and members of the Louisiana State Medical Society should now be directing their attention to developing plans to attend the Annual Meeting of the Society, which is to be held in Shreveport, April 10-12. The House of Delegates will meet on Monday, April 9. Several factors are outstanding, which would indicate an unusual attendance at this time.

It has been two years since the Society has had a scientific meeting, and it is assured that the physicians will look with favor upon the opportunity this meeting will present to them. As a result of this intermission of scientific programs, we find that the most prominent physicians of the State are being placed on the program, which should insure keen interest in various subjects discussed scientifically. In addition, there is an outstanding feature and we feel greatly honored in being able to

have with us at that time Dr. Dean Lewis, President of the American Medical Association, who will appear on Tuesday's Surgical Program. It is not very often our opportunity or privilege to have with us such a distinguished guest, and it is hoped that the various doctors of the State will indicate their appreciation of the efforts of the various chairmen of the scientific sections by attending. In keeping with the unusual scientific presentations of the program, there is going to be a special cancer program fostered by the Louisiana State Cancer Committee. This symposium will probably be on Wednesday or Thursday. These various scientific treats should in themselves prompt the attendance of every physician interested in these important subjects. In keeping with the traditions of the physicians of Caddo Parish and especially Shreveport, the Committee on Arrangements has been most active in the development of plans for our entertainment. It is a fact that those who have had the opportunity of ever attending a meeting at Shreveport and being the beneficiaries of the wonderful hospitality of the physicians of this wide awake City will always be glad and look forward with a great deal of anticipation to a return visit. It is very gratifying to report that there will be a concentration of all activities in the Washington-Youree Hotel, where ample accommodations are available for the scientific and social features of the meeting.

Doctors desiring hotel reservations are requested to communicate with Dr. W. H. Browning, Chairman of the Committee on Hotels, Highland Clinic, Shreveport, as soon as possible.

Also, doctors desiring to enter scientific exhibits at the Annual Meeting are requested to communicate with Dr. W. P. Butler, Chairman of the Committee on Scientific Exhibits, Shreveport Sanitarium, not later than March 15.

You are, therefore, admonished to make your plans early, in order that there may not be any confusions with your opportunity to attend the meeting of the Louisiana State Medical Society in Shreveport. A detailed scientific program will be in the hands of every member of the State Society two weeks previous to the meeting.

THE EAST AND WEST FELICIANA BI-PARISH

The East and West Feliciana Bi-Parish Medical Society met in the East Louisiana State Hospital with Dr. Glenn J. Smith and Staff. Drs. O. W. Bethea and P. T. Talbot were the speakers of the evening. The subjects of their papers were "Physical Diagnosis" and "Arthritis". Both subjects were freely and favorably discussed by physicians present. Drs. Bethea and Talbot were elected honorary members of our Society.

A vote of thanks was extended Drs. Bethea and

Talbot for the presentation of their excellent discourse on these practical subjects.

Members and guests present: Drs. Bethea, Talbot, Shaw, Pipes, Lea, Miller, Stafford, Odom, Williams, Smith, C. A. Weiss, Sr. and Jr., Voss, Robards, Thames, C. S. & E. M. Toler, Mrs. Robards, Roby, Miss Bankston, Mrs. Bridges, Bunhan, and Rev. Roussell and Miss Tate.

CLAIBORNE PARISH MEDICAL SOCIETY

At one of the largest medical meetings ever held in this section Thursday night, February 8, at the Homer City Hall, Dr. J. W. Cox, Field representative of the American Society for the Control of Cancer made the principle address of the evening dealing with the work and progress made in the control of cancer.

Dr. C. O. Wolff of Haynesville read a paper on "Cancer of the Breast and Uterus". Dr. C. P. Rutledge of Shreveport also read a paper on "X-Ray and Radium in the Treatment of Cancer." Other interesting talks were made by Dr. J. E. Knighton, Sr., Dr. J. A. Hendrix, and Dr. S. C. Barron, all of Shreveport.

ACTIVITIES OF THE STATE BOARD OF HEALTH—SOCIAL HYGIENE ASSOCIATION OF NEW ORLEANS

Among the outstanding activities of the organization during the past year have been the educational lectures given on different phases of social hygiene. The lectures are given by a voluntary committee which includes a group of outstanding people of the community. Thirty-one lectures have been given to Mothers' Clubs of the public schools, two to parochial schools, one to groups of Tulane students, one to the Louisiana State University student body, three to Salvation Army groups, five to a group of young colored students, one to the Laymen's League of the Unitarian Church, one to the Jewish Women's Council, one to New Orleans district nurses, two at the Tulane Summer School, three to the Tulane School of Social Work, and one to a club at the Young Men's Christian Association. Thousands of people have been reached through these lectures. Tulane University has included in their curriculum a series of lectures on social hygiene to freshmen in all departments.

Through the generosity of the Louisiana State Board of Health, some pamphlets on sex education have been purchased and are given away free on request. A great many pamphlets on venereal diseases have been sent out, including 600 to 27 Civilian Conservation Corps camps in the state. Altogether over 12,000 pamphlets have been distributed.

A colored executive committee of our organization has been formed during the past year, with Mr. Dent, superintendent of Flint-Goodridge Hos-

pital, as Chairman. An institute for colored people was held, conducted by Mr. Franklin O. Nichols of the American Social Hygiene Association, and Dr. Roscoe Brown of the U. S. P. H. S. The program was designed to reach the schools and colleges, the industries, churches, social workers and public health nurses, and persons interested in becoming lecturers in social hygiene. Over 11,000 people were reached in the four weeks and there were 14 film showings to 2,529 people. It is hoped that very lasting good will come out of this and a regular social hygiene program for colored people will develop. Mr. Dent gave invaluable assistance to Mr. Nichols and Dr. Brown. The national association and the Public Health Service through their representatives are to be commended for the fine piece of work done.

NEWS ITEMS

Dr. C. C. DeGravelles, Councilor of the Third Congressional District, has moved from Morgan City to New Iberia. He is located in the State National Bank Building.

Dr. P. K. Rand of Alexandria, a prominent member of the Rapides Parish Medical Society, favored the Louisiana State Medical Society office with a visit during his recent trip to New Orleans.

Dr. A. A. Herold, Shreveport, has been appointed the member of the Council of the Southern Medical Association from Louisiana for a regular Council term of five years, the appointment having been announced recently by the President, Dr. Hugh Leslie Moore of Dallas, Texas. Dr. Herold succeeds Dr. Homer Dupuy, New Orleans, who, having served the constitutional limit, was not eligible for reappointment.

Dr. J. R. Turner who has practiced medicine in Homer since 1924 has moved to Amherst, Texas, where he will do general practice. During 1924-1925 Dr. Turner was in charge of the Claiborne Parish Health Unit. From 1925 until the time he left Homer he was engaged in general practice of medicine.

Dr. Frank Charles Mann, professor of experimental surgery, Mayo Foundation, will deliver the Stuart McGuire lectures for the current year on the nights of April 2 and 3 at the Medical College of Virginia, Richmond. Dr. Mann's subjects will be The Anatomy and Physiology of the Liver, and Experimental Pathology of the Liver.

A testimonial dinner was given to Dr. Stuart McGuire by the faculty and board of visitors of the Medical College of Virginia on Monday, January 15, 1934, at the Commonwealth Club, Richmond, Vir-

ginia, in recognition and appreciation of his forty years' continuous service to the institution as professor, president, and now chairman of the executive committee of the Board of Visitors.

The Merck Institute of Therapeutic Research, Rahway, New Jersey, announces the appointment of Dr. Eugene Maier as Chief Bacteriologist. Dr. Maier was associated with the Rockefeller Institute of New York as Research Assistant from 1926 to 1930. Since 1931, up to the time of becoming associated with Merck & Co. Inc., Dr. Maier has been at Bellevue Hospital, New York, in the department of pathology, as bacteriologist for the Tuberculosis Division of Columbia University.

"RUDOLPH MATAS MEETING OF THE AMERICAN SOCIETY OF REGIONAL ANESTHESIA"

At the New York Academy of Medicine on Tuesday, February 27, at the Tenth Anniversary Year of the American Society of Regional Anesthesia, Dr. William B. Coley introduced Dr. Rudolph Matas, who read the scientific contribution of the evening on "Local and Regional Anesthesia; A Retrospect and Prospect."

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. For the week ending January 20, the following diseases were reported in double figures throughout the State. There were 46 cases of chicken-pox, 43 of syphilis, 42 of gonorrhoea, 32 of diphtheria, 30 of scarlet fever, 28 of pneumonia, 25 of measles, 22 each of pulmonary tuberculosis and cancer, 20 of typhoid fever, and 10 of malaria. The typhoid fever cases were scattered throughout the State, Orleans Parish with 4 and Sabine Parish with 3 being the only two parishes to report more than 2 cases. Seventeen of the 30 cases of scarlet fever were reported from Orleans Parish, as was 1 case of smallpox, 1 of meningitis, and 2 of tularemia. For the fourth week of the year ending January 27, these diseases were reported in double figures: Sixty-two cases of syphilis, 41 each of measles and gonorrhoea, 37 of scarlet fever, 20 of diphtheria, 20 of influenza, 14 of cancer, 13 of pneumonia, 12 of tuberculosis, and 10 each of whooping cough and chicken-pox. A mild epidemic of scarlet fever was present in Orleans Parish as 22 cases were reported. Three cases of smallpox were listed from Catahoula Parish. For the week which ended February 3, chicken-pox with 64 cases led all other reportable diseases. There were also 33 cases of measles listed, 26 each of scarlet fever and pneumonia, 19 of syphilis, 17 each of diphtheria and pulmonary tuberculosis, 12

of cancer, and 10 of influenza. Three cases of undulant fever were reported, 1 from Catahoula and 2 from East Baton Rouge, and 1 case of smallpox from Orleans Parish. Fifteen of the 26 cases of scarlet fever came from Orleans Parish. For the sixth week of the year ending February 10, measles led the list of reportable diseases with 89 instances. Pneumonia weather is accountable for the 47 cases of pneumonia reported this week. There were also listed 43 instances of syphilis, 39 each of gonorrhoea and tuberculosis, 26 of diphtheria, 25 each of malaria and scarlet fever, 23 each of hookworm disease and chicken-pox, 19 of influenza, and 17 of cancer. Avoyelles Parish reported 3 cases of typhoid fever, Tangipahoa 1 case of smallpox, Orleans Parish 1 case of typhus fever and 14 of scarlet fever.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. Reports for the week ending January 13 show there were 133 deaths in the City of New Orleans, divided 81 white and 52 colored. The death rate for the group as a whole was 14.4, the white race 12.4, and for the colored 19.4. The infant mortality this week was 146, a very high figure due to the high negro infant mortality of 196. The next week, ending January 20, showed a sharp rise in the total number of deaths, there being 177 listed of which 112 were deaths in the white population and 65 in the colored. The rates for the three groups respectively were 19.2, 17.1, and 24.3. The infant mortality rate was 108, again due to the large number of infant deaths in negro children. The week ending January 27 showed a slight reduction in the total number of deaths, which were 169, giving a rate of 18.3. These deaths were divided 95 white, with the rate of 14.5, and 74 colored with a rate of 27.7. The infant mortality rate was 127, again due to the same cause as in the previous weeks. There was somewhat of a decrease in the total number of deaths in the week of February 3, 156 being listed, of which 84 were deaths in the white race and 72 in the colored. The death rate for the whole group was 16.9, for the white race 12.8, and for the colored 26.9. The infant mortality rate had dropped down to 64 due to the fact that the negro infant mortality rate was only 98. There was a sharp rise in the following week which ended February 10 in the number of deaths in the City of New Orleans. There were 188 in all, of which 113 were white and 75 colored. The total death rate was 20.4; white race 17.2; and the negro 28.0. The infant mortality rate had jumped up to 108 due to the negro infant mortality rate of 147. More deaths occurred in New Orleans in the first six weeks of the year than oc-

curred in 1933. The rate so far this year is 17.7, as contrasted with the first six weeks of last year when it was 16.2.

AMENDMENT NO. 3 TO THE UNITED STATES INTERSTATE QUARANTINE REGULATIONS, PUBLIC HEALTH SERVICE

In accordance with the provisions of the Act of Congress approved February 15, 1893, the United States Interstate Quarantine Regulations are hereby amended to make Section 1 read as follows:

1. For the purpose of interstate quarantine the following diseases shall be regarded as contagious and infectious diseases within the meaning of Section 3 of the Act approved February 15, 1893: Plague, cholera, smallpox, typhus fever, yellow fever, typhoid fever, paratyphoid, dysentery, pulmonary tuberculosis, leprosy, scarlet fever, diphtheria, measles, whooping cough, epidemic cerebrospinal meningitis, anterior poliomyelitis, Rocky Mountain spotted or tick fever, syphilis, gonorrhoea, chancroid, anthrax, influenza, pneumonia, epidemic encephalitis, septic sore throat, rubella, chicken pox, and psittacosis.

H. Morgenthau, Jr.,

Acting Secretary of the Treasury.

Through the Louisiana State Board of Health.

MEDICINAL WHISKY RULING ISSUED BY FEDERAL DRUG OFFICIALS

The Food and Drug Administration today issued a statement intended to clarify the specific requirements of the Federal Food and Drugs Act as they apply to medicinal whisky. The announcement supplements but does not in any way conflict with the labeling regulations covering beverage whisky recently issued by the Federal Alcohol Control Administration. It shows that whisky sold for drug purposes is subject to requirements which do not apply to an article intended exclusively for beverage use.

The Food and Drug Administration emphasizes that the requirements it enforces in regard to medicinal whisky are not administrative rulings, but are set forth in the Food and Drugs Act which requires that drugs listed in United States Pharmacopoeia shall conform to the definition in that authority. The definition for whisky in the U. S. Pharmacopoeia is more rigid than the definition for "straight whisky" which the FACA issued February 6, 1934, in that Pharmacopoeia whisky must be aged four years in charred wood containers, and its alcoholic content must be not less than 46 per cent and not more than 53 per cent by volume of absolute alcohol. Medicinal whisky which does not conform to the pharmacopoeial standard must be labeled to differentiate it clearly from the official product. The Food and Drug Administra-

tion statement includes illustrations of labels which will be regarded as legal on such products.

SPECIAL LEGISLATION

Physicians and medical societies throughout the United States, no matter which side they take on such a highly controversial subject, are watching with interest proposed legislation before the Seventy-third Congress calling for amendment of the present federal birth control laws. These amendments, commonly known as the "Doctors Only" bills, are Senate Bill 1842, sponsored by Senator D. O. Hastings of Delaware, and House Bill No. 5978, introduced by Representative Walter Pierce of Oregon.

This proposed legislation would amend the existing federal restrictions so as to legalize the sending or receiving of contra-ceptive information,

instruments and medicines between physicians and their patients, medical colleges and hospitals and from physician supply houses and manufacturers.

The sponsors of the "Doctors Only" bills merely seek to place the responsibility for prescribing contra-ceptive action where it rightfully belongs—in the hands of the medical fraternity.

Leading doctors also contend that this change in the statutes will greatly aid in the proper care of cardiac, tuberculous and diabetic patients where pregnancy is contra-indicated and where conception would necessitate a therapeutic curretment.

The passage of these laws will depend largely upon the expressions received from the physicians and there is yet time to express such views to their Congressman or the Senator and Representative mentioned above who are sponsoring these bills to amend the present laws for the interest and protection of the medical profession.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

FROM OUR PRESIDENT

To the Mississippi State Medical Association:

We have been very much gratified with the favorable response to our request for the organization of county medical societies. Realizing the importance of a well organized profession in order that we may be better prepared to promote the professional and material welfare of our profession, we proposed this method of organization, believing the desired end may be accomplished more readily by designating the county societies as the unit of organization for the State Medical Association.

We would not in any way detract from the splendid record of our component societies nor would we advise an interference with them. Both types have an important work to do in their respective fields. The county society should deal with the professional and economic problems that confront our profession. The component society should function as purely a professional society, providing interesting and instructive programs, thereby promoting the professional welfare of their members. The county society should be our first line of resistance against unethical practice and hostile onslaught from the laity.

The entire social fabric of our land is in process of remodeling to meet the changed conditions of the age in which we are living. Our profession cannot expect to escape the effect of these changes in our economic structure. That there will in the future be some modification of our present method of practice there can be no doubt. Conditions exist today that are giving momentum to the oncoming wave of discontent with our present day method of caring for the sick among the public. The increased cost of medical care brought about largely

by the advance in medical science, various diagnostic laboratory aids required, and the more or less general hospitalization of the sick has put scientific medicine beyond the grasp of the great middle class of our population. This condition of affairs cannot continue without leading us directly to some form of state medicine at no very distant day.

We can accomplish nothing by merely meeting and adopting resolutions condemning this or that solution of the problem. The public expects us to do constructive planning in the matter of solving this problem; we must offer a solution that will be acceptable to both the profession and the public. We cannot hope to accomplish this desired result unless we study the subject. It is in the county society that this study must begin.

I believe it is the moral duty of every ethical physician to join his county medical society. The only obstacle that can stand in the way is the financial inability to pay dues. In this day of financial stress I realize that some good physicians are unable to join organized medicine. I believe it is the duty of the county society to help these men by taking care of their state dues until they can carry on. This can be done without affecting the finer sensibilities of the physician in the least.

Some of us confuse the function of the county society, state association, and American Medical Association with the many special organizations in the medical profession, such as the American College of Surgeons, the American College of Physicians, Southern Medical Association, Southeastern Surgical Congress, etc. These latter organizations are specialized bodies organized purely for advancement in professional knowledge and in a way are honorary in character.

The county society, state association, and A. M. A. are the profession mobilized to foster and protect both the professional and the material welfare of the physician—in other words, the legislative body of the profession.

Therefore, let us build our county society as strong as possible. Each county society should make application through its Councilor for a charter. This should be done without delay in order that the application for the charter may be presented to the House of Delegates at the meeting in May.

I hope our campaign for new members may be continued up to May 8, 1934, the date of the meeting of the State Association. Let us all work together for a large increase in our membership in order that we may truthfully say that the Mississippi Medical Association can speak authoritatively for the profession in the State of Mississippi.

J. W. D. Dicks,
President.

Natchez,
February 10, 1934.

CALENDAR

SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CHICKASAW COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

CLAIBORNE COUNTY MEDICAL SOCIETY:

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Alcazar Hotel, Clarkedale.

DELTA MEDICAL SOCIETY: April, Cleveland.

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July, and October, Hernando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December, Meridian, 3 P. M.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY: First Wednesday of each month, Bay St. Louis, Pass Christian, Gulfport or Biloxi, 7:30 P. M.

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July and October, Natchez, 2 P. M.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Hotel Vicksburg, Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, Pascagoula, 7:30 P. M.

MONROE COUNTY MEDICAL SOCIETY: Second

Tuesday of each month, alternates between Aberdeen and Amory.

NORTH MISSISSIPPI MEDICAL SOCIETY:

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY: Third Tuesday of March, Pontotoc.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June, alternates between Hattiesburg and Laurel, 3 P. M.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 P. M. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, Wesson, Tylertown, Monticello or Brookhaven, 12:30 P. M.

WEBSTER COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

WINONA DISTRICT MEDICAL SOCIETY:

MISSISSIPPI STATE HOSPITAL ASSOCIATION: Joint meeting with the State Hospital Associations of Arkansas, Louisiana and Tennessee, May 7, Natchez.

MISSISSIPPI STATE MEDICAL ASSOCIATION: May 8, 9 and 10, Natchez.

MEMBERSHIP

Below are given the number of white physicians in the nine districts and the eighteen component societies, the number of members of the Association as of February 5, 1934, and the percentages of membership. The number of physicians is taken from the "Roster of Mississippi Physicians" for 1934 as compiled by the State Board of Health. The number of members was furnished by Dr. T. M. Dye, secretary of the Mississippi State Medical Association.

It will be noted that the membership percentage on February 5 was only slightly below the percentage for the entire year of 1933, being 55.3 as against 58.1 for last year. Some secretaries' reports are apparently missing. It is to be expected that the membership by next month will show a decided rise.

STANDING BY DISTRICTS

District and Councilor	Number of Physicians	Number of Members	Per Cent Members
1. Third—M. W. Robertson.....	215	176	81.9
2. Eighth—W. H. Frizell.....	121	83	68.6
3. First—J. W. Lucas.....	240	148	61.7
4. Ninth—D. J. Williams.....	69	38	55.1
5. Fifth—W. H. Watson.....	237	110	46.4
6. Seventh—Joe E. Green.....	160	72	45.0
7. Second—L. L. Minor.....	109	47	43.1
8. Fourth—T. J. Brown.....	86	35	40.7
9. Sixth—H. Lowry Rush.....	130	47	33.1
TOTALS	1,367	756	55.3

STANDING BY SOCIETIES

Society	Number of Physicians	Number of Members	Per Cent Members
1. Pike County.....	26	26	100.0
2. Claiborne County.....	7	6	85.7
3. Jackson County.....	12	10	83.3
4. Northeast Mississippi.....	215	176	81.9
5. Homochitto Valley.....	50	35	70.0
6. Issaquena-Sharkey-Warren	53	35	66.0
7. Clarksdale & Six Counties....	79	52	65.8
8. Delta	161	96	59.6
9. North Mississippi.....	85	47	55.3
10. Harrison-Stone-Hancock.....	57	28	49.1
11. Tri-County.....	45	22	48.9
12. South Mississippi.....	153	70	45.8
13. Winona District.....	86	35	40.7
14. Central.....	177	69	39.0
15. East Mississippi.....	119	46	38.7
16. Clarke-Wayne.....	18	3	16.7
17. DeSoto County.....	12	0	0.0
18. Tate County.....	12	0	0.0
TOTALS	1,367	756	55.3

LET'S FOLLOW THE EXAMPLE OF PIKE COUNTY!

COMMUNITY HOSPITALS

The bill to provide for the equitable care of the charity sick requiring hospitalization in community hospitals, as sponsored by the Mississippi State Medical Association and the Mississippi State Hospital Association has been introduced in the Legislature with more than seventy co-signers in the House and twenty-seven in the Senate. The Committee on Community Hospital Legislation of the State Medical Association and the Committee on Community Hospitals of the State Hospital Association have spent three years studying, proposing and educating the public and it is believed are presenting a reasonable and unselfish solution of the hospital care of charity patients. The members of these committees have worked untiringly and deserve every praise from the associations they represent. It is to be confidently hoped that success for their efforts may be announced in our next number.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The State Hospital Associations of Arkansas, Louisiana and Tennessee have accepted the invitation of the Mississippi State Hospital Association to meet in joint session at Natchez, May 7. Each hospital association will have its own individual meeting in the forenoon of that day. There will be a joint session in the afternoon with each association responsible for a part of the program. A banquet will be held at night with speakers from national associations. Dr. Bert W. Caldwell, executive secretary of the American Hospital Association, will be present and take part in the proceedings.

The Mississippi State Hospital Association was

represented by its secretary at the annual dinner and conference given by the president and board of trustees of the American Hospital Association in honor of the officers of the state and regional hospital associations at the Palmer House, Chicago, February 13. There was extensive discussion of important problems and developments of interest to the hospital field.

The Mississippi representative also attended the meetings of the Council on Medical Education and Hospitals of the American Medical Association at Chicago on February 12 and 13.

Dr. R. J. Field, president of the Mississippi State Hospital Association, has announced the appointment of Dr. H. A. Gamble, Greenville, as chairman of the Committee on Legislation.

SOUTHERN MEDICAL ASSOCIATION



Dr. Harvey F. Garrison, Jackson, has been appointed the member of the Council of the Southern Medical Association from Mississippi for a regular Council term of five years, the appointment having been announced recently by the President, Dr. Hugh Leslie Moore of Dallas, Texas. Dr. Garrison succeeds Dr. Inman W. Cooper, Meridian, who, having served the constitutional limit, was not eligible for reappointment. February 6, 1934.

QUAIL DINNER

The really big social event of the year among Delta doctors is the annual quail dinner each January given by Jim Biles and that delightful wife of his down on the high bluff of Cassidy Bayou at Sumner in Tallahatchie County. If you have never been to one of these dinners where Dr. and

Mrs. Biles and their charming daughters and two doctor sons entertain in their sumptuous home then you just don't know what a great time is.

Invitations go out to all sections of the broad Delta land and here they come. Even Sam Eason from somewhere over in the hills found his way down to Sumner and to Mrs. Biles' table. From Cleveland and Rosedale and Greenwood and Clarksdale and Jonestown and Coahoma and all the neighboring towns round about! Nobody fails to come unless he has smallpox or encephalitis.

One year when Cassidy Bayou got to be about twelve miles wide and one mile deep we had to leave our cars and finish the trip in boats which were tied up in the front yard. We found a levee built around the house and a gasoline engine busy pumping the water out. But nothing inside the house got wet nor diluted.

Seventy-five fat, juicy quail are prepared for every thirty guests (I came near saying thirsty guests, but nobody gets thirsty at Jim Biles'). One of the rich experiences in ADDITION to the eating is the rich flow of wit from Will Vardaman. It's worth a fifty-mile ride down there just to listen to this inimitable man even if you didn't get to the table at all. Long live the Biles family!

T. M. Dye.

Clarksdale,
February 5, 1934.

ADAMS COUNTY MEDICAL SOCIETY

Call meetings of the physicians of Adams County were held on December 18 and January 23 for the purpose of organizing an Adams County Medical Society. Dr. E. E. Benoist was elected president, Dr. H. A. Whittington, vice-president, and Dr. W. K. Stowers, secretary-treasurer. A fee schedule was prepared and submitted to the local Federal Emergency Relief Administration Director to be used as a basis for calculating fees for the treatment of indigent sick in Adams County.

The following committees were appointed by the chair:

Medical Advisory Board—Dr. R. D. Sessions, Chairman; Dr. Wallace Smith, Dr. J. S. Ullman.

Committee on By-Laws—Dr. J. S. Ullman, Chairman; Dr. L. S. Gaudet, Dr. E. E. Benoist.

Lucien S. Gaudet,
County Editor.

Natchez,
February 8, 1934.

CENTRAL MEDICAL SOCIETY

The February meeting of the Central Medical Society met in the convention hall at the Robert E. Lee Hotel, Tuesday, February 6, with 50 members and guests present.

The scientific program was begun with a most interesting case report. The patient, white, female, old, had consulted Dr. F. E. Rehfeldt for pain in the neck, left arm, side, unable to swallow food, pain after eating, chest felt full, heart "troubled her". Routine examination and tests negative except for jaundice. Roentgenograms made by Dr. Henderson showing the stomach to be pushed up into the chest cavity were shown and explained. Patient willing to have operation. Exploratory operation performed by Dr. Rehfeldt showed two-thirds of stomach had slipped through the diaphragm and the entire hand could be slipped into the mediastinal space. Adhesions were so great, unable to extract stomach. Rubber tube was put in. Patient died three days later from a myocardial disturbance, it is supposed. Dr. Henderson is of the opinion that gastro-inguinal hernias are far more common than we realize, especially in the Jewish race.

Dr. Frank Hagaman's case report dealt with the case of a negro woman on whom he had performed an operation for carcinoma of the stomach in 1933. At time operation was done, patient was unable to retain her food. Under general anesthesia, a general resection of the stomach was done. Convalescence was good, patient eats well and is able to do all of her work. The main reason that the operation has proved so successful is that a valve-like action was produced, which is sometimes very hard to accomplish after one of these operations. Dr. Hagaman showed several roentgenograms made at different intervals and explained them as he discussed the case. The patient was also present when the case was discussed.

Dr. R. E. McLean, a new member, recently moved to Jackson from New York City, read a paper on "Urticaria and Angioneurotic Oedema". His paper represents a search through the literature on urticaria and angioneurotic oedema since 1900 and mentions a multiplicity of supposed causes and of supposed treatments found, together with one specific case reported cured by a specific treatment: Bacillus coli vaccine, mixed. That treatment has been used by the authors since 1915 but has not been reported because a proven scientific basis for the action of the vaccine had not been obtained. Fifty-three cures are reported on approximately as many cases of the condition, although exact records of the cases in the series was not offered. It suggests the use of the vaccine therapy in the so-called idiopathic variety of the diseases. Dr. McLean's paper was freely discussed by Drs. Rembert, Womack, E. L. Green, and L. W. Long, with Dr. McLean closing.

The second paper was given by Dr. Robin Harris on "Association of Scintillating Scotoma and Nasal Accessory Sinus Disease." In this paper Dr. Harris attempted to show that scintillating scotoma

is extremely common in the sinus patient, especially in the chronic pan-sinusitis of long standing. Dr. Hughes made a brief comment on this paper.

Dr. W. E. Noblin made a short talk on the federal relief program in which he said that the allotments for medical attention were going to be lessened and urged all doctors doing any work for the C. W. A. to limit their services to emergency work. A motion was made by Dr. Noblin to the effect that all doctors giving anesthetics should be paid a fee of \$2.50 for their services. This motion was seconded and referred to the advisory board of medical relief of the C. W. A.

Drs. D. T. Brock and F. F. Smith were elected to membership.

At the conclusion of the program, the Society enjoyed delicious sandwiches and ice cold beer and Coco-Cola with Patterson's Pharmacy and the Plaza Drug Store as co-hosts.

Lawrence W. Long,
Secretary.

Jackson,
February 11, 1934.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at Hotel Vicksburg on February 13, with 15 members and one guest in attendance. President W. H. Scudder presided. The scientific program included the following:

Clinical Case for Discussion and Diagnosis.—Intestinal Obstruction Caused by Eating Clay (Pica).—Dr. J. A. K. Birchett, Jr.

The Common Cold:

Introduction by the Chairman, Dr. Birchett, Jr.
Symptoms and Diagnosis.—Dr. G. M. Street.

Differential Diagnosis.—Drs. H. H. Haralson and E. H. Jones.

Etiology.—Dr. L. J. Clark.

Pathology.—Drs. S. W. Johnston, G. P. Sanderson, and D. A. Pettit.

Predisposing Causes.—Drs. N. B. Lewis and W. P. Robert.

Prevention.—Drs. F. M. Smith and S. W. Johnston.

Treatment.—Drs. G. W. Gains and H. H. Johnston.

Complications.—Drs. W. A. Smith and J. D. West.

General Discussion.—Drs. W. H. Scudder and F. M. Smith.

Exchange of essayists was announced as follows: For March—Central Medical Society, Dr. T. E. Wilson, Jackson, for the Central Medical Society; Dr. W. P. Robert, Vicksburg, for this Society; For July—Tri-Parish Medical Society, Dr. B. R. Burgoyne, Lake Providence, Louisiana, for

the Tri-Parish Society; Dr. S. W. Johnston, Vicksburg, for this Society.

A resolution commending Hon. P. C. Canizaro for his support of the Legislative Bill to abolish the present law which prevents the garnishment of salaries paid by a municipality, county or state. Introduced by Dr. S. W. Johnston, and passed.

A similar resolution commending Hon. J. H. Cullin for support of Legislative action exempting physicians from the sales tax. Introduced by Dr. G. P. Sanderson and passed.

The next meeting of the Society will be at Hotel Vicksburg on Tuesday, March 13, at 7 p. m. Dr. P. S. Herring, Vicksburg, is chairman, and the program will include a paper on "The Blood Supply of the Heart", by Dr. T. E. Wilson, Jackson and two papers by members of this Society. The committee in charge of the program consists of Drs. P. S. Herring, C. J. Edwards, H. H. Haralson, N. J. Lewis, D. A. Pettit, and H. B. Wilson.

MONTGOMERY COUNTY MEDICAL SOCIETY

The physicians of Montgomery County met in Winona January 16 and organized a county medical society. The following officers were elected: Dr. E. W. Holmes, president; Dr. C. P. Hemphill, vice-president; Dr. J. O. Ringold, secretary and treasurer. Dr. E. C. O'Cain was elected delegate to the State Medical Association and Dr. E. W. Holmes alternate.

The following physicians were present: Dr. C. P. Hemphill, Sweatman; Dr. S. S. Caruthers, Duck Hill; Dr. J. H. Toole, Stewart; Dr. J. O. Ringold, Winona; Dr. F. L. Harris, Winona; Dr. E. C. O'Cain, Winona; Dr. J. P. Synott, Winona; Dr. E. W. Holmes, Winona.

J. O. Ringold,
Winona,
January 18, 1934.
Secretary.

WASHINGTON COUNTY MEDICAL SOCIETY

The Washington County Medical Society held its first meeting in January. The meeting was called to order by Dr. D. C. Montgomery, president. Of the 36 doctors in the county 16 were present. Those attending were S. L. Lane, Hollandale; R. A. Haggard, Arcola; R. L. Sanders, Leland; T. C. Oliver, Leland; R. C. Finlay, Glen Allen and T. B. Lewis, L. C. Davis, O. H. Beck, H. A. Gamble, D. C. Montgomery, C. P. Thompson, J. B. Hirsch, J. Shackelford, J. A. Beals, and J. G. Archer, all of Greenville.

John G. Archer,
Greenville,
February 6, 1934.

CHICKASAW COUNTY

The staff meeting of the Houston Hospital was held jointly with the medical societies of Ponto-

toc, Calhoun, Chickasaw and Webster Counties, Thursday night, January 25, in the dining room of the new Masonic Temple at Houston. There were present sixty doctors and the welfare workers from five counties.

Guests of the evening were Dr. T. M. Dye, secretary of the Mississippi State Medical Association; Dr. J. M. Acker, Jr., secretary of the Northeast Mississippi Thirteen Counties Medical Society; Drs. R. B. Caldwell, C. M. Speck and W. H. Anderson of the Committee on Community Hospital Legislation of the Mississippi State Medical Association; Dr. J. P. Wiggins, Cleveland; Dr. J. D. Biles, Sumner; Miss Hardin, welfare worker of Monroe County; Miss Johnson, welfare worker of Pontotoc County; Miss Robson, welfare worker of Calhoun County; Miss Gray, welfare worker of Webster County; and Miss Lockhart, welfare worker of Chickasaw County. The latter were introduced by the presidents of the County Societies of the counties represented.

Dinner was served at 7:30 P. M. by the hospital nurses. A splendid entertainment program of musical and reading numbers was rendered by Misses Virginia Campbell, Peggy Mitchell, Roberta Donaldson and Hazie Rodgers of Pontotoc.

Dr. Felix J. Underwood, executive officer of the Mississippi State Board of Health, was on the program for the meeting, but was unavoidably detained and sent a telegram to that effect, which was read at the meeting.

The subject for discussion at this meeting was, in the main, the contract the Mississippi State Medical Association has with the F. E. R. A. Dr. T. M. Dye represented the state medical association and gave a very interesting talk on the work of the Association and explained in detail the contract with the F. E. R. A., which was further discussed by all the welfare workers present and a number of visiting and local doctors.

Short and interesting talks were made by Drs. Wiggins, Acker, Anderson, Caldwell, Speck and Biles.

Dr. J. M. Hood, president of the Northeast Mississippi Thirteen Counties Medical Society, closed the meeting with an interesting talk in which he extended an invitation to the county medical societies present to have as many meetings as they could at Houston the last Thursday night of each month.

W. C. Walker,
County Editor.

Houlka,
February 10, 1934.

COPIAH COUNTY

Dr. Lee Rhodes Reid, Rockport, Copiah County, will be away for a few months doing post graduate work.

Dr. C. R. McKee, Hazelhurst, sustained several minor contusions, when his car skidded in loose gravel and turned over.

W. L. Little,
County Editor.

Wesson,
February 5, 1934.

DESOTO COUNTY

Our membership for this year will be materially increased over the past year. Every active doctor is a member with one exception. I have hope of getting him.

Dr. Sidney Eason, secretary of the Tate County unit always has a large percentage of members. He is active as usual—Tate County has a good record for membership and Eason intends to maintain it.

Dr. A. H. Little, secretary of the North Mississippi Medical Society has been diligent in business. We look expectantly forward to a marked increase in membership in this fine medical organization.

Before this is printed the meeting of the Mid-south Medical Assembly in Memphis will have passed into history. A large attendance is expected and an interesting program has been arranged. Dr. P. W. Rowland of Oxford is president. Dr. Rowland was a charter member of the old Tri-State Medical Association, the predecessor of the present Assembly. Dr. Rowland has been earnestly active in medical circles and organizations for a number of years.

L. L. Minor,
County Editor.

Memphis, Tenn.,
February 10, 1934.

GRENADA COUNTY

All is well with our county group at this time with no changes in personnel.

There is very little sickness but business conditions have improved 25 to 35 per cent. We are hopeful that the Legislature will give up the relief on privilege tax that we so justly deserve.

Persuant to resolutions by the Council adopted November 9, 1933, the doctors of Grenada met in the office of the Grenada Clinic on December 21 and organized as the Grenada County unit of the Winona District and Mississippi State Associations. Officers were elected as follows: President, Dr. R. A. Clanton, Grenada; vice-president, Dr. F. B. Coats, Hardy; secretary-treasurer, Dr. J. K. Avent, Grenada; censors, Dr. E. C. Rouse, Graysport and Dr. H. T. Rogers, Grenada.

Delegate to State Association.—Dr. T. J. Brown, Grenada.

On December 21 at 1 P. M. a very interesting session of Winona District Society was had at Winona. After an enjoyable luncheon at Hotel Wis-

teria a splendid program was presented. Those having good papers were Dr. S. S. Caruthers of Duckhill, the retiring president, Dr. B. S. Guyton of Oxford and Dr. M. E. Arrington of Vaiden. About 35 were in attendance. Officers for 1934 were elected as follows: President, Dr. J. James. Ackerman; secretary and treasurer, Dr. P. B. Erumby, Lexington.

On January 16, I visited with the doctors of Eupora for a few hours. A good spirit prevails in that county. Altogether there is a more promising outlook for the 4th Councilor's District.

T. J. Brown,
County Editor.

Grenada,
February 12, 1934.

KEMPER COUNTY

Through the recent death of Dr. W. W. Holliday of Oak Grove, Kemper county has lost her oldest and most venerable physician. He labored not for fame nor worldly gain and I wish a biographer might write the story of his life, for I know it would inspire those of us left behind to emulate his long years of unselfish labor.

Dr. Cook of Preston is gradually improving from an illness of several months' duration.

A. M. McCarthy,
County Editor.

Electric Mills,
February 8, 1934.

LEFLORE COUNTY

We deeply sympathize with Dr. and Mrs. E. W. Hunter in the loss by death of their granddaughter, Jane Page Steele, aged 2 years, at their home here January 10.

On January 18 Dr. Felix Underwood of Jackson attended the meeting of the State Veterinary Association in Greenwood, and addressed them on "The Relation of Bovine Tuberculosis and Human Tuberculosis." Dr. S. L. Brister, Jr., of Greenwood also addressed the association on "Tuberculosis in the Home."

Dr. Lee K. Mayfield, formerly of this place is now located at Memphis, Tenn., 548 S. Highland Street.

Dr. T. G. Hughes was called to Greenwood from his home in Clarksdale on January 24 to see his mother, Mrs. J. R. Hughes, who died January 25 and was buried here the next day. His aged father, the Rev. J. R. Hughes, will live with Dr. Hughes in Clarksdale.

Dr. J. D. Biles of Sumner entertained his friends with a bird supper January 24 at 7 P. M. There were 32 doctors from the North Delta and Northeast Mississippi present, besides other guests. We had a most enjoyable evening, a splendid supper and program. The doctors from Leflore County pres-

ent were Drs. I. B. Bright, W. E. Denman, F. M. Sandifer and W. B. Dickins.

Dr. George Baskerville visited in Memphis on January 23.

On December 21, Miss Frances Barnwell Johnson of this place and Mr. Edward McLeod Meek of West Point were married in New Orleans, where they both were attending school, Miss Johnson at Sophie Newcomb and Mr. Meek at Tulane, where he is a senior medical student, and will graduate in June.

Garland Holloman of Millsaps College, Jackson, spent the week-end February 3 and 4, with his parents, Dr. and Mrs. T. B. Holloman at Itta Bena.

Dr. D. C. Montgomery of Greenville was a visitor to Greenwood, February 7.

Leflore County doctors were honored with a buffet supper February 7, at the Greenwood Country Club, given by the Auxiliary to the Leflore County Chapter of the Delta Medical Society. During the supper a musical program was given. A violin number by Miss Marjorie Yates accompanied by Miss Mary Helen Graves. Miss Marion Dickins, also accompanied by Miss Graves, sang two numbers. Mrs. I. B. Bright, Jr., sang "The Old Spinning Wheel". Little Miss Mona Adams entertained with a novelty song and dance number, accompanied by Miss Clara Tupper. After supper bunco was enjoyed with trophies for success being won by Dr. J. A. Crawford, and Mrs. F. M. Holloman.

Dr. Russell A. Hennessey of Memphis, Tenn., was a guest of Mr. Ellett Lawrence of this city, February 6 and 7.

W. B. Dickins,
Greenwood,
February 8, 1934.

MONROE COUNTY

I have just glanced through the February number of the *Journal* and it is gratifying to note the reports from all parts of the state that our membership is increasing in every county. This, of course, is as it should be. I cannot understand how any man can get his own consent to remain outside of the medical associations in his state and county and try to practice medicine. The benefits are so great that a selfish interest alone, it seems to me, would impel him to join and co-operate. Again it is so impossible for him to render the best possible service to his clientele if he fails to avail himself of the help that is his for the taking. But why waste time in this line of reasoning? Those who may read this comment know all this as well as I and those who are not members will not see what I am writing. But I am happy to believe that we shall have nearly one hundred per cent membership this year. It must make our fine president feel a bit proud of his achievement in this line. All honor to Dr. Dicks and his co-work-

ers. I am wondering, however, if the fact that a few more dollars in the offing did not weigh in the premises? However, the newcomers are right welcome and I feel that many splendid men have joined our ranks. Again I say, thrice welcome!

Two North Mississippi doctors are being buried today. One of these is my neighbor—both were my friends. Dr. I. G. Walden was born and reared and has lived all his life within ten miles of Amory. He had many friends and will be sorely missed by them. Dr. Sydney Chastain lived at Potts Camp, near Holly Springs, but his relatives live in Monroe, Lee and Itawamba Counties. He is being buried in Corinth. I extend to their friends condolence and may they rest in peace. They were both members of the Baptist Church.

Dr. G. T. Tubb of Aberdeen, one of my dear friends, has been sick recently, but I am delighted to know that he is much better now.

I was made glad yesterday afternoon by a nice visit from my good friend, Dr. Jamie Acker, also of Aberdeen. His visits are always more than welcome. While in my office we talked of the approaching quarterly meeting of our local or district society. This meeting will be held on March 20 at Pontotoc. This will be the first time we have held one of these meetings in that fine old historic town. Pontotoc is the home of some of the state's best doctors. My loyal friend, that princely gentleman, Dr. C. D. Mitchell, was born and reared there. May I say to him that we shall expect him to meet with us when we foregather there in March.

Dr. W. N. Reed, my office associate, has had some trouble recently, with his eyes. He made a trip to Memphis that he might have the advice of one of the South's leading eye men. I am happy to say that conditions were not so distressing as many of his friends were led to fear.

Dr. M. Q. Ewing, also of Amory, has been complaining of eye trouble too.

CWA has been employing quite a few of our people recently. This has been a great help to many, who, otherwise, would have been dependent upon charity. Among the projects that have been undertaken here is an airport. We hope to be placed on a regular mail route.

Weather conditions remain wonderful. It is true that we have had some cold days, but there has been no rain or snow to speak of. Yesterday was "ground hog day", but there was not a cloud to be seen. If the old saying is true, we shall have bad weather yet.

One month of the new year is gone and it will soon be time for crops to be planted again. Our people are facing the future with more hope and courage than they had a year ago. For once, it seems we have a national leader that knows and sympathizes with the masses. The masses have

faith in him and will follow his leadership. I wonder if this may be, indeed, the "Year of Jubilee?"

Here is hoping good "luck" to you all.

G. S. Bryan,
County Editor.

Amory,
February 3, 1934.

PONTOTOC COUNTY

Pontotoc, Calhoun and Webster County Medical Societies were invited to meet with the Chickasaw and Webster County Medical Societies at Houston, on January 25. We had quite a number of visitors from other counties. After the business session was over the Chickasaw county doctors entertained with a six o'clock dinner.

Dr. W. P. Webster has moved to Pontotoc county, Houka, R. 3 to take the place of Dr. C. W. Paterson who has moved to West Arkansas.

Quite a number of the Pontotoc County doctors are planning to go to the Mid-South Post Graduate Medical Assembly in Memphis next week.

Dr. I. P. Carr, Clarksdale, was a visitor to relatives in Pontotoc one day last week. Will ring off for this time.

R. P. Donaldson,
County Editor.

Pontotoc,
February 7, 1934.

WARREN COUNTY

Dr. H. B. Goodman, son of Dr. and Mrs. H. S. Goodman of Cary, goes to the Vicksburg Sanitarium where he has accepted the position of house physician. Dr. Goodman is a recent graduate of Tulane University Medical Department. Since graduating in medicine he has served an internship in Charity Hospital, New Orleans, and Mississippi State Charity Hospital, Vicksburg.

Dr. G. Y. Hicks of this city, son of the late Dr. G. Yerger Hicks, has, we are advised, accepted the position of house physician at the State Charity Hospital. The late Dr. G. Yerger Hicks was superintendent of this hospital for a number of years. Ye editor was an interne at this institution when the elder Doctor Hicks was co-superintendent with the late Dr. S. D. Robbins.

It is with pleasure we note the news items in the daily press, advising that Dr. B. B. Martin, Jr., of this city has been granted a license to practice his profession in the State of Louisiana. This license was granted by the State Medical Licensing Board following routine examinations on all required subjects. Dr. Martin at present is house physician at Baptist Hospital, New Orleans, Louisiana.

The Vicksburg Hospital at its February staff meeting announced an addition to the staff of a man to do internal medicine in the person of Dr.

William K. Purks from the Peter Bent Brigham Hospital, Boston, Mass. Dr. Purks is expected to assume his duties within the month.

Warning! To the profession in and about Port Gibson, Dr. Jack Parsons of Vicksburg is down there somewhere "learning to shoot." Keep the children in.

Dr. J. A. Milne, field agent for the State Board of Health of Mississippi, was in our city this month checking up on our local health department, advising of and explaining the future policies and program of the State Board of Health.

Dr. F. Michael Smith, director of the Warren County Health Department, made a visit back to his old home at Kilmichael, Montgomery County, during the month of January. He makes an annual pilgrimage back to the old home of yesterday years, that "old acquaintance may not be forgot." However, he notes with sadness the inevitable changes in fields and faces. The doctor would not be arrogant but feels he has a right to speak with pride of the contributions this little hill county has made to the medical as well as other honorable professions. Within the last three or four decades it has given to us three Doctor Armstrongs, four Doctor Frizells, five Doctor Applewhites, two Doctor Flowers, three Doctor Townsends, etc., but only one *Doctor "Smith."*

As a result of the efforts of the Issaquena-Sharkey-Warren Counties Medical Society to launch a methodical and effectual malaria control program for the city of Vicksburg, the city was recently visited in a tour of inspection by Mr. J. A. LaPrince of Panama Canal fame, senior engineer of the United States Public Health Service, Mr. Nelson Rector, state sanitary engineer, and Dr. George Riley, state malariologist.

It comes to ye editor over the "grape vine line," or some other equally authentic source that there are a number of doctors, health officers, in our state, that are making a special study of the drama; that they, are oftentimes heard paraphrasing the immortal lines of one of Shakespeare's well known characters, and are "orating" continually" to be or not to be? That is the question. Whether it is nobler to suffer the pains of an outraged conscience, endure the present wrongs and injustices, or end it all and fly to evils we know not of." Yes, "brethren" 1933 was a pretty tough old year and many "factors" contributed to its toughness other than "the cares that infest the day." The League of Nations set a precedent that made it perilous to hold or endeavor to hold conferences. It just seems Dante's Inferno or everybody's Hades reopened in this eventful year, and has made no effort to close. It seems the "cruel fates" decreed that all the hate and jealousy of all the gods should be poured out on many of the disciples of Hygeia and Esculapius,

and there was no sacrificial passover blood sprinkled on the lintels or doorposts of any man. Here is hoping that the remainder of 1934 may bring us saner and happier days.

Dr. H. T. Ims,
County Editor.

Vicksburg,
February 7, 1934.

WASHINGTON COUNTY

Dr. and Mrs. L. C. Davis, Greenville, attended the Kiwanis conference in Jackson this past month.

Dr. R. C. Finlay, Glen Allen, was in Greenville mingling among his many friends.

Dr. R. N. Crockett, Winterville has been making rather frequent visits to Greenville lately much to the delight of his many friends.

Dr. T. C. Oliver, Leland, has visited rather frequently in Greenville this past month. Dr. Oliver gives good news of the wonderful improvement of his son Ferris who is ill at Sanatorium.

Dr. Virgil Payne and family of Greenville have recently moved to Pine Bluff, Ark. to make their home. Their Greenville friends regret very much their moving away.

Dr. T. B. Lewis' home, Greenville, was the scene of a most delightful party given by Mrs. Lewis in honor of Mrs. Douglas of Memphis.

Miss Hunter Miller and Miss Louise Miller, daughters of Dr. and Mrs. H. R. Miller of Lamont are recuperating from recent illnesses, much to the joy of their many friends.

Mrs. Jimmie Franklin, Jackson, formerly Miss Evanelle Lewis, daughter of Dr. and Mrs. T. B. Lewis, Greenville, gave a most delightful concert at Mrs. Paul Gambles home for the Greenville Federated Club. Mrs. Franklin has a superb lyric soprano voice, and is one of Mississippi's outstanding artists.

Dr. F. M. Acree, Greenville, president of the local Rotary Club and Dr. L. C. Davis, Greenville, president of the local Kiwanis Club, are kept busy trying to keep each club outdoing the other.

The following doctors and wives attended the President's Ball at Greenville, January 30: Dr. and Mrs. A. G. Payne, Dr. and Mrs. H. A. Gamble, Dr. and Mrs. L. C. Davis, Dr. and Mrs. F. M. Acree, Dr. and Mrs. J. F. Lucas, Dr. and Mrs. J. B. Hirsch and Dr. J. G. Archer. Dr. A. G. Payne was one of the honored few taking part in the quadrille.

Dr. and Mrs. C. P. Thompson, Greenville, entertained at luncheon the Washington County Board of Supervisors, Sheriff Ben Gilbert, Deputy Sheriff B. B. Payne and Chancery Clerk Howard Dyer.

Dr. and Mrs. C. P. Thompson visited their daughter, Dorothy, who is a junior at Ole Miss:

John G. Archer,
County Editor.
Greenville,
February 6, 1934.

WINSTON COUNTY

Dr. W. W. Parks made a trip to Memphis this week with a patient.

Dr. E. L. Richardson, county health officer, has been ill this week, but we are glad he is better at this time.

Dr. L. T. Parks has been in the city this week on business.

Dr. S. W. Pearson recently took a patient to Memphis for treatment.

Dr. W. B. Hickman made a trip to South Mississippi last week.

Dr. C. A. Kirk is a member of the C.W.A. of this county and frequents our city.

We all are inspired with greater optimism than we have been before.

M. L. Montgomery,
County Editor.

Louisville,
February 7, 1934.



MRS. HARVEY F. GARRISON
Jackson
President, 1928-1929

Mrs. Garrison's position is unique in that she is a niece of a doctor, a grandniece of a doctor, a sister of two doctors, the wife of a doctor, the mother of a doctor, and has four cousins who are doctors. Elizabeth Bethea Garrison was born at Hebron,

Mississippi, was educated in the state schools and taught for several years in the public schools.

In 1903 she was married to Dr. Harvey F. Garrison, of Seminary, Mississippi.

Mrs. Garrison joined the Woman's Auxiliary to the Mississippi State Medical Association at its second meeting after organization, which was held in Jackson, 1924. Since that time she has been active in the work of the auxiliary. At the 1924 meeting she was elected councilor of the fifth district. She served as president of the state auxiliary 1928-1929, as state historian 1932-33, and as president of the Woman's Auxiliary to the Central Medical Society 1933-1934.

Mrs. Garrison is also active in church and civic organizations, having served as councilor and president of the Parent-Teachers Association of Jackson.

THE WOMAN'S AUXILIARY
TO THE
MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank Van Alstine, Jackson.
President-Elect—Mrs. Henry Boswell, Sanatorium.
Secretary—Mrs. Adna Wilde, Jackson.
Treasurer—Mrs. E. C. Parker, Gulfport.
Press and Publicity—Mrs. Leon S. Lippincott, Vicksburg.

HISTORY OF THE WOMAN'S AUXILIARY
TO THE
MISSISSIPPI STATE MEDICAL ASSOCIATION
(Continued)

Gulfport was the scene of the Sixth Annual Convention of the Auxiliary to the Mississippi State Medical Association, May 15, 1929.

In the absence of Mrs. Harvey F. Garrison, president, and the president-elect, Mrs. M. H. Bell, Vicksburg, both being absent because of serious illness, the council appointed the parliamentarian, Mrs. Dan J. Williams, Gulfport, to preside.

The outstanding items of work were health education and activities promoted in connection with the health camp, increasing the \$121 left from the flood relief fund to \$150 and used in sending three children to the health camp; cooperation with several county health officers in assisting with food and clothing in a cyclone area; placing several subscriptions to Hygeia.

Dr. W. H. Frizell presented the auxiliary with a beautiful gavel made of Mississippi black walnut from a part of the old Capitol building, and carved by a state convict. It is bound by a silver band carrying the inscription, "Presented to the Ladies Auxiliary to the Mississippi State Medical Association, 1929, by Dr. W. H. Frizell."

Officers for 1929-1930 were elected as follows:
President, Mrs. M. H. Bell, Vicksburg.

President-Elect, Mrs. L. L. Polk, Purvis.

First Vice-President, Mrs. F. L. VanAlstine, Jackson.

Second Vice-President, Mrs. A. Street, Vicksburg.

Third Vice-President, Mrs. W. J. Anderson, Meridian.

Fourth Vice-President, Mrs. A. B. Harvey, Tyler-town.

Recording Secretary, Mrs. Henry Boswell, Sanatorium.

Corresponding Secretary, Mrs. W. H. Parsons, Vicksburg.

Treasurer, Mrs. G. D. Mason, Lumberton.

Parliamentarian, Mrs. Dan. J. Williams, Gulfport.

Councilors

First District, Mrs. M. L. Cockerham, Gunnison.

Second District, Mrs. J. M. Wright, Hernado.

Third District, Mrs. A. H. Little, Oxford.

Third District, Mrs. W. H. Curry, Eupora.

Fourth District, Mrs. H. L. McCaleb, Yazoo City.

Fifth District, Mrs. W. G. Gill, Newton.

Sixth District, Mrs. Albert Hand, Shubuta.

Seventh District, Mrs. J. W. D. Dicks, Natchez.

Eighth District, Mrs. W. A. Dearman, Gulfport.

WOMAN'S AUXILIARY TO THE WINONA DISTRICT MEDICAL SOCIETY

On Wednesday, Jan. 31, Mrs. J. K. Avent, Grenada, entertained the Woman's Auxiliary in her home. After a luncheon the meeting was called to order with the president, Mrs. Avent in the chair. Two new members were present, Mrs. Rodgers and Mrs. Sam Caruthers. Mrs. Clanton discussed the interesting articles from Hygeia. Mrs. O'Cain gave a vocal solo with Mrs. Sam Caruthers accompanying her at the piano. Mrs. O'Cain is the chairman of the program committee for the remainder of the year.

Mrs. S. S. Caruthers,
Press and Publicity Chairman.

Duck Hill,

February 2, 1934.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The Woman's Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society held its regular meeting for January in the Hotel Vicksburg. A delightful luncheon was enjoyed by a large number of members. Mrs. H. S. Goodman of Cary, newly elected president presided. Mrs. Frank L. Van Alstine, Jackson, our state president was guest speaker for the program. She made a number of helpful suggestions for local and state work. Mrs. Goodman announced the chairmen and members of the various committees for the year.

Judging from the attendance and enthusiasm at

the meeting this year promises to be a most successful one. Those in attendance were: Mrs. H. S. Goodman, Mrs. W. C. Pool, Cary; Mrs. Frank L. Van Alstine, Jackson; Mrs. L. E. Martin, Anguilla; Mrs. W. A. Smith, Pantherburn; and Mesdames S. W. Johnston, Guy Jarratt, Preston Her-ring, W. H. Parsons, A. Street, F. M. Smith, H. H. Haralson, Jack Ewing, B. B. Martin, Leon S. Lippincott, M. H. Bell, Edley Jones, D. A. Pettit, Charles Edwards and Miss Zita O'Leary, Vicksburg.

VICKSBURG SOCIAL NOTES

Mrs. B. B. Martin and daughter Mrs. Robert Dent are planning to visit New Orleans during Mardi Gras.

Mrs. George M. Street had as her guest for the week end, Mr. and Mrs. Hunter White.

Mrs. Edley Jones visited her mother Mrs. Jiggetts in Canton.

Dr. and Mrs. F. M. Smith spent the week-end in Kilmichael, in Clay County.

Mrs. Haydon McKay of Jackson spent several days visiting her sister, Mrs. E. F. Howard. Mrs. McKay was a delegate to the Council of Church Women held in Vicksburg last week.

Mrs. Morris of Brandon was a guest of her sister Mrs. M. H. Bell, during the meeting of the Council of Church Women.

Mrs. T. H. Sparks of Jackson has been visiting her daughter Mrs. W. H. Parsons.

Mrs. L. J. Clark.

WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

The Woman's Auxiliary to the Central Medical Society enjoyed a delightful luncheon at the Edwards Hotel on Tuesday, February 6, with Mrs. F. L. Van Alstine and Mrs. H. C. Ricks as hostesses, for the first assembling since the holidays. The table arrangement of lovely spring flowers and green calces was particularly fresh and springlike.

Because of illness of the president, Mrs. Harvey F. Garrison, the vice-president, Mrs. F. E. Rehfeldt presided.

The Public Relations and Preventorium Committees reported plans were ready to conduct the essay contest on "The Prevention of Tuberculosis" and the "Work of the Preventorium" in the junior high schools of Jackson.

Because of severe colds, removal of tonsils, and other illness in several of the homes a number of members were unable to be present, but the following responded to roll call: Mrs. D. W. Jones, Mrs. F. E. Rehfeldt, Mrs. H. C. Ricks, Mrs. R. R. Welch, Mrs. N. C. Womack, Mrs. H. C. Sheffield, Mrs. A. L. Monroe, Mrs. R. Harris, Mrs. W. S. Sims, Mrs. F. L. Van Alstine, Mrs. R. R. Halfacre, Mrs. F. J. Underwood, Mrs. C. F. MacKenzie, Mrs. W. L. Hughes, Mrs. W. F. Henderson, Mrs. M. L. Batson, Jackson,

Mrs. Temple Ainsworth,
February 8, 1934. Chairman Press and Publicity.

HONOR ROLL

The following have cooperated in the preparation of the Mississippi sections of our JOURNAL this month:

COUNTY EDITORS: L. S. Gaudet, W. C. Walker, W. L. Little, L. L. Minor, T. J. Brown, A. M. McCarthy, W. B. Dickins, G. S. Bryan, R. P. Donaldson, H. T. Ims, John G. Archer, M. L. Montgomery.—12.

SOCIETIES: Adams County Medical Society, L. S. Gaudet; Central Medical Society, Lawrence W. Long; Issaquena-Sharkey-Warren Counties Medical Society; Montgomery County Medical Society, J. O. Ringold; Washington County Medical Society, John G. Archer; Mississippi State Hospital Association.

—6.

HOSPITALS: Baptist Hospital, L. W. Long; King's Daughters' Hospital, Greenville, J. W. Shackelford; Natchez Sanatorium, L. S. Gaudet; Vicksburg Hospital, W. H. Parsons; Vicksburg Sanitarium.—5.

WOMAN'S AUXILIARY: Mrs. Leon S. Lippincott, Mrs. Harvey F. Garrison, Mrs. S. S. Caruthers, Mrs. L. J. Clark, Mrs. Temple Ainsworth.—5.

OTHERS: J. W. D. Dicks, T. M. Dye, F. J. Underwood, E. R. Nobles, V. B. Philpot, H. F. Garrison, S. W. Johnston, J. A. K. Birchett, Jr., G. C. Jarratt, J. B. Hirsch, H. A. Gamble, R. J. Field.—12.

GRAND TOTAL—40.

THANK YOU!

BOOK REVIEWS

Physical Therapeutic Technic: By Frank Butler Granger, A. B., M. D. 2d ed.; revised by William D. McFee, M. D. Philadelphia and London. W. B. Saunders Company, 1932. pp. 436, illus. Price \$6.50.

The second edition of Granger's work, posthumously revised by William D. McFee, follows closely the lines of the first edition. Chapters are devoted to the therapeutic application of the various electrical currents, light, massage and hydrotherapy. Then follow special chapters on certain diseased conditions in which physical therapy is of special value. Included in these are calcified subdeltoid bursitis, peripheral paralysis, infantile paralysis and the electrosurgical removal of certain accessible benign and malignant conditions.

There are a few statements which the reviewer may question. Electrodesiccation of the tonsils in adults is recommended as "the physical therapeutic treatment of choice". Electrocoagulation however is preferred by most operators today. We have been unable to secure the uniform results reported from the use of autocondensation and saturation in hypertension.

The concluding chapter of 140 pages consists of an index of diseases, alphabetically arranged, in which physical agents have been found of value and are recommended. The physical therapy prescription is given together with specific treatment directions. It will be noted that in almost every condition discussed two or more physical agents are recommended in a definite order for definite reasons. Granger emphasises that all therapeutics should be applied with brains . . . that physical measures are only a part of the triad of medicine, surgery, and physical therapy, and should follow a careful physical and laboratory examination of the patient.

The methods of applying the various physical agents are well described and well illustrated. Granger's book lives as the authoritative expres-

sion of one of the pioneers in physical therapy.

NATHAN H. PÖLMEER, M. D.

Health and Environment: By Edgar Sydenstricker. Mc-Graw-Hill Book Co., Inc., New York, 1933, pp. 217.

This presentation is one of a series of monographs on recent social trends in the United States. This series of monographs was a product of ex-President Hoover's Committee on Social Trends. *Health and Environment* is a surprisingly small book considering the ground it attempts to cover. This is explained by the author when he says "—when one reflects that the really significant, so slowly and painfully accumulated, is not large and can be put in a few pages.—" Had the author indulged in speculation he could easily have padded these few facts, and produced a voluminous treatise. Fortunately he did not, and the result is an authoritative compilation of facts about the relation of health and disease to geographic influences, social status and environment.

MAURICE SULLIVAN, M. D.

Manual of Clinical and Laboratory Technic: By Hiram B. Weiss, M. D. and Raphael Isaacs, M. D. 4th ed. Philadelphia. W. B. Saunders & Co., 1932. 117 pages.

A very useful little manual for third year medical students to follow in working up a ward patient from the clinical and laboratory aspects.

A brief summary of the newer laboratory procedures are given with tables of normal and abnormal findings that together with tables of the nutritive value of foods may be useful to the general practitioner.

Some of the laboratory technic is rather questionable. The Author's method of blood matching by using simple dilutions of whole blood from patient and donor would not be sensitive enough to detect many instances of weak cross agglutination. Again the placing of "Ice of sputum" on a

slide to dry while stirring and holding it over a bunsen burner would be almost an impossible feat to accomplish successfully, and would certainly not compare with the careful selection of appropriate particles for examination. F. M. JOHNS, M. D.

A City Set on a Hill: By C.-E. A. Winslow, Dr. P. H., New York. Doubleday, Doran & Company, Inc., 1934, pp. 367.

In 1922 the Milbank Memorial Fund announced that it would finance a program of health demonstrations in New York State, one in a rural county, one in a medium-sized city, and one in a metropolitan area. In 1931 Prof. Winslow presented in a book a review of the activities carried out in the rural county. "A City Set on a Hill" is a presentation of the program inaugurated in 1923 in the medium-sized city, namely, Syracuse.

The first chapter of the book contrasts the ideals of municipal government of the great cities of the past with those of the present-day American city, with much discredit to the latter. The next two chapters outline the history of Syracuse and the development of the health program in the city. The balance of the book, with the exception of the last two chapters, describe the various activities and administrative units concerned with the development of the demonstration. The last two chapters deal with the financial costs of the project and in general point out the value of the demonstration from the standpoint of saving inhuman lives as well as in dollars. The possible consequences of drastic cuts in health department budgets occasioned by the present financial "depression" are also discussed.

Throughout the book in the evaluation of services and activities of various organizations the shortcomings as well as advancements are noted. Although some standard must be used when making comparisons it appears to the reviewer that the author adhered too rigidly to the American Public Health Association Standards in appraising the various activities.

The book is admirably written as are other publications by Prof. Winslow, and the printing and set-up of the book are excellent. One jarring note is apparent, however, on page 139 where the word "tubercular" is used for "tuberculous."

One is also impressed by the fact that the relationship of the private physician to the public health program is for the most part ignored. One is left to wonder whether the practitioner in Syracuse is lacking in his appreciation of preventive medicine, or if the community health organizations of that city have ignored him in their efforts to stimulate preventive measures in private practice.

This book should find its way into the library of every organization interested in the health problems of medium-sized American cities. City health

officers will find in it many excellent suggestions for improving their own activities. The shortcomings as well as the successes of the Syracuse demonstration are worth careful study. Many of its methods might well be copied by other cities; while others would have to be modified to suit local conditions.

C. C. DAUER, M. D.

The Pregnant Woman: By Porter Brown, M. D. New York. Eugenics Pub. Co. 1933. pp. 174. Price \$2.00.

This is another manual for the expectant mother. It discusses in a plain common sense manner the things she should know, what she should do, and what she should not do. Enough is given regarding pregnancy and labor to enable her to know and understand the situation she is facing. A chapter is included on the common superstitions, and also one on a program of education before marriage. The latter is good, but appears a little out of place in a book entitled *The Pregnant Woman*. The work can safely be recommended to pregnant women as a good practical guide, easy to understand and not burdened with technicalities.

E. L. KING, M. D.

Psychiatry in Medical Education: By Ralph A. Noble, M. D. New York. Nat'l. Comm. for Mental Hygiene, 1933. pp. 58.

This little pamphlet from the National Committee for Mental Hygiene, by Dr. Ralph A. Noble, not only gives many enlightening details as to the teaching, or rather, lack of teaching of Psychiatry in medical schools, but also points out the practical methods and the practical aims which should be maintained in planning a curriculum to include proper Psychiatric teaching. There can be no doubt in the mind of any enlightened physician, certainly not in the minds of any psychiatrists, as to the great need for better understanding of Psychiatry in medical men, nor can there be any doubt as to the great services such an understanding would render them.

E. MCC. CONNELLY, M. D.

PUBLICATIONS RECEIVED

W. B. Saunders Company, Philadelphia: *Modern Clinical Psychiatry*, by Arthur P. Noyes, M. D.

Lea & Febiger, Philadelphia: *A Diabetic Manual, for the Mutual Use of Doctor and Patient*, by Elliott P. Joslin, M. D. *Laboratory Medicine*, by Daniel Nicholson, M. D.

Charles C. Thomas, Springfield: *The Lyophilic Colloid*, by Martin H. Fischer, and Marian O. Hooker.

The Williams and Wilkins Company, Baltimore: *Annals of the Pickett-Thomson Research Laboratory*, by D. R. Thomson.

United States Government Office, Washington: *Annual Report of the Surgeon General of the Public Health Service of the United States for the Fiscal Year, 1933.*

New Orleans Medical

and

Surgical Journal

Vol. 86

APRIL, 1934

No. 10

TRANSURETHRAL RESECTION OF PROSTATIC BARS, HYPERTROPHIES AND CANCER*

EDGAR G. BALLENGER, M. D.,

OMAR F. ELDER, M. D.

and

HAROLD P. McDONALD, M. D.

ATLANTA, GA.

Concerning this subject many divergent opinions are held by equally competent urologists. No effort will be made to analyze these divergencies of opinion or the reasons therefor. The essential fact is that a survey of the opinions now available clearly indicates that the men who have done the most transurethral resections are the most enthusiastic for this method and those who have done the fewest of these operations are the most critical and skeptical. Personally we admit our enthusiasm for this procedure; we admit that at first we were both critical and skeptical but as the results were followed and studied our enthusiasm has steadily increased.

Just about the time the essentials of relief of prostatic obstructions by suprapubic and perineal operations had been reasonably well agreed upon, along came the transurethral resectionists with measures radically different from well established methods. The resectoscope, with an electrode activated by a current of high frequency, at once became an agency equally powerful for good or harm, according to when and how it was used. In consequence many controversial questions again came forth.

Lacking in experience with the new method

*Part of the Annual Stanford Emerson Chaille Address, Orleans Parish Medical Society, New Orleans, La., December 4, 1933.

but pushed forward by the desire to keep abreast the times, many urologists, ably assisted by plausible salesmen, found themselves with new expensive equipment, new methods, and new problems. Naturally, at first little was known about the technic, the types of obstruction suitable for the new method and even less about the amount of tissue to remove, after treatment and many other problems associated with transurethral resection. Unfortunately, at first this procedure was regarded as a minor measure, and, by many, time was not devoted to study and experimental work with the new equipment and the new problems arising from its use. It was, therefore, not unexpected that beginners in this type of work should have found many troublesome problems to meet.

The good results obtained by the men doing a large number of resections, the low mortality rate obtained after experience had been acquired, the small amount of pain incident to the procedure and the short time needed for postoperative hospitalization have clearly shown the procedure to be a definite improvement over prostatectomy. In consequence, its misuse by beginners has been more than offset by the good results of experienced resectionists.

Comparing twenty-five years of prostatectomy experience with our results following 240 transurethral resections during the past two years leaves the comparison strongly favoring the resection method.

Before going into details concerning the diagnosis, technic, etc., it seems desirable to answer a few questions which naturally arise after the statement just made.

Are the beneficial results following transurethral resection lasting or are they merely temporary? The answer to this question can not be made with certainty but it seems to de-

pend very largely upon one factor, the thoroughness of the resection. At first our main effort was to be very careful in this work. After having several resections to do over because an inadequate amount of tissue was removed, we added another important objective, thoroughness.

What is meant by thoroughness or what amount of tissue should be removed? We are now convinced that all hypertrophied masses which protrude into the bladder should be removed; the floor of the vesical orifice should be lowered until it is on a level with the deep urethra and the floor of the bladder; lateral masses which press into the urethra should be removed; and tissue overhanging the anterior part of the bladder neck should be resected. Moreover, after what seems, by cystoscopic view, to be adequate removal of prostatic tissue, the finger of an associate should be passed into the rectum and any remaining masses should be pressed toward the resectoscope while the cutting loop removes additional tissue from hypertrophied lateral lobes. This suggestion is by no means intended to give the impression that tissue should be removed until only a thin layer separates the urethra and rectum. What is meant is that obvious hypertrophied masses should be resected until they no longer feel like masses.

Does fibrous tissue form in the resected area and contract later? To answer this question, about one hundred cystoscopies have been done at various periods after resection, from a few months to nearly two years. Most agreeable surprises followed these examinations; instead of finding fibrous or contracting tissue, which at first we feared, the mucosa looked normal and when touched with ureteral catheters did not give the sensation of being thickened or of having an underlying base of fibrous tissue.

How about bleeding during and after transurethral resections? Different patients vary greatly as to the amount of bleeding. At the time of operation we have seen ten with a fair amount of hemorrhage which in all was stopped by the coagulation current before leaving the operating room. In two the bleeding should be classed as severe. Immediate postoperative

bleeding was seen in five but in only one was it necessary later to pass the resectoscope to stop it. Late postoperative bleeding was of not infrequent occurrence, especially during the second and third postoperative weeks. This nearly always responded to rest, free intake of liquids and ergotole (fluid extract of ergot) in 20 to 30 minim doses three times a day, as needed; the ergotole was not kept up after the bleeding stopped. In nine, a catheter was required to evacuate blood and clots; most of the time catheters were left in until the bleeding ceased, usually from six to twenty-four hours. In no case was suprapubic cystotomy needed or done for the control of bleeding at the time of resection or later.

What is the best type of resectoscope to use? We have employed four high frequency units and prefer the Davis-Bovie. We have used two resectoscopes and prefer the McCarthy.

Is malignancy more likely to develop after resection of benign growths than after prostatectomy? It is still too early to answer this question. Concerning the subject there are, however, some very significant facts: in personal communications from Bumpus, Davis, Alcock, Nesbit, and from our own records, it is shown that in the combined list of more than two thousand prostates only one patient, benign at the time of resection, has carcinoma developed subsequently and in this case there was doubt as to whether the specimen taken came from a part sufficiently deep to make it conclusive that the gland was benign at the first resection.

Bumpus, at the Mayo Clinic, had the records of more than seven hundred resection cases, benign at the time of the operation, looked over and he was unable to find one which later developed cancer. His records go back for a period of eight years during which time the resections were done. While, as previously stated, it is still too early to say whether or not resection of the vesical neck removes a precancerous area, an analysis of former pathologic studies correlated with postoperative transurethral resection and findings, points rather definitely, however, to the surmise that the adequate removal of benign hypertrophied tissue at the vesical neck and deep urethra removes a site at which cancer is likely to develop. In

case carcinoma of the prostate already exists, our experience leads us to believe that transurethral resection affords the most satisfactory means of maintaining an adequate outlet for urine. Obstructing tissue is removed as needed to keep the patient voiding. This is preferable to permanent suprapubic drainage. Radium and deep roentgen-ray therapy are employed as indicated.

Is the sexual function impaired by resection? The answer is no; improvement not impairment of the sexual function generally is observed. In some the improvement is striking, in others there is no change. Prostatic obstructions are always posterior to the verumontanum, and since this valuable landmark is a useful sexual organ, there is every reason for leaving it, none for removing it. Following resection of fibrous contractions and bars, the semen ejaculated not infrequently goes back into the bladder instead of coming out through the urethra. This appears, however, to be as much of an asset as a liability.

How about the mortality rate and complications? In 240 resections four have died, giving a mortality rate of less than two per cent. Considering the greatly enfeebled condition of many of the patients in this group, we feel that had they all been subjected to prostatectomy, either in one or two stages, the mortality rate would have been probably five times greater. In fact, many of the patients would have been regarded as too feeble to stand prostatectomy. Of the four deaths, two were from heart failure, one from lobar pneumonia and one from uremia.

Other complications were epididymitis 14; cardiac complications 7; pyelitis 6; and periprostatic abscesses 2. In one patient with carcinoma the bladder was ruptured intraperitoneally. Suprapubic cystotomy and drainage were done at once and the patient made an uneventful convalescence. The question of hemorrhage has already been discussed. Naturally in a group as large as this there were many other minor complications, not, however, of sufficient importance to waste your time enumerating.

This group includes all operable patients who came to us seeking relief from prostatic obstruction during this time except two upon whom prostatectomy was done on account of

the large size of the hypertrophied mass. With the experience we have since acquired we now would do transurethral resection, probably in two stages, upon both of these. Two patients, almost moribund, died soon after entering the hospital. Preparatory treatment was of no avail and no operation was done.

DIAGNOSIS

The diagnosis of prostatic obstruction is exceedingly easy to make. In men of fifty years of age or older, a weak stream, frequency in urination, especially in the latter part of the night, and difficulty in starting the stream nearly always mean vesical neck obstruction. In differentiating other obstructive lesions, urethral strictures, bladder tumors, calculi and spinal cord lesions are the main disorders to be excluded. Unfortunately the average patient and the average doctor do not regard the obstructive symptoms seriously until acute retention or some such disturbance sharply directs attention to need of relief of difficult voiding.

While we are most insistent that cystourethroscopic examinations be done to clear up the diagnosis in most of the chronic or recurrent affections of the deep urethra, just the reverse is true in dealing with hypertrophy and carcinoma of the prostate. Here much harm may be done by ill-timed and indiscriminate cystoscopy. Besides, in most instances, all of the information needed may be obtained by milder and less disturbing measures. When uncertainty exists as to the cause of urinary obstruction in elderly men, cystoscopy, gently done, may be needed to make sure as to whether the obstruction can be relieved by resection of bars or fibrous contractions of the vesical neck.

Recently we have made a modification in our method of making cystograms which we think affords definite advantages over the usual procedures: By the plan about to be described, cystoscopic examination before the resection anesthesia has been given, most of the time, is not necessary.

A film is made ten minutes after skiodan is given intravenously. This picture should include the symphysis pubis, so as to include the prostate and bladder.

The second film is taken after the patient has voided.

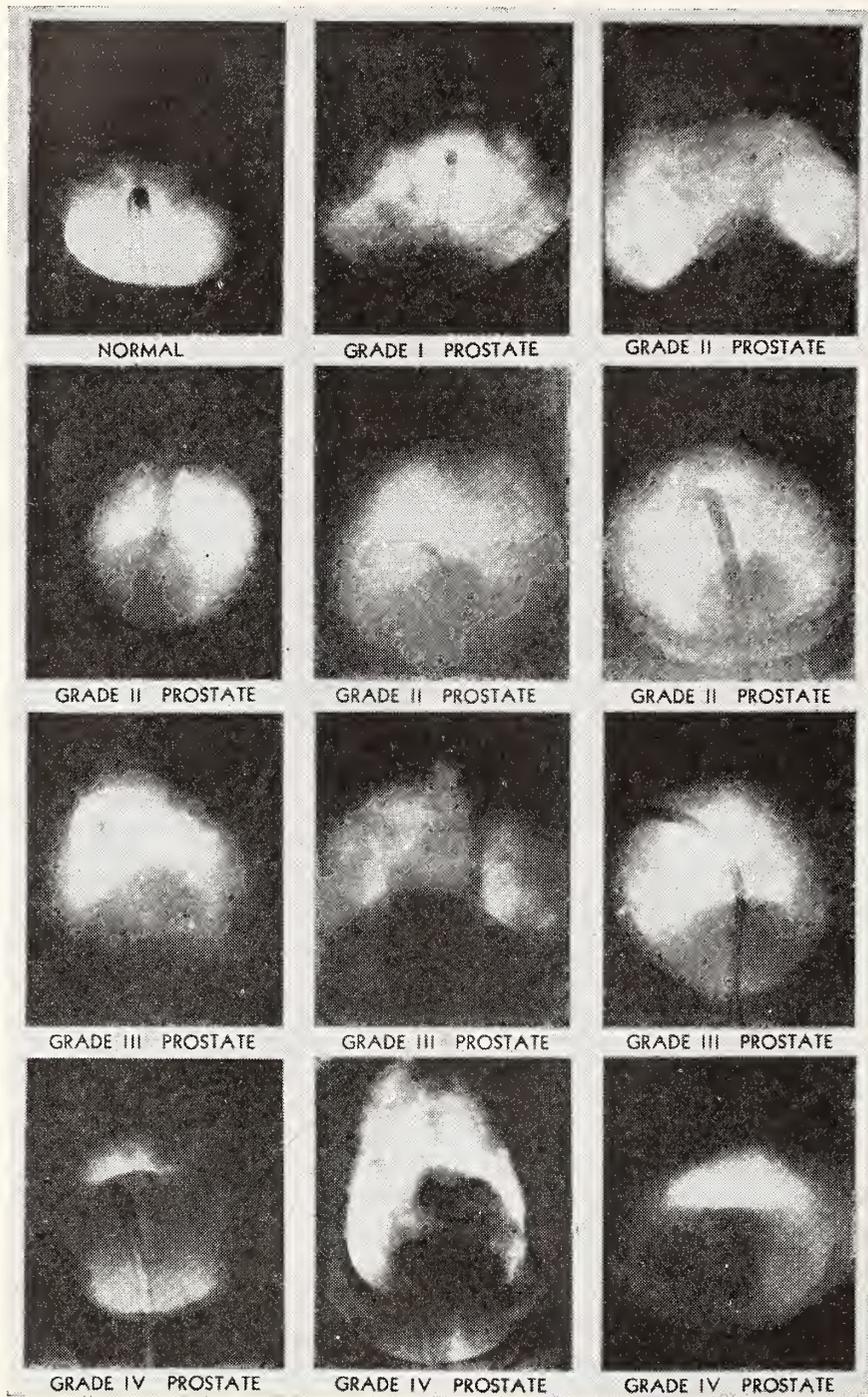


Fig. 1.—Air cystograms showing varying grades of prostatic hypertrophy.

A third is taken if the patient is unable to empty the bladder sufficiently to cause it to collapse over an intravesical mass. A catheter is passed, the urine drawn off and 30 cc. of the skiodan urine or a 20 per cent skiodan solution is injected into the bladder. In this picture the nearly empty bladder should be collapsed over intravesical protrusions, which are shown in a graphic manner if the patient is properly

prepared and the films properly taken. Moreover, in addition, a fair estimate of the renal function is obtained and the amount of residual urine, diverticula, calculi and dilatation of the ureters and renal pelves are demonstrated.

We know of no simple and painless procedure which provides a similar amount of desired information. Sometimes a film with the patient in a semi-upright position is required.

The timing of the pictures, of course, should vary according to the renal function, that is with the rate of skiodan excretion.

It is not within the scope of the present discussion to go into the indications for cystoscopy or to discuss the details of residual urine, back pressure damage, renal insufficiency, bacilluria, pyuria, hematuria, etc., nor can we dwell upon cardiovascular, pulmonary and gastrointestinal complications. Suffice it to say that delay in relief of prostatic obstruction makes all of them worse. If the phthalein test and skiodan show the kidney function to be good, blood chemistry studies need not be made; if doubt exists, these studies are of great assistance in deciding how much preliminary drainage and forcing of fluids are required before the resection is done.

SELECTION OF METHOD

Cautious beginners have rightly limited transurethral resection to bars, fibrous contractions of the vesical neck and hypertrophies of medium size.

As we have gained experience and as post-operative results were studied, more confidence was acquired and larger glands were resected transurethraly until now we feel the chief contraindication is our inability to introduce the resectoscope. We admit that this statement sounds like a rash one but our experience bears it out, except for the reservations later to be made. Very large glands are likely to require more than one resection, but even so the dangers and hospitalization still are less than those incident to the average prostatectomy.

We now know that large amounts of tissue can be removed with little danger, that a free stream can be provided and that the external sphincter need not be damaged. The size of the gland, therefore, rarely should be a contraindication for the resectionist with adequate experience and patience.

With huge glands that project far into the bladder, we think the two-way resection is desirable. By this we mean the removal of the intravesical mass by loop resection through a suprapubic cystotomy incision and a week or so later, by transurethral resection, the remainder of the obstructing tissue is removed.

In utilizing the two-way method the major

disadvantages of prostatectomy, as well as the disadvantages of transurethral resection of the very large prostate are avoided.

Surprisingly little pain and bleeding are caused by the two-way resection. It increases, of course, the time required in the hospital, but in only a very small percentage of patients is this method needed.

WARNINGS

It is sincerely hoped that these statements and this discussion will not convey the impression that transurethral resection should be undertaken lightly or be regarded as a minor procedure; just the reverse is true; care in diagnosis, ample preparatory treatment, painstaking resection and watchful postoperative attention are all necessary, weeks or months of preliminary drainage may be essential for those who wait until one foot is already in the grave before relief is sought. Preparation of the resectionist, who should first be a cystoscopist and trained in urethroscopic procedures, is also quite as important as preparation of the patient. Beginners should not lose sight of the fact that difficulties or emergencies may arise unexpectedly and call for correct and prompt decisions which may determine whether success or failure results. Technical details and complicating difficulties, numerous and varied, may arise. Without these warnings our report would seem unduly optimistic.

Transurethral prostatic resection is more wearing on the operator than is prostatectomy; team work has been of great value to us. The tiring character of the work is greatly reduced by the trained assistance of a competent associate. Moreover, for an untired resector to take up the unfinished work permits more thorough resection, and we advise orderly team work wherever possible.

Offsetting the disadvantages of transurethral resection, after confidence and experience have been acquired, it may be said that in no urologic procedure is the work more fascinating or the results more spectacular.

Much to our surprise recently a representative of a well-known organization dealing in urologic equipment informed us that his company has sold this year more incontinence clamps than were sold during the past three

years. This we take to mean that the external sphincter has not been receiving the attention it deserves or that blind cuts have been made which resected a segment of this important muscle.

CONTRAINDICATIONS

Transurethral resections of the prostate gland have two types of contraindications, one has to do with the patient, and the other with the operator. Obviously, too, these factors are intimately associated with each other. If mechanics alone were concerned inability to pass the resectoscope would be the only contraindication. Such unfortunately is not the case. Quite large glands may be removed easily by experienced resectionists or with difficulty and danger by beginners. In dealing with large hypertrophies the contraindications are not fixed limitations but variables, determined by the experience, skill and patience of the operator or by the size and type of the obstructing mass and the complicating factors.

The contraindications are, therefore, mainly relative. What at first seemed to us contraindications we now regard as either:

1—Conditions in need of the removal of a large amount of tissue;

2—Those requiring two stage resection;

3—Those who need two-way resection, that is suprapubically as well as transurethrally;

4—Those in need of prolonged drainage by urethral catheter, by catheter inserted suprapubically through a trochar puncture, or by a mushroom catheter introduced through a small cystotomy incision.

So in dealing with large glands of borderline size or those with complicating factors we have the feeling that excepting a small percentage for whom prostatectomy should be done, the problem is not to choose between prostatectomy and transurethral resection, but rather to select the most appropriate of the above plans. Many of our best results have come from the group of patients with complications and conditions which might easily have been considered contraindications.

This statement should by no means make the beginner overbold because the choice of method is chiefly a personal one; in such cases Alcock says that 90 per cent of the

result depends upon the man who is doing the resecting.

PRELIMINARY TREATMENT

Preparatory treatment should include digitalization where there is need, or even likelihood of the need, of cardiac stabilization or stimulation. When required, retention catheters should be employed until the kidney function has become adequate, or at least stabilized at a reasonable level of efficiency. Forcing fluids is often of vital importance. A twenty-four hour output of 2000 cc. has been the minimum required in preparation of those who are poor surgical risks. Urinary antiseptics should be administered as indicated. In patients with good renal function, highly acid urine is desirable when infection is feared. On the contrary, when anuria is feared alkalies are employed.

Prolonged suprapubic drainage sometimes is a life saving procedure when diverticula and foul infection exist and when retention catheters are not well tolerated or when for any reason a patient in wretched condition seems unable to stand resection and who does not make satisfactory progress with retention catheter drainage. Only five of our patients required suprapubic drainage. When they did, if the urine was bloody, foul with infection or if the bladder was contracted the drainage tube was placed through a small suprapubic cystotomy incision. When the urine was clear and the bladder large, puncture with a trochar was employed instead of cystotomy. A catheter was inserted through the trochar which was then removed, leaving the catheter for suprapubic drainage. Such puncture drainage should always be carefully done with the bladder fully distended and never in case the bladder is contracted. Skillfully performed such puncture drainage is accomplished with little if any disturbance or shock.

TECHNIC

Nearly all of our resections have been done under low spinal anesthesia. Spinocaine has been employed in the usual manner, except after the needle has been inserted, the table is tilted so as to lower the patient's head be-

fore the solution, lighter than spinal fluid, is injected. This undoubtedly tends to keep the anesthesia low, almost eliminates the nausea frequently seen and definitely lessens the number who have a drop in blood pressure.

If the amount of tissue to be resected is small, only about one-half the usual dose is given; if the gland is large and a long anesthesia is needed, the full amount is given.

A 28 F sound is introduced and allowed to remain in the urethra from three to five minutes before the resectoscope is introduced. This facilitates the passage of the resectoscope. If the exact condition of the bladder, vesical neck and prostatic urethra has not already been determined cystoscopically, careful inspection is made before the resection begins.

The size, shape and character of the verumontanum is noted in order to render its identification easy as the resection proceeds. The ureteral openings are located if possible

and are avoided in removing tissue. The resection then is carried on in an orderly manner. With bars and fibrous contractions, the removal of tissue is started at six o'clock and continues until all obstruction is removed. With protruding masses, the resection is started on the middle or lateral lobe, leaving the other side as an undisturbed landmark as long as is feasible. Bleeding, if of any consequence, is checked by the coagulating current applied while the electrode is being moved over the bleeding area or vessel. In this manner the bleeders are more easily stopped, leaving only a thin layer of coagulated tissue. If at any point excessive coagulation has been required, a slow cut is made at this place, taking away the area deeply coagulated and thereby lessening the tendency of late bleeding. Clear vision of the area being resected is always essential. Care is taken never to overdistend the bladder and never to make a cut at the verumontanum or anterior to it.

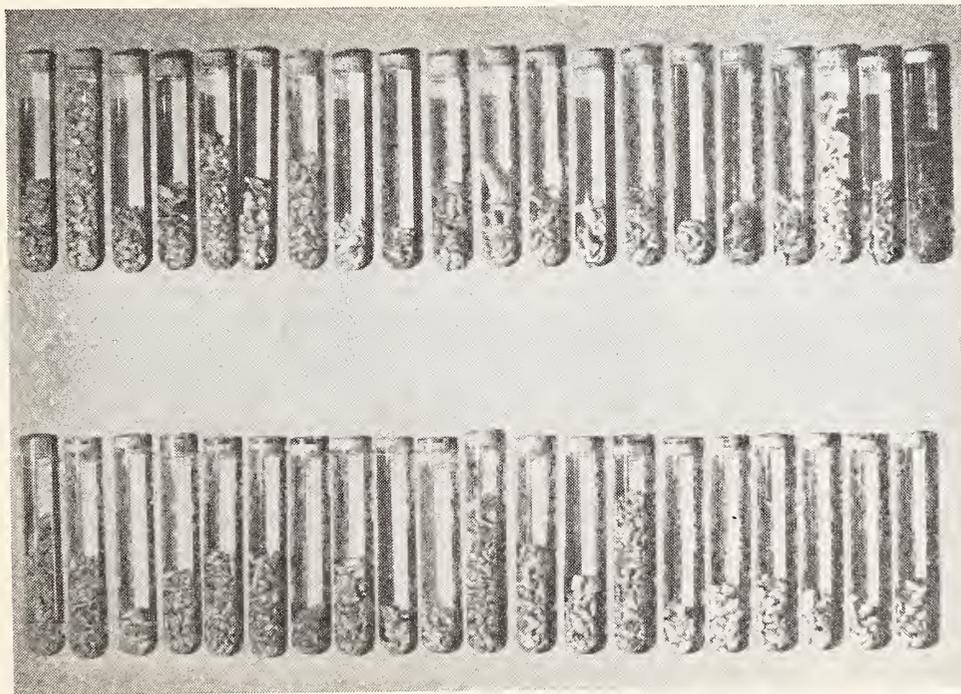


Fig. 2.—Specimen showing the varying amounts of prostatic tissue and bars removed. The tubes are $\frac{3}{8}$ of an inch in diameter and 6 inches long. Each tube shows the amount removed at one resection.

After removing sufficient tissue to make the area between the verumontanum and the ureteral openings look like the normal vesical neck, a finger is placed in the rectum and prostatic masses if present are pushed toward the resecting loop until the removal of tissue seems adequate. Pieces which may have fallen back into the bladder are now removed by the loop, forceps or suction. After the resected area is carefully inspected for bleeding or oozing areas, which are lightly but completely coagulated, a 22 F catheter is inserted and fixed in place with adhesive plaster. The patient is returned to his room, with his head still lowered, and this position is maintained for two or three hours, depending upon the time required for the resection. Care is taken to see that the catheter continues to drain. The patient is given liquids freely and, if needed, glucose intravenously, saline solution and cardiac stimulation. The catheter is removed in 48 to 72 hours unless the patient is exceedingly weak; he is allowed to get up on the third or fourth day and on the day following, the average patient is allowed to leave the hospital, if his home is nearby. The usual postoperative stay in the hospital for the last 180 resections has been five days.

POSTOPERATIVE CARE

After resection, as well as before and during the transurethral procedure, the utmost care is taken to prevent and to control infection; urotropin, acriflavine, pyridium and such drugs are continued according to the type of infection present. As to the advisability of bladder irrigations after removal of the catheter we feel less certain for at times irrigations appear to start secondary bleeding. The best of all ways to control infection is by adequate relief of urinary back-pressure.

If all of the obstruction is thought to have been removed by the first resection, tests are made later to determine if there is resi-

dual urine. We are not satisfied with mediocre results and if voiding is not free we take it to mean that obstructing tissue has been left and its subsequent removal should not be unduly postponed. The majority of patients void freely at one. A few, who are very weak, have a moderate amount of difficulty for a while even when all of the obstruction has been removed. Catheters are then passed as needed. The existence of residual urine during the first few weeks need give no alarm if the resection has been adequate. If, however, there is reason to believe that sufficient tissue has not been removed, the retention catheter is employed for about ten days, or longer if required, when a second resection is done.

A certain number of patients are annoyed by tenesmus and undue frequency in urination until the resected area has healed. For this codein in half grain doses has given more satisfactory relief than other remedies we have tried.

Beginning about six weeks after transurethral resection, prostatic massage about once a week should be employed. This has been of undoubted value in giving patients a sense of urinary and sexual well being.

When urethral strictures are present, and often in the absence of strictures, the use of sounds is also of definite value. Pyuria is almost always present during the first month or longer until healing is complete and no special effort is made to clear it. Forced fluids and time usually are sufficient unless complications such as diverticula or pyelitis exist.

Finally, in closing, please do not forget that the enthusiasm we feel for transurethral resection has been, and still is, counterbalanced by a multitude of precautions in diagnosis and preparatory treatment, as well as in operative procedures and postoperative care.

THE TREATMENT OF MENSTRUAL
DISORDERS BY HORMONAL
THERAPY

A REPORT OF 30 CASES*

J. THORNWELL WITHERSPOON, M. D.†

NEW ORLEANS

As a branch of clinical medicine gynecology is outstanding in its close contacts with endocrinology. In his daily routine the gynecologist encounters many of the endocrinopathies already recognized as such and the treatment of these problems, menstrual disorders due to endocrine imbalance, forms the subject for discussion of this paper. Thirty cases of functional disorders of menstruation are presented, which have been treated and studied over a period of 30 months, but before entering upon a detailed discussion of them, a simple outline of the hormonal control of the normal menstrual and reproductive cycles may be helpful in understanding the rationale of the endocrinal therapy.

It is now generally accepted that the ovary produces at least two internal secretions. One has its origin from the granulosa cells of the ripening graafian follicle, and is termed theelin, amniotin, oestrin, folliculin, and female sex hormone. Its influence extends from the onset of the menstrual flow to the mid-interval phase, the time of ovulation, with rupture of the mature follicle. This hormone not only stimulates the endometrium from its resting stage to the stage of hypertrophy or proliferation, but it also produces growth, greater contractile motility, and increased blood supply to all the accessory genital organs, especially the uterus, vagina, and mammae. It is from the vaginal changes produced by this hormone that the Allen-Doisy smear test for oestrus is derived.

A second internal ovarian secretion is produced by the corpus luteum. This hormone, progesterin, is concerned chiefly with the conversion of the hypertrophied endometrium at the time of ovulation into the secretory or premen-

strual endometrial phase as seen just prior to the menstrual flow. In addition, as shown by Reynolds in a rather ingenuous type of uterine fistula, progesterin exerts a quiescent influence on uterine motility. It must be remembered, however, that the action of progesterin is always secondary to that of oestrin. Progesterin can produce none of the changes specific to it unless the uterus and endometrium have been primed, as it were, with oestrin. The influence of oestrin on the endometrium followed by progesterin stimulation is a one-two type of action, and in this respect the hormones are synergistic. On the other hand, their actions may be antagonistic, since progesterin, when it has the controlling influence, tends to keep the action of oestrin in abeyance, or even forces its excretion in the urine.

As the time for the menstrual flow approaches, the progesterin influence is on the wane, while the oestrin control, with the beginning ripening of another graafian follicle, is becoming more powerful. It is thought that the actual menstrual flow is precipitated by the withdrawal of the progesterin influence and by oestrin ascendancy.

Probably the most important advance in the physiology of the reproductive system which has been made in recent years is the demonstration of the role which the anterior pituitary plays in the menstrual and reproductive cycles of woman. The work of Zondek and Aschheim in Germany and Smith and Engle in this country stand out above all others. This gland, now looked upon as the "motor control" of the ovaries, secretes two hormones, or a quantitative difference of one, which are responsible for the activation and secretion of oestrin and progesterin by the ovaries. It is generally assumed at the present time that the first hypophyseal factor, Prolan A, causes follicular maturation and activation of oestrin, while the second hormone, or a greater quantity of the same hormone, termed Prolan B, produces the ovarian luteinizing processes with the subsequent production of progesterin. In the normal woman there is present only a very small quantity of these hypophyseal factors, but Zondek has shown that the hormonal blood content is increased in an explosive fashion when pregnancy occurs,

*Read before the Orleans Parish Medical Society December 11, 1933.

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and on this finding is based the Aschheim-Zondek test for pregnancy.

The ovarian follicular hormone and the anterior pituitary luteinizing factor were the two hormones used in this series of cases. Both were supplied by Dr. J. F. Anderson of E. R. Squibbs and Sons; the former as Amniotin, 1 c.c. equalling 50 R.U.; the latter as Follutein, 1 c.c. equalling 250 R.U. No greater than 2 c.c. doses were given at one time because Zondek has demonstrated that smaller doses are safer when the desire is to bring about the normal processes of ovulation and luteinization, since there is danger, if too great luteinization takes place before ovulation can occur, that the ovum will be imprisoned within the luteinized follicle. Also, experimentally, Frank has shown that excess hormonal concentration in the blood is quickly excreted in the urine.

Thirty cases of functional menstrual disorders are presented, and in all cases no pathology other than endocrine dysfunction could explain the condition. The cases can be divided into four main groups, each of which will be discussed separately.

I. Idiopathic or functional uterine bleeding, or hyperplasia of the endometrium: 12 Cases.

This condition has commanded much interest both on the continent and in this country. Generally speaking it occurs only during woman's reproductive years, and more than half of the cases are noted after the age of forty. Most observers agree that the immediate cause of this disorder is an excess of the ovarian follicular hormone, in the absence of the corpus luteum factor. Since the production of these hormones is contingent upon a properly functioning anterior lobe, in the last analysis functional uterine hemorrhage may probably be considered a manifestation of hyperfunction of the anterior lobe. Histologically, the endometrium presents a general lack of uniformity of hypertrophied glandular elements, embedded in a dense stromal proliferation; the "Swiss cheese" pattern of the glandular distribution is very characteristic of this condition. The cause of the bleeding in hyperplasia of the endometrium is still debatable. Schroeder in Germany reports scattered small areas of necrobiosis, with localized thromboses and small areas of des-

quamation; these are considered to be the source of the abnormal bleeding. As opposed to this theory, Hartmann suggests an active bleeding factor originating in the anterior lobe, while Novak comments upon a possible biological factor which increases the permeability of the uterine vessels and thus permits a massive exodus of blood by diapedesis through a relatively intact surface. This theory is substantiated by Geist who has shown that endometrial debris is not cast off in the hemorrhage of endometrial hyperplasia.

The rationale of hormonal treatment in this condition is to activate luteinization in the ovary by the injection of the anterior pituitary luteinizing hormone, and thus convert the persisting non-secretory, hyperplastic phase of the endometrium into the secretory, pregravid type which is usually associated with normal menstruation. Twelve cases with excessive uterine bleeding were given a series of daily injections of 250 R.U. of the anterior lobe luteinizing hormone. In 8 cases the bleeding was successfully checked. In one case a curettage had been performed 6 months previously for the uterine hemorrhage; since the injections this patient had had 11 normal menstrual periods. In one of the 4 cases in which the hemorrhage persisted after treatment, the patient had a curettage performed, which has temporarily checked the flow. One patient has become pregnant after the restoration of the normal menstrual cycle.

II. Amenorrhoea: 12 Cases.

Fortunately amenorrhoea is rarely a serious condition even though psychically it may be rather disturbing. In general it may be said that by far the largest group of causes of amenorrhoea are constitutional, only a small proportion being local or anatomical. In the endocrinopathic amenorrhoeas, lack of menstruation is usually a manifestation of a general glandular hypo-secretion. In the hypo-gonadal type the amenorrhoea is the prototype of the lack of menstruation after the menopause or after castration. The hypo-pituitary type of amenorrhoea is commonly associated with adiposity, characterized by large shoulder pads, rather large bust, a narrow waist, and heavy fat deposits about the abdomen, buttocks and hips. The hands are small and delicate, and the fin-

gers slender and rather pointed. Thyroid dysfunction, either in the hypo- or hyper-phase of activity, is often associated with hypo or amenorrhoea. In this series, contrary to the reported literature, the hypo-phase of the dysfunction prevailed. Obesity is present, evenly distributed and with small mammary development, while the hands are most often small and thick with stubby fingers. Sterility is a very frequent finding.

Amenorrhoea is a symptom of some underlying condition, not an entity itself, and therefore the treatment should be directed toward the cause. The aim of the hormonal treatment was to simulate as closely as possible the normal hormonal control of the menstrual cycle. The follicular hormone was injected in daily 50 or 100 R.U. doses for 10 days. In theory this hormonal control is similar to that in the first half of the menstrual cycle, that is up to the time of ovulation. With the endometrium primed as it were to hypertrophy, the anterior pituitary luteinizing factor was then administered daily for six 250 R.U. doses, thus converting the hypertrophied non-secretory endometrium into the pre-menstrual type. Only upon withdrawal of the anterior pituitary luteinizing hormone was menstruation expected to follow.

Twelve cases of amenorrhoea were so treated; in 5 cases apparent menstruation returned, while in 7 only spotting or no flow resulted. The main problem associated with amenorrhoea is whether or not the bleeding produced is normal menstruation, or if again we are dealing merely with menstruation without ovulation. Also whether or not the uterine bleeding, if once returned, will remain a permanent rhythmic flow is another speculation. Suffice it to say that endocrine treatment for amenorrhoea must still be viewed pessimistically, and that thyroid extracts probably offer the best results.

III. Primary Dysmenorrhoea: 4 Cases.

Recent investigations of primary dysmenorrhoea by Knaus in Germany and Reynolds in this country indicate that the probable immediate factor causing pain is the spasmodic contractility of the uterine musculature, and that this is of endocrine origin. These investigations have shown that the oestrous phase in the non-pregnant rabbit is associated with marked

uterine activity, while anoestrus is characterized by only feeble motility, if any at all. Translated to the human problem, uterine rhythmic contractions become increasingly more marked as the graafian follicle develops. After rupture of the follicle and the corpus luteum formation, the uterine contractions are inhibited, so that during the progestin phase of the cycle, the uterine muscle is relatively quiescent. The pain in primary dysmenorrhoea is characteristically of a spasmodic, colicky nature; it begins a day or two before the onset of the menstrual flow, theoretically the time when the lutein body begins to degenerate, and the oestrin stimulation again comes into its own. Knaus has demonstrated on human subjects that removal of the corpus luteum influence brings about a rapid return of uterine contractions, in fact this is the period of maximum uterine muscular activity.

The aim of treatment in this condition is to withdraw the corpus luteum influence slowly, so that the oestrin stimulation of the uterus will not be precipitated, but will appear gradually. Reynolds has shown in rabbits that the urine of pregnant women, like that of progestin, inhibits uterine motility. Therefore the method of treatment employed was to inject daily, from 3 to 5 days previous to the expected period, 250 R.U. of the anterior lobe luteinizing hormone. After the period had passed, no treatment was given until just before the next expected period. Four patients were so treated; in two cases the results were very satisfactory, while in the others some relief was noted.

IV. Menopausal Disturbances: 2 Cases.

During the menopause in many women little disturbance is produced, in some there is moderate discomfort, while in a few the symptoms of characteristic vasomotor flushes, dizziness, headaches are so frequent and so severe as to make the patient quite miserable. The immediate factor in the production of the menopause and its symptoms is obviously the withdrawal of the ovarian secretions before the anterior hypophysis has had time to adjust itself to its new hypertrophied role. Therefore the aim of hormonal treatment for menopausal disturbance is purely a substitutional one, supplying the organism with the necessary ovarian hormones

until the anterior pituitary gland can undergo hypertrophy and bring about the correct adjustment.

The method of treatment was to inject on alternate days 50 R.U. of the follicular hormone in combination with 250 R.U. of the anterior lobe luteinizing factor. Only two cases were so treated, and excellent results obtained in each. It must not be forgotten, however, that this condition is often amenable to treatment with sedatives, the passage of time, etc., so too much emphasis must not be placed on apparent hormonal therapy cures.

COMMENT

It is most difficult to evaluate the true cure of any menstrual disorder because of the difficulty of estimating the psychic factor, because of the well known variations in different women, because of the lack of similarity in the same woman at different times. Nevertheless the subjective psychic satisfaction that there has been an amelioration of the menstrual disorder, whether or not it can be scientifically proven, is of tremendous gratification to the patient, who, from her point of view, has been greatly benefitted.

Ovarian and anterior pituitary hormonal treatment of menstrual disorders is still in its infancy. The brilliant results secured on animals by hormonal injections have not been du-

plicated when used on the human subject. What the future holds is mere speculation. Undoubtedly better results will be obtained from hormonal therapy when the hormones themselves are available in purer and more concentrated forms, and when their actions and functions are more fully understood.

BIBLIOGRAPHY

1. Curtis, A. H., *Obstetrics and Gynecology*, 1933, W. B. Saunders Company, Philadelphia and London.
2. Fluhmann, C. F., The interrelationship of the anterior hypophysis and ovaries, *Am. J. Obs. and Gyn.*, 22:803, 1931.
3. Frank, R. T., The role of the female sex hormone, *J. A. M. A.*, 97:1852, 1931.
4. Giest, S. H., The morphology of menstrual blood and its diagnostic value, *Am. J. Obs. and Gyn.*, 22:532, 1931.
5. Graves, W. P., Some observations on the etiology of dysfunctional uterine bleeding, *Am. J. Obs. and Gyn.*, 20:500, 1930.
6. Knaus, Arch. f. Gynak, 141:374, 1930.
7. Meyer, R. A., A contribution to our knowledge of normal and diseased ovulation and the uterine processes related to it, *Arch. f. Gynak*, 113:259, 1920.
8. Novak, E., and Martzloff, K. H., Hyperplasia of the endometrium, a clinical and pathological study, *Am. J. Obs. and Gyn.* 8:385, 1924.
9. Novak, E. and Reynolds, S. R. M., The cause of primary dysmenorrhoea, *J. A. M. A.* 99:1466, 1932.
10. Schroeder, R., Anatomical studies of normal and pathological physiology of the menstrual cycle, *Arch. f. Gynak*, 104:27, 1915.
11. Smith, P. E. and Engle, E. T., Experimental evidence regarding the role of the anterior pituitary in the development and regulation of the genital system, *Am. J. Anat.* 40:159, 1927.
12. Witherspoon, J. T., The treatment of menstrual disorders by the injection of blood from pregnant donors, *N. O. Med. and Surg. J.*, 86:85, 1933.
13. Zondek and Aschheim, *Arch. f. Gynak*, 130:1, 1927.

TABLE I
MENORRHAGIA AND METRORRHAGIA
12 Cases.

Age	Menarche	Menstrual History	Duration of Symptoms	Fertility	Number of Injections	Observation	Results
34	14	Men.	6 mos.	1	5	8 mos.	Metrorrhagia
22	12	Men.	4 mos.	0	2	11 mos.	10 normal periods
23	13	Men.	5 mos.	0	5	7 mos.	6 normal periods
24*	13	Men.	10 mos.	0	6	12 mos.	11 normal periods
25	14	Men.	4 mos.	0	9	8 mos.	Metrorrhagia
15	12	Men.	14 mos.	0	2	1 mo.	Metrorrhagia
26	13	Men.	8 mos.	1	4	21 mos.	20 normal periods
29	13	Met.	6 mos.	2	4	23 mos.	22 normal periods
27	15	Men.	2 mos.	6	6	24 mos.	12 normal periods
27	13	Men.	2 yrs.	0	8	14 mos.	became pregnant
30	11	Met.	4 mos.	1	3	18 mos.	12 normal periods
28**	15	Men.	10 mos.	0	8	12 mos.	16 normal periods
							Metrorrhagia

* Curettage 6 months previously.

** Admitted to hospital for curettage.

TABLE II
AMENORRHOEA

12 Cases.

Age	Menarche	Menstrual History	Duration of Symptoms	Fertility	Number of Injections	Observation	Results
27	16	Oligomen.	6 mos.	0	6	9 mos.	7 periods
27	15	"	8 mos.	0	12	6 mos.	No flow
24	15	"	5 mos.	0	10	8 mos.	Occasional spotting
29	14	"	4 mos.	0	11	19 mos.	No flow
25	15	"	12 mos.	2	3	15 mos.	12 periods
36	13	"	3 mos.	0	17	24 mos.	No flow
21	16	"	1 yr.	0	8	18 mos.	16 periods
22	16	"	2 yrs.	0	23	28 mos.	No flow
23	14	"	4 mos.	0	3	30 mos.	28 periods
21	15	"	12 mos.	0	25	22 mos.	Occasional spotting
15	13	"	6 mos.	0	6	13 mos.	13 periods
23	19	"	2 yrs.	0	4	7 mos.	Occasional spotting

TABLE III
PRIMARY DYSMENORRHOEA

4 Cases.

Age	Menarche	Duration of Symptoms	Fertility	Number of Injections	Duration of Observation	Results
29	12	14 yrs.	0	3	11 mos.	Pain half as bad
21	11	10 yrs.	0	6	10 mos.	Pain relieved
19	13	6 yrs.	0	6	9 mos.	Pain relieved
16	13	3 yrs.	0	8	9 mos.	Pain greatly relieved

TABLE IV
MENOPAUSE

2 Cases.

Age	Menstrual History	Duration of Symptoms	Number of Injections	Observation	Results
43*	Normal	2 mos.	10	8 mos.	Flushes relieved
40*	Normal	7 mos.	3	9 mos.	Flushes relieved

* Surgical menopause.

Dr. C. Jeff Miller: Dr. Witherspoon has given us an excellent brief resume of our present knowledge of the endocrines as related to gynecology. Since the first work of Bouin and Ancel, when for the first time query was introduced into this subject, it has been under the shadow of speculation in various forms, and there have been probably more fanciful stories built up about the use of endocrine treatment than any other theory of medicine. But during the past six years, really constructive work has been done by Doisy, Smith, Allen, and other men.

It was an interesting thing to me to read recently very definite statements advanced in various magazines and very definite claims made

for the treatment in the physiology of menstruation and its various changes, but as yet very little has been contributed as to the clinical application. I shall speak more about its use clinically. You, of course, know that we have practically scrapped the various ovarian extracts, and most of the remedies proposed up to the last four or five years are no longer kept in the pharmacopeia. We are working practically with the same group: theelin under different names; progestin, not yet on the market, but they hope soon to give it to us, and in the meantime we have found that pituitary extract takes its place. I have, frankly, been disappointed in the use of theelin and follutein in cases of amenorrhoea. We have not had the benefits from it that we expected. However, and very

fortunately, amenorrhoea is no serious condition. It is really due to local conditions, and I may say in passing here, that if we are to carry on the work, we should appreciate that we must make a general study of the patient in every phase, if possible, to determine if there is a serious condition, because many cases of amenorrhoea clear up themselves, and under very little treatment. But I have not been very happy over the results obtained from theelin.

I have seen some cases of primary dysmenorrhoea relieved by anterior pituitary scution, as just reported by Dr. Witherspoon. In other words, the second half of the menstrual cycle is the quiescent period and, given for lowering the motility of the organs, it may bring about a quieting effect. In some cases they report that dysmenorrhoea was improved. We must not forget that all this organic therapy work, is nothing yet but substitutional. So we hear of it being given in every direction as a tonic for the organs—we certainly have no grounds for administration in such cases.

In another group, those of the menopause and artificial menopause, I believe we get good results with these methods. We get nothing much more than subjective results in the natural menopause. I believe it has some disadvantages. It means subsequent trips to the doctor's office, hypodermics—always objectionable. In the operative group, if this group of cases is treated by bromides, we probably will accomplish as much as by theelin, fol-lutein, and that group. It does help in some cases, but how much may be due to the medicine or to the subjective effect, one cannot always say. We know many cases improve suddenly, but we must expect this.

The whole subject has gone along further in the last five years than in all previous history. We have something to work upon, and it is just such work as Dr. Witherspoon is doing here in trying it clinically, in very carefully selected subjects, and in going over practically everything the patient may complain of, that we may get some clinical facts to guide us.

Dr. J. Thornwell Witherspoon (In conclusion): I should like to thank Dr. Miller for his discussion of my paper. I propose in the next year to follow this treatment along here in the clinic, and possibly, by the end of the session I will have another series of cases to report to you.

THE THERAPEUTIC PARADOX A Case Report

M. K. King, M. D.†
SAVANNAH, GA.

The recognition of the therapeutic paradox has helped to clarify the status of salvarsan in the treatment of cardio-vascular syphilis. The definition of this phenomenon as given by Wile is as follows:

"This consists in a remarkable general improvement following arsenical treatment, followed by a most rapid deterioration with accentuation of the original cardiac defect. Two factors are suggested as explanations: first, that the syphilitic products have been too rapidly replaced by scar tissue; or second, that their rapid disintegration has produced a chemical change deleterious in its effect. We are confronted with the remarkable paradox that the patient may get well or better of his syphilis, and die as the result of the dispersion of his syphilitic cardiac lesion."

In the case reported below the rapid breaking down of a syphilitic cardio-vascular lesion by arsphenamines is forcefully illustrated.

CASE REPORT

A. F., a colored male of 45 years of age, came to this hospital on March 28, 1932 with a chief complaint of pain in the chest. The essential facts in the history were as follows: In 1918 he developed a penile ulcer and was treated with several injections of salvarsan before being discharged from the army. He had had no more antiluetic treatment, but had worked hard as a laborer until January 1932, a period of 14 years. At that time he was admitted to a local clinic because of a cough and pain in the chest. Physical and roentgenographic examination of the chest failed to show any pathology beyond a slight increase in the transverse diameter of the heart. (Fig. 1). The Wasserman test was positive and a diagnosis of tertiary syphilis was made. He was given a course of 6 doses of salvarsan. For a while he improved symptomatically, and then became worse. He was sent to this hospital in March, 1932, approximately 2½ months after the onset of symptoms, and 2 months after the roentgenogram shown in Fig. 1 was made.

On admission to the hospital the pupils reacted sluggishly to light. A large aneurism of the aorta

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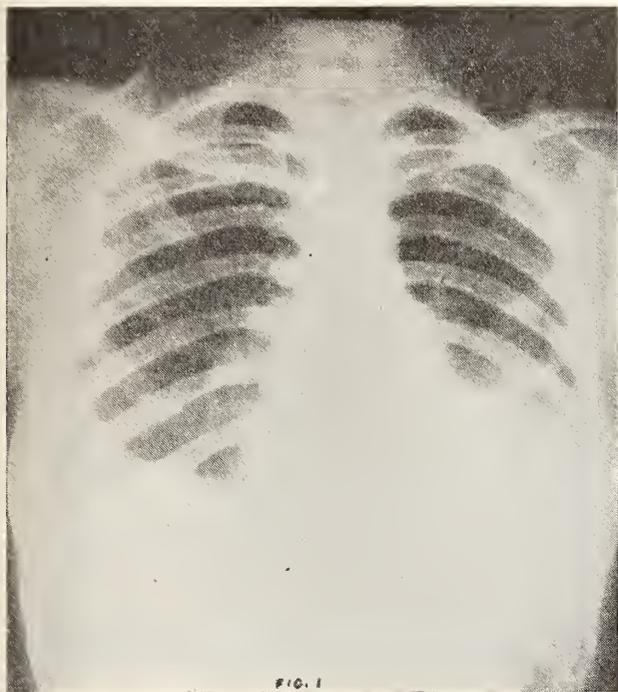


Fig. 1. Chest plate taken immediately preceding salvarsan injections (Jan. 1932). Note that no apparent widening of the aorta exists at this time.

was found on examination of the chest (Fig. 2). The Wasserman and Kahn tests were strongly positive. He was placed on iodides and mercury for 2 months, and then small doses of neoarsphenamine and bismuth were begun. In October 1932, 7 months after admission, the aneurism began to

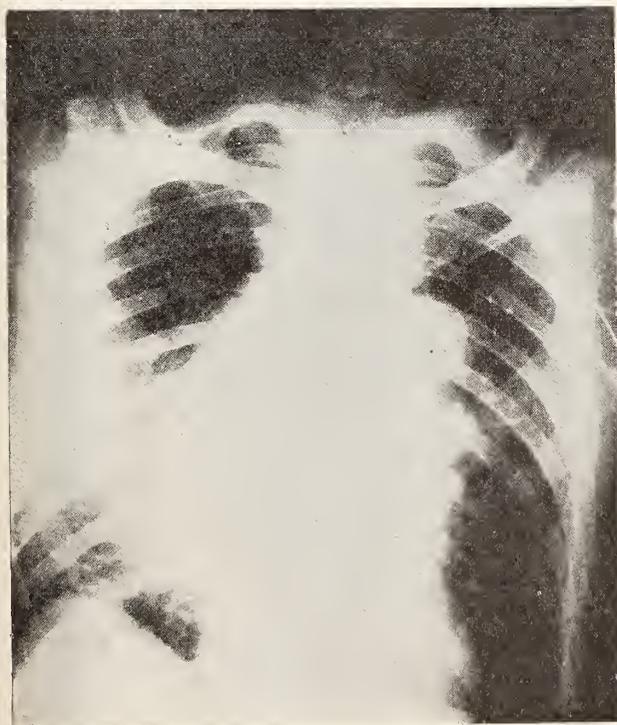


Fig. 2. Two months later, after 6 doses of salvarsan. (Mar. 1932). Notice the size of the aneurism.

push through the right chest wall anteriorly. All antiluetic therapy was stopped. The aneurism grew progressively larger (Fig. 3), but in spite of the resulting pressure and rib erosion he remained fairly comfortable. Codeine was given occasionally, more to control a severe brassy cough which he had developed than for pain. Only in the terminal stages was morphine necessary to keep him quiet. On June 6, 1933 a point of softening appeared in the skin overlying the bulging mass in the anterior chest wall. Bloody serum began to ooze from the opening which soon appeared, and this oozing continued in gradually increasing quantity until his death occurred 2 weeks later, June 23, 1933.

Necropsy showed a large aneurismal sac filled with a laminated, well organized clot, which filled the greater portion of the right pleural cavity, compressing and displacing the right lung. The heart was not greatly enlarged. The whole thoracic aorta was the seat of extensive and destructive syphilitic changes.

It is interesting to note the extremely rapid development of this aneurism as shown in Figs. 1 and 2, made two months apart. Undoubtedly at the time the first roentgenogram was made extensive syphilitic changes were

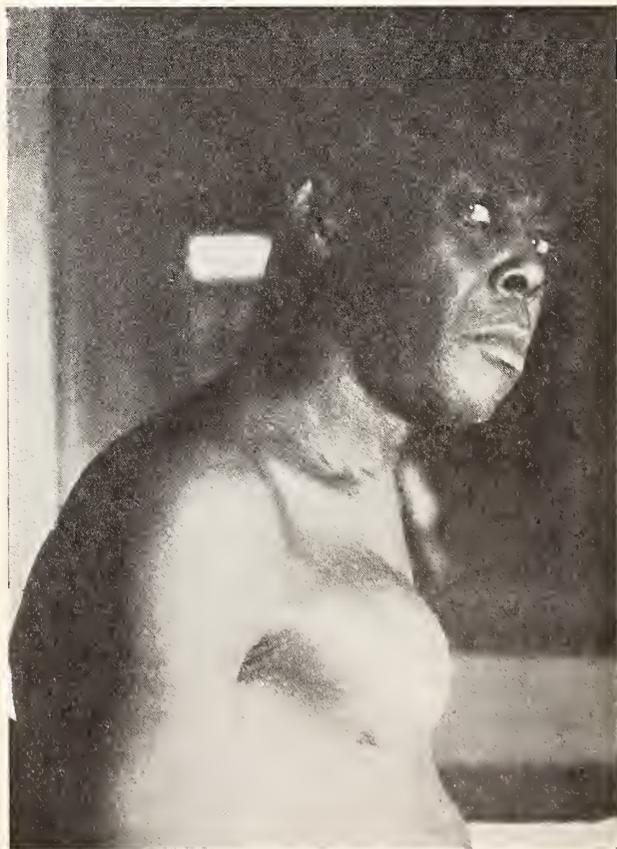


Fig. 3. One year after symptoms first appeared. (Jan. 1933).

already present in the aorta, which could not be recognized clinically. This report is by no means intended as an argument against the use of the arsphenamines in the treatment of cardio-vascular syphilis. It seems to be the consensus of opinion in the recent literature that they do have a very important place, especially neoarsphenamine. That they may have a destructive and rapidly fatal action when used ill-advisedly has been frequently attested. The above case is thought to demonstrate the therapeutic paradox in a case of cardio-vascular syphilis, not identified clinically before treatment was begun.

TREES FOR STREET ORNAMENTATION*

NARCISSE F. THIBERGE, M. D.
NEW ORLEANS

In turning back the pages of my travel book, I find the dearest memories connected with a summer spent in the Mountains of North Carolina studying and classifying the many beautiful trees stretching over these health-giving hills and valleys. Since then, I have never felt lonesome, because every tree on the roadside is an old friend. When I meet an unfamiliar one, I hasten to identify it and add one new companion to the group.

It is therefore not without some hesitancy that I would condemn a tree. When, however, the health and comfort of the people are threatened, when a tree is proven allergic to many I think it should be replaced or better still, it should never have been planted. Trees command our love and respect: they gave us comfort, cool refreshing shade and adorned and graced our homes long before air conditioning was known. They form loving and lasting monuments along the path of time to mark great events in literature and history. The Evangeline oak on the Teche, and the beautiful Oak Alley in Chalmette, are landmarks of Louisiana history.

When our patient's comfort is threatened however, the naturalist must step out: it is not

a question as to whether this or that tree goes to the hall of fame, it is not a question of whether or not a tree adds beauty and charm to our City, or cools and shades our homes, nor of whether or not it is fruit bearing, but first and foremost, whether or not it is a hay fever producer.

To prove a nuisance to the sufferers, a tree must bloom profusely and scatter a pollen which is small and absorbable. This pollen when absorbed, must prove severely irritating to many. Most of our trees produce pollen so large, that its weight prevents its being scattered far. The pollen of grass (8 million to each plant) affects its immediate neighborhood while that of ragweed is so light that it is easily carried five miles. The following table shows the potential area of trees.

POTENTIAL RADII OF HAY-FEVER TREES
2.5 feet high

POLLEN WIND				
micron	2 mi.	10 mi.	20 mi.	30 mi.
10	184	920	1840	2760 feet
15	82	410	820	1230
20	46	230	460	690
30	20	102	204	306

POTENTIAL RADII OF HAY-FEVER TREES
5 feet high

POLLEN WIND				
micron	2 mi.	10 mi.	20 mi.	30 mi.
10	368	1840	3680	5520 feet
15	164	820	1620	2460
20	92	460	920	1280
30	40	204	408	602

The pollen of the pine is abundant; being provided with wings, it can be carried far but, fortunately, its resinous envelope prevents its absorption. The winged pollen is not dissolved in the nose, but quickly swept down and out. The majority of tree pollen measures from 25 to 40 microns and are barely carried further than the tree's own shadow. Occasionally, though rarely, under high wind, pollen of 20 and 30 microns has been found on the atmospheric plate set 3 or 5 miles away.

The discomfort caused at that distance is short lived; the ragweed, however, (8 billion to each plant) constantly remains well concentrated in the atmosphere for 7 weeks over practically our whole City and intensifies, if it does not initiate the annoyance previously caused by

*Read before the Orleans Parish Medical Society December 11, 1933.

tree and grass pollen. Hence, ragweed will always remain our greatest problem.

The following table contains the most common of our trees; the size of the pollen is noted as also whether or not the tree's pollen has so far proven a hay fever producer.

WIND POLLINATED AND VERY BAD FOR THE ALLERGIC:

Ash (White)	Pollens measure	20 microns
American Elder	" "	30 "
Box Elder	" "	25x40 "
Cedar (Mountain)	" "	15 "
Cottonwood (Arizona)	" "	24 "
Cottonwood (Yellow)	" "	22x32 "
Cedar (Red)	" "	20 "
Hackberry	" "	25 "
Hickory	" "	35 "
Live Oak	" "	16x30 "
Maple (Hard)	" "	45 "
Maple (Red)	" "	40 "
Mulberry (W)	" "	19 "
Plum (Carolina)	" "	22x30 "
Sweet Gum	" "	30 "
Water Oak	" "	18x34 "
Walnut (Black)	" "	40 "
Willow (Black)	" "	20x32 "

INSECT POLLINATED, BUT STILL MAY PROVE HARMFUL TO THE ALLERGIC LIVING NEAR:

Bridal Wreath	Pollens measure	8x12microns
Coral	" "	30 "
Ligustrum Amurense	" "	25x35 "
Ligustrum (Common)	" "	20x25 "
Ligustrum (Japonica)	" "	23x37 "
Magnolia (Evergreen)	" "	45x83 "
Mosquite (Prairie)	" "	20x50 "
Sumach (Staghorn)	" "	30x40 "

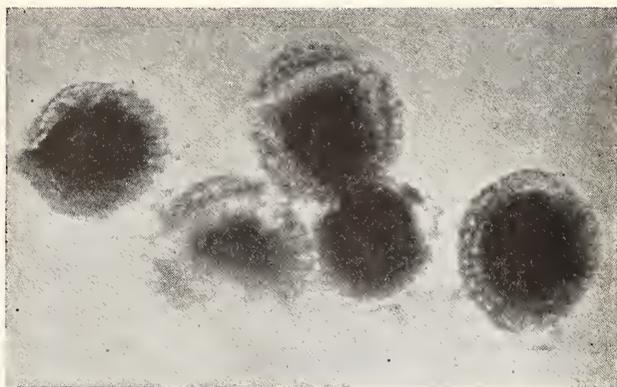
WIND POLLINATED BUT POLLEN'S CAPSULE TOO RESISTANT TO PROVE HARMFUL TO THE ALLERGIC:

Date Palm	Pollens measure	23x50microns
Pine Coulter	" "	58 "
Pine (long leaf)	" "	40 "
Palm	" "	12x24 "

INSECT POLLINATED AND RECOMMENDED AS NON-IRRITANT TO THE ALLERGIC:

Camphor	Pollens measure	15x25microns
China ball	" "	30 "
Crepe Myrtle	" "	22x31 "
Cherry (wild)	" "	12x23 "
Holly (Amer.)	" "	20x30 "
Holly (wild)	" "	" "
Locust	" "	10x30 "
Mimosa (trailing)	" "	6 "
Parkinsonia	" "	20x40 "
Pomegranate	" "	35 "

The Ligustrum of late has proven itself an undoubted source of great discomfort to many



Ligustrum Pollen

allergic patients. The late Dr. Scheppegrell, in his classical article on trees, had sounded a note of warning which unfortunately, has remained unheeded. Since his death, this variety has been widely planted, and, on account of its luxuriant and ever-increasing blooming capacity, the concentration has proven of increasing annoyance every year. The Parking Commission, I am told, has finally consented to heed the warnings and the repeated suggestions of the American Hay Fever Prevention Association, and lately, through the urgent efforts of our Committee, they have promised to abandon further planting of the Ligustrum. The complete removal of all the Ligustrum already planted however, is a huge task and I believe, would prove an exorbitant expense to the City.

To the tree lover, and the average 99 per cent non-allergic population, this wholesale elimination does look almost sacrilegious. There is no doubt as I said, that the incidence of intense suffering has been increased this past year, though the velocity and direction of the wind and number of storm days was practically similar for 1932 and 1933. A prepared map shows the residence of the hay fever sufferers. The streets where Ligustrum has been planted are also mapped. When all cases are studied, this map indicates only slight relation to the Ligustrum. On the contrary, it proves that tree polinosis is strictly a neighborhood affection and one that should be handled by the neighborhood affected.

Dr. Scheppegrell recommended trimming the trees. The Ligustrum Vulgare has long been trimmed to form decorative hedges, the wax Ligustrum lends itself still more easily to form ornamental garden designs. The Ligustrum tree

will stand severe pruning even during its flowering period. The foliage is thick and can be easily converted into a beautiful street decoration without losing its power to cool and shade in comfort the very ones whom it has persecuted.

We took at random 56 of our 850 allergic patients and found 31 positive and 25 negative to *Ligustrum*, but in only 3 of these was the reaction most marked for *Ligustrum* compared to other allergens. Other varieties of combined tree pollen such as Elm, Maples, Oak and Pecan, proved predominant in 4 of these 56 thus studied. Hence, from this analysis tree allergy still remains a secondary consideration: about 5 per cent compared to the 75 per cent Ragweed cases.

It was a source of surprise to us from inquiries sent out to see how little *Ligustrum* tree is known or planted outside of the South. No mention of *Ligustrum* is made in Farmer's Bulletin No. 1208. Bailey's *Cyclopedia of Horticulture* gives the following varieties and mentions that *Ligustrum* can be found all over the South and West as far as California:

"The evergreen *Ligustrum* and those that are native in warmer climates are much used throughout the South," according to F. L. Mulford of the United States Department of Agriculture, "while only the hardiest ones like *Ligustrum Vulgaris* and *Ligustrum Amurense*, thrive in the North. *Ligustrum Ovalifolium* is much used here and at St. Louis and at intermediate points, but is precariously hardy and dies close to the ground every few years."

"Distribution - - - East Asia and Himalayas, Europe and North Africa, United States of America, *Ligustrum Vulgare*, *Ligustrum Iboti*, *Ligustrum Acuminatum* and *Ligustrum Amurense*, are hardy North up to Long Island. *Ligustrum Japonica*, North to Philadelphia. *Ligustrum Ovalifolium* will stand salt water sprays along the sea shore."

We conclude from these facts that the average citizen is not prepared to look with enthusiasm or conviction on the wholesale destruction of beautiful grown trees at the value of \$51.80 each (\$65.00 in New York). At the same time, we do not wish to face the experience of Texas with the Mesquite tree where Dr.

I. S. Kahn writes me it is so thickly planted that nothing can be done for it.

In trying to solve this difficult problem, 2 questions arise: What trees should we plant and what must be done with the trees already planted? The first problem is one for the Park- ing Commission. To them, now, as two years ago, we suggest that their selection be made in regard to the list above submitted. The Department of Agriculture furnished us with the following list which has proven satisfactory over the South. These, on account of their rapid growth, their shade giving qualities, their deciduous habits and their freedom from parasite diseases are recommended by Washington:

Many varieties of Oak.
Tulips
Sweet Gum
Sycamore
Elm
Staminate Maidenhair
Some Maples

About $\frac{1}{4}$ (Pine, Palm, Myrtle, Willow, Poplar, Oak, Elm, Hackberry, Magnolia, Camphor, Sycamore, Chinaberry, Holly, Maple) of the 48 indigenous varieties of trees listed by the Louisiana Department of Conservation adorn our streets. Many of the 48 varieties do not lend themselves for street decoration, some are affected by parasites, others give off disagreeable odors, others give too much shade, or scatter too many leaves, grow too fast or their roots destroy the pavement.

Added to these considerations, in future selection, the hay fever sufferers are entitled to be given a serious thought and a voice in the selection. We suggest furthermore that concentration of any one variety be avoided.

In New Orleans, the Camphor tree, if freed from parasites, has been most satisfactory. The beautiful alley of pink crowns of the Myrtles on Napoleon Ave., is an example to be followed. The Magnolias are world renowned and one wonders why they are not more often selected; though evergreen, their crown is not too compact. Surely, from the lists given, from Washington and the Louisiana Division of Forestry, one can select a useful ornamental and beautiful tree which will give comfort, cool-

ness and shade without being a scourge to the allergic.

The second part of this problem, however, is not so easy to settle. We maintain that the problem is a neighborhood problem and should be settled neither by the 99 per cent of the population to whom pollinosis is unfamiliar, nor by the 1 per cent of the allergics of the whole City, but by improvement Association composed only from that special neighborhood where the question of removing or not removing the tree is up for solution. A fine grown tree is valuable; this allergen bearing tree is often very beautiful, has sheltered and comforted many, has enhanced the value of their property and of those near it. In our enthusiasm, we must not close our eyes to these facts, but in all justice, pass the problem to those most affected.

A New Orleans lady, annoyed during the last two years by the *Ligustrum*, has practically solved her problem by cutting back the blossoms. On Carrollton and Hickory, is a beautiful example of how the Topiarist can improve the setting of a house. The approach to the Baptist Hospital and many gardens near also show what pruning and trimming can accomplish. Why not try Topiary before wholesale and expensive slaughter?

CONCLUSION

(1) Abandon further planting of *Ligustrum* as far as possible. (2) Plant different varieties of trees in the same neighborhood and avoid concentration of any one variety of trees. (3) Trim the *Ligustrum* now planted.

APPENDIX

Camphor Tree:

Leaves Alternate

Ovate—Elliptical

Acuminate

Axillary Pannicles

Ligustrum:

Leaves opposite, short petiole—Entire without stipules.

Flowers in terminal panicles—Calyx campanulate obtusely 4 toothed.

Corolla funnel shaped—Stamens 2—One 4 seeded drupe.

Fifty species in Asia and Himalayas—One in Europe and N. Africa.

Fruits may be greenish, yellowish, white or whitish.

DISCUSSION

Dr. E. D. Fenner: I do not know when I have ever risen to speak to this Orleans Parish Medical Society when I felt more utterly incompetent than I do at this moment. I have read with a great deal of care the paper that Dr. Thiberge has presented, and I have listened to it with deep interest, and I believe that it concerns every member of this Society and every citizen of New Orleans, but I feel that if there is one thing that it proves beyond dispute it is this is a question that only those who are really students of the subject are competent to discuss. It proves the fact that the profession and the citizens of this community must depend upon men like Dr. Thiberge and his predecessor, Dr. Scheppegegrell, to teach us what is to be done and how it is to be done to protect us from the ravages that render the lives of so many of our friends and acquaintances unhappy during the incidence of hay fever.

I think Dr. Thiberge has made a most illuminating presentation of this matter, but it leaves with me still the belief that few of us here are competent to affirm or dispute the statements that he has made, and I feel that this paper is one that is of importance because the conclusions and well based opinions that it expresses may influence the public that makes gardens, and the Parking Commission which creates parks and the ornamentation of our streets; they may be induced by the strong and irrefutable arguments presented by Dr. Thiberge to accept the advice of men like him, who can tell them what to do to prevent the misery of that 1 per cent who sneeze more loudly than the other 99 per cent, and I personally feel grateful to have listened to Dr. Thiberge's paper, but I confess that I do not feel that I have done anything more than open the discussion.

Dr. C. V. Kraft: It has been many a day since I talked to my physician friends. It has been said if you want to differ, differ with a friend, and in the name of suffering humanity I am going to differ a little bit from Dr. Thiberge's paper, because I have had experience perhaps in another line, and perhaps I am like the specialist—a man who is a specialist in stomach troubles, if someone comes to him with rheumatism, he is going to think about the stomach first. Now, I can talk about the subject as a horticulturist; I am also a physician; but, best of all, I have been a hay fever subject since six years old, and I am over sixty, and I know something about hay fever.

When I first practiced medicine, when I graduated, I was going to cure hay fever, and I studied that disease. I soon found out I knew very little about the cure of hay fever, but for years I was sure hay fever was caused by ragweed only until Dr. Thiberge proved I was barking up the wrong tree, that it wasn't ragweed at all that caused my attacks.

Coming back to the ligustrum tree. It is one of the trees in the South. It is a beautiful tree. I hope this Society will not recommend cutting down all ligustrums planted on our streets. There is another ligustrum tree, the wax ligustrum, which is a shrub, and that shrub becomes beautiful only by trimming. The ligustrum tree blooms early in the Spring and there are few people who have hay fever in the Spring. They usually have it in the Fall. Spring hay fever would be perhaps less than 2 or 3 per cent of this community. Any recommendation that the Society makes, I would like to see them eliminate from their recommendation the wax ligustrum, which is really a shrub, these trees may be put in the Parking Commissions hands for trimming before they bloom, and in that way prevent hay fever for that 1 per cent making all the noise.

I remember one case in Algiers, a lady who had hay fever for a good many years, went to a physician in town and spent all her money, and finally someone told her about the ligustrum tree. She had enough influence to have the ligustrums cut down on her square, and still she had hay fever. Someone said if you sell your old horse you will never have hay fever. So she did and had no more hay fever. The dandruff from the horse caused her hay fever. I hope automobiles will not have dandruff.

Dr. B. G. Efron: I think I was responsible for the agitation to cut down the Ligustrum trees. I wrote a letter to the City Council stating that I was seeing a great number of patients who had ligustrum hay fever and asked the Council to destroy these trees.

There are a few things the essayist and the gentleman following him said I want to disagree with. One is the incidence of allergic disease in the general population which is not 1 per cent but from 5 to 10 per cent. May I correct my horticultural friend about the incidence of early summer hay fever in the South and Louisiana and New Orleans in particular? In Louisiana 85 per cent of all hay fever cases start in April, May or June and do not quit until September, October or November, and unless I am seeing an unusual group of individuals, eight out of ten patients have not only ragweed hay fever but grass and ragweed. The ragweed patient has hay fever later in Louisiana than in the North. The Ligustrum hay fever patient has hay fever in April, May, or June. I investigated 37 cases of early summer hay fever from my own records. (I am going to worry you with a paper on ligustrum hay fever some time later) I found that 8 per cent of early summer hay fever were caused by ligustrum alone, and in 77 per cent of the grass cases, ligustrum was a complicating cause. In going through this city, I find that the ligustrum is planted in long rows all over the residential part

of this city. I have conclusive proof of people getting relief when the ligustrum tree is cut down.

You can trim ligustrum hedges and shrubs very easily, but how you can trim trees 20 feet high without a great deal of effort and expense I don't know. Some streets are lined with ligustrum. The only practical way to be rid of this menace is to cut the ligustrums down.

Dr. N. F. Thiberge (In conclusion): Thanks to the gentlemen who discussed my paper. It is only by having a difference of opinion that we can get anywhere at all. We are sure that Dr. Fenner was entirely too modest. We feel certain that he knows a great deal about hay fever.

In reference to Dr. Kraft, we made mention in the paper about wax ligustrum, about the beautiful hedges enhancing the value of properties, as at the Baptist Hospital. These can be easily pruned.

We realize that our claim of 1 per cent allergy is conservative, we stand upon a firm basis in claiming at least 1 per cent having hay fever but we do not include all allergic conditions. In basing our statistics, we do not select patients only in wealthy circumstances, but from all over the city.

In regard to trimming the trees, as far as the expense is concerned, each tree is estimated in an authoritative book upon trees as being worth at least \$50.00. If these trees are eliminated it would not only cost labor to cut down but replacement value. You can figure how much more expensive it would be than trimming.

In arriving at the statistics, we have treated allergic patients for 18 years and covered about 5000 cases, and though the percentage is a modest one, we stand firmly on that ground.

The blooming period of the tree is very short and it comes in early spring, in February and March, and we believe trimming is worth trying. Why not interest the neighborhood of the patient to try topiary? It has been tried and found practical. If in some instances, why not in more instances?

THE LAW OF NEGLIGENCE AND MALPRACTICE AS APPLIED TO PHYSICIANS*

THOMAS P. BRADY
BROOKHAVEN, MISS.

Physicians like all other citizens are subject to all laws, both federal, state and local, and in addition thereto, are subject to laws relating only to physicians and surgeons passed by the

*Read before the Tri-County Medical Society, Tylertown, Miss., June 13, 1933.

various states and to the rules and regulations of the state boards of health.

The law defines a physician as one authorized to prescribe remedies for and treat diseases, one lawfully engaged in the practice of medicine or one vested in or practicing the art of medicine and the word "doctor" is the broadest term applicable to one who practices medicine, including both medicine and surgery in its original meaning. The word physician comes from the Greek word *Phusis*, which means nature. Technically, physician today means not only what has been said but also it signifies an academic distinction founded upon having received a degree. The word is used commonly to denote skill in the general subject of medicines.

The right to practice medicine and surgery is not *malum in se* or a nuisance *per se* and when unaccompanied by acts which are in themselves evil, vicious and criminal is not a crime of common law.

In the case of *Redman v. State*, it is pointed out that the practice of medicine was open to all people at common law who desired to practice it subject to liability for deaths for lack of skill and to the right of the government to proceed by *quo warranto* to prevent incompetents from following the business.

The right to practice medicine, though a valuable right, is likewise sometimes said to be a property right or to partake of both the nature of property and liberty. It is not an absolute unqualified or fixed right under our Constitution but is subordinate to the police power of the State and also to the power of Congress to make laws necessary and proper for carrying into execution the Eighteenth Amendment.

In the case of *Lowrie v. State, Board DD of Registration*, the New Jersey Court held that it was within the power of the Legislature to make the practice of dentistry without license an offense against the public since they may well think it involves public injury and to punish it by fine or penalty or to authorize imprisonment for non-payment of the penalty.

No one today, generally speaking, has a right to practice medicine without having the necessary qualifications of learning and skill. There are exceptions, however, to this rule in cases of emergency where the exigency is of so

pressing a character that some kind of action must be taken before the practitioners can be found or procured.

It was held in California, however, that where approximately twenty-four hours elapsed between the commencement of treatment in a confinement case and the birth of the child that an emergency did not exist. Apparently, the Court felt in this case that adequate time existed in which to procure a competent physician.

Likewise the practice of Christian Science treatment in many states is expressly excepted by the Statute. In other states, however, it is held to be within general prohibition in practicing without license. This form of treatment falls within the broad practice of religious tenets of any church, which is an exception.

Some courts have held that the practice of medicine is a mere privilege.

I shall not concern myself any further as to the right to practice medicine and surgery inasmuch as all present are undoubtedly qualified legally and medically to engage in the practice of medicine. The securing of your degrees, internship, the obtaining of your licenses, as required by the statutes of this State, has been fulfilled. I shall only touch briefly upon the relationship of a physician to his patient, inasmuch as this is commonly known and for the most part commonly complied with.

The relation between a physician and his patient is one of trust and confidence, and all dealings between them will be closely scrutinized, particularly those inuring to the benefit of the physician.

As pointed out in 48 C. J. 1111, while communications between a physician and his patient are ordinarily privileged, it has been held that the question of whether a breach of medical confidence is actionable depends upon the character of the disclosure made.

It was held in the case of *Simonsen v. Swenson*, 9 A. L. R. 1250, that a physician, who in good faith and with reasonable grounds decides, upon confidential information given by his patient, that he has a contagious disease, is not liable in damages to the patient for such disclosure to others as will prevent the spread of the disease.

A physician may advise the removal of a

patient to a hospital but he has in an ordinary case no authority to order such removal.

The relationship of physician and a surgeon and a patient, in conclusion, is one arising out of contract either express or implied and the general rules as to the construction and validity or legality of contracts apply. A physician or surgeon may by special agreement or notice limit the extent and scope of his employment. Unless specified, the physician's employment continues until the physician's services are no longer needed or until terminated by common or mutual consent or at the will of either party.

In the case of *Hood v. Moffett*, 109 Miss., 757, the Court held that where pain results from a physician's breach of his contract to treat a patient that damages may be recovered for the accompanying mental anguish.

The bulk of damage suits against physicians or surgeons, however, is predicated for the most part upon negligence and malpractice. The treatment of these questions as evidenced by the laws and cases of our state, due to a lack of time, necessarily must be brief.

Negligence and malpractice have been defined as follows:

Malpractice, coming from the words *mala praxis*, means and is bad practice, either through lack of skill or neglect to apply it if possessed, 48 C. J. 1112. Malpractice is either wilful neglect or ignorance.

Negligence on the part of a physician has been said to consist in his doing something which he should not have done, or omitting to do something which he should have done, or his failure to exercise the required degree of care, skill and diligence. As to the requirement of skill and care to be used by a physician in treatment of his patient generally in the absence of a special contract to do so, a physician or surgeon is not required to exercise extraordinary care and skill of the highest degree possible. The reason for this rule of law is that in this profession, as in others, natural genius and unusual industry, learning and experience may enable some of its members to obtain a pre-eminence that it would be vain to expect in the great majority, as pointed out in the case of *Getchell v. Hill* 21 Minn. 464.

If the physician or surgeon is not a special-

ist he is not required to exercise the skill and care of the specialist or expert but is only required to possess and exercise the degree of skill and learning ordinarily possessed and exercised under similar circumstances by the members of his profession in good standing and to use ordinary and reasonable care and diligence and his best judgment in the application of his skill to the case.

The object of this law is to guard the patient against the wrongful practice of ignorant or negligent men who hold themselves out as physicians and surgeons and on the other hand, to protect the faithful practitioner of ordinary learning, skill and ability from loss in reputation or purse on account of matters for which it would be unreasonable to hold him responsible, *Loudon vs. Scott*, 12 a. L. R. 1487. Skill, in the sense in which it is here used, includes not only the knowledge or information which a surgeon has in reference to the propriety or desirability of a given operation but also the ability to perform the operation in a proper and approved way, *Akridge v. Noble*, 114 Ga. 949. Ordinary skill or average skill means such degree of skill as is commonly possessed by men engaged in the same profession. Naturally, therefore, the degree of care and skill required of the specialist is far greater than that of the average practitioner, and the question of when a physician becomes a specialist is held to be not one of law but one of fact.

The reason for this rule is that if the alleged specialist possesses no greater skill in the line of his specialty than the average physician, there would be no reason for his employment. Possessing, therefore, such additional skill it becomes his duty to give his patient the benefit of it, *Baker v. Hancock*, 64 NE 38. Since this question is one of fact and not of law, it results, therefore, that a jury of twelve men can only decide when a physician is or is not a specialist.

The determination of the degree of learning and skill required of the physician in his treatment of a particular case must be according to the state of medical or surgical science at the time.

It has been held in this regard that in the use of comparatively new power or force the prop-

erties of which are not fully known or understood, very great care should be exercised. Frequently the degree of care and skill required of a physician or surgeon is qualified also by reference to a locality or localities. The locality is not the place where the services are rendered, however, but the place where the physician is stationed and located and where he engages in the practice of his profession.

In substance then, the general practice in particular cases by the physicians who are present is the determinant of what is ordinary skill and care.

Physicians are bound to follow methods generally approved and required in the profession. Any alterations or deviations from this general rule are made at the risk of the physician. While the law realizes there are different schools of medicine, it does not favor or give exclusive recognition to any particular school or system, and the question whether or not a practitioner in his treatment of a case exercised the requisite degree of care, skill and diligence is to be tested by the general rules and principles of the particular school of medicine which he follows, and not by those of other schools. A failure to exercise reasonable care, skill and diligence will make the physician liable in an action for damages, and what is reasonable care, skill and diligence likewise depends largely upon the circumstances of the particular case, and upon the duty to be performed, the degree requisite being in proportion to the nature of the case.

For instance, in the case of an unconscious person, great caution to see that no injury occurs is only ordinary care. Where a physician also is in doubt regarding a case he should use his best judgment as to the consultation with other physicians or surgeons or be guilty of a lack of reasonable care and diligence.

The fact that a physician or surgeon renders his services gratuitously does not absolve him of the duty to use ordinary care, skill and diligence.

In the use of anesthetics, it has been held that a physician must use ordinary care in administering the same and that ordinary care and skill are not to be measured by the usual and ordinary skill possessed by other physi-

ans but that of persons whose occupation and study gives them a skill or better knowledge as to its use than is possessed by general practitioners. This same rule likewise applies to physicians operating x-ray apparatus or applying radium, *Unger v. Grimsley*, 138 Miss., 591.

As to the acts or omissions constituting or not constituting negligence, the courts have held that while a physician is not expected to anticipate results arising from peculiar characteristics and conditions of a patient of which he has no knowledge, for failure to possess the requisite skill or exercise the requisite care and diligence as a result of which the patient is injured, the physician or surgeon is liable. In some jurisdictions this is the rule by force of statute. Therefore, a physician is liable for injuries resulting from his failure to exercise his best judgment or failure to exercise the required care in that the physician did things he should not have done or failed to do things he should have done in particular instances. However, in any of these cases, the want of skill or care must have been the proximate cause of the injury or death of the patient.

A physician is not bound to render professional services to everyone who applies and he can refuse to accept a case, or respond to a call, although he is the only physician available, provided said patient is unable to compensate him but after having accepted the case he does not have the right to discontinue his services without just cause without making himself liable for the injury or death of said patient.

In the treatment of a case, it has been broadly held that any deviation from the established mode of practice is sufficient to charge a physician with liability in case of any injury arising to the patient. When a particular mode of treatment is upheld by a consensus of opinion of the members of the profession, it should be followed and if a physician sees fit to experiment with some other mode he does so at his peril, being responsible for resulting injuries to the patient.

Our courts have held that a patient is entitled to an ordinary careful and thorough examination, such as the circumstances, the condition of the patient and the physician's opportunities for examination will permit.

However, irrespective of how skilled in administering drugs, a physician cannot rely on the diagnosis of another since the patient is entitled to the judgment of his physician formed from his own diagnosis, 218 Ala. 609.

Likewise the excessive delay in taking a roentgenogram which would have better enabled a physician to treat an injured elbow was held to be negligence in the case of Hoover v. McCormick, 197 Ky. 509.

While a physician does not insure the correctness of his diagnosis, a physician or surgeon is required to use reasonable skill and care in determining through diagnosis the condition of the patient and the nature of his ailment. He is responsible for a failure due to the want of requisite skill and care to diagnose the nature of the ailment, with resulting injury or detriment to the patient. This does not apply in the case of rare diseases which can only be detected by skilled experts but does apply even where information and not medical treatment was sought. Broadly speaking, a physician is not liable for an honest error or mistake in judgment, provided, however, there is present a reasonable doubt as to the nature of the physical conditions involved or as to the proper course to be followed or where good judgments may differ. In emergency operations, a surgeon is not liable for an honest error in judgment. The unwarranted abandonment of a case after its assumption will render surgeons liable to damages at least where he does not give reasonable notice or provide a competent physician in his place, and he is also liable for increased pain and suffering resulting therefrom. The frequency of visits to be made by a doctor is a question for a physician to determine if he uses ordinary judgment. Temporarily leaving his practice is permissible provided he notifies the patient in question that he is going away and indicates who will attend him while gone, provided he does not remain away longer than he has informed his patient he would. A physician generally speaking is liable for operating without the patient's consent or in the case of a minor without the consent of the minor's parents or guardian. It is frequently held that a physician or surgeon is liable for

operating without the consent of the husband or wife.

In the matter of dealing with contagious diseases:

A physician is negligent who fails to advise and warn members of the family and local authorities and is liable under the statute for the penalty imposed thereby, and also to any person who suffers directly because of the physician's negligence.

Fraud and deceit in misinforming a patient will make a physician liable.

Likewise, physicians employed by a patient to diagnose or treat the case together are jointly liable for any negligence.

A doctor is not liable for the negligence of the hospital or of the nurses, attendants or internes, who are not his employes, if he has no knowledge thereof or has no connection therewith or if it is not discoverable by him in the exercise of ordinary care or unless he is negligent in permitting them to attend the patient. However, it has been held that where a hospital nurse, although not in the regular employ of the operating surgeon is under his special supervision and control during the operation, the relation of master and servant exists and that the surgeon is liable under the doctrine of *ex respondeat superior* for the nurse's negligence.

In so far as particular acts are concerned, the violation on the part of any physician of any statute relating to physicians makes that physician criminally liable. For instance, it is incumbent upon the physician to obtain a license and to obtain a license in the form and manner required. It is incumbent upon the physician to file the license. Physicians are liable not only criminally but, as is well known, they are also subject to disbarment for the performing of a criminal abortion, or for the habitual use of drugs, or for the illegal distribution of drugs or alcohol. Courts of many states have held also that a physician who undertakes to treat a patient or operate upon a patient under the influence of drugs or alcohol is *'prima facie'* liable for any injury or death resulting to said patient.

The law does not give a physician the right to determine whether or not a fetus shall be born alive or dead. It is incumbent upon the

physician to deliver a fetus alive. The wilful failure to do so on the part of a physician is a violation of the law of this state and subjects him to criminal prosecution, disbarment and civil action. This perhaps is a hard law, particularly when applied to the birth of a mongolian idiot but it is nevertheless the law. In common law, a fetus was held to be alive when it had quickened in the womb.

In the case of *Prewett v. Philpot*, 142 Miss., 707, decided in 1926, it was held that it was for a jury to decide whether or not the doctor was negligent in raising a window during an operation from which an infection subsequently occurred.

The operation was being performed on a hot June night, small insects came through the screen and several days after the operation due to inflammation a second operation was performed and one of said insects was found in the wound.

Likewise, it has been held that burns inflicted by an x-ray were for the jury to determine as to whether or not that constituted negligence on the part of the attending physician.

In the absence of explanation the leaving of a four inch rubber tube in a patient's body by a physician until the wound healed was negligence. That was in the case of *Saucier v. Ross*. The same rule has been held in so far as gauze, clamps and other medical paraphernalia is concerned. Likewise, whether or not sterilized instruments were used or whether or not the instruments were sterilized, it has been held for the jury to ascertain.

It has been held that there is no excuse for a physician who agreed to treat one person that at the time treatment became necessary he could not leave another patient and the physician was held guilty of negligence, *Hood v. Moffett*, 109 Miss., 757.

The unrestricted giving of drugs by a physician to a patient who in his opinion cannot live comfortably without them and who is likewise considered an incurable addict may or may not be classified as negligence and in the event of trial, it would be a matter for the jury to decide.

The degree of care and skill to be exercised

by a physician in treatment of patients, both male and female never goes beyond the point of necessity. The question of necessity is largely within the discretion of the attending physician. Law books are full of cases in which physicians have abused the rights and the confidence of their profession. The Courts have been and are quick to blame any physician who apparently in the exercise of his profession abuses this privilege and is guilty of unnecessary and unwarranted examination or abuse of his patients, particularly female. This abuse applies not only to the body of the female but likewise to the character, and doctors who have attempted familiar and vulgar attitudes toward their female patients have been held liable for slander and have been required to forfeit their licenses. This includes the performing of abortions and any unwarranted or unnecessary questioning of patients, both male and female, relative to matters pertaining directly or indirectly to sex or sex matters.

The well known Teat case, all of you are probably well acquainted with. I do not feel it is necessary to touch upon these matters any further.

In conclusion, I would like to say that in my opinion, there are two professions that are truly worthwhile, that is, are beneficial to mankind. In many respects they are diametrically opposed. I refer to the minister and the physician. It is my opinion, you have chosen the most serviceable of the two in that you are daily alleviating the mental and physical sufferings of mankind. Strange as it may seem, I am sincere when I say I frequently envy you.

HYPOTHYROIDISM*

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Much confusion has arisen in the use of the terminology myxoedema and hypothyroidism. A definite clinical picture of myxoedema has long been on record but it is of the hypofunction of the thyroid gland that we wish to speak. Warfield divides hypothy-

*Read before the Clarksdale and Six Counties Medical Society, March 15, 1933.

roidism into three main groups, namely: (1) cretinism, (2) myxoedema of adults; and (3) masked or occult hypothyroidism. It is the last classification of Warfield that we wish to consider here, but we believe that myxoedema may occur in any degree of hypothyroidism, mild, moderate or severe.

Latent hypothyroidism is a condition in which there are few or none of the classical symptoms of myxoedema but there is evidence of deficiency of thyroid function. Lawrence and Rowe suggest that myxoedema is probably present in hypothyroidism only where a considerable degree of arteriosclerosis is found and that some circulatory and renal insufficiency is indicated as well as deficiency of the thyroid. Hence we will use hypothyroidism as a broader, more recent and more accurate term to indicate the whole range of conditions associated with reduced thyroid activity. Myxoedema will be used as a purely clinical term to define a condition long familiar to us. This familiarity often causes us trouble, as it frequently has few of the earmarks of myxoedema.

Varying degrees of hypothyroidism are responsible for a large amount of ill health. With our present day interest in endocrinology, it seems hardly conceivable that a condition which is so common should go unrecognized for the length of time that we frequently find it. The symptoms of fatigability, irritability and depression are often called neurasthenia. Many sufferers attribute their symptoms to an increasing age, etc.

ETIOLOGY

There is no known cause for many cases. Injuries to the thyroid in the course of disease have been considered a cause. Marine says that hypertrophy of the thyroid depends upon a relative or absolute deficiency of iodine. This deficiency of iodine may be due to: (1) factors which bring about an abnormally low intake of iodine; (2) factors which interfere with the absorption or utilization of an otherwise adequate intake; (3) factors which increase the needs of the body for the iodine-containing hormone. In the latter group may be included puberty, pregnancy, lactation and the menopause. DeQuervain says

that the slighter forms of hypothyroidism occur in patients whose glands have been damaged by an inflammatory affection or by endemic goitre. Some people apparently operate on a very narrow margin of thyroid deficiency and any acute infection may easily lower the thyroid threshold. Operative measures, of course, account for a few of the hypothyroid cases.

SYMPTOMS

There is no definite group of symptoms that characterizes hypofunction of the thyroid. The train of symptoms are so many and varied that we will only attempt to enumerate the most important and those most commonly overlooked.

Fatiguability or exhaustion, for which there is no adequate explanation in the patient's mode of life, is one of the most frequent symptoms. That tired feeling after sleep, that "lack of pep," are expressions that are heard frequently, and while not pathognomonic, should always be investigated.

Hypothermia, with definite sensitiveness to cold, may be a very frequent finding. Menstrual irregularity, most frequently a menorrhagia but at times an amenorrhoea may be the chief complaint. Hans Lisser states that he has only encountered menorrhagia and has never seen thyroid extract relieve amenorrhoea. Complete amenorrhoea, so common in pituitary and primary ovarian hypofunction, is relatively rare. The intermenstrual interval is either shortened or lengthened, but the quantity and duration of the flow are usually increased, with frequently a complete arrhythmia of the cycle. Poor emotional control is found with the menstrual irregularities noted. Constipation or obstipation may often be relieved in these cases of lowered thyroid function by the proper dosage of thyroid. Headache is more common than is often recognized. Irritability is an accompaniment of emotional instability. Vague abdominal pains, which are not constant in location, should not be overlooked.

Other symptoms such as loss of memory, apathy, inability to concentrate for any length of time, parasthesias, numbness and tingling of

the extremities occur occasionally. It has been noted that loss of sexual power, with impotence in the male and sterility in the female, may occur. Pregnancy frequently follows the administration of thyroid in these hypothyroid cases.

PHYSICAL SIGNS

Inspection will often give us a valuable lead. The skin may be slightly dry and cold and often lacks that tone you find in the normal. The outer half of the eyebrow may be thinned. The patient tends to run to the heavyweight class but you may find him markedly underweight. In the severe type of lowered thyroid function, overweight is a very common finding.

The pulse rate is usually slow but may be found fast in those patients who are irritable and emotionally unstable. The blood pressure is generally low, with a low pulse pressure occasionally noted. In uncomplicated cases, unless the myxoedema is marked, we seldom see an enlargement of the heart. Relaxation of the Achilles reflex, as noted by Chaney, may be found.

LABORATORY FINDINGS

A lowered basal metabolism is an essential finding in hypothyroidism, but is not pathognomonic. The basal rate may range from the low normal to minus 50. Lawrence and Rowe report that there is a slight tendency to hypoglycemia in thyroid failure. There may be a slight increase in the lymphocytes in the differential with a normal white cell count. Roentgen ray examination of the gastro-intestinal tract will often reveal the atony so characteristic and so commonly the cause of obstipation.

DIFFERENTIAL DIAGNOSIS

The most important single test in differentiating between hypothyroidism and other glandular dyscrasias is in the metabolic estimation. A lowered basal metabolic rate is most essential in making a diagnosis of hypothyroidism. However, we find lowered basal metabolic rates in hypopituitarism, ovarian hypofunction, Addison's disease as well as in general debilitative states. Patients with pituitary hypofunction have a characteristic girdle adiposity, which does not have the feel of myxoedema. The basal rate usually does not run as low as in thyroid failure. Choked discs and an impaired

visual field are also found in pituitary enlargement. Thyroid medication may be a differential point. The blood picture, the clinical findings and the laboratory findings plus the history will differentiate from any debilitating disease.

Thurman and Thompson reported 196 patients with basal metabolic rates ranging from 11 to 45 below the average normal, in whom no oedema was present. At least 11 per cent of those patients they considered normal (basal readings ranging from minus 11 to minus 24). In 13 they considered an underfunction of the thyroid to be present; 172 they considered to be suffering from various pathological conditions, such as starvation, pituitary tumor, muscular atrophy, etc., but in whom no underfunction of the thyroid could be shown as demonstrated by their response to thyroid medication. So again we wish to reiterate that not all cases of low basal metabolism can be regarded as hypothyroidism. Their opinion is that a basal metabolism of minus 25 or lower represents hypothyroidism and that less than minus 21 usually means that an underfunction of the thyroid is not present. Hans Lissner states that basal metabolism rates never descend below normal as far as they ascend above normal. All errors, such as poor cooperation, faulty preparation, leakage of the apparatus, etc., result in a higher rate than it should actually be. A case of adult myxoedema with a rate of 45 below normal represents a much more severe grade of hypofunction than a case of plus 45 does in hyperfunction.

TREATMENT

The amount of thyroid which must be given cannot always be based on the basal estimation. In patients with a long standing deficiency, there seems to be an inertia, which it may require large doses to overcome. The dosage should be started slowly and gradually increased. The dosage required to raise the metabolism to normal is usually greater than is required to maintain that normal. Functional activity of the thyroid fluctuates considerably under the influence of fatigue, infection or nervous strain and the patient should be instructed to report these conditions promptly. Klaus states that there is a diminished function of the thy-

roid during pregnancy as shown by characteristic changes in the nitrogen and chloride retention and a lowered iodine content of the colloid. If pregnancy supervenes during treatment, it usually requires more thyroid to carry the patient at a normal level.

We use the thyroid extract rather than thyroxin in treating most cases. We believe that we are treating a condition in which there is a failure of the entire gland and that thyroxin only supplies a part of the gland and is much more toxic and must be much more carefully observed. Toxic symptoms will not develop so quickly with the whole gland preparation as they will with the powerful thyroxin.

Focal infection must be eliminated. By so doing, the maintenance load of thyroid may be lessened. Acute illnesses may require an increased dosage. Removal of all strain or irritation will hurry recovery. Allowance must be made for depression, irritability and other symptoms and a patient must never be allowed to be classed as a neurasthenic.

After regaining normal health, the next question asked by the patient is the duration of treatment. That depends on the extent of the thyroid failure. Patients with definite thyroid failure will have to take thyroid the greater portion of their existence, with regular intervals of intermission. The danger of producing hyperthyroidism is greatly decreased by these periods of intermission.

CASE REPORTS

(1) Mrs. M. C., aged 31 years. Patient referred to me by an oto-laryngologist to whom she had gone for relief of headaches and sinus trouble. Cloudy sinuses reported but no pus. Patient states that she is tired and sleepy all the time. Has had palpitation of the heart for past four months, which she notices most on walking and exercise. Sleeps well. Is nervous. Flushes easily and is very emotional. Loud talking and unexpected noises make her nervous and irritable. Complains of pain in left axilla. Has one child three and one half years old. No miscarriages. Weight 145 pounds when married. Reached 185 pounds during year after childbirth. Menses began at 12 years of age, regular, 4-5 days duration, normal amount, and 28 day type, are normal at present date. Blood pressure 162/90.

Physical Examination: Fairly large, apprehensive, somewhat adipose individual. Height 71 inches, weight 185 pounds, pulse 90. Face flushed.

Eyes prominent (from birth). Conjunctivae injected. Skin warm and moist. Thyroid not enlarged or palpable. Heart rate slightly accelerated. No tumor masses felt in abdomen. Pelvic Examination: Uterus retroverted and fixed by old pelvic inflammatory mass. Basal metabolic rate—26. Treatment: thyroxin and ovarian extract. 4/30/31, basal metabolic rate—3 (much improved). Blood pressure 134/78; pulse 72.

(2) Mrs. D. M. C., July 14, 1931, aged 35 years. Height 65 inches. Weight 138. Pulse 72. Has had some menstrual irregularity for months. Came to office with chief complaint of profuse hemorrhage for past ten days. During last six to seven months patient has frequently had menses bi-monthly. Prior to that, menses were regular but very profuse, 7 to 10 days duration. Has been very nervous recently. Complains of dizziness and smothering spells. Headache for past 10 days. Menses began at 13 years, regular, 3 to 4 days duration and normal. Has one child, 14 years old. Several miscarriages, all since birth of only child.

Physical Examination: Skin smooth, soft. Hair glossy. Thyroid not palpable. Pulse 72. Cardio-respiratory, negative. Pelvic examination: small cervical tear, with small soft mass the size of walnut, fixed in left cul-de-sac. Basal metabolic rate—13. Given thyroid extract, grains $\frac{1}{2}$. Did not return for check up on basal metabolic rate but states that she feels fine and menstrual flow has decreased to normal. Last seen November 20, 1932.

(3) Mrs. T. S. W., September, 1930, aged 57 years. Height 65 inches. Weight 225. Complains of severe headaches, dizziness, aches and pains over body. Has noticed cold extremities for past six months and is more susceptible to cold. Complains of tired feeling, especially noticed on arising in morning. Had typhoid at 21 years. Weighed 120 pounds then. Began gaining weight. Has had four children. After first child, weight increased greatly. Present weight 225. Menses began at 14 years, free, 6 days duration, very painful but regular. Menopause at 50 years. Pulse 60. Blood pressure 180/110. No basal metabolic rate taken at that time. Given thyroid, grains 1, daily and increased to grains 3 and patient felt much relieved. Had much greater energy and headaches decreased in severity and frequency. Weight dropped to 185 pounds. Patient last treated March, 1931, until February 16, 1932, when I was called to her home. She complained of severe headaches, dizziness, dyspnoea, aches and pains over joints and chilly sensation. Blood pressure 228/130. Weight 216 (patient stated that her weight had reached 230 but that she had been a very strict diet for two weeks). Skin dry and scaly. Basal metabolic rate 0. The laboratory reported the test to be very unsatisfactory, as the patient was very restless, dyspnoeic and complained of pain in her

hip. She had had a sleepless night due to pain in her hip, so we discounted the zero reading and began treatment with thyroid. We hope to do several things here: (1) to relieve the headache to some extent; (2) to lower the blood pressure; (3) to make the patient feel more like a normal being with regard to the aches, tired feeling, etc.; (4) we also expect to reduce the weight considerably, thereby relieving the heart load to a great extent.

A recheck of the basal metabolic rate made March 1, 1932, showed the same normal rate. We added pituitary to the treatment and the patient gradually improved. Her blood pressure, taken February 28, 1933 was 168/95. Her weight was reduced to 185 at one time but she admits that she has been lax in taking medication. She is greatly improved in every way, however.

(4) Mrs. N. M., 4/30/31, aged 30 years. Height 67 inches. Weight 140 pounds. Complains of palpitation of the heart, which she notices more frequently on lying down and which awakens her frequently from a sound sleep. Has attacks of dizziness and says she feels temporarily blind. Tires easily. Awakens in the morning feeling as if she had not rested. Sleepy and very nervous. Very easily irritated. Emotionally unstable. Headaches frequent. Has one child about three years old. No miscarriages. Wasserman, negative. Pulse 80-90. Menses began at 13 years, regular 28 day type, 3 to 4 days duration, flow normal. Has been decreasing in amount for several years, now menstruates about every three weeks, but menses very scant. Colds infrequently but more often feels stopped up.

Physical Examination: Skin soft and smooth. Hair soft and oily. Thyroid not palpable. Findings otherwise negative, except for some cloudiness of antra. Treatment: thyroxin for one month, basal metabolic rate—6. Patient felt much better, was much more cheerful, had headaches very infrequently and felt like engaging in her usual work. Returned to office 3/20/32 stating that she had felt so well for several months that she had not been taking thyroid, was 6 months pregnant. Symptoms returned in a more aggravated form except that the headaches are not so severe and the palpitation is much less frequent. Pulse 90. Blood pressure 90/50. Weight 156. Basal metabolic rate—16. Given thyroid, grain 1 daily, for three weeks and basal metabolic rate was again—16. Thyroid increased to grains 2 daily. Pulse 82. Blood pressure 110/60. Patient was carried through pregnancy with the 2 grain dosage, except for short intervals. Normal delivery of normal infant. Basal metabolic rate was reduced to —11.

Here we have a case complicated by pregnancy. Normally we expect the basal metabolic rate to be raised during pregnancy. Pregnancy will fre-

quently raise the basal metabolic rate of a patient just below normal, to normal or to a small plus value. However, if the basal metabolic rate is too low and we consider all rates below—20 in this classification, pregnancy will cause an exacerbation of all the symptoms. We feel that in pregnancy we must be especially careful in our initial doses. It is especially necessary to give thyroid for the sake of the child, as we feel that familial hypothyroidism is a very definite entity. The possibility of these mothers giving birth to children of lowered thyroid secretion, with all the resulting stigmata and train of ill health, is being more thoroughly recognized. Litzenberg states that in his series, a little less than one third of the women with a low basal rate who conceived, aborted, some of them repeatedly.

DISCUSSION

The finding of a lowered basal metabolic rate is essential to a diagnosis of hypothyroidism, but we wish to emphasize again that there are many other conditions which bring about a lowered rate. Thurman and Thompson have recently classified patients with low basal metabolic rate into three groups; (1) those who are apparently healthy and have a low metabolism; (2) those with hypothyroidism too mild to result in myxoedema; and (3) those in whom a lowered metabolism is associated with a pathological condition other than underfunction of the thyroid. We agree with his classification. We believe that a greatly lowered basal metabolic rate is not necessary for a diagnosis of hypothyroidism and agree with Hans Lisser that where the clinical picture is suggestive, even though the basal metabolic rate falls within the low normal, a trial of thyroid therapy is advisable. The nature of the response to thyroid therapy is of great importance. As a means of establishing the diagnosis it is of even greater importance than the determination of the basal metabolism, since it distinguishes between lowered metabolic rates due to primary and secondary hypothyroidism. Thyroid medication is ineffective and even increases the disaffection where the lowered metabolism is due to other causes than a true hypothyroidism. In some instances in which we have a true hypothyroidism associated with some other condition, the administration of thyroid gland substance will alleviate part of the symptoms.

Litzenberg found a lowered basal metabolic

rate present in a large percentage of menstrual disturbances and sterility and to a definite but lesser proportion of repeated abortions. He found that 50 per cent of sterile women had a low basal metabolism and of cases treated with thyroid, one third conceived. He came to the conclusion that lowered basal metabolism, even to a moderate degree, interferes with the reproductive function in a large percentage of cases as shown by disturbance of menses, sterility and interruption of pregnancy.

SUMMARY

Hypothyroidism is a common clinical condition which produces considerable disability and which responds well to treatment.

Failure to recognize the disease is due to the vague symptomatology. The value of the basal metabolic rate is recognized but we wish to emphasize the fact that a lowered rate is found in many other conditions. The nature of the response to thyroid medication is invaluable in diagnosis in a borderline case. But we wish to advise caution in the dosage in those cases.

NEW ORLEANS Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

GO TO YOUR STATE MEDICAL SOCIETY MEETING!

The next annual meeting of the Louisiana State Medical Society will be held in Shreveport, beginning April 10, and the annual meeting of the Mississippi State Medical Association will be held at Natchez, starting May 8. Both of these two meetings should be attended

by every member of organized medicine in the two States. Scientific programs have been provided which will provide invaluable post-graduate instruction. The latest information in the study of disease will be brought out, and moot points will be presented in which there are variations in opinion, which will afford an opportunity to those not down on the program as essayists, to express their opinions and their point of view concerning these debatable points. In this way it will be possible to obtain a broad outlook on medicine and to learn from the experience of others, and to give to others your own experiences.

The importance of the State Medical Society meetings can not be over emphasized. It is not possible always for the busy practitioner to attend the national meetings, nor is it always possible for the man actively engaged and busy the greater part of the time in his professional duties to keep entirely abreast of medical literature. At these meetings facts and data are presented in a readily assimilable form, which will make splendid brain pabulum to nourish the brain cells for a considerable period of time.

In addition to the scientific information the man obtains at these State meetings, always the social features of the program should be stressed. Here one has the opportunity of coming in contact with physicians from all over the State, of getting to know them, and to relax with them. This social side of a meeting broadens a man, gives him a wide outlook, and increases his knowledge of his fellow man. Also at these meetings often the physician has the opportunity of meeting men of national prominence. For example, at the Louisiana State meeting the well known surgeon, Dr. Dean Lewis, President of the American Medical Association, will deliver the annual oration.

With all these advantages and reasons for attending the State Society meetings, it would seem that the doctor owes it to himself to secure a needed rest and change; he owes it to his patients to go to the meeting where his fund of information will be materially increased by the scientific papers and scientific exhibits. All in all, we can not see why a man should skip such an opportunity.

A PROPOSED CHANGE IN THE BY-LAWS

Elsewhere in this issue will be found a letter from Dr. S. C. Barrow, former President of the Louisiana State Medical Society, concerning a proposed change in the By-Laws, which should be studied by every member of the organization. Their opinions should be expressed to their delegates concerning these proposed changes. As the Medical Defense of the Society is conducted at the present time, one lawyer, living in New Orleans, is paid a retaining fee by the Society. Necessarily damage suits arise all over the State, and likewise it is impossible for the Society lawyer to be available here, there, and everywhere. Dr. Barrow points out that a local attorney would be of greater value at the time the threatened suit is being considered. He would be at hand to take care of all the annoying preliminaries and possibly might be in a position to prevent suits, which would be entered if much time had to elapse because the details had to be arranged by mail. The organization should give serious thought to Dr. Barrow's suggestion.

TREATMENT OF MALARIA

Three months ago comment was made on the treatment of malaria in these editorial columns, more particularly from the viewpoint of the Dutch producers of quinine. A recent study by Russell,* conducted under the auspices of the International Health Division of the Rockefeller Foundation in conjunction with the Bureau of Science, Manila, P. I., on the use of plasmochin and atabrine in malaria therapy warrants further discussion of the problem of malaria therapy, a problem which is of extremely practical value in view of the great increase of malaria in the past year. This study is based on clinical experience and laboratory experiments.

This paper deals largely with the use of plasmochin and presents the following briefly summarized information concerning the use of this

*Russell, Paul F.: Plasmochin, plasmochin with quinine salts, and atabrine in malaria therapy. Arch. Int. Med., 53:309, 1934.

drug, first developed in 1915. Experience has shown that plasmochin alone is indicated only in those conditions in which quinine is contra-indicated, as at times in pregnancy, in black-water fever, and when there is an idiosyncrasy to quinine. The dose is one tablet after each meal for several days, and three tablets on three successive days for each week thereafter until the symptoms have disappeared. Plasmochin gives very much more satisfactory results when combined with quinine. It is available on the market as plasmochin compound, which contains one-sixth grain (0.1 gm.) of plasmochin and 2 grains of quinine (.125 gm.). This dosage of quinine has been found to be not as effectual as larger doses, so that plasmochin with quinine salts is now on the market containing the same amount of plasmochin but with 5 grains (0.3 gm.) of quinine sulphate. Plasmochin thus combined has a stronger curative action and less toxic effect than when given alone. It is essentially a gametocyte destroyer but has comparatively little effect on the sporozoites. With experimental avian malaria the combination of plasmochin and quinine is more effective than either of these two drugs alone. It is advisable to give the plasmochin with quinine to adults, one tablet three times daily; to small children one-half tablet once or twice a day; to children between the ages of 6 and 10 one-half tablet three times a day. Parasites will disappear from the blood by the sixth or seventh day and the gametocytes almost immediately will be inactivated or destroyed. The treatment should be continued for two weeks. Muhlens has suggested the use of atabrine and plasmochin in the treatment of estivo-autumnal malaria, the former drug replacing quinine. So much for the treatment of the estivo-autumnal malaria.

Atabrine has a destructive effect, according to Russell, on the schizonts in all forms of malaria and on the gametocytes of tertian and quartan malaria, but not on the crescents of the estivo-autumnal infection. One tablet containing 1½ grains (0.1 gm.) is given to adults three times daily for a week. Apparently relapses do not occur after this treatment. Some malariologists point out that there are different strains of *Plasmodium falciparum* which have different and distinct properties, including their reactions to drugs, and that the drug

which may be effective in one section of the world may not prove to be so satisfactory in other places. However that may be, Russell very definitely gives the impression that these two

anti-malarial preparations represent a distinct contribution to the treatment of malaria. He emphasizes, however, that "they do not replace quinine; rather they supplement it."

HOSPITAL STAFF TRANSACTIONS

J. T. NIX CLINIC
New Orleans.

At a meeting held in March, 1934, Doctor J. M. Perret, presiding, presented the following paper.

CLINICAL AND ELECTROCARDIOGRAPHIC FINDINGS IN 100 CASES OF HYPERTENSION.

Hypertension is a subject of perennial and of great interest to both layman and physician. The public today is blood pressure conscious. Our patients should be informed that high blood pressure is a symptom and not a disease. It takes about a minute to take a blood pressure reading, but it may take a long time to properly interpret it. Hypertension is a danger signal which should make us carefully examine the patient suffering from it. In some cases it may be a compensatory and beneficial reaction. There is but slight doubt that a continued hypertension will terminate in the rupture of a cerebral blood vessel, direct damage to the heart as in myocarditis and coronary disease, or renal disease. Cabot estimates that 95 per cent of cases of long standing high blood pressure show a hypertrophied heart.

We do not know how long it will take for the catastrophies mentioned above to occur. Several years ago it was thought that a patient with a blood pressure in the neighborhood of 200 would live about two years. We know now, however, that the outlook is not necessarily that bad if the underlying cause of the hypertension can be removed or influenced by proper living and working habits, diet and drugs. To illustrate by a few examples: Mr. G. T. had a blood pressure of 230-118 in 1921 and 214-120 in 1934; Mrs. J. W. had 238-130 in 1925 and 295-150 in 1932; Mr. H. H. F. had 228-160 in 1925 and 210-150 in 1932; Mrs. G. J. G. had 260-180 in 1930 and 300-170 in 1932. As far as I know all of these patients are still living.

Hypertension is common and apparently on the increase. We frequently find it in the so-called degenerative diseases. It seems to be a part of the price demanded of us by our rapid mechanized modern civilization. The stress and strain of the present day seem too much for us. We seem unable to adapt ourselves rapidly enough and in con-

sequence suffer physical deterioration. We become examples of the degeneration of civilization.

The 100 cases studied were taken from the consecutive records of 851 patients who were examined at the Clinic during a period of seven months. This therefore reveals an incidence of hypertension in 8.5 per cent of all ambulatory patients. A systolic pressure of 160 mm. of mercury was arbitrarily taken as the norm of hypertension. The mercury column type of sphygmomanometer was used. The auscultatory method was followed and the patient was in the recumbent position when the reading was taken. I am of the opinion that the rule of the age plus 100 gives a too high reading. A better rule is to assume that a person of twenty years has a blood pressure of 120 and for every two years of age add one point. Thus by the first method a person of forty years would have a pressure of 140, whereas by the second method he would have a pressure of 130. Five to ten points can be deducted in the case of women.

A very brief abstract of the findings follows. Chart No. 1 illustrates the systolic and diastolic pressures and the number of male and female patients occurring in each decimal group of pressure.

Chart No. 1—Blood Pressure

Blood Pressure	No. of			Blood Pressure	No. of		
	Systolic	Cases	Male		Diastolic	Cases	Male
160-169	24	6	18	50-59	1	1	0
170-179	16	7	9	60-69	0	0	0
180-189	12	5	7	70-79	0	0	0
190-199	15	7	8	80-89	1	1	0
200-209	13	7	6	90-99	13	4	9
210-219	6	4	2	100-109	21	7	21
220-229	3	2	1	110-119	31	12	19
230-239	6	0	6	120-129	13	7	6
240-249	1	0	1	130-139	9	4	5
250-259	0	0	0	140-149	4	2	2
260-269	2	2	0	150-159	1	0	1
270-279	1	1	0	160-169	2	1	1
280-289	0	0	0	170-179	3	1	2
290-299	0	0	0	180-189	0	0	0
300 plus	1	0	1	190	1	1	0
Total	100	41	59		100	41	59

80% of cases had a systolic pressure between 160 and 209 mm. Hg.

87% had a diastolic pressure between 90 and 139 mm. Hg.

Chart No. 2 illustrates the age and sex.

Chart No. 2—Age and Sex

Decade	Total cases	Male	Female
10-19	1	0	1
20-29	5	2	3
30-39	5	2	3
40-49	26	11	15
50-59	37	14	23
60-69	20	8	12
70-79	5	3	2
80-89	1	1	0
	100	41	59

The youngest patient was a woman of eighteen and the oldest was a man of eighty-one years.

83% occurred between forty and seventy years, and the greatest number, 37%, occurred in the fifth decade.

Forty-four of the total of fifty-nine women had reached the menopause.

Complaint—Sixty-three different kinds of complaints were noted. Forty-nine cases had one complaint, thirty-two had two, fifteen had three, one had four, three had none. The following were the most common complaints: indigestion 24, headache 18, backache 14, dyspnea 10, dizziness 7, nervousness 6.

Occupation—Hard physical work does not seem to be an important factor. Twenty-four occupations were represented. Housewives 49, teachers 8, merchants 7, clerical workers 5, priests 4, physicians 3. The remaining occupations were represented by only one or two cases.

Habits—89 drank coffee, 29 alcohol, 23 tea. 70 percent of the men smoked. Smoking was not investigated in the women.

Digestive System—Appetite good 79, poor 21. Indigestion 48. Constipation 37.

Micturition—Day: average, 3 or 4 times; extreme, 9 to 14 times. Night: average, 1 to 2 times; extreme, none to 14 times. Twenty-nine cases had no micturition at night.

Family History—Cardiac disease was found in 14, renal disease in 6. These figures indicate that, as a rule, patients are not conversant with their medical family history.

Weight—There is a tendency to overweight. The weight varied between 79 and 279 pounds. In 48 percent it was between 140 and 180 pounds. 15 percent weighed over 200 pounds.

Urinary Findings—These were generally not bad. Albumin was found in 13, sugar in 6, hyaline casts in 14, granular casts in 5.

Phenolsulphonethylthalein Test—In eighty-four cases the excretion of two hours and ten minutes was between 30 and 50 percent.

Wassermann Test—Positive in five males and eleven female.

Teeth—Edentulous 28, infected 52, good 20.

Tonsils—Atrophied 55, hypertrophied 15, infected 7, submerged 13, normal 10.

Gastro-Intestinal Tract X-ray—Studied on sixty cases. Gastric ulcer 1. Gastropnoxis 1. Duodenal

ulcer 1. Duodenal stasis 1. Appendicitis, Chronic 31. Adhesions, Postoperative 9. Colitis, Mucous 1. Colon-hypermotile 2,—ptosed 2,—spastic 3, stasis 2. Gall bladder pathology 9. The findings were negative in fourteen.

The high incidence of pathologic changes found in the appendix and gall bladder is striking.

Cardio-Vascular System—Aortic regurgitation 2, aortic second sound accentuated 80, aortic systolic murmur 20, apical systolic thrill 3, apical thumping 7, auricular fibrillation 4, cardio-respiratory murmur 1; hypertrophy was found by physical examination in 49 percent, by fluoroscopy in 36 percent, and by skiagraph in 72 percent; mitral regurgitation 7, mitral stenosis 2, mitral systolic murmur 12, premature ventricular contractions 10, pulmonary systolic murmur 2, sinus arrhythmia 1, tachycardia 10.

Blood Vessels—Peripheral arteriosclerosis 25, retinal arteriosclerosis 45.

Diagnosis—Two hundred and sixty-four different aggregate diagnoses were made. Ten cases had 1 diagnosis, thirty-eight cases had 2 diagnoses, thirty-five cases had three diagnoses, twelve cases had 4 diagnoses, five cases had 5 diagnoses. These figures illustrate the fact that patients, especially elderly ones, suffer from many disease entities. To impress this we have only to witness an autopsy and we will be struck with the multiplicity of pathologic conditions found. The more carefully we examined a patient the more pathology we usually found to exist.

The following were the commoner clinical diagnoses: Angina pectoris 2, aortitis 13, chronic appendicitis 6, arteriosclerosis 25, auricular fibrillation 3, cardiac dilatation 3, cardiac hypertrophy 49, chronic cardiac valvular disease 11, chronic cholecystitis 7, chronic myocarditis 17, chronic interstitial nephritis 83, obesity 8, premature ventricular contractions 10, infected teeth 52, chronic tonsillitis 7, hypertrophied tonsils 15.

Electrocardiographic Findings—Rate, average 89. Rhythm, regular 76, irregular 24. P-R Interval, average 0.16, variation 0.12 and 0.34

P Wave: Lead I, normal in 81; Lead II, normal in 63; Lead III, normal in 60.

Q R S Complex: Lead I, normal in 92; Lead II, normal in 82; Lead III, normal in 78.

R Wave: Lead I, normal in 77; Lead II, normal in 76; Lead III, normal in 85.

S Wave: Lead I, normal in 90; Lead II, normal in 89; Lead III, normal in 30. Deep S. wave in 69.

T Wave: Lead I, normal in 69; Lead II, normal in 83; Lead III, normal in 36. T wave in lead I was of coronary type in five cases. T wave was negative in lead III in forty-one cases.

Preponderance: Auricular 14, left ventricular 67, right ventricular 1.

Blocks: Sino-auricular 2, aborization (left) 9, bundle (right) 1.

Premature Contractions: Auricular 2, left ventricular 7, right ventricular 5.

Miscellaneous: Auricular asynchronization 1, auricular fibrillation 2, auricular hypertrophy 2, mitral disease 12, myocarditis 21, ventricular tachycardia 1, sinus irregularity 3.

Deductions:

1. Incidence 8.5 percent of all ambulatory cases and probably on increase.
2. Prognosis should always be guarded but not too pessimistic.
3. More common in women, 59 percent, than in men, 41 percent. 74 percent of the women had reached the menopause.
4. The greatest number, 37 percent, occurred in the fifth decade.
5. Complaints were very diversified. Indigestion leads the list.
6. Hard physical work did not seem to be an important factor.
7. Coffee drinking, use of alcohol, and smoking appeared to be factors of some importance.
8. There is a tendency to corpulency.
9. Renal function, P. S. P., was good but decreased.
10. Foci of infection were common in the teeth, tonsils, appendix, and gall bladder.
11. The heart and blood vessels suffered the greatest damage.
12. The electrocardiograph revealed much of interest and value. An electracardiogram is relatively as important in studying a case of hypertension as the X-ray in tuberculosis.

THE OSCAR ALLEN TUMOR CLINIC OF
CHARITY HOSPITAL
NEW ORLEANS

Continuation of the paper presented by Doctor James K. Howles, essayist, the director, Doctor James T. Nix, presiding.

PRECANCEROUS DERMATOSES

Perhaps no single factor alone is responsible for cancer. Some of the theories advanced are as follows:

1. Cohnheim's theory attributes new plastic growths to congenitally displaced epithelium, which begins to grow riotously. One of the objections to this theory is the fact that cancer often starts where no congenital rests can be demonstrated, and where it is extremely improbable that any such rests did exist. The question of why these rests should become malignant is not answered by the proponent of this theory.

2. Changes in cell type or metaplasia do occur, but within narrow limits, in epithelial tumors.

3. The regression theory as sponsored by Ribbert, wherein a condition of cell change occurs,

whereby cells become atavistic or less differentiated. It is generally conceded by pathologists that tumors arising from less differentiated cells and showing the structure of the primitive cells are the most malignant.

4. Thiersch's theory of change in tissue balance has received little support.

5. Ewing lists a number of parasites that have at some time been held to be responsible for cancer; he includes bacteria, coccidia, sporozoa, blastomycetes, mycetoza and spirochetes.

These are just a few of the theories, but there are numerous incidental factors that must be considered in the occurrence and growth of neoplasms, a few of which are:

Age—As previously stated, cancer of the skin usually occurs in those well past middle life.

Sex—The two sexes are almost equally affected, except in cancer of the mouth, which is not common in women.

Race—The native American Indian rarely suffers from cancer of the skin. The negro only exceptionally suffers from basal cell cancer. The lymphomata are rare in the negro. The multiple idiopathic, hemorrhagic sarcoma of Kaposi is most frequent in Hebrews.

Heredity—Judging from clinical data alone heredity seems to play no part in the production of cancer of the skin. Some of the multiple benign growths are, however, found in members of the same family. Maud Slye working with cancer in mice, showed the tendency of cancer to occur according to the laws of heredity. She states: "The elimination as far as possible of all forms of over-irritation of the tissues of an individual of high cancer ancestry will go far to eliminate the provocation of cancer, and the eugenic control of matings so that cancer shall at least not be potential on both sides of the hybrid cross, ought to eventuate in a considerable decrease in the frequency of human cancer."⁷

The effect of such factors as trauma, light, and occupation upon cancer growth will be discussed subsequently.

The hypothesis that chronic irritation is an important factor in the etiology of neoplasms is supported by the fact that the occupations of men subject their skins to more irritation of a chronic nature than does the work of women as a rule. The late occurrence substantiates this hypothesis also. There are many forms of chronic irritations which have been associated with cancer of the skin, some of them frequently, others rarely.

Mechanical Irritation—In 1925 Mortan⁸ reported the occurrence of neoplasms on areas of the head, which were continuously irritated by poorly fitted eye glasses. Rings, crutches, saddles, garters, etc., have been designated as the contributing cause of skin cancer by Ullmann.⁹

Cancers developing immediately after traumatic injuries are curiosities—as Bowen¹⁰ states various keratoses form the commonest cutaneous lesions that become cancerous. Certain of the soft nevi, especially the common pigmented moles, and scars resulting from various causes, either infectious or traumatic, are apt to become the seats of epithelial tumors.

Marjolin's Ulcer—Cancer frequently develops upon the scars of various dermatoses. Most prominent of these is the scar resulting from ordinary burns of the third degree. Cancer originating in such lesions is commonly called Marjolin's ulcer.

Lupus vulgaris—Lupus vulgaris of many years duration is not infrequently complicated by cancer. Sequeira¹⁸ as early as 1908 noted the high frequency of malignancy present in old lupus scars. Approximately 2 per cent of all cases of lupus become cancerous, is an estimate given by Hazen.¹⁴ The occurrence of cancer in the scars of lupus erythematoses is rare.

X-ray Dermatitis—This was much more frequent in the early days of X-ray therapy than it is at present. Volumes have been, and still could be written on the misuse of the Roentgenrays by inexperienced therapists. It will suffice to say that X-ray therapy is a study unto itself, and this fact is readily appreciated by the physician who has been called upon to treat X-ray dermatitis in the past. The proper dosage of superficial X-ray is enough, no more nor less should be given.

Xeroderma Pigmentosum—This skin disease usually begins with an inflammatory hyperemia and a freckle-like condition, atrophy follows—also, venous telangiectasia occurs. Keratoses appear later, the skin is dry and rough. Later ulceration occurs followed by carcinomatous changes. The neoplasma are of prickle-celled type.

Dermatoses Due to Actinic Rays—These are commonly known as sailor's skin. This condition was originally described by Unna as occurring in sailors who were much exposed to weather and sun. The same condition occurs in farmers. It is especially prevalent in our midwestern states and in Australia. It is believed by Lawrence to be due to the excessive amount of sunshine and the low relative humidity of the atmosphere. It is common among gardeners.

Simple Keratosis—Bowen believes that keratoses form the commonest cutaneous lesions that become cancerous. Solitary patches of keratosis frequently develop in the elderly, usually upon the face and hands.

Seborrheic Warts—These lesions also called warts are common on the backs and faces of elderly persons. Sutton divides these lesions into three types, the keratotic, the nevoid, and the verrucose. These seborrheic warts are usually of dark color and

resemble dirty candle grease stuck on the skin. Basal-celled cancers are very prone to develop upon these verrucous lesions when they are situated at sites of trauma, and occasionally a prickle-celled cancer develops in this situation. When these lesions develop upon the dorsa of the hands, prickle-celled cancer is a common result. It is estimated that nearly five per cent of all these keratoses, especially those of the keratoid variety, terminate in cancer.

Arsenical Keratoses—It has long been known that arsenic may cause keratoses, but it has been only recently shown that the internal administration of arsenic can cause keratoses that may eventually in carcinomata. These lesions have been studied by Hartzell¹⁵ and Schamberg,¹⁶ both of whom agree on the essential points, that arsenic must be administered in fairly large amounts over a considerable length of time. The cancers developing on these arsenical keratoses are of the prickle-celled type. Often it is difficult to differentiate these arsenical keratoses from the verrucous growth of xeroderma pigmentosum.

Leukoplakia—and aphthous lesions around the oral orifice are definite precancerous lesions of the skin. Cancer develops on these sites in many instances in the presence of irritation, whether it be due to faulty denture or chemical or thermal irritation. Their presence should prompt immediate therapeutic action.

Papillomas—The fibro-epitheliomata of the skin (papillomas) give rise to either basal or prickle cell cancer, when they are subjected to chronic irritation or trauma.

Cutaneous Horns—It is generally known that cutaneous horns often become malignant. According to Hazen, the change takes place at the base and is evidenced by ulceration, secretion and induration.¹⁴

Pigmented Moles—Melanotic cancers always have their origin in either congenital or acquired pigmented moles. Bloodgood¹¹ reported on these in 1963. He advises removal of all moles that show signs of growth, as a prophylactic measure. Keen¹² corroborated his findings. Neither the large, raised, hairy moles, nor the small hairy ones, are apt to develop into melanotic growths, and only rarely do they become the seat of basal-celled cancers. The relatively flat, deeply pigmented common moles are the dangerous ones from a standpoint of malignancy. They are usually bluish black, black, or brownish black in color.

Leg Ulcers—Chronic leg ulcers rarely become cancerous. Bloodgood in 1904, and Gottheil in 1912, reported on this condition. Cancer prefers to develop from a dry sore and not from a moist one. In common with most carcinomata of the extremities these growths are usually of the squamous cell variety.

Sinuses, Wens, and Ganglia—Sinuses and fistulas are cited as being the starting points of epithelial neoplasm by some writers, but when one considers the frequency of sinuses and fistulas the subsequent development of cancer is very rare. Wens and ganglia also serve as the starting point of cancer. In fact, any ulceration may be a potential malignant lesion, especially if it is of long duration.

Paget's Disease—This disease is often considered as a precancerous condition, but there is still dispute as to whether the cutaneous lesions may not be secondary to the cancerous changes. It should be treated adequately and thus give the patient the benefit of the doubt.

Syphilis—The development of carcinomata at sites of syphilitic ulcers is often referred to, but the condition is certainly unusual. When they occur it is usually in the scars left by the ulceration and not in the active syphilitic gumma.

Blastomycosis—Lesions have been reported as becoming cancerous, but they are extremely rare. Bloodgood reports such changes occurring in blastomycotic ulcers.²¹

Keratosis Follicularis—Wende reported a case where the keratotic lesions of Darier's disease became carcinomatous.

Chronic Occupational Dermatitis—Schamberg reported on the prevalence of cancer in tar workers, paraffin workers, and chimney sweeps in 1910. The crude petroleum has a particularly irritating effect upon the skin, especially around the hair follicles. The scrotum of chimney sweeps is the site usually affected. Soot in the rugae of the scrotal skin, combined with mechanical irritation, is thought to be the etiological agent in this type of cancer.

Inflammatory Dermatoses—Eczema, lichen planus, psoriasis, occasionally give rise to cancer of the skin, but in the vast majority of the cases reported it is probably that some other factor played a role. Internal administration of arsenic or X-ray therapy may have been the cause.

Conclusion.—Any persistent localized thickening or scurfy spots or warty-like lesions with glandular enlargement or fissures, especially on the lower lip, are suspicious of cancer. The keynote of the whole question is early diagnosis of cancer. If all apparently harmless cutaneous growths on adult skin, which suddenly flare up or become active, were removed, we should have fewer cancers. The scope of this paper does not permit a discussion of the therapeutic measures recommended for each of these potentially cancerous lesions, but it should suffice to say they should be recognized and properly diagnosed early, using the pathologist's help by sending biopsies whenever possible, and then should be treated adequately. Followup routine in all treated skin cancers does much to discover early recurrences.

REFERENCES

1. Yamagiwa, K. and Ichikawa, L.: J. Cancer Res., 3:1, 1918.
2. Pearl, R., and Bacon, A. L.: Arch. Pathol., 6:67-89, 1928.
3. Stout, A. P.: Human Cancer, Lea & Febiger, Phila., 1932, p. 534.
4. Ewing, James: Neoplastic Diseases, W. B. Saunders Co., Phila., 1928, 3rd ed., p. 864.
5. Andrews, G. C.: Diseases of the Skin, W. B. Saunders Co., Phila., 1932, p. 923.
6. Cohnheim, J.: Vorlesungen uber allg. Pathologie, Berlin, 1877, i.
7. Syle, Maud: J. Med. Research, 20:68-73, 1915-16.
8. Morten, J. J.: J. A. M. A., 84:166-168, 1925.
9. Ullman, K.: Die Schädigungen der Haut durch Beruf und gewerbliche Arbeit, Leipzig, 3:202-258, 1912.
10. Bowen, R.: J. Cutan. Dis. 29:241, 1912.
11. Bloodgood, J. C.: Prog. Med., 4:149, 1903.
12. Keen, E.: J. A. M. A. 41:62-63, 1903.
13. Sutton, R.: J. A. M. A. 60:2126-2128, 1914.
14. Hazen, H. H.: Skin cancer, C. V. Mosby Co., St. Louis, 1926, p. 39.
15. Hartzell, L.: Am. J. Med. Sci., 118:205, 1897.
16. Schamberg, J. F.: J. Cutan. Dis., 28:644, 1910.
17. Schamberg, J. F.: J. Cutan. Dis., 28:44, 1910.
18. Sequeira, S.: Brit. J. Dermat., 20:40, 1908.
19. Bloodgood, J. C.: Prog. Med., 4:131, Dec. 1904.
20. Gottheil, W.: J. A. M. A., 58:14-15, 1912.
21. Bloodgood, J. C.: Prog. Med., 4:135, Dec. 1907.

MINUTES OF MERCY HOSPITAL STAFF MEETING

February 15, 1934.

Meeting called to order by Dr. Ph. C. DeVerges, presiding as Chairman and Dr. E. L. Zander acting as Secretary.

Dr. Oriol as Chairman reported that of five deaths this month, one autopsy had been obtained and of four deaths in the preceding month, two autopsies had been obtained which was a rather good percentage. The one autopsy of this month was that of a case of heroin poisoning with acute intoxication. There was nothing of importance about this case to be discussed. From the previous month two autopsies were discussed, one being a case of (1) Chronic Parenchymatous Nephritis-Pyelitis, the second a case of (2) Cerebral Hemorrhage-Myocarditis-Hypertension.

Dr. Campagna, Chairman of the Scientific Committee asked for suggestions in regards to the Scientific Program, suggesting that there being so many current magazines read and so many other organizations which read scientific papers compiled from literature, that he thought it would be more interesting if the program varied by the presentation of case reports, each department being assigned a meeting night to present these cases. The case must be a case that was treated at Mercy Hospital. On motion of Dr. Jos. Brierre, seconded by Dr. Tessitore it was motioned that this suggestion be adopted until further notice.

Dr. Campagna presented the following cases in order to inaugurate this program:

(1) A case of auricular fibrillation in a male, age 40: There was in this case some aortic involvement. The patient giving a history of both rheumatism and having had a positive Wassermann. So far no results had been obtained by digitalization. No focus of infection was found at the present time, the tonsils having been removed recently at the time of illness. This patient was examined by the staff.

(2) A case of pulsus bigeminus in a woman, age 50: The electro-cardiogram was discussed, the patient not being able to appear in person. This condition was not caused by drugs. She gave a history of a positive Wassermann and she complained of no symptoms at the present time.

(3) Treated for a pneumonia of the right lung several years ago, at the present time complaining of pain in the right arm particularly, and at times in the left arm following exertion. A congestion of the veins of the left arm and the neck due probably to intra-thoracic pressure. The roentgenrays made a diagnosis of a probable atelectasis of the middle lobe of the right lung, or a probable tumor was considered. Dr. Battalora suggested the probability of a cervical rib. The pain was anginoid in character. Dr. Cox suggested further examination by the bronchoscope. This case was examined by the staff.

(4) Congestive heart failure with ovarian cyst: This patient was demonstrated to show the results obtained in this case. This patient had a very large abdomen and due to her senility and heart condition she was considered a very bad surgical risk, however, notwithstanding this, under a local operation, Dr. J. E. Brierre reported that an incision was made through the abdomen under local anesthetic and the peritoneum walled off and an incision made into the cyst, two quarts of fluid being removed the first day and gradually a small amount of fluid was removed from day to day by a tube which was left in, after which it was removed. The patient aside from the cyst had present also some fibroids. Up to the present time the patient has been more comfortable and able to walk about and the fluid had not reformed.

(5) Congestive heart failure: The feature of this case was the perfect intake and output chart that was demonstrated. On her first admission, the patient became improved and was able to leave the hospital. Electrocardiographic chart was also demonstrated. The patient had several bad teeth which was the focus of infection. There existed myocardial damage with ectopic beats. The systolic blood pressure was 200 and the same proportion of the diastolic. The patient was digitalized being given 13 cat units. It was said that the P. S. P. of 60 per cent could not be depended on, as in these congestive heart cases, due to the congestion

of the liver, which existed at the time, it was often faulty.

(6) Patient 62 years of age reported by Dr. Johnson gave a history of angina, shortness of breath and swelling. Blood pressure 190/120. He had what was a coronary thrombosis attack from which the patient died. Dr. Johnson was able to obtain this heart from the undertaker which proved to be very interesting. The heart was enlarged and at the apex, the muscle was gone, replaced by scar tissue probably of two years duration, it was thought. The right coronary vessels were obliterated and of the left only a small branch was functioning. It was very hard to understand how this patient lived as long as he did with this condition. Dr. Hauser discussed this case and said it was the result of coronary arteriosclerosis with thrombosis and infarction, with the replacement of the muscle tissue by fibrous tissue. Sometimes this resulting in rupture of the muscle fibers or a thrombosis of the brain or elsewhere. Dr. Brierre also discussed this case.

Edwin L. Zander, M. D.,
Secretary.

ST. FRANCIS SANITARIUM

Preceded by a Dutch Supper the regular monthly meeting of the Staff of St. Francis Sanitarium was called to order by Chairman Dr. F. C. Bennett, November 15, with the following present: Drs. Bennett, Coon, Fisher, French, Graves, Gray Sr., Hunter, W. E. and Irma Jones, M. Johnson, Murphy, McHenry, O'Donnell, Perot, Pankey, Pracher, Rizzo, G. M. Snellings, J. Snellings, Walsworth, Young, Talbot and Gray Jr.

Motion by Dr. F. C. Bennett, seconded by Dr. F. P. Rizzo that amendment be made in constitution regarding hour of staff meeting and that same be called at 7:00 P. M. instead of 7:30 P. M. Carried.

Case report by Dr. W. E. Jones—Bronchial Spirochetosis. This is a case of a young lady who gave history of hurting in chest, aching over entire body, felt feverish morning and evening, did not cough or sneeze, was expectorating small amount of blood. Patient was treated with alkalies gr. 30 every three hours, thio-bismol 0.2 (h) intravenously every other day and neo-arsphenamine 0.3 gr. and .45 gr. every third day. Patient showed marked improvement when dismissed from Sanitarium ten days later.

Case discussed by Drs. Hunter, Talbot, Pracher, G. M. Snellings and Walsworth. Dr. J. E. Walsworth complimented Dr. Jones for presenting such an unusual and interesting case.

Case report by Dr. C. P. Gray, Jr.—Cascara Sensitivity.—Mrs. A. S. K., a white female aged 37 years was admitted to St. Francis Sanitarium for laparotomy. At operation a supra-vaginal hysterectomy

tomy was done. The post-operative course was uneventful until the morning of the fifth day when patient was suddenly covered with severe urticarial wheals over the entire chest, abdomen and extremities. These were characterized by redness and intense itching. The patient's chart was carefully examined for any cause of the rash. She had received nothing but the usual post-operative liquids and sedatives and the morning of the eruption dose of cascara and milk of magnesia. On carefully questioning the patient she said she had the same type of rash while in the hospital several years previously after taking cascara segrada. The next day the milk of magnesia and cascara was repeated and was immediately followed by reappearance of the rash—the next day she received cascara and the urticarial rash reappeared. The cascara was replaced by mineral oil and the remainder of the convalescence was uneventful.

Diagnosis of cascara sensitivity was made for the following reason:

(1) The patient had not received anything to eat that she did not continue to eat after the disappearance—The medication given was continued with the exception of cascara. (2) The rash came on immediately within 30 minutes after the ingestion of the cascara. (3) She had previous similar condition following ingestion of cascara. (4) She had taken milk of magnesia in the interim and never had any unusual results. (5) Patient gave no history of asthma, hayfever or sensitiveness to any medicine or food.

Committee on publication:

Dr. C. P. Gray
Dr. F. P. Rizzo

HOUSTON HOSPITAL STAFF MEETING

The regular staff meeting of Houston Hospital was held February 22 at which time Dr. Douglas D. Eaugh had a very interesting paper on "The Recognition and Management of Mental Disorders in General Practice," which was freely discussed by all doctors present. Music for the occasion was furnished by Miss Annie Mae and Mr. Wesley Patch of Houston. Luncheon was served by the Hospital nurses.

W. C. Walker.

NATCHEZ SANATORIUM STAFF MEETING

The regular monthly meeting of the staff of the Natchez Sanatorium was held on February, 14 at 7:00 P. M., with the following program:

1. Luncheon
2. Roll call and reading of minutes
3. Unfinished business
4. Reports of committees
5. Report of Medical Records Department
6. Report of a case of acute tracheo-bronchitis in a child three years of age, by Dr. L. S. Gaudet.

7. A paper on cranio-cerebral injuries by Dr. R. D. Sessions
8. Adjournment.

Lucien S. Gaudet

VICKSBURG HOSPITAL STAFF MEETING

1. The meeting was called to order at the usual time by the Chairman, Dr. T. P. Sparks, Jr., on February 8, 1934.

2. Routine business was transacted and the work of the various departments discussed.

3. Scientific program was presented as follows:

1. Some general remarks concerning transurethral prostatectomy with presentation of case. Dr. T. P. Sparks, Jr.
2. Arteriovenous aneurism with case report Dr. W. H. Parsons.
3. The kidneys in pregnancy. Dr. I. C. Knox.

Mildred O'Ryan,
Secretary

Vicksburg
March 13, 1934.

Abstract—A discussion of the transurethral operation for the relief of prostatic obstruction.—T. P. Sparks, Jr., M. D.

The patient, a white male, 58 years of age, registered at the Vicksburg Hospital, complaining of inability to void. The history was that 24 hours previously, being unable to pass urine, a physician was called and the bladder was emptied by catheter. Subsequent distention and discomfort caused him to enter the hospital and at 5 A. M. he was examined by me. The bladder at that time was greatly distended and 500 cc. of urine were withdrawn. It was estimated that a like amount remained in the bladder and this was gradually removed by catheter.

The past history was irrelevant except that for the past seven or eight years there has been a gradual diminution in the size of the urinary stream and during the past year this had grown materially more marked, both as regards the size of the stream and ability to begin the act of micturition.

The past history, except for the urologic complaint previously noted, was of no interest in connection with his present disease.

Physical examination revealed a fairly well developed, but poorly nourished, elderly man, who did not appear acutely ill. The skin was rather dry, but otherwise normal. The gums were edentulous. Superficial examination of the nose and ears negative. There was no glandular adenopathy, and the head and neck otherwise showed nothing of great moment. The blood pressure reading was systolic 130, diastolic 80. The lungs were clear and the cardiovascular system was relatively nor-

mal. The abdomen except for some distention with gas, was not remarkable.

The external genitalia appeared normal. Examination of the prostate showed it to be enlarged, grade 2, the middle lobe being particularly affected. The gland was quite tender to palpation.

Laboratory studies showed the dye output normal and the creatinine and non protein nitrogen levels were within normal limits.

It appeared, therefore, that this patient had a prostatic obstruction with complete retention, and it seemed to me that the case was ideally suited for the transurethral operation.

Catheter drainage was instituted for a period of 48 hours at the end of which time surgery was done. Spinal anesthesia was employed and one gram of tissue was removed from the middle lobe. It was my impression that this provided satisfactory canalization. A 22 catheter was left in place and the patient was returned to his room in excellent condition. The postoperative course for the succeeding three days was entirely uneventful. At that time the catheter was removed after having filled the bladder with an antiseptic solution. The patient's attempt to void, however, was not satisfactory, the urine flowing in a small dribble. Again the catheter was introduced and allowed to remain for ten days, at the end of which time there was some improvement in the size of the urinary stream but it did not approach normal. I concluded, therefore, that more tissue should be removed, and, again employing spinal anesthesia, the resectoscope was introduced and the bladder thoroughly inspected. There were no clots noted and no fragments of tissue, the results of previous section, were found. It was noted that the lateral lobe encroached upon the lumen to a degree that easily explained the patient's inability to void. The site of previous incisions showed some reddening with beginning granulation and there was some superficial sloughing. At this time two deep cuts were made in each lateral lobe and three cuts were made in the area previously excised, so that a total of two grams of tissue were removed. An indwelling catheter was placed in the bladder and the patient again returned to his room, once more in excellent condition. During the succeeding 24 hours, under the strictest aseptic precautions, the bladder was irrigated each 30 minutes with warm boric acid solution. This was felt wise because there was slightly more than the usual amount of blood in the urine. On the third post-operative day, the catheter was removed, after filling the bladder, and the patient promptly voided a large stream of urine. He was discharged from the hospital on the seventh post-operative day in satisfactory condition. The urinary stream was large, the burning which accompanied micturition (and incidentally this is an

expected and common concomitant finding) was definitely diminishing. The patient voided an average from 250 to 300 cc. of urine and possessed but one dram of residual urine.

What appeared following the first surgical procedure to be a satisfactory canalization proved later to be not sufficient. No doubt had I removed at the original operation the total amount of tissue ultimately resected at both, namely three and one-half grams, the second operation would not have been required.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on March 12 with eleven members of the staff and three guests present. After the business of the staff and analysis of the work of the hospital for the month of February Dr. R. Michael Smith, Director, Warren County Health Department, presented and explained the annual statistical morbidity and mortality report for the year of 1933.

In the cancer clinic a case of squamous cell carcinoma (Grade I) of lower lip was presented for discussion.

Special case reports included:

Adenoma of Recto-Sigmoid Region.—Dr. A. Street.

Lymphangioma of Mesentery.—Dr. H. B. Goodman.

Dr. A. Street made a report of the Fiftieth Annual Session of the Mid-South Post-Graduate Medical Assembly at Memphis, Tenn., and the Fifth Annual Assembly of the Southeastern Surgical Congress at Nashville, Tenn.

Dr. Leon S. Lippincott presented a report of the Thirtieth Annual Congress on Medical Education, Licensure and Hospitals at Chicago and The Annual Conference of the Trustees of the American Hospital Association with the Presidents and Secretaries of Regional and State Hospital Associations at Chicago.

Three-Minute Reports of the Literature of the months were presented as follows:

The Treatment of Hay Fever.—Dr. L. S. Lippincott.

The Treatment of Circulatory Failure.—Dr. L. J. Clark.

Ultra Violet Therapy in Erysipelas of Children, and Eczema and Allergy Treated with Spleen Liquid.—Dr. S. W. Johnston.

The meeting closed with a lunch.

The next meeting of the staff will be held Monday, April 9, at 6:30 P. M.

Abstract.—Adenoma of the Recto-Sigmoid Region.—Dr. A. Street.

Patient.—While female, aged 55 years, widow; has had two children; admitted to the Vicksburg Sanatorium February 2, 1934.

Chief Complaint.—Has noticed small amounts of blood in stools for the past year. Weight six months ago 125; present weight 95½ pounds. Bowels move without cathartics; no diarrhea. Appetite good; no digestive symptoms; no pain. Blood in stools was fresh at times, at other times dark and apparently old.

Family history.—Father died of dysentery. One sister died of carcinoma of breast.

Physical Examination.—Fairly well developed; poorly nourished. Temperature 99°F. Blood pressure 120/80. Digital examination of rectum showed nothing; no hemorrhoids. General physical examination shows no important findings.

Clinical Laboratory.—Blood hemoglobin 77 per cent; erythrocytes 4,080,000; leukocytes 13,000; differential leukocyte count within normal range; platelets 240,000; clot retraction complete in 18 hours; coagulation time 2 minutes; blood Wassermann test negative. Urine: Normal. Feces: Fresh and old blood.

Roentgen ray examination, including fluoroscopic was made of thorax, stomach (G. I. series), and colon, barium filled and double contrast. The only abnormal finding was demonstrated in the double contrast film of the colon. This appeared to be a round tumor, about ¾ inch in diameter, in recto-sigmoid region.

On February 3, the rectum was carefully inspected through the proctoscope and nothing abnormal observed. Sigmoidoscope was then introduced. Eight inches from the anus the growth was easily observed, appeared to be about three-fourth inch in diameter, was roughly round in shape and was very movable.

With a punch instrument, the tumor was removed in pieces, keeping the field dry by suction. The growth proved to be pedunculated, and the

base of the stalk was thoroughly coagulated with the high frequency current. The field was left entirely dry and there was no subsequent bleeding. There was no postoperative discomfort and the patient was discharged in good condition on February 7, 1934.

Microscopic examination of tissue by Dr. L. S. Lippincott showed the following: Adenoma. Some glands cystic. Some chronic and acute inflammatory. Much interstitial blood. Some areas show blood pigment, mostly near surface (old hemorrhage).

The patient was seen again on March 9. She has noticed no more blood and has no complaints.

Abstract.—Lymphangioma of Mesentery—Dr. H. B. Goodman.

Patient.—Negro male, aged 4 years, admitted to Charity Hospital, November 20, 1933.

Chief Complaint.—Pain in abdomen; nausea and vomiting.

Present Illness.—Began night of November 17 with sudden acute pain throughout abdomen; followed soon by nausea and vomiting. Castor oil given at this time caused an evacuation of the bowels the next morning. Pain throughout abdomen continued November 18 and there was occasional vomiting. No other symptoms of note except anorexia. Pain continued and became more or less localized over lower right quadrant on November 19. A doctor was called at this time and saw patient again on November 20. Because of no apparent improvement patient was advised to come to the hospital. There had been no respiratory symptoms of note; bowels had moved once since onset; parents thought there had been a slight elevation of temperature.

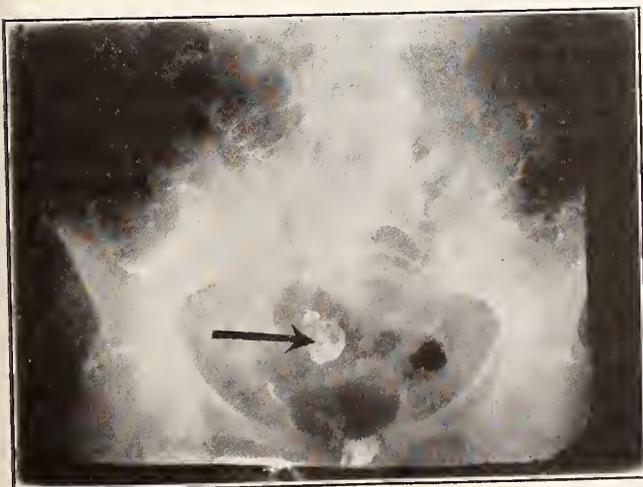
Past History.—Irrelevant.

Family History.—Irrelevant. No tuberculosis or cancer in family.

Social History.—Lived in ordinary plantation home.

Physical Examination.—Well developed and nourished; apparently acutely ill; respiration slightly increased; pulse rapid but of fair volume. Tongue slightly dry. Small palpable cervical glands. Abdomen slightly protuberant; slight tenderness throughout; rather marked tenderness and rigidity over lower right quadrant. Palpable mass in region of lower right quadrant, seemingly rather thick and irregular. Percussion note slightly tympanitic over entire abdomen except over lower right quadrant where a slightly dull note was obtained. Physical examination otherwise not remarkable.

Clinical Laboratory.—Urine showed an occasional pus cell, otherwise not remarkable. Blood: Leukocytes 14,000; differential leukocyte count, small mononuclears 16 per cent, large mononuclears 5



per cent, polymorphoneutrophils 78 per cent, polymorph eosinophils 1 per cent; no malaria found.

Preoperative Diagnosis.—Acute gangrenous appendicitis, with localized abscess formation.

Operation.—November 21, under ether anesthesia; a right rectus incision was made, a large amount of straw colored, clear fluid obtained. Intestines throughout were injected. Exploring the abdomen a large freely movable mass was found at the right of the umbilicus in the right lumbar region. This mass was delivered and found to involve the lower ileum and mesentery for a distance of about six inches. The mass was attached to the ileum 12 to 15 inches above the cecum, and apparently involved mesentery mostly. Somewhat smooth, irregular and cystic in appearance. Closely encroached upon the ileum and seemed to be causing almost complete ob-

struction. Several enlarged lymph nodes in mesentery in region of growth. After thorough examination, resection was decided upon, and was performed in the usual manner with an end-to-end anastomosis. Appendix was apparently normal and due to the condition of the patient and length of operation was not removed. Abdomen was closed without drainage.

Postoperative Diagnosis.—Underdetermined tumor of ileum and mesentery.

Pathological Diagnosis.—Lymphangioma, cavernous; chronic and acute inflammatory.

Subsequent.—For three days patient was acutely ill with temperature of 103 to 104°F, pulse 140 to 150. Improvement then began and convalescence was uneventful; discharged from the hospital on 12th postoperative day. Patient was seen three weeks later and was apparently well.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

APRIL 2. Eye, Ear, Nose and Throat Staff, 8 P. M.

APRIL 4. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

APRIL 4. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

APRIL 6. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

APRIL 9. House of Delegates, Louisiana State Medical Society, Shreveport.

APRIL 11. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

APRIL 11. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 p. m.

APRIL 11. Touro Infirmary Staff, 8 P. M.

APRIL 13. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

APRIL 13. French Hospital Staff, 8 P. M.

APRIL 16. Hotel Dieu Staff, 8 P. M.

APRIL 17. Charity Hospital Medical Staff.

APRIL 18. Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

APRIL 18. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

APRIL 18. Charity Hospital Surgical Staff.

APRIL 19. Eye, Ear, Nose and Throat Club, 8 P. M.

APRIL 20. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

APRIL 20. I. C. R. R. Hospital, 12 Noon.

APRIL 20. Mercy Hospital Staff, 8 P. M.

APRIL 23. ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

APRIL 24. Baptist Hospital Staff, 8 P. M.

APRIL 25. Clinico-Pathological Conference,

Touro Infirmary, 10:30 to 11:30 A. M.

APRIL 25. Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

APRIL 27. Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

The outstanding occurrence in the Orleans Parish Medical Society during the past month has been the Joint Clinical Meeting of this Society with the Charity Hospital Staff on Monday, March 12. The cases presented were particularly ones of interest to the Profession at large.

Dr. C. H. Tyrone — Hysterectomy for Early Carcinoma of Cervix and Ovarian Cyst.

Dr. Isidore Cohn — Splenectomy for Purpura Hemorrhagica.

Dr. Ambrose H. Storck — Splenomegaly with Hematemesis.

Dr. Alton Ochsner — Anterotheracic Esophagoplasty.

Dr. L. L. Cazenavette — An Atypical Case of Tabes.

Dr. Cornell — Fat Embolism.

Dr. J. O. Weilbaeher, Jr. — Addison's Disease.

Dr. J. K. Howles — Mycosis Fungoides.

Dr. Lucian H. Landry — Cicatricial Microstoma.

Dr. I. M. Gage — Malignant Papilocystadenoma Left Breast.

Dr. H. Mahorner — Mesenteric Thrombosis of Jejunum.

Dr. K. Hosoi — Fungus Infection of Lung (2 cases).

The New Orleans Association of Commerce has extended an invitation to the Orleans Parish Medical Society to be represented on their Direc-

torate. Accordingly Dr. Waldemar R. Metz, President of the Society was selected by the Board of Directors to fill such a position.

We regret to report the loss by death of one of our Active Members Dr. Edward McCormac.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 1/31/34.....	\$1,274.02
February Credits:	1,186.34
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TOTAL CREDITS:	\$2,460.36
February Expenditures:	1,073.80
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ACTUAL BOOK BALANCE: 2/28/34	\$1,386.56

LIBRARIAN'S REPORT

During February 66 books have been added to the Library. Of these 50 were received by binding, 12 by gift, 2 by purchase and 2 from the New Orleans Medical and Surgical Journal. New titles of recent date are listed below.

It is interesting to note how different are the subjects on which we are called upon to gather material from month to month. The subjects for February, listed below are particularly distinctive.

Cause of death in gallbladder surgery.
 Thyroidectomy in congestive heart failure.
 Diarrheas in infancy and childhood.
 Personal bibliography of H. E. Menage.
 Hypotension in pregnancy.
 Anomalies of cystic duct and hepatic artery.
 Injection of alcohol in lumbar sympathectomy in vascular disease.
 Value of periodic health examination.
 Ureteral transplantation.
 Ford suture.

Tumors of the kidney.
 Anorchidism.
 Back pain.
 Vertebral and sacro-iliac arthritis.
 Diaphragmatic hernia.
 Milk leg.
 Effect of exposure on myelitis.
 Increasing of muscular activity by use of sodium acid phosphate.
 Bitters.
 Anatomy of Guten's maximus muscle.
 Brown's vaso-motor index.
 Sodium salicylate.
 Vertebral and sacro-iliac injuries.
 Radiotherapy.
 Officers of A. M. A. for 1913.
 Melorheostosis.
 Relation of pharmacy to medicine.
 Contagiosa molloscum.
 Congenital ichthyosis.

NEW BOOKS

Central Physiotherapy Association—Proceedings. 1924.
 American Academy of Ophthalmology and Otolaryngology—Transactions. 1926-28.
 Hoffman, F. L.—San Francisco Cancer Survey. 1933.
 Practitioner's Library of Medicine and Surgery. v. 5-6. 1934.
 Park, W. H.—Pathogenic Microorganisms. 1933.
 Curtis, A. H.—Obstetrics and Gynecology. v. 3. 1933.
 Hawaii Territorial Medical Association—Transactions. 1933.

FREDERICK L. FENNO, M. D.,
 Secretary

LOUISIANA STATE MEDICAL SOCIETY NEWS

DOCTORS!—DOCTORS!!—DOCTORS!!!

Shreveport welcomes you to the Queen City of Louisiana where the warmth and fellowship is genuine. The keys of the city will be given you by our honorable Mayor George W. Hardy, Jr. The President of the Chamber of Commerce will also greet you. And last but not least, the members of the Shreveport Medical Society will extend to you a royal welcome as only the Shreveport doctors can do.

There are many things to see in this quaint little city. First Barksdale Field, the largest flying field in the world. Aeroplanes in the air at all hours. A sight and a thrill at any time.

Visit Cross Lake, Shreveport's water supply. A thirty mile drive around this picturesque body of water.

Play golf on any of the four golf courses in Shreveport. You are welcome at any one. Your badge is your only credential.

Shreveport in the heart of the world's largest oil field. Seven oil refineries at or around Shreveport.

Visit the Shrine Club and the Forty and Eight Club on Cross Lake.

Don't miss the barbecue at the Forty and Eight Club given by the local pharmacists to the Medical Society. This is to be held on the evening of April 9. Be here for you are expected. This will start the meeting off right.

Be sure to bring the ladies. We want them. Come doctor and bring another doctor with you. Lots of knowledge—lots of fun. Unlax and be gay. We expect you to be here.

Shreveport and its doctors are awaiting the sound of the gavel of the worthy president of the Louisiana State Medical Society, Dr. C. A. Weiss, with much enthusiasm. There will be big doings in Shreveport during the week of April 10, 11, and 12, 1934. Shreveport as usual will do itself proud in the entertainment and comfort of its guests. Big things are already underway, and when the happy day arrives all will be hunkadory.

All committees under the direction of Dr. J. M. Gorton, Gen'l. Chairman, are working to make this meeting the best in the State Society's history. It will be if you doctor will come. It takes a good attendance to make any medical meeting a success. So be here.

Among the social features, there is to be a banquet, which is under the supervision of Dr. Charley Gowen. Several luncheons will also be held. Golf will reign supreme for those who are golf minded. Dr. Milton Smith will see to it that the greens are in good order and that the fairways are such that none can shoot out of bounds. This is a big inducement to come. Besides these regular entertainments, many smaller *tete-à-tetes* where the low down of college days can be lived over again.

Our hotel committee, under the supervision of Councillor Dr. W. H. Browning, will secure your reservation for you. Shreveport has plenty of accommodations for all. Come all for we have a fine place for you, and we are going to expect you.

Much space has been taken by exhibitors, both commercial and scientific. Dr. W. P. Butler is chairman of the Scientific exhibits and should any desire for space for the purpose of displaying scientific material write Dr. Butler at once.

By all means bring the ladies. The Auxiliary has planned a royal entertainment for them. Luncheons, bridge, golf, auto rides, and a reception at Barksdale Field, the world's largest air port.

The following are chairmen of the various committees:

Dr. J. M. Gorton.....	General Chairman
Dr. C. R. Gowen.....	Banquet
Dr. Harold J. Quinn.....	Commercial Exhibits
Dr. G. A. Caldwell.....	Entertainment
Dr. D. R. McIntyre.....	Finance
Dr. Milton F. Smith.....	Golf
Dr. W. H. Browning.....	Hotels
Dr. C. P. Rutledge.....	Lanterns
Dr. W. J. Norfleet.....	Luncheons
Dr. O. C. Rigby.....	Registration
Dr. W. P. Butler.....	Scientific Exhibits
Dr. A. J. Thomas.....	Signs & Decorations
Dr. Frank H. Walke.....	Publicity

A LETTER FROM EX-PRESIDENT BARROW

To the Members of the House of Delegates of the Louisiana State Medical Society:

I would respectfully call your attention to what I believe an inequality existing in the By-Laws of the State Society and which I am sure was not intended.

Chapter 14—Medical Defense—Section I, reads as follows:

Active members of the Louisiana State Medical Society who have paid all dues, assessments and other charges assessed or levied by the Louisiana State Medical Society shall be entitled, on conditions hereinafter specified, to receive without personal expense therefor, legal advice and court service of an attorney or attorneys at law *in the employ of the Society*, and witness fees for the purpose of conducting their defense in any courts in the State.

Chapter 14—Medical Defense—Section 4, reads as follows:

This committee shall have *Full Authority* governing all matters pertaining to the Medical defense features of this Society: *With Power to Employ Counsel*. Summon and employ expert witnesses and incur such other expenses as in the judgement of the committee may be necessary in the defense of members against whom suits



Dr. C. A. Weiss, Baton Rouge
President
Louisiana State Medical Society.

may be brought; provided, always, that the total expenditure of any single suit shall not exceed 25 per cent of the fund available at the time suit is incurred. (*Italics in each instance are ours.*)

You will note Section I provides a physician, legal council by an attorney in the employ of the Society, Mr. Adams of New Orleans at this time. When a damage suit is threatened against a doctor, it is a known fact that the time to act is before the suit is filed. By the filing of the suit with consequent publicity, the damage to the doctor is accomplished to a great extent and this is what our Society contemplates preventing in all cases.

At this time and in the past, the attorneys employed by the State Society, are domiciled in New Orleans. Were they domiciled in any other section of the State, the injustice would still exist. If a suit is threatened against a doctor away from the vicinity of the State Society attorney, it is evident that it is more difficult for the threat to be smothered out by him at a distance, than it would be by an attorney on the ground.

Section 4 evidently intended, from the wording, that the Committee on Defense should have some latitude in such case, at least to the extent of giving the defendant doctor the services of an attorney close at hand, who could *talk* turkey to the lawyer for him, rather than to have to handle the preliminaries through the mails. An attorney on the ground to handle the preliminaries, preventing suits, should be an economical saving to the Society in the long run, rather than an expense, to say nothing of the interests of the physician involved.

An amendment to the By-Laws giving the Committee on Defense, the right to employ an attorney to handle the preliminaries in such cases and later act with the State Society attorney, should he wish, if the case goes to court, will be offered at the next meeting of the House of Delegates. I find unanimous endorsement of this plan, among the doctors in the country Parishes, with whom I have discussed the matter.

To those of us who have had the experience of being threatened with a damage suit and found ourselves in a mess, without a lawyer on the spot who could look the shyster in the eye, the situation appeals as being very unfair in that it forces us to go to the expense of hiring an attorney rather than risk the chance of having a suit filed. To discuss the matter through the mails and thus delay vigorous resistance, is hazardous.

We trust when the matter comes before the House of Delegates, all will give it the broad-minded consideration it deserves.

S. C. Barrow, M. D.
Shreveport, La.

"PRESIDENT'S NIGHT" OF AVOYELLES PARISH MEDICAL SOCIETY

The Avoyelles Parish Medical Society held its regular meeting at Cottonport, Wednesday evening, March 14, 1934. There were present, Drs. Albert L. Bordelon, K. A. Roy, Jules D. Lemoine, W. F. Couvillion, S. J. Couvillon, R. G. Ducote, A. M. Abramson, L. C. Cope, A. T. Barbin, local members and Drs. R. O. Simmons, J. T. Cappel, M. H. Foster, Noel Simmonds and Aubrey White as guests, all of Alexandria.

With the home of Dr. Bordelon, President, thrown open with all of its splendor and glory, the tradition of the Avoyelles medicos was revived and the local unit and guests were honored by one of the best receptions in the history of the Avoyelles Medical Society since its organization fifty-six years ago. The banquet was unsurpassed and the scientific program rendered, was well carried out.

Dr. A. M. Abramson of Marksville read a paper titled: "Certain Aspects in Superficial Infections and Wounds". The discussion was opened by Dr. L. C. Cope also of Marksville, followed by Drs. Simmons, Cappel and Foster of Alexandria and Dr. S. J. Couvillon of Moreauville.

Dr. S. J. Couvillon acted as toast-master and after a few introductory remarks, called upon Dr. R. O. Simmons of Alexandria, veteran member of the Central Louisiana medical profession for a toast, which the Doctor tendered, and his remarks were timely, gave food for thought and closed in paying a beautiful tribute to Doctor and Mrs. Bordelon and to Dr. and Mrs. Jules Lemoine, members of the local profession, for the reception tendered.

Dr. Aubrey White, President of the Rapides Medical Society extended an invitation to the Avoyelles medicos to attend in a body the next meeting of Rapides Medical, April 2nd, and to furnish an essayist from Avoyelles for the occasion. By a unanimous vote, Doctors Walter and Sam Couvillon were chosen as the "battery" of Couvillons to read a paper and open discussion. Dr. Walter to read the paper and Dr. S. J. to open discussion.

There being no further business, the Society adjourned to meet at Plaucheville, Wednesday, June 13, 1934 when Dr. A. T. Barbin of Marksville and Dr. J. T. Cappel will read papers and Dr. Jules Lemoine and Marion Foster, Alexandria will open discussions, respectively.

S. J. Couvillon, M.D.
Secretary

TRI-PARISH MEDICAL SOCIETY

The Tri-Parish Medical Society held its monthly meeting in Lake Providence, Tuesday, March 6 at 7:30 p. m. in the Community Club on Lake

Providence. Following an enjoyable banquet and fellowship hour, Dr. G. P. Sanderson of Vicksburg, Mississippi gave an interesting discussion of Acute Appendicitis. A general discussion of the subject was enjoyed by members of the society.

Dr. G. W. Gaines of Tallulah, the President of the Society was chosen as the delegate to the Louisiana State Medical Society meeting with Dr. D. W. Kelly of Oak Grove as alternate.

FOURTH DISTRICT MEDICAL SOCIETY

An enthusiastic meeting of the Fourth District Medical Society was held in conjunction with the Shreveport Medical Society at Shreveport, March 6, 1934. There were about 150 physicians present. An interesting scientific program was presented with a case report by Dr. G. A. Caldwell of Shreveport, a discussion of Surgical Diseases of the Spleen by Dr. Battle Malone of Memphis and Peripheral Vascular Diseases by Dr. George Herrmann of Galveston.

The meeting was thoroughly enjoyed by all present.

Paul D. Abramson, M. D.,
Secretary-Treasurer

SIXTH DISTRICT MEDICAL SOCIETY

The annual meeting of the sixth District Medical Society was held on Thursday, March 15, at 9:30 A. M., at Our Lady of the Lake Sanitarium, Baton Rouge. The meeting was well attended, forty-five members being present. Luncheon was served at the hospital. The newly elected officers are as follows:

President, Dr. Sidney Porter, Baton Rouge; Sec-Treasurer, Dr. Cecil Lorio, Baton Rouge; Delegate, Dr. John Griffith, Slidell; Vice-Presidents: Ascension, Dr. F. H. Hanson, Donaldsonville; East Baton Rouge, Dr. Chas. Voss, Baton Rouge; East Feliciana, Dr. E. M. Robard, Jackson; Iberville, Dr. A. A. Landry, Plaquemine; Livingston, Dr. Z. J. Gautreau of Albany; Tangipahoa, Dr. L. H. McGehee, Hammond; Pointe Coupee, Dr. M. O. Beanel, New Roads; St. Helena, Dr. H. A. Tynes, Grangeville; St. Tammany, Dr. John Griffith, Slidell; Washington, Dr. E. E. Lafferty, Bogalusa; West Baton Rouge, Dr. J. O. St. Dizier, Walls; West Feliciana, Dr. C. C. Blakeney, St. Francisville.

PRESIDENTIAL WELCOME TO DR. MATAS AT "THE RUDOLPH MATAS" MEETING OF THE AMERICAN SOCIETY OF REGIONAL ANESTHESIA

It is an extreme pleasure to realize that the time has now arrived for the opening of the "Rudolph Matas Meeting" of the American Society of Regional Anesthesia. This session has been awaited with keen anticipation. Over a period of

ten years this organization has concentrated its efforts upon the general study and advancement of nerve blocking measures. And during this time, in which has come the gradual extension of physiologic nerve block into every department of Medicine, it has been our good fortune to listen to many programs of merit, some of unusual and outstanding merit. Yet there is no fear of exaggeration in making the statement that tonight's meeting marks the climax of this decade of organized activity.

Now at the outset of this session I feel it a duty to call to your attention, (although perhaps it may be superfluous to do so) to a well-defined disease which prevails, and which has prevailed for a considerable time to the South of us, that is, in the Central Southern and South Eastern Sections of the United States. This disease exists both in endemic and pandemic forms and it is alike infectious and highly contagious. This affection is marked, not by any intense fever, but by a deep and earnest *fervor*. What then, do you ask, is the name of this condition? It is officially known among the countless individuals afflicted, as *Matasism*.

To those who have not heard of this condition, at least by name, one can speak only through comparisons. Everyone, of course, has heard of *Osterism*; and we are all aware of what this term has come to mean at McGill, at John Hopkins, at Oxford, and elsewhere. Similarly, we are conscious of what *Murphyism* came to mean in Chicago and gradually throughout the United States and the world as the admirers of the late John E. Murphy increased. And here in New York we all know how the love and esteem for our own George David Stewart has grown and is still growing posthumously into what, by analogy, might be termed *Stewartism*. All of this makes clear *something* of the meaning of *Matasism*.

And it is of passing interest to note how naturally one mentions together these names; Matas, Murphy, Stewart, for they have often been grouped together before. Leaders in widely divergent centers of medical training, the personalities which these names represent have previously converged, as though drawn together by some inevitable law or force, perhaps the force of their personal magnetism. For both the late Dr. Stewart and our honored guest are past-presidents of the American College of Surgeons and both have been guest speakers and Murphy eulogists in the John B. Murphy Memorial Building in Chicago, the permanent home of the American College.

Now our program tonight is not long and is entirely given over to the purpose of honoring Dr. Matas for his pioneer work in regional and local anesthesia. Therefore in extending this Presidential welcome in behalf of the Society, I am taking

the privilege of adding (and reading) these few introductory paragraphs. We would be happy could Dr Matas but carry home with him the firm conviction that there has taken place here in New York a sincere and massive spread of this Southern affection, Matasism.

We in the North have already been fully exposed to the contagion. For on the occasion of the seventieth birthday of our Guest Speaker, Mr. Paul B. Hoeber, Editor of the American Journal of Surgery, acting through a committee of friends of Dr. Matas, devoted an entire issue of the journal, some four hundred pages, to an additional national and international spread of the condition described. And to read therein the two full pages of very fine print which summarize some of the titles and honors which have been heaped upon Dr. Matas, both here and in other countries, serves to give one an even greater sense of gratitude that he has seen fit to honor this Society in turn through his presence here this evening. Again, the New Orleans Medical and Surgical Journal of February 1928 similarly published a special 'Matas Issue'. And as one reads and studies the writings and teachings of the man and drinks in the estimates of him as recorded by his associates, friends, and admirers through the years there is not the slightest difficulty in appreciating the inevitability that Matasism should have developed. This term, let it be fully understood is not created here and now, nor is it thus repeated through any lapse or carelessness, it is on the contrary a term which has gained wide usage as a mark of admiration for an outstanding figure and for the things he represents. So extensive has the literature about Matas become that, as you see, among the followers there of necessity arose even a language and terminology exclusive to the cult, or order.

And during this Northern visit of our guest we propose a lame pun to add to this exclusive terminology; we refer to a desire for a *Matastasis of Matasism*. If cancer can spread by metastasis, if evil can so spread, why cannot good similarly invade and permeate its new foci. This Society of Physicians and members of a Healing Art are filled with delight to encourage a disease of such benignity.

And now we shall say no more, except to warn you of the distinct dangers to those who join this Southern Order. Once succumb and you will find placed upon you serious obligations. You will be touched by standards of the highest quality. Matasism, by the very writings of its founder, is based upon a response to two great words; one *duty* and two, *work*. Other words and ideas which must dominate you are: modesty, humility, love of the poor, complete subjugation of self to great causes.

Writers to date are agreed that the secret of Matasism is the remarkable rotundity of this man's character. Greatness coupled with simplicity; scientific courage (witness the development under Dr. Matas of endoaneurysmorrhaphy) coupled with personal diffidence; individual progress forever tempered by a complete interest in the progress and problems of associates; exact medical and surgical knowledge always modified to meet the needs of a higher humanitarianism. And thus by a similar rotundity of character in all departments we find a development of that unusual balance which brings together divergent virtues while avoiding, through sheer sincerity of purpose, the vices which so easily tarnish the single virtue of the non-balanced character. Yet in last analysis the sound base of Matasism upon which has been built the impressive superstructure is simply this; response to conscience and to duty, coupled with reliance for end-results upon the one touchstone,—work.

Consistent with this rotundity of his character, it has been through giving that Dr. Matas has received. To Medicine he has given a profound devotion; to the South has gone his abiding love; and to Tulane University and to his native city, New Orleans, has gone service without stint. All of these, we are assured,—Tulane, New Orleans, the South, Medicine, have been life itself to Dr. Matas. Of these matters we shall now hear more and in detail. Yet quite beyond doubt it is this sincerity of his selflessness, this attempt to lose himself in great causes, which is destined to preserve and to immortalize this leader of men.

As has been written of our Guest Speaker by another; "He is a towering figure in the world of Medicine and of men. He has proved himself to be a chivalrous knight, and at once an humble worker, a literateur, a dreamer, an original thinker, and a thorough master of the art of surgery. His ways are modest, his motives pure".

Thus, as President of the American Society of Regional Anesthetics may I extend to you our heartiest welcome. May I express to you, Dr. Matas our gratitude that you have braved the northern winter to be with us to-night.

We view you, Sir, as the embodiment of great medical principles, ideas and ideals even more than as a pioneer in the development of regional anesthesia and as a scientist, teacher, and surgeon of the first order.

E. M. Livingston, M. D.
President

NEWS ITEMS

Dr. Howard R. Mahorner of the faculty of the Graduate School of Medicine of the Tulane University of Louisiana, addressed a meeting of the Alabama Academy of Science at Mobile, Saturday March 10, 1934, on "Etiology of Goiter".

Charles A. Bahn, President of the Louisiana Society for the Prevention of Blindness, has accepted membership on the Advisory Committee of the National Society for the Prevention of Blindness.

The Semicentennial Number of the Archives of Pediatrics was published in February. This Journal was the first one in the English language devoted to the diseases of infants and children. The fifty years that the Journal has appeared have all been characterized by sticking closely to the clinical features of pediatrics. The success of this policy is obvious, for the Journal would not otherwise have passed through successfully the fifty years of an active journalistic life.

Dr. D. D. Moore, Secretary of the Ouachita Parish Medical Society, announced that talks of medical importance to every family will be made by radio each Wednesday night from Monroe. The names of doctors making the talks will not be announced but every member of the society will contribute to the program at sometime.

AMERICAN JOURNAL OF DIGESTIVE DISEASES AND NUTRITION

A new journal devoted to diseases of the gastrointestinal tract and to nutritional disorders appeared on the fifteenth of March. This journal is under the editorial guidance of Dr. Frank Smithies, of Chicago, Editor-in-Chief, and Dr. B. S. Cornell, of Forf Wayne, Indiana, Supervising Editor. A group of slightly over one hundred physicians throughout the country make up the Editorial Council. From New Orleans representation on this council is had by Doctors Sidney K. Simon, Charles F. Craig, Rudolph Matas and E. W. A. Ochsner.

The journal is divided into ten sections, the first of which deals with clinical medicine, the second experimental physiology, the third nutrition, the fourth roentgenology, the fifth therapeutics, the sixth abdominal surgery, the seventh surgery of the lower colon and the rectum, and the last three sections are devoted to editorials, book reviews and miscellaneous topics of interest. The authors who contribute to the first volume of this journal argue well for its future welfare. They have presented material of a high grade and the editorial supervision apparently has been strict.

We wish to congratulate the Editor-in-Chief for the splendid and auspicious beginning of what will undoubtedly be one of the *good* medical publications in this country. The journal will undoubtedly receive careful editing and the selection of articles will be such that it will be an authoritative publication. The format and the make-up, already definitely determined, warrants

a word of praise. The cover is attractive, the grade of paper is excellent, the illustrations are clear and the type is in size sufficient to read with a minimal amount of trouble. From every point of view a happy future is visualized for this new publication.

SIGMA XI TO BE ESTABLISHED AT TULANE

On April 13, there will be installed at Tulane University of Louisiana a chapter of the National Society for the Promotion of Research, Sigma XI. The installation ceremonies will consist of the presentation of a charter to the partitioning group by Dr. Edward Ellery of Union College. Following this there will be a banquet at which Dr. Alton Ochsner will be toastmaster, and after which a public lecture will be held in the auditorium of Dixon Hall, at which time an address will be given by Dr. E. C. Faust, who will talk on "The Human Body's Defense against Disease". There are 34 partitioners some of whom are members of this national organization, who have applied for the charter.

LOUISIANA SOCIETY FOR THE PREVENTION OF BLINDNESS

The Journal is in receipt of a very interesting report from Susan M. Bassett, R. N., Supervisor of Midwives for the Louisiana Society for the Prevention of Blindness. In this report, which space prevents publishing in full, Miss Bassett paints a very vivid picture of the difficulties that the nurses have in instructing midwives. She reports that in St. Tammany Parish 19 midwives were visited and instructed in the use of silver nitrate solution and general hygiene of the eye in January. The following week another large number of midwives were visited, and the week following a group of thirty-two were seen in Ascension Parish, as well as the doctors of the Parish.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending February 17, there were reported 173 deaths in New Orleans, divided 111 white, 62 colored, giving a death rate of the group as a whole of 18.7, for the white 16.9, and for the colored 23.2. The infant mortality rate this week was 102. For the week ending February 24, the total number of deaths reported were 167, giving a death rate of 18.1. The deaths were divided 102 white, with a rate of 15.6, and 65 colored, with a rate of 24.3. The infant mortality rate was only 76. The death rate had fallen in the week of March 3 to 16.7 as a result of 154 deaths, divided 89 white, with a rate of 13.6, and 65 colored, with a rate of 24.3. The infant mortality rate was 89. For the week

ending March 10, there was a considerable drop in the number of deaths, they falling to 132, divided 84 white, and 48 colored. The total death rate was 14.3, for the white population 12.8, and for the colored 17.9. The infant mortality rate was 89.

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. During the week ending February 17, there was reported to the State Board of Health 113 cases of measles, 56 of syphilis, 33 of pneumonia, 30 of tuberculosis, 27 of gonorrhoea, 26 of scarlet fever, 23 of chicken-pox, 15 of cancer, 11 each of influenza and typhoid fever, and 10 of malaria. The typhoid fever cases were reported in large number from Terrebonne Parish. The epidemic of measles apparently was somewhat on the increase, as in the following week ending February 24, 128 cases were reported. Other diseases in double figures include 45 cases of pneumonia, 42 of scarlet fever, 22 of diphtheria, 21 of syphilis, 20 each of cancer and chicken-pox, 11 of influenza, and 10 of whooping cough. There was a still further increase in the number of cases of measles in the week ending March 3, there being 159 cases listed. The pneumonia cases had fallen to 28. Other diseases reported in double figures include 41 cases of chicken-pox, 30 of hookworm, 28 of diphtheria, 25 of scarlet fever, 21 of tuberculosis, 18 each of influenza and syphilis, 14 of cancer, 12 of whooping cough, and 11 of typhoid fever. The typhoid fever cases were scattered through various parishes in the State. One case of smallpox was reported from East Baton Rouge Parish. Measles still made up the bulk of the cases reported for the week ending March 10, 185 instances being recorded. The other diseases reported in double figures include 35 each of syphilis and diphtheria, 31 of chicken-pox, 30 of pneumonia, 22 of scarlet fever, 17 each of gonorrhoea and typhoid fever, 16 each of influenza and pulmonary tuberculosis, 14 each of cancer and malaria. Seven of the new cases of typhoid fever were reported from Terrebonne Parish. The epidemic of measles was still raging according to the reports for the eleventh week of the year ending March 17. At this time there were 293 cases of measles listed. There were also reported 31 cases each of chicken-pox and pneumonia, 26 of diphtheria, 24 of scarlet fever, 21 of pulmonary tuberculosis, 19 of syphilis, 16 of cancer, and 10 of typhoid fever. There were reported 5 cases of smallpox from DeSoto Parish, and 1 case each of encephalitis and epidemic meningitis from Orleans Parish

LOUISIANA ACADEMY OF SCIENCE

The Annual Meeting of the Louisiana Academy

of Science was held at the Louisiana State University Medical Center on March 14, 15, and 16, 1934. It is customary each year for the Society to give a gold medal to the one who contributes the most valuable paper and the best method of presentation. This year there were forty-six papers presented for consideration by the Committee. Dr. Leon J. Menville of New Orleans was awarded the medal this year for research work in radiology.

APPROACHING MEETINGS

The Eighteenth Annual Clinical Session of the American College of Physicians will be held in Chicago, April 16-20, with general headquarters at the Palmer House. A magnificent session of clinics and scientific essays has been arranged for by the General Chairman of the meeting, Dr. James B. Herrick of Chicago.

The annual meeting of the American Association on Mental Deficiency will be held at the Hotel Waldorf Astoria, New York, May 26, 27, 28 and 29, 1934. The Saturday session, May 26, will be given over to the sociological, psychological and the special educational aspects of the problem in order that local social workers and school teachers may have an opportunity to attend without interfering with their regular duties. The Tuesday afternoon session will be a conjoint meeting with the American Psychiatric Association. Data as to the program may be obtained from the Secretary, Dr. Groves B. Smith, Godfrey, Illinois.

WOMAN'S AUXILIARY NEWS

Program of the Shreveport Session
Headquarters—Registration Desk and Meetings of
the Auxiliary to the Louisiana State
Medical Society.

Washington-Youree Hotel, Mezzanine Floor
(Washington Side)

Mrs. Joseph E. Heard.....	General Chairman
Mrs. L. W. Gorton.....	Vice-Chairman
Mrs. Barron Johns.....	Vice-Chairman
Mrs. H. G. F. Edwards.....	Vice-Chairman
Chairmen of Sub-Committees	
Registration.....	Mrs. W. J. Sandidge
Hostess.....	Mrs. R. T. Lucas
Tickets and Program.....	Mrs. Harold Quinn
Automobiles.....	Mrs. B. C. Garrett
Publicity.....	Mrs. W. B. Allums
Exhibit.....	Mrs. John R. Anderson

General Entertainment Committee

Mrs. W. R. Harwell
Mrs. W. S. Kerlin
Mrs. A. A. Herold
Mrs. W. S. Woolford
Mrs. F. G. Ellis
Mrs. P. R. Gilmer
Mrs. C. B. Erickson
Mrs. H. L. Scales.

Monday, April 9, 1934

8:00 P. M. Bridge Party at Women's Department Club, 802 Margaret Place.

Tuesday, April 10, 1934

9:00 A. M. Pre-Convention Executive Board Meeting, Junior Ball Room, Roof, Washington-Youree Hotel, (Washington Side). Mrs. John H. Musser, President of Auxiliary to Louisiana State Medical Society, presiding.

12:30 P. M. Auxiliary Luncheon at Shrine Club, Lake Shore Drive. Tickets \$.75.

2:30 P. M. Drive to Shreveport's Gardens.

5:00 P. M. Tea at Barksdale Field.

8:00 P. M. Open Meeting, Crystal Ball Room, Mezzanine Floor, Washington-Youree Hotel, (Washington Side.)

Wednesday, April 11, 1934

9:00 A. M. General Session of Auxiliary. Mrs. John H. Musser, President, presiding. Junior Ball Room, Roof, Washington-Youree Hotel, (Washington Side).

Invocation—Rev. Anson Stokes.

Welcome Address—Mrs. L. W. Gorton, President, Auxiliary to Shreveport Medical Society.

Response to Address of Welcome—Mrs. Wiley R. Buffington.

Reading of the Minutes.

Reports—

State Officers

State Committees

Parish Auxiliaries

Special Committees

Report of Woman's Auxiliary to American Medical Association.

Report of Woman's Auxiliary to Southern Medical Association.

Recommendations of Executive Board.

New Business.

Report of Nominating Committee.

Election of Officers.

Introduction of New Officers.

Reading of Minutes.

Announcements by new President, Mrs. T. H. Watkins.

Adjournment.

12:30 P. M. Luncheon at Washington-Youree, Main Dining Room, Style Review.

3:00 P. M. Program tea at the home of Mrs. A. A. Herold, 1166 Louisiana Avenue.

7:30 P. M. Banquet and Dance, Crystal Ball Room, Washington-Youree Hotel, (Washington Side).

Thursday, April 12, 1934

9:30 A. M. Post-Convention Executive Board Meeting. Mrs. T. H. Watkins, President of Auxiliary to Louisiana State Medical Society. Junior Ball Room, Roof, Washington-Youree Hotel, (Washington Side).

11:30 A. M. Morning Coffee at The Pines, Greenwood Road.

3:00 P. M. Tea at Women's Department Club, 802 Margaret Place.

RESOLUTIONS ON THE DEATH OF DOCTOR EMIL REGARD PASSED AND ADOPTED BY THE AVOYELLES PARISH MEDICAL SOCIETY, IN REGULAR SESSION, January 10th, 1934.

WHEREAS, The Almighty in its infinite power, has seen fit to take away from our ranks on June 3rd, A. D. 1933, Doctor Emil Regard, native of Mansura, Louisiana, after a brief illness and

WHEREAS, in the untimely passing of this great and good man, the medical profession sustains the loss of one of its leaders and the business world a very valuable asset. He was a man of remarkable intelligence, splendid energy, a lover of truth, sober and excellent practitioner, therefore

BE IT RESOLVED, That the Avoyelles Parish Medical Society in session assembled—in session when for a period covering practically forty years, enjoyed the presence and services of this fellow member, who in medical memorials has been characterized as a "granite pillar" of our local unit, desire to extend to his bereaved widow and interesting family the heartfelt sympathies of its membership and that copies of these resolutions be sent to his family, to the New Orleans Medical and Surgical Journal for publication and to be retained in the archives of this Society.

S. J. Couvillon, M. D.

Kirby A. Roy, M. D.

E. Stanley Matthews, M. D.

Committee on Resolutions.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

MEMBERSHIP TOPS 1933

Claiborne and Pike report one hundred per cent membership for their County Societies. Jim Acker of the Northeast Mississippi Thirteen Counties Society reports a membership of one hundred eighty out of a possible two hundred eligible physicians in the territory. There are several retired physicians in this territory who no longer feel that they are a part of the medical fraternity and should not belong to organized medicine. Five or six counties in this Society report one hundred per cent membership.

There are other societies and counties that are showing up practically as well. With all societies being strictly county organizations the membership should run well over ninety per cent of eligibles.

T. M. Dye,
Secretary,

Mississippi State Medical Association

Clarksdale,

March 5, 1934.

STANDING BY DISTRICTS

Districts and Councilor	Number of Physicians	Number of Members	Per Cent Members
1 Third—M. W. Robertson.....	215	180	83.7
2 Second—L. L. Minor.....	109	75	68.8
3 Eighth—W. H. Frizell.....	121	83	68.6
4 First—J. W. Lucas.....	240	157	65.4
5 Ninth—D. J. Williams.....	69	39	56.5
6 Sixth—H. Lowery Rush.....	130	62	47.7
7 Fifth—W. H. Watson.....	237	110	46.4
8 Fourth—T. J. Brown.....	86	37	43.0
9 Seventh—Joe E. Green.....	160	67	41.9
TOTALS.....	1,367	810	59.3

STANDING BY SOCIETIES

Society	Number of Physicians	Number of Members	Per Cent Members
1 Pike County	26	26	100.0
2 Claiborne County	7	6	85.7
3 Northeast Mississippi	215	180	83.7
4 Jackson County	12	10	83.3
5 Tata County	12	10	83.3
6 Homochitto Valley	50	35	70.0
7 Clarksdale & Six Counties..	79	54	68.4
8 North Mississippi	85	57	67.1
9 DeSoto County	12	8	66.7
10 Issaquena-Sharkey-Warren	53	35	66.0
11 Delta	161	103	64.0
12 Tri-County	45	23	51.1
13 Harrison-Stone-Hancock ..	57	29	50.9
14 East Mississippi	119	59	49.6
15 South Mississippi	153	66	43.1
16 Winona District	86	37	43.0
17 Central	177	69	39.0
18 Clark-Wayne	18	3	16.7
TOTALS.....	1,367	810	59.3

The membership percentage on March 5 was 59.3.

The percentage for the year of 1933 was 58.1.

MEMBERS BY COUNTIES AS OF MARCH FIFTH, 1934

County	Number of Physicians	Number of Members
1. Adams	25	20
2. Alcorn	16	13
3. Amite	7	1
4. Attala	16	2
5. Benton	6	2
6. Bolivar	40	36
7. Calhoun	13	13
8. Carroll	9	2
9. Chickasaw	16	16
10. Choctaw	7	1
11. Claiborne	7	6
12. Clarke	11	3
13. Clay	10	10
14. Coahoma	30	23
15. Copiah	17	7
16. Covington	8	2
17. DeSoto	12	8
18. Forrest	33	19
19. Franklin	7	5
20. George	5	2
21. Greene	6	2
22. Grenada	9	6
23. Hancock	6	1
24. Harrison	46	26
25. Hinds	105	49
26. Holmes	22	12
27. Humphreys	13	5
28. Issaquena	3	3
29. Itawamba	9	4
30. Jackson	12	9
31. Jasper	12	4
32. Jefferson	6	4
33. Jeff. Davis	7	1
34. Jones	35	11
35. Kemper	10	5
36. Lafayette	17	10
37. Lamar	7	3
38. Lauderdale	50	31
39. Lawrence	8	4
40. Leake	19	2
41. Lee	37	31
42. Leflore	40	25
43. Lincoln	15	12
44. Lowndes	26	16
45. Madison	11	2
46. Marion	12	13
47. Marshall	10	7
48. Monroe	22	21
49. Montgomery	11	7
50. Neshoba	14	11
51. Newton	13	7
52. Noxubee	12	9
53. Oktibbeha	13	12

54. Panola	15	8
55. Pearl River	12	5
56. Perry	5	3
57. Pike	26	26
58. Pontotoc	18	14
59. Prentiss	14	8
60. Quitman	16	6
61. Rankin	9	4
62. Scott	12	3
63. Sharkey	13	7
64. Simpson	16	3
65. Smith	11	2
66. Stone	5	2
67. Sunflower	31	19
68. Tallahatchie	21	14
69. Tate	12	10
70. Tippah	11	6
71. Tishomingo	9	8
72. Tunica	11	5
73. Union	13	12
74. Walthall	5	3
75. Warren	37	25
76. Washington	37	24
77. Wayne	7	1
78. Webster	12	9
79. Wilkinson	5	4
80. Winston	13	5
81. Yalobusha	13	12
82. Yazoo	21	6

AN INVITATION

The Homochitto Valley Medical Society as hosts for the meeting of the Mississippi State Medical Association that meets in the Historic City of Natchez in May, is making plans for a large attendance, and are also extending a hearty welcome to the Hospital Associations of Alabama, Louisiana, Arkansas, Tennessee and Mississippi. With the kind assistance of the members of the Garden Pilgrimage, we hope to make your visit one long to be remembered.

Lucien S. Gaudet,
County Editor.

Natchez,
March 6, 1934.

COUNTY SOCIETIES

TO COUNTY MEDICAL SOCIETIES:

I feel quite sure that at the coming meeting of the House of Delegates at Natchez in May that the charters of all large hyphenated societies will be recalled and that charters will be issued to individual county societies. This is in keeping with the expressed intent of the Council.

It is necessary that each county make application through its Councilor to the Council for a charter for a County Medical Society. This application should be in regular form, should carry the name of all members of the Society living

within the county, and should be signed by the President and the Secretary of the County Society. Those counties that have not organized a county Society should do so at once.

The large societies composed of a number of counties will maintain their organization as social and scientific organizations, but will not elect delegates to the State Association after this year. Delegates will be hereafter elected by the County Societies.

T. M. Dye,
Secretary.

Clarksdale,
March 5, 1934.

CALENDAR

SOCIETY MEETINGS

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CHICKASAW COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

CLAIBORNE COUNTY MEDICAL SOCIETY: CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Alcazar Hotel, Clarksdale.

DELTA MEDICAL SOCIETY: April, Cleveland.

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July, and October, Hernando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: Third Thursday in February, April, June, August, October and December, Meridian, 3 P. M.

HARRISON-STONE-HANCOCK COUNTIES MEDICAL SOCIETY: First Wednesday of each month Bay St. Louis, Pass Christian, Gulfport or Biloxi, 7:30 P. M.

HOMOCHITTO VALLEY MEDICAL SOCIETY: Second Thursday of January, March, July and October, Natchez, 2 P. M.

ISSAQUENA - SHARKEY - WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month. Hotel Vicksburg, Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, usually at Jackson County Hospital, Pascagoula, 7:30 P. M.

MONROE COUNTY MEDICAL SOCIETY: Second Tuesday of each month, alternates between Aberdeen and Amory.

NORTH MISSISSIPPI MEDICAL SOCIETY: NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month, McComb, 7 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June, alternates between Hattiesburg and Laurel, 3 P. M.

TATE COUNTY MEDICAL SOCIETY: Second Wednesday, every other month, Senatobia, 8 P. M. (Not meeting regularly this year).

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, Wesson, Tylertown, Monticello or Brookhaven, 12:30 P. M. (Next Meeting June 12, Tylertown.)

WEBSTER COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

WINONA DISTRICT MEDICAL SOCIETY.

MISSISSIPPI STATE HOSPITAL ASSOCIATION: Joint meeting with the State Hospital Associations of Arkansas, Louisiana and Tennessee, May 7, Natchez.

MISSISSIPPI STATE MEDICAL ASSOCIATION: May 8, 9 and 10, Natchez.

NATCHEZ HOTELS

The hotels of Natchez send you a cordial invitation to visit our historic city during the annual meeting of the Mississippi State Medical Association and give assurance that there will be no advance in rates, which are as follows:

EOLA HOTEL

All Rooms With Private Bath
\$2.50 and \$3.00 single room, 1 person.
\$3.50 to \$4.50 single room, 2 persons.
\$4.00 to \$5.00 room, twin beds, 2 persons.

NATCHEZ HOTEL

Rooms With Private and Connecting Bath
\$2.00 and \$2.50 single room, 1 person.
\$3.00 to \$4.00 single room, 2 persons.
\$3.50 to \$4.50 room, twin beds, 2 persons.

CORINNA HOTEL

\$2.00 room, private bath, 2 persons.
\$1.50 Room, connecting bath, 1 person.
\$2.00 room, connecting bath, 2 persons.
\$1.50 room, without bath, 2 persons.
\$1.00 room, without bath, 1 person.

CONCORD HOTEL

\$2.00 room, private bath, 1 person.
\$2.50 room, private bath, 2 persons.
\$1.50 room, connecting bath, 1 person.
\$1.50 room, connecting bath, 1 person.
\$2.00 room, connecting bath, 2 persons.
\$1.50 room, without bath, 2 persons.
\$1.00 room, without bath, 1 person.

Lucien S. Gaudet,
For the Committee.

Natchez, March 14, 1934.

IN RE INTRAVENOUS MEDICATION

The State Board of Public Welfare has receded from its position that the giving of intravenous medication constituted an office call and should be treated as such. A telegram from Mr. George B. Power, Director, says: "Instructions being

given Welfare Workers to allow half the usual fee where giving of intravenous medication."

We find the Board of Public Welfare ready to always listen to reason and common sense.

T. M. Dye,
Secretary.

Clarksdale,
March 12, 1934.

CENTRAL MEDICAL SOCIETY

The February meeting of the Central Medical Society met on the Roof Garden, Robt. E. Lee Hotel, Tuesday, February 6. A delicious dinner was served at 6:30 P. M. Dr. Catherine McCormick, a native Mississippian, was introduced to the Society by Dr. Noblin. Dr. McCormick is contemplating locating permanently in Jackson, giving special attention to obstetrics.

The scientific program was a little different this month in that we had the entire program given by the doctors of Yazoo City. Dr. J. B. Anderson read an interesting paper on "Diagnosis and Treatment of Sacro-Iliac Arthritis." His paper was briefly commented on by Drs. Frank Hagaman, T. W. Kemmerer, Anderson, closing. The second paper, "Treatment of Intracranial Hemorrhage With Case Report," was read by Dr. J. T. Rainer. Discussion by Dr. Frank Hagaman with Dr. Rainer closing. Dr. Gilruth Darrington, who acted as chairman of the Yazoo City program, was last on the program. His paper on "Gonorrhoea in the Male" was most interesting and instructive. Drs. L. B. Moseley, H. R. Hays, and Noblin discussed it with Dr. Darrington, closing.

The Central Medical Society is going to put on more programs of this type by having the entire program presented by the doctors from the various towns in the Society. Dr. A. M. Webb of Sartartia was elected to membership. After the business session was concluded, the meeting adjourned at 9:15 with 54 members and guests present.

L. W. Long,
Secretary.

Jackson,
March 10, 1934.

ISSAQUENA-SHARKEY WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Coral Room, Hotel Vicksburg, March 13, with seventeen members and six guests present. After a supper at 7 P. M., the meeting was called to order by the president, Dr. W. H. Scudder.

Papers and discussions: Dr. P. S. Herring, Chairman.

1. The Blood Supply of the Heart.—Dr. T. E. Wilson, Jackson—exchange essayist from the Central Medical Society.

Discussed by Drs. L. J. Clark, W. K. Purks and P. S. Herring. Dr. Wilson closed

2. Pyelitis.—Dr. D. A. Pettit, Vicksburg.

Discussed by Drs. W. H. Parsons, L. S. Lippincott, F. M. Smith and W. P. Robert. Dr. Pettit closed.

3. The Handling of a Normal Obstetrical Case.—Dr. P. S. Herring.

Discussed by Drs. H. S. Goodman, D. A. Pettit, W. C. Pool, and L. W. Long. Dr. Herring closed.

Guests were Drs. L. W. Long, G. C. Verner and T. E. Wilson of Jackson, and W. K. Purks, J. D. West and H. B. Goodman of Vicksburg.

The next meeting of the Society will be held April 10 at 7 P. M. Dr. G. Y. Hicks, Vicksburg will be chairman and the program will include a clinical case for discussion and diagnosis and a general discussion by the Society of "Appendicitis."

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY

The following program and invitation to the First Quarterly Meeting of the Northeast Mississippi Thirteen Counties Medical Society on March 20 at the First Methodist church, Pontotoc, 2 P. M., has been received from Dr. J. M. Acker, Jr., Secretary:

Meeting Called to Order.—Dr. J. M. Hood, President.

Invocation.—Rev. M. E. Scott.

Reading and Adoption of Minutes Last Meeting.

The Nursing Profession Works for Recovery.—Miss Ruth Dalton, Houston.

Symposium on Cancer:

Cancer.—Dr. G. S. Bryant, Amory.

Factors Influencing the Control of Cancer.—Dr. Shields Abernathy, Memphis, Tenn.

General Discussion opened by Drs. J. A. Crisler, Memphis, Tenn.; W. A. Dearman, Gulfport; Bernard Patrick, Corinth.

Business session.

TRI-COUNTY MEDICAL SOCIETY

The Tri-County Medical Society met in Hazelhurst, March 13. The meeting was called to order by the president, Dr. C. L. Simmons of Hazelhurst.

The society was fortunate in having Dr. J. W. D. Dicks of Natchez, president of the Mississippi State Medical Association, present as guest speaker. He gave an interesting talk on the changes now taking place in the practice of medicine and reminded the society of the extension of free medical service being rendered by the Federal Government, free clinics, insurance societies, etc., this making it still harder for the general practitioner to make

a living, and stressed the fact that many well-to-do people are taking advantage of these free clinics, while we doctors are taxed to help support these clinics while we are donating free service in the clinics, besides much charity work on the outside.

Dr. Edwin E. Benoist of Natchez read a paper, the subject, "Observations Concerning Gall-bladder Disease," and Dr. R. S. Savage of Brookhaven, read one, subject, "Laboratory Work that May be Done in the Office."

Both of these papers were interesting and were discussed liberally. Dr. H. A. Whittington of Natchez and Dr. O. G. Eubanks of Crystal Springs were present and took part in the discussions.

Other visitors present were Drs. J. H. Watson and J. F. Scarborough of Hazelhurst.

It was voted that the next regular meeting be held at Tylertown, June 12.

H. R. Fairfax,
Secretary.

Brookhaven,
March 15, 1934.

CHICKASAW COUNTY

The following neighboring doctors attended the Mid-South Post Graduate Assembly at Memphis, February 14-17: Drs. W. H. Curry, Eupora; E. L. Richardson and S. W. Pierson, Louisville; J. M. Hood, Houlika; V. B. Philpot, Houston; J. A. Hardin, Calhoun City; J. A. Rayburn and R. P. Donaldson, Pontotoc.

Mrs. F. L. McGahey and daughter, Mary Elizabeth, of Calhoun City, met Dr. McGahey, who is taking post graduate work at Tulane University, New Orleans, at Jackson for the week-end.

Dr. V. B. Philpot of Houston has just returned from Nashville, where he attended the Southern Surgical Congress.

W. C. Walker,
County Editor.

Houlika,
March 10, 1934.

DESOTO COUNTY

Dr. J. M. Wright of Hernando has resumed his practice after an attack of the ubiquitous flu.

Mrs. Wright suffered the loss of her mother who died recently at her home at Nesbit.

Dr. W. C. Lester, a well known physician of Pannola County, died recently in his home at Batesville. Dr. Lester was one of the hosts to the December meeting of the North Mississippi Medical Society.

Dr. C. M. Hammond of Walls recently spoke to the Memphis and Shelby County Medical Society on his RESPIRATOR of which he is the inventor. Those who have seen this machine in operation speak most optimistically of it and bespeak a wide field of usefulness for this new apparatus.

Dr. P. W. Rowland of Oxford is the president of the Mid-South Medical Assembly and Dr. Clyde M. Speck of New Albany is the Vice-President for Mississippi. The attendance and interest were unusually good at the annual meeting in Memphis in February.

Dr. Hunter Cox has located in his home town, Eudora, to practice his profession. Dr. Cox, after completing high school, graduated from the University of Mississippi, getting his M. D. Degree at the University of Illinois. He served his internship at Cook County Hospital. He is well prepared for his chosen work and we predict a fine and useful career for him.

L. L. Minor,
County Editor.

Route 4,
Memphis, Tenn.,
March 10, 1934.

HINDS COUNTY

Dr. Wm. F. Hand spent three weeks in Greenwood the first part of February, unintentionally, and, therefore, was unable to make a report to the Journal for that month. I regret very much that this had to be missed.

The staff of the Baptist Hospital held its meeting in the dining room of the hospital February 20. There was a good attendance and a good program enjoyed as well as the dinner.

The staff of the Jackson Infirmary held its meeting February 2, and a wonderful meal was served, after which the members retired to the library where an interesting program was enjoyed.

We sincerely regret to hear of the death of Mr. Ainsworth of Bay Springs, who passed away February 16. Mr. Ainsworth was the father of Dr. Temple Ainsworth of Jackson. The sympathy of the medical profession is extended to those members left behind.

Dr. Lauch Hughes is expected to reopen offices in the Labar Building, Jackson, again in the next few days. We are all delighted to have Dr. Hughes back in rank.

Dr. Van Dyke Hagaman, Jackson, took unto himself a wife the earlier part of February. Dr. Hagaman is to be congratulated. The bride, Miss Sue Griffith, is the daughter of Judge Griffith, Jackson. The happy couple are to be at home in Jackson where Dr. Hagaman has recently reopened offices for the practice of eye, ear, nose and throat.

Many of the doctors of Jackson and surrounding territory recently spent a most profitable visit to Memphis where they attended the meeting of the Mid-South Postgraduate Assembly.

Dr. Katherine McCormick, formerly of Mississippi recently completing her hospital work in

New Orleans, is preparing to open offices in Jackson for the practice of obstetrics.

The Central Medical Society held its meeting Tuesday evening at 6:30 on the roof garden of the Robert E. Lee Hotel. A good dinner was served and a most wonderful program enjoyed by a large attendance. Those appearing on the program were Dr. J. B. Anderson, who read a splendid paper on the diagnosis and treatment of sacro-iliac arthritis; Dr. J. T. Rainer, who gave us a most complete resume on the treatment of intracranial-hemorrhage, with report of cases; and last but not least, a paper by Dr. Gilruth Darrington on the care and treatment of gonorrhoea in the male. This was a most interesting presentation. These doctors are all of Yazoo City. We hope to have them back again in the near future for some more good papers.

Wm. F. Hand,
County Editor.

Jackson,
March 7, 1934.

LEFLORE COUNTY

We are glad to welcome Dr. D. T. Sayle back to his old home at Highlandale, Leflore County, from Black Hawk, Carroll County.

Dr. Ben F. McNeal of Moorhead has moved to Swiftown, and we are glad to have him back in Leflore county.

Dr. J. B. McElroy of Memphis, Tenn., was a visitor to Greenwood February 11.

Dr. Claude Yates of Philadelphia was a visitor in the home of his brother, Dr. R. B. Yates, the week end of February 11.

Among the witnesses in the Dean-Kennedy murder trial were the following out-of-town doctors: Dr. W. F. Hand, State Chemist, Mississippi State College; Drs. W. F. Hand, A. E. Gordin, A. G. Wilde, of Jackson; Dr. John Martin of Pope; Dr. J. T. Smith of Meridian; and Drs. Louis Leroy and W. R. Wallace of Memphis, Tenn.

Drs. Doyle Seward of Yazoo City, C. J. Pittman of Ruleville, S. D. Newell of Inverness, and J. D. Biles of Sumner were recent visitors to Greenwood.

W. B. Dickens,
County Editor.

Greenwood,
March 5, 1934.

MONROE COUNTY

A few weeks ago I was talking with a prominent and highly intelligent lady and she remarked that if any town ever needed a doctor it was Amory. Well, the need has been supplied; for since then a very interesting and accomplished young doctor has moved in. His name is Dr. B. E. Kane. Dr. Kane was reared in Pennsylvania—is a graduate from University of Chicago—has done research

work in Vanderbilt—is a bacteriologist and finished technician, having first intended to follow this line of work. He interned in one of the Oklahoma hospitals and did a year's private practice in that state. We are delighted to have him locate with us.

Dr. A. I. Boozer, one of our most popular doctors, has just recovered from a week's encounter with flu. The decision was in his favor but it was a real fight. Dr. I. P. Burdine has been under the weather too. But he seems to be himself again. Some one even accused me of being puny too. But maybe it was a mistake. Nevertheless I did not attend the recent meeting of the Mid-South Postgraduate Assembly at Memphis. Perhaps that admission will convict me of being guilty as charged.

Dr. C. E. Boyd, who is spending some months at Tulane in postgraduate work ran up home during the recess at Mardi Gras time. His friends were delighted to see him looking so well. He reports that he is "learning fast and loves his teacher". So he must be a "good boy". Jokes aside, it is a great pity that the world and our profession has so few men of his type and calibre. His clientele will be glad to have him back home and they will profit much by his absence too; for he is working hard, I know, to fit himself for better service than before he went away.

I was sorely pained to learn a few days ago that my good and loyal friend, Dr. Lilly of Tupelo, had died suddenly. Dr. Lilly was a gentleman of purest type. He was capable, courteous, loyal to his friends and true to the ethical standards that all doctors should measure up to. One of my best personal friends is gone. I shall miss him sadly—my sympathy goes out to his family—would that I might help them bear their grief.

Our territory has been scourged with every conceivable complaint that follows childhood; chicken pox—measles—whooping cough and scarlet fever. Of course diphtheria has about been conquered. But measles has been especially prevalent and severe in its attacks. A few deaths have occurred from it.

Well the first year of the "new deal" has passed into history. Things are not as we should like to have them, yet they are not so bad as they were a year ago. The people are getting work and pay. This is all that our country needs except that some plan must be devised that will keep the few who are already rich from growing richer at the expense of the poor. I feel that such a plan will be developed if it is humanly possible to do so. "It may be now that the kingdom is coming in the year of jubilee" (apologies to Will Rogers).

Pardon my brevity (?), I must say "goodbye".

Amory,
March 5, 1934.

G. S. Bryan,
County Editor.

PANOLA COUNTY

I regret to state that the past month was a rather sad one for Panola County. Dr. W. C. Lester of Batesville was found in a dying condition early one Sunday morning and was dead in a short while after being found. Dr. Lester had been married only a short time and his death was quite a shock to his wife, the former Miss Allie Seales of Batesville and his many friends.

Dr. H. R. Elliott, also of this city, was forced to undergo a gall-bladder operation, but I am glad to report that he is doing nicely now.

Dr. A. J. McIlwain, former practitioner of Merigold, is now located at Batesville occupying the former office of the late Dr. W. C. Lester.

G. H. Wood,
County Editor.

Batesville,
March 9, 1934.

PEARL RIVER COUNTY

The winter has been mild until recently. This has been fine on patients and physicians alike; on patients because many have nothing with which to pay a doctor, and on physicians because it has not been necessary for them to expose themselves to inclement weather in order to treat people when remuneration was doubtful or small at best. Our physicians state that so far as remuneration for services is concerned conditions are not improved. Here is hoping that there will be a change soon.

Everybody has been working for the past few months at C. W. A. work or interested in it in some way. Some good work has been done, some very valuable work. Our health department has been able to get almost 200 sanitary units constructed. There is a marked educational value to this work in addition to the advantages along the line of sanitation. The hospital at Poplarville is getting some much needed repairs also thru the C. W. A.

Dr. W. T. Thornhill has moved from this county to Stephenson, where he will look after the medical work for the L. O. Crosby interests there. Mr. Crosby is soon to begin operating a large lumber mill at this place. Dr. Thornhill will, after a few months, have associated with him in this work, Dr. D. H. Thornhill, his son, who is completing his internship at Touro Infirmary, New Orleans, La. I understand that another physician is soon to come to this county to take Dr. Thornhill's place. We regret that it is necessary for us to lose the association with Dr. Thornhill who is a most pleasant man to work with.

G. E. Godman,
County Editor.

Poplarville,
March 3, 1934.

PONTOTOC COUNTY

We are sorry to report that Drs. Z. A. Dorsey of Troy and E. B. Burns of Ecrú have been on the sick list recently, but are glad to report that they are both able to be back in harness.

Pontotoc County Medical Society met in Pontotoc, Monday, March 5.

Northeast Mississippi Thirteen County Medical Society will meet in Pontotoc, March 20. We are expecting a good attendance.

R. P. Donaldson,
County Editor.

Pontotoc,
March 8, 1934.

WARREN COUNTY

The Vicksburg Infirmary held its monthly staff meeting, Wednesday, March 8. A delightful luncheon was served and the following doctors were guests at the meeting: W. C. Pool, Cary; G. W. Gaines, Tallulah, La.; and C. L. Green, Utica

For the month of February. Dr. G. W. Gaines, of Tallulah, La., is our one hundred per cent doctor on attendance at medical meetings. During the month, Dr. Gaines met with every staff meeting held at the various hospitals of our city, and also attended the monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society. This was his Mississippi attendance. We are advised his Louisiana record is fully as commendatory. But he is young and active (only seventy-five years old) and youth must have its fling.

Speaking of youth, someone has said "Youth, no matter how oppressed by stress, most always faces life and hope; *Old Age*, too often looks alone into the bleakness of oncoming fate." Despite this depressing prognostication, our *venerable* Dr. Guy C. Jarratt took upon himself the urge of "youth" and hied himself away to the meeting of the "Mid-South Post Graduate Medical Assembly" convening at Memphis, Tenn. And on his return home visited the scenes of his childhood and young manhood's yesterday years at Blytheville, Ark.

Dr. Tom Sparks silently and successfully deported himself for a few days to "The Romantic City of the South," New Orleans, where he made acceptable "contact" with former friends and acquaintances

The Mississippi editor of the New Orleans Medical and Surgical Journal, Dr. Leon S. Lippincott, became so "het-up" over the red hot articles being sent in from the county editors of the state that he made a hurried trip to the "Windy City" to cool his feverish brain, and while in Chicago he attended the meeting of the American Hospital Association.

On Thursday night, March 9, 1934, the Vicksburg Hospital held its monthly staff meeting. A

delectable luncheon was served, followed by routine business. On this occasion the hospital had as its guests Drs. Stafford of Newellton, La., Hopkins of Lake Providence, La., Gaines of Tallulah, La., Jenkins of Port Gibson, and West of the J. W. Collier C. C. Camp, Vicksburg.

It has been said that there are some men who know the price of all things but the value of *nothing*. This would not be applicable to Dr. I. C. Knox, who, recognizing the value of the Mid-South Medical Assembly to the doctors of this territory, attended its recent convention at Memphis, Tenn.

Dr. Preston S. Herring, genial, jovial, rotund physician of our city, has been commuting as a boy scout master from Vicksburg to Monroe. In transit his rural attentions were centered around and about Tallulah. Preston is so deliberate in drawing conclusions, so impartial in arriving at decisions, that the prime object of his urban and rural visiting was to get the various sands of the soil into his *sandals* that he might determine more accurately whether the city or the county has the greater "grind."

Dr. A. Street, Vice-President of the Mid-South Medical Assembly, was one of the Vicksburg doctors who attended the recent meeting of this convention at Memphis, Tenn.

Dr. C. H. Kibbey, wife, and son, of Birmingham, Alabama, were visitors in our city this month. Dr. Kibbey is sanitarian for the Tennessee Coal and Iron R. R. Company. This company in their mines, smelting furnaces, etc., located around Birmingham, employ approximately 25,000 workers. Ye Editor spent a most pleasant hour with this delightful family. Dr. Kibbey is the author of several books. One on "Municipal and Rural Sanitation" has been most outstanding in that field. The doctor looks with much apprehension upon the unjustifiable encroachment being made upon ethical preventive medicine by certain factors and organizations endeavoring to place upon it the responsibilities of social welfare work and curative medicine.

When ye *other* county editors shall have read these lines (for perhaps ye are the only doctors in Mississippi who do) it will be about time for us to begin planning to pack our shabby "knapsack" with our few and limited belongings that will be essential to our making the trip to Natchez to attend the annual convocation of our State Medical Society.

May I ask, will you pack that "old grip" and meet us there? You know it occurs to us that it would be great for every county editor in Mississippi to come to Natchez and attend the State Medical Society convening there in the month of May. It further occurs to us that our state editor would be delighted to see and meet with us, and we believe we would not be presumptuous in as-

suming he would be glad to help us arrange for an informal luncheon one day during the session that we might all get together, learn to know each other better, and have a round table discussion of the future policies to follow and services to be rendered by a county editor. And would it not be great to hear a brief report in his inimitable style from our venerable scribe from Amory, in "A Reminiscence of Mississippi Doctors I Have Known."

Think it over, we feel it would do us good.

H. T. Ims,
County Editor.

Vicksburg,
March 9, 1934.

WASHINGTON COUNTY

Dr. L. C. Davis, Greenville, attended the Eye Clinic in Memphis, Tenn., February 9-12, given by Dr. Elschmig of Czechoslovakia. About fifty attended this most unusual and instructive meeting.

Dr. and Mrs. D. C. Montgomery of Montbury, Greenville, entertained in their charming way with a dinner this past month complimenting about twenty of their friends.

The following Washington County doctors attended the Mid-South Post Graduate Medical Assembly Association meetings in Memphis, February 13 to 16: H. A. Gamble, P. G. Gamble, D. C. Montgomery, A. G. Payne, F. M. Acree, E. W. Eubanks, J. A. Beals, and J. G. Archer, all of Greenville.

Dr. H. A. Gamble, Greenville, gave an address on "The Relative Merits of Anesthetic Agents," at the first annual meeting of the Mid-South Nurse Anesthetists Association held in Memphis, February 14 and 15.

At the February meeting of the Staff of the King's Daughters' Hospital, Greenville, the following officers were elected for the ensuing year: Chief of Staff, Dr. J. F. Lucas; Secretary, Dr. J. Shackelford; Vice-President, Dr. O. H. Beck; Chairmen of Sections: Surgical, Dr. P. G. Gamble; Medical, Dr. F. M. Acree; Specialties, Dr. J. C. Pegues.

Dr. and Mrs. S. L. Lane, Hollandale, were called to Weir the last of February to the bedside of Dr. Lane's aunt who was very ill.

The Epidemiological Unit of the State Board of Health, consisting of Dr. A. L. Gray and Miss Margaret Meade, are working with the County Health Department in the interest of a more effective communicable disease control program. In connection with their epidemiological investigations, studies on the relative value of Alabama alum precipitated toxoid, Squibbs's alum precipitated toxoid, and Ramon toxoid as immunizing agents are being carried on. The reactions follow-

ing these agents are being observed for several days after their administration. A later check will be made to determine the percentage of children giving a negative Schick after the one dose precipitated as compared with the two-dose Ramon toxoid.

On February 27, at a meeting of representative groups from the six county parent-teachers' association and the health department staff, called for the purpose of considering the child hygiene program, a special request was made that the county welfare office set aside sufficient funds to care for decayed teeth, and removal of tonsils for indigent school children.

Dr. and Mrs. J. B. Hirsch, Greenville, attended the wedding of Mrs. Hirsch's nephew, Mr. Julius Marks of Bronxville, Tenn., and Miss Ann Liberman of Memphis, Tenn.

Dr. and Mrs. J. B. Hirsch were awakened in the wee hours of the morning, several week ago, to find that their home was on fire. Through the efficient work of the local fire department the flames were soon extinguished, before so very much damage was done.

Dr. and Mrs. L. C. Davis, Greenville, were called to Jackson in February to the bedside of Mrs. Davis' brother. Their many friends are delighted to hear that he is all right again.

Dr. Paul Gamble, Greenville, spent a few days in Nashville, Tenn. this past month on business.

Dr. and Mrs. J. F. Lucas, Greenville, had as their house guest this past month Mrs. Joe Gee, of Carrollton.

Dr. and Mrs. F. M. Acree and daughter, Greenville, spent a few days with Dr. Acree's father and mother in Dover, Tenn. Enroute home they made Little Rock, Hot Springs, and other places of interest in Arkansas.

The many friends of Dr. T. B. Lewis are glad to know that he has completely recovered from a very badly infected finger.

Dr. E. T. White's mother, Mrs. J. A. Johnson of Merigold, was ill for several days at the King's Daughters' Hospital, Greenville. Her many friends are glad to know that she is able to be out again.

The Auxiliary to the Delta Medical Society held its regular meeting February 7 at the Methodist Church Annex, Greenville, with Mrs. S. M. Shankle, Hollandale, presiding. A delicious luncheon was served. Mrs. W. C. Pool of Cary, past president of the Mississippi State Auxiliary was present and gave a most interesting address.

Dr. K. L. Witte, Leland, has been appointed a member of the Washington County Agricultural Adjustment Administration Committee.

John G. Archer,
County Editor.

Greenville,
March 3, 1934.

WILKINSON COUNTY

Our industrious editor should receive a vote of thanks for his untiring efforts to obtain favorable legislation on the physicians' and hospitals' lien bill. As a law it will prove of great help to the physicians and hospitals in our State. To Dr. Lippincott, credit where credit is due.

Dr. G. H. Butler spent a few days in Memphis on business this month.

Dr. R. J. Field attended a committee meeting in Jackson in the interest of proposed legislation for community hospitals. He reports that they were very kindly received by the Senate and House Committee.

We welcome to our district this month a new physician, Dr. W. T. Thornhill who will take over the medical duties of the new lumber manufacturing company at Stephenson. This business, formerly the Foster Creek Lumber Company, is opening under new management. Business is picking up—maybe. Dr. Thornhill comes here from Picayune. It is with pleasure that we welcome him and wish him much happiness and success in his new location.

Miss Doris McGraw, R. N., a graduate of F. M. H. and Mr. Jack Darden, both of Centreville, were quietly married on March 1. We wish them much happiness and success.

S. E. Field,
County Editor.

Centreville,
March 2, 1934.

WINSTON COUNTY

Dr. H. B. Wadkins of Noxapater was in our city last week on business.

Dr. W. W. Parks and his wife carried their grandson to the hospital for an examination this week. We are glad to know they found no evidence of any bad ailments in his case.

We would like to have in our next Journal a local from each county reporter on how well the FERA local managers are cooperating with their doctors respectively in their counties.

The writer with the other members of the Louisville High School Board made two trips to Jackson this month in the interest of a C. W. A. project to correct a very bad condition existing with our school, the walls being cracked from a defective foundation. We are glad to say we have the work now on and hope to correct conditions before April 1, the time limit for such under the last announcement.

M. L. Montgomery,
County Editor.

Louisville,
March 1, 1934.

YALOBUSHA COUNTY

February 9, 1934.

We the undersigned licensed resident physicians of Yalobusha County, met in Water Valley, on the 9th day of February, 1934, and proceeded to organize a County Medical Society which is part of the North Mississippi Medical Society and the Mississippi State Medical Association.

After organizing and electing Dr. Geo. A. Erown, President, and Dr. L. S. Brown, Secretary of the Society, we adopted the following schedule of fees for the indigent sick in Yalobusha County, which we believe conforms with the Mississippi State Medical Association and the Executive Committee of the State Board of Public Welfare, Jackson, and agree to accept the minimum fee as agreed upon by the representatives of the Mississippi State Medical Association and the Executive Committee of the State Board of Public Welfare, which schedule is as follows:

Office Calls	\$ 1.00
Bedside Calls (city	1.50
with 50 cents per mile additional	
Obstetrical Calls	15.00
Major Operations	25.00
Minor Operations	5.00

The following named physicians were selected to act in the capacity of an Advisory Committee to represent the Yalobusha Medical Society and its members in any controversy that may arise between said members and the local relief workers: Dr. S. L. Cox, Water Valley; Dr. R. J. Criss, Coffeeville; and Dr. J. S. Donaldson, Oakland.

It is hereby requested to the various field workers that they shall not suggest any particular doctor to any patient but leave the matter solely with the patients themselves.

The society unanimously voted that the privilege license imposed on physicians should be abolished.

Signed: Dr. G. A. Brown, Water Valley; Dr. L. S. Brown, Water Valley; Dr. S. E. Cooper, Water Valley; Dr. S. L. Cox, Water Valley; Dr. D. C. French, Water Valley; Dr. W. M. Jackson, Water Valley; Dr. R. J. Criss, Coffeeville; Dr. H. O. Leonard, Coffeeville; Dr. C. H. Spearman, Coffeeville; Dr. J. S. Donaldson, Oakland; Dr. H. P. Sayles, Tillatoba; Dr. W. R. Best, Scobey.

MARTIN SANATORIUM

Dr. W. T. Thornhill has resigned his position with the Martin Sanatorium and has accepted the position of physician and surgeon for the Crosby Manufacturing and Lumber Company of Stevenson.

Dr. W. W. Hickman of Piave, who has been serving the Virgin Pine Lumber Company of that place as physician and surgeon, is taking Dr. Thornhill's place at the Martin Sanatorium.

Picayune,
March 1, 1934.

V. B. Martin,
County Editor.

THE WOMAN'S AUXILIARY

to the

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. VanAlstine, Jackson
 President-Elect—Mrs. Henry Boswell, Sanatorium.

Secretary—Mrs. Adna Wilde, Jackson.

Treasurer—Mrs. E. C. Parker, Gulfport.

Press and Publicity—Mrs. Leon S. Lippincott,
 Vicksburg.

HISTORY OF THE WOMAN'S AUXILIARY TO
 THE MISSISSIPPI STATE MEDICAL
 ASSOCIATION.

(continued)



MRS. M. H. BELL

Vicksburg.

President, 1929-1930.

Ada Robinson Bell was born at Walthamstow, Essex, England. She came to Mississippi in 1890. She graduated from the New Orleans Hospital Training School for Nurses with the highest honors, being valedictorian of the first class of '95. She was then honored by being given the position as superintendent of nurses there, which position she filled with ability until removing to Memphis, Tennessee, where she capably filled a similar position at the Memphis City Hospital until her marriage to Dr. M. H. Bell of Arkansas, in Calvary Church, Memphis, August 1, 1901. They moved to Vicksburg, Mississippi, in 1903, where Mrs. Bell still resides.

Mrs. Bell has been active in the Auxiliary since its organization; serving as its president in 1929-1930. During her term of office she wrote a series of Public Health Lessons and distributed them for study by the Auxiliary, the P. T. A. and Nurses Clubs. These were later arranged and published by the State Board of Health under the name of "A Quiz Compend."

Being the daughter of an Episcopal clergyman, and so closely associated with the medical profession, she has retained a human interest in people and things around her which has made her one of Vicksburg's most loved women. She has been closely identified with all civic enterprises.

She became associated with the Civic League, served two successive terms as president of the Public Health Commission, and upon her retirement from this office was appointed chairman of the Board of Directors. She was appointed by the mayor and city commissioners as a member of the school board at the time of the erection of the new high school building. She so capably filled this position that she was re-elected to another three-year term of office, being the first woman to hold such a position in Vicksburg.

On May 13, 1930, The Woman's Auxiliary to the Mississippi State Medical Association met in the Coral Room of the Vicksburg Hotel with the president, Mrs. M. H. Bell, presiding.

The Health Camp having become a permanent State institution in beautiful new buildings under the management of the superintendent of the Sanatorium, and given the name of the Preventorium, the auxiliary undertook the sponsoring of a fund to be used for the children at the Preventorium as they were greatly in need of additional items not supplied by the State appropriation, such as toys, accessory school supplies, playground equipment, and such other things as children need to keep them happy.

Mrs. Henry Boswell reported one boy taken care of for two months, and two others for one month each from the money contributed by the auxiliary the previous year.

Officers for the ensuing year were as follows:
 President, Mrs. L. L. Polk, Purvis.
 President-Elect, Mrs. G. D. Mason, Lumberton.
 First Vice-President, Mrs. A. Street, Vicksburg.
 Second Vice-President, Mrs. W. C. Pool, Cary.
 Recording Secretary, Mrs. Henry Boswell, Sanatorium.

Treasurer, Mrs. E. C. Parker, Gulfport .

Councilors:

First District, Mrs. N. L. Cockerham, Gunnison.

Second District

Third District, Mrs. Jim Hill, Corinth.

Fourth District,

Fifth District, Mrs. H. L. McCaleb, Yazoo City.

Sixth District, Mrs. W. G. Gill, Newton.

Seventh District, Mrs. C. C. Hightower, Hattiesburg.

Eighth District, Mrs. W. L. Little, Wesson.

Ninth District, Mrs. B. Z. Welch, Biloxi.

FROM OUR PRESIDENT

This month we begin to think of our annual meeting next month at Natchez. The program in detail will be in the next issue of the Journal as well as in the official program of the Medical Association.

If any Auxiliaries have not sent in their report to me please do so at once that I may be able to make a comprehensive report from all departments.

It is not too early to be planning to go to Natchez. Quite a number of members from various auxiliaries have expressed their intention of attending and it encourages us to believe we will have the best attendance in the history of our organization.

The Natchez ladies are preparing a real treat for us, so let us not disappoint them! Everybody go!

Mrs. Frank L. Van Alstine.

Jackson,
March 9, 1934.

WOMAN'S AUXILIARY TO THE HARRISON-STONE-HANCOCK MEDICAL SOCIETY

Life in the C. C. C. Camps was the subject of talk by Dr. Elmer D. Gay, Long Beach, before the Woman's Auxiliary to the Harrison-Stone-Hancock Medical Society, Wednesday afternoon at the home of Mrs. E. C. Parker, East Beach, with Mrs. W. W. Cox and Mrs. E. M. Fahnestock as co-hostesses. Dr. Gay who is medical officer at the C. C. C. camps at Ramsay Springs and Kiln, told of the physical examinations given the boys when they first entered the camps, of the corrections made, of the physical building up, of food conditions and general camp facilities.

Mrs. Daniel J. Williams, new president, and the other new officers assumed their duties. Mrs. Williams announced committee personnels for the ensuing year, the first named in each committee being chairman: Philanthropic or Hospital, Mesdames E. C. Parker, C. A. McWilliams, George Melvin, C. A. Sheely, W. A. Dearman, D. G. Rafferty, E. M. Fahnestock; Civic and Membership, Dr. Emma Gay, Mesdames J. S. Laird, M. M. Snelling, J. A. McDevitt; Publicity and Preventorium, Mesdames C. H. McCall, W. E. Murphy, E. P. Odeneal; Program and Hygeia, Mesdames Elmer Gay, C. G. Beckett, H. K. Rouse, Jr., N. W. Lake, C. H. Denner, R. E. Longino, W. W. Cox.

At the close of the meeting the hostesses entertained at tea. The dining table was attractively ar-

ranged and Mrs. H. L. Rouse, Jr. presided. Those present were, Mesdames George Melvin, D. J. Williams, Elmer Gay, W. E. Manney, C. A. McWilliams, H. R. Rouse, Jr., R. A. Switzer, W. E. Murphy, M. J. Wolfe, C. G. Beckett, J. S. Laird, L. C. Rouse, C. H. McCall, W. W. Cox and Mrs. E. C. Parker.

Mrs. Dan J. Williams.

Gulfport,
March 10, 1934.

SOCIAL NOTES FROM JACKSON

Mrs. Harvey F. Garrison enjoyed several days in Memphis, where she went with her son, Dr. Harvey F. Garrison, Jr., who attended the medical convention held there last month.

Henrietta Rehfeldt, daughter of Dr. and Mrs. F. E. Rehfeldt, Mary Lane Womack, daughter of Dr. and Mrs. Noel Womack, and Maud McLean, daughter of Dr. and Mrs. Sam McLean, were particularly lovely as maids in the Junior Auxiliary Carnival Pageant.

Of much interest in medical circles has been the marriage of Dr. VanDyke Hagaman to Miss Sue Hart Griffith.

In order to avoid conflicting with the monthly University Club bridge luncheons, the Auxiliary meetings have been changed from the first Tuesday of each month to the second Tuesday.

Mrs. Temple Ainsworth,
Press and Publicity Chairman.

Jackson,
March 10, 1934.

WOMAN'S AUXILIARY TO THE SOUTH MISSISSIPPI MEDICAL SOCIETY

There are 74 doctors who are paid up members in the South Mississippi Medical Society. Their wives are eligible to membership in the Auxiliary.

In May, 1933, this auxiliary was organized at a luncheon meeting with Mrs. Arthur McGlothlan of St. Joseph, Missouri, past president of the National Auxiliary, as guest speaker and with Mrs. L. L. Polk, Purvis, presiding. Twenty members joined and paid dues. Due perhaps to the scattered territory covered by the Society, all efforts to increase the auxiliary membership have been unsuccessful.

This auxiliary meets quarterly when the doctors meet. Average attendance for the year has been thirteen with practically full attendance at luncheon meetings.

The meetings have been social, mostly. Interesting and appropriate talks were made on subjects relating to the medical profession and their families. Several well received talks were taken from Medical Economics and programs based on state programs were used. Musical numbers have added to these programs, the efforts being made to use all talent in the families of the profession, mu-

sically or in any capacity individual members were fitted for.

Individual reports were heard at each meeting of various civic organizations for the programs of human welfare. The auxiliary is represented 100 per cent in the communities' humanitarian organizations and are found leading in the various lines of work.

This auxiliary has made efforts to have Hygeia re-instated in the schools by the P. T. A. Subscriptions were cancelled because of the many essential needs for charity during the depression.

An essay contest on Tuberculosis and the Preventorium, with a prize of \$2.50 was sponsored in the Hattiesburg Junior High School. Material and chapel talks were given and arranged on the subject. A donation of \$5.00 was made to the Preventorium.

Splendid publicity of the auxiliary has been given in the local papers, announcements of meetings previously and full reports of these meetings afterwards. So well did the paper give publicity to the doings of the auxiliary that the Medical Society members jokingly called attention to the fact that, characteristic of busy doctors, they had failed to get any mention at all of some of their best meetings.

One weak point has been reported to the state publicity chairman.

The Medical Society, on the whole, has been well pleased that the auxiliary was bringing their wives together and promoting a better acquaintance and understanding in the profession through them. Sincere and lasting friendships have been formed. Contacts with other people of the same status and interests has made for greater relaxation and enjoyment of special occasions for the doctors. This social phase of the auxiliary appeals most to the doctors. They have been most encouraging and have registered eager satisfaction at any efforts made by their wives in the auxiliary.

New officers will be elected March 8, too late for this report.

Officers for the past year were: President, Mrs. C. C. Hightower, Hattiesburg; first vice-president, Mrs. Thomas R. Beech, Ellisville; second vice-president, Mrs. J. W. Horn, Lucedale; secretary, Mrs. R. H. Clark, Hattiesburg; treasurer, Mrs. Grady Cook, Hattiesburg; parliamentarian and councilor, Mrs. L. L. Polk, Purvis.

Mrs. C. C. Hightower,
President.

Hattiesburg,
March 7, 1934.

WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

On February 20, there were eighteen members of the local auxiliary present at its monthly meeting.

A very delightful luncheon was held in the Monroe Room of the Hotel Vicksburg. The table was decorated with lovely spring flowers arranged by the hostess, Mrs. D. A. Pettit.

The President, Mrs. H. S. Goodman of Cary, conducted the business meeting in her efficient manner. A number of items of interest were discussed. It was decided that the auxiliary continue its subscriptions to Hygeia for the county schools and the usual donation to the Preventorium also be made.

At the conclusion of the business, Mrs. Pettit entertained the members by reading a paper on Pasteur. It was one of the most enlightening and carefully prepared papers that has ever been presented before the auxiliary.

VICKSBURG SOCIAL NOTES

Dr. and Mrs. F. M. Smith and family motored to Monroe to see their sister and mother.

Mrs. A Street is enjoying a visit from her mother, Mrs. Davidson of New Jersey. It has been several years since Mrs. Davidson's last visit and her friends are delighted to see her again.

Dr. H. H. Haralson celebrated his eightieth birthday March 10. This happy occasion united his family, those being present were his wife, six daughters, five sons-in-law, twenty grand children and one great grandchild. One daughter, Mrs. Sydney W. Johnson, has served as president of our local auxiliary, twice, and has been president of the Mississippi State Medical Association Auxiliary. Dr. Haralson has made his home in Vicksburg since 1898 and during that time has made many friends who have deep affection for him.

Dr. Walter Johnston motored from Shreveport last week-end, bringing his sister, Sydney and her friend Virginia Duffey who are attending Dodd College.

Dr. and Mrs. George Street and their two interesting and attractive daughters, Pauline and Lois, are spending a delightful vacation in Havana, Cuba.

Mrs. Edley Jones has her mother, Mrs. Jiggetts of Canton, visiting her. Mrs. Jiggetts has made many friends here who are always pleased over her visits.

Mrs. T. P. Sparks of Jackson spent several days last week with her daughter, Mrs. W. H. Parsons. Mrs. Sparks' improvement in health is very gratifying to her numerous friends.

Dr. and Mrs. Preston Herring motored to New Albany to meet Mrs. Herring's father, Dr. J. C. Greenoe.

Dr. and Mrs. A. Street have returned from the Southeastern Surgical Association meeting held in Nashville, Tenn., the first of March.

Dr. and Mrs. Leon S. Lippincott went to Chicago in February where Dr. Lippincott attended a meeting of the Congress on Medical Licensure, Educa-

tion and Hospitals, and a Conference of State and Regional Hospital Association Executives with the Board of Trustees of the American Hospital Association.

Mrs. Laurence J. Clark.

Vicksburg,
March 10, 1934.

HONOR ROLL

The following contributed to Mississippi's share of our Journal this month:

COUNTY EDITORS: W. C. Walker, L. L. Minor, Wm. F. Hand, W. B. Dickins, G. S. Bryan, G. H. Wood, G. E. Goodman, R. P. Donaldson, H. T. Ims, John G. Archer, S. E. Field, M. L. Montgomery, L. S. Gaudet.—13.

SOCIETIES—Central Medical Society, L. W. Long; Issaquena-Sharkey-Warren Counties Medical Society; Northeast Mississippi Thirteen Counties Medical Society, J. M. Acker, Jr.; Tri-County Medical Society, H. R. Fairfax.—4.

WOMAN'S AUXILIARY—Mrs. Frank L. Van Alstine, Mrs. Dan J. Williams, Mrs. Temple Ainsworth, Mrs. C. C. Hightower, Mrs. Laurance J. Clark, Mrs. Leon S. Lippincott.—6.

HOSPITALS—Houston Hospital, W. C. Walker; Natchez Sanatorium, Lucien S. Gaudet; Vicksburg Hospital, Mildred O'Ryan; Vicksburg Sanitarium.—4.

OTHERS—T. M. Dye, V. B. Martin, T. P. Sparks, Jr., A. Street, H. B. Goodman.—5.

GRAND TOTAL—32.

YOUR EDITORS THANK YOU..

BOOK REVIEWS

Mental Hygiene in the Community: By Clara Bassett. New York. The MacMillan Company, 1934, pp. 394.

This book has been written to show the breadth and scope of mental hygiene. The author has also tried to show its usefulness under various conditions and encourages the application of certain principles in the solution of problems which arise in the community, but no attempt is made to present definite answers to individual problems.

In a short introduction mental hygiene is defined and some of its limitations are pointed out. The remainder of the book is devoted to chapters which attempt to show what mental hygiene has to offer in the solution of problems in medicine, nursing, social service, delinquency and low, parental education, education of the preschool and school child, teacher training, church and theological training, industry, recreation, and finally in the conduct of psychiatric institutions and agencies.

Besides having a bibliography at the end of the book, there are numerous references in footnotes. The index is good. The references, however, are not all selected with care, since it appears that some are chosen to prove a particular point without taking into consideration that the validity of the quotation may be open to question.

The reviewer feels that the author is not justified in condemning so whole-heartedly the stern process of education in the past. After reading the book one is left with the impression that unless the principles of mental hygiene are not applied to all phases of our lives we are doomed to failure.

The book should prove a useful one to any person who is interested in the field of mental hygiene, but more particularly to the psychiatrist, the psychiatric social worker and to the psychologist.

C. C. DAUER, M. D.

Obstetrics and Gynecology: Vol. 3, ed. By Arthur Hale Curtis, M. D. Philadelphia. W. B. Saunders Co., 1933. pp. 1201 illus.

Volume 3 of Curtis' *Obstetrics and Gynecology* is splendidly illustrated, particularly the sections on the various methods of repair. The chapters on disturbance of function, especially those discussed by Novak, whose work in this field is most outstanding, are fully detailed and worthy of special mention. In the opinion of the reviewer, the author of the chapter on sterility might have added to its interest and value by a plainer and more detailed discussion. The chapters on gynecological and obstetrical diseases, symptom complexes and gynecological and obstetrical roentgenography are worthy of particular note.

The Index to the set shows care in preparation and seems entirely adequate.

In closing, the reviewer feels that a definition of certain technical terms would add to clarity of expression in certain instances. Since the book is intended for general practitioners rather than for those engaged in the special fields of gynecology and obstetrics, it would seem that a simpler form of expression would facilitate the use of the volume.

ADOLPH JACOBS, M. D.

Pathogenic Microorganisms: By William Hallock Park, M. D. and Anna Wessels Williams, M. D. 10th ed. enl. & rev. Philadelphia Lea & Febiger, 1933. pp. 867.

All previous editions of this text have been well received. The present edition has been thoroughly revised by the authors to keep step with recent advances in work on undulant and yellow fever, bacteriophage and additional data on immunization in diphtheria and scarlet fever. In the chapter on leprosy certain references are given on the

gaseous tension method of cultivating the leprosy bacillus. Certain workers have found that the presence of the recommended gases neither enhances nor inhibits the growth of *E. leprae*. References are conveniently listed at the bottom of each page. The text as a whole is well suited to the needs of the public health laboratory worker, since it contains chapters on the bacteriological examination of water, air, soil, milk and various other foods.

H. J. SCHATTEBERG, M. D.

Proceedings of the First International Congress on Mental Hygiene. New York. International Committee for Mental Hygiene, Inc., 1932. 2 v.

These volumes furnish not only very interesting but very instructive reading for anyone, no matter whether he is a psychiatrist, social worker, lay physician or layman. To attempt to analyze the mass of data and the viewpoints on the subject as brought out by the individual articles would be too great a task for a brief review. It suffices to say that these volumes would be a valuable addition to anyone's library.

Aside from the scientific data contained in the volumes, one is most impressed by the stupendous task which must have been facing the management of this Congress and by the successful way with which they dealt with it. One is also most impressed by the indications shown of the tremendous strides the Mental Hygiene movement has made in its comparatively short life, and cannot help but feel that Mr. Clifford Beers, the originator of the movement, has erected a monument to himself, which will stand for all time and one which would be worthy of any man, and that Dr. Thomas W. Salmon would have been proud of the work done if he could have known of it.

E. MCC. CONNELLY, M. D.

Laboratory Medicine. A guide for Students and Practitioners: By Daniel Nicholson, M. D. Second Edition, Revised. Philadelphia. Lea and Febiger, 1934. pp. 566. 124 eng. Price \$6.50.

A thorough revision brings this standard text up to date with a wealth of information on the indications for methods and interpretation of practically all of the clinico-pathologic tests useful in the modern practice of medicine.

Laboratory tests that are too difficult for the average young physician with some laboratory training to perform are given in principle only. The indications for making all such tests and the interpretation of the findings being stressed by greater detail than will be commonly found in other books upon Clinical Pathology.

The illustrations are clear and ample with the exception of the parasitological findings which are

so important in Southern medical practice. The drawings of ova and larvae are too schematic. The three malaria parasites pictured on the colored plate of blood are also totally inadequate.

F. M. JOHNS, M. D.

Metabolic Diseases and Their Treatment: By Erich Grafe, M. D., translated by Margaret Galt Boise. Philadelphia. Lea and Febiger, 1933. pp. 551.

This authoritative German work deserves the thoughtful consideration of the American medical audience. It is comprehensive in its scope, covering the fields of undernutrition, malnutrition, vitamin deficiencies, metabolism and diet in fever, obesity, diabetes, mellitus, gout, alcaptonuria, cystinuria, aminuria, diabetes insipidus and calcareous diatheses (oxaluria, uraturia, phosphaturia, calcinosis). It will serve as an excellent reference volume for the clinician interested in these fields. It is also of great value to the student who wishes some elaboration of his usual vague and inadequate information about metabolic disease in general. Finally by reason of its rich bibliography it will be of great use in opening up the literature not only for the clinician but to original investigators as well.

I. I. LEMANN, M. D.

Practical Medicine Series—General Medicine: ed. by George F. Dick, M. D. and others. Chicago. Year Book Publishers, 1933. pp. 831.

In this volume one notes the articles that the several editors have considered as marking an advance in medicine in 1933. The book is divided into sections devoted to the different branches of medicine and it is surprising the amount of information that has been abstracted. The selections reflect scholarship and the numerous editorial comments tend even more to accentuate the care given to the compilation of the book. It should be read by everyone interested in medicine.

I. L. ROBBINS, M. D.

PUBLICATIONS RECEIVED

The MacMillan Company, New York: *Manometric Methods*, by Malcolm Dixon, M. A., Ph. D., Sc. D.

J. E. Lippincott Company: *International Clinics*, by Louis Hamman, M. D.

Paul B. Hoeber, Inc., New York: *The Clinical Management of Horseshoe Kidney*, by Robert Gutierrez, A. B., M. D., F. A. C. S.

New Orleans Medical

and

Surgical Journal

Vol. 86

MAY, 1934

No. 11

SOME PRINCIPLES AND POLICIES OF THE MEDICAL PROFESSION IN ITS PUBLIC RELATIONS*

C. A. WEISS, M. D.
BATON ROUGE, LA.

As president of the Louisiana State Medical Society, and in the name of all of the members and guests of our society whom you have so cordially welcomed to your fair city and entertained so lavishly, I wish to thank you. If there is one city in our dear old state of Louisiana that has the happy faculty of knowing just how to entertain the Louisiana State Medical Society at an annual meeting, it is your enterprising city of Shreveport. The best evidence of that statement is the fact that Shreveport has never failed to get the annual meeting of the society whenever they extended an invitation, except one year, when they graciously stepped aside to let Baton Rouge have it. For that graciousness and magnanimity we of Baton Rouge shall ever be grateful.

I would like to tell you just how much I appreciate the honor of being president of the Louisiana State Medical Society. Words are, however, inadequate to express how I feel after having had conferred upon me the highest honor possible at the hands of my fellow practitioners of medicine. If you will just put yourself in my place, think all the good things possible and try to picture all the nice things I would like to say, you will guess just how I feel.

To be permitted to even flicker amidst the galaxy of brilliant medical lights who proudly boast of their membership in Louisiana State Medical Society is indeed a rare privilege. Ours is indeed a heritage to guard with jealous pride,

*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

and it is in our societies where we are brought in touch alike with the great names which have stood out in our history because of their firm adherence to the ideals of our profession and with our fellow practitioners of today, who command our admiration and affection, that we draw our greatest inspiration to hold true to the tenets of our brotherhood.

The history of our profession is the inspiring record of the greatest of all arts, whose basic motive is the principle of unselfish service to our fellow man; a brotherhood which has put ideals above all else. Ideals are like the stars, you will not succeed in touching them, but like the seafaring man on the desert of waters, you choose them as your guides, and following them you reach your destination.

If it is true that imitation is the sincerest of flattery, the medical profession should feel extremely proud of its Hippocratic code. The President of these great United States is strenuously trying to compel American industry to adopt a code of fair dealing of the ethical significance of the Hippocratic Code.

Medicine today finds itself with many complex problems to solve. Some lapping greedily at the very foundation of ideals that make medicine near and dear to the true physician. Some of these problems the physician has created for himself, but the majority and those that are causing us the most concern have originated with the laity, who after nurturing them to maturity were awed by their size and ungainliness and shifted them to the ever willing shoulders of the medical fraternity. In spite of the wonderful heritage justly medicine's own, the practice of medicine by the physician and for the benefit of suffering humanity is fighting harder today for its very existence than at any time in its history.

The lean years following the years of wild and untrammelled financial excesses have certainly brought with them bitter days of atonement. The pinch of sudden deprivation of many of those worldly pleasures and comforts, which the human race considers so essential to its welfare, has brought us face to face with conditions which were considered impossible during the fat days of affluence.

During those super-prosperous days, what a terrible financial orgy took place. Companies were merged into corporations, stupendous bond issues were passed by municipalities, states and nations. Tax free bonds were sold and resold at ever soaring prices. tremendous fortunes amassed over night. The tremendous influx of capital into the vaults of our banks intoxicated our bank officials with a financial plethora that eventuated into a serious banking apoplexy at a most critical period. All credits were terribly abused and we were spending what ready money we possessed without a thought or care for the tomorrow.

The sudden crumbling of our house of pleasure, squandering and recklessness was followed by the inevitable days of reckoning. Awakened to sobriety from our wild delirium we realized that it was all a dream and sudden deprivation a hard cold actuality. Summarizing convinced us further that nearly all that had gleamed with a golden glint was only pewter, and the sober period of retrenchment began in earnest. During this period of retrenchment luxuries were discarded first and even the necessities of life were cut down, until in many instances deprivation of the essential elements necessary to the proper functioning of the human body necessitated the services of the physician. It was then that the medical profession experienced the vicissitudes of the depression. Even in times of affluence the doctor usually receives his remuneration after the landlord, grocer, butcher, baker and auto dealer have been taken care of out of the family budget. The doctor who knows too well the compensating value of promises, had to content himself with more promises, many of which he did not even trouble to enter on his ledger knowing full well that he was only adding the useless waste of time and paper.

The physician ever conscious of his duty to

humanity, besides giving freely of his services where needed, gave material assistance, and contributed financially to many relief measures. His services were solicited and obtained without compensation by innumerable persons and organizations, nay even civic communities and our Federal government did not hesitate to use his services freely and without reward, to further their own measures of relief to the needy. The Government has recently placed medical care on the list of necessities along with food, clothing and shelter which must be provided for the unemployed indigents, but has made no provisions for re-embursing the physician for his services. The Federal authorities charged with the responsibility of caring for the present vast army of indigents solicited the aid of the medical profession and have given its members the alternative of accepting a fee schedule for its services, degrading to their sense of honor and belittling to their professional dignity, or have the medical relief which justly belongs to the physicians of a community usurped by an importation, willing or probably compelled by circumstances to accept an inadequate fee dictated by a political bureaucracy.

For the last several years socialists and communists have attempted to make of ethical medicine the catspaw for drawing the chestnuts from the fire. Only the alertness of the medical fraternity has prevented the practice of medicine from being the opening wedge by which socialism and communism might enter under the guise of sheeps' clothing. Now the urgency and possibilities of the present emergency are so far-reaching and sinister that both the probabilities and possibilities of the present crisis bear the closest watching by the medical profession.

It behooves the medical profession to be extremely cautious in their ultimate decisions and condescensions in the present crisis, for by our deeds shall we be judged and what is worse by our precedents shall we be ever after enslaved.

Much is being written about the uneven distribution and unbearable burden of sickness especially upon that vast concourse of people known as the middle class, the wage earners of moderate salaries. It is not only unfair but unwise, in a consideration of the cost of illness, to ignore the fundamentals of economics gen-

erally, including such problems as steady employment, thrift, self responsibilities, adequate wages, voluntary commercial insurance as opposed to compulsory state medicine, balanced budgets, proportionate spending with due consideration for the necessities and comforts as contrasted to squandering for needless luxuries.

The Milbank Memorial Fund with its large contributions to the Committee on the Costs of Medical Care admits having fallen down in its self appointed job of working out a system of socialized medicine. However, we have not yet heard the last of the Milbank efforts, for to quote from their report, "where there is life there is hope."

Industrial economics and medical economics are often confused because sociological meddlers would transfer the precepts of industry to the gentle art of healing, without the proper conception of the essential differences between the two. The doctor's investment in office and equipment is but a small part of his capital. All attempts to transmute the control of medical equipment into the control of the doctor impedes the accumulation and application of individual knowledge and skill, so essential to the independence and advancement of medicine.

The physician does not sell a fabricated commodity to supply a popular demand, nor are the prices demanded for his services subject to market fluctuations. The products of the medical profession, inseparable from the individual physician himself, is sold, not in response to a popular demand, but is only sought and employed frequently after all other means have been found inefficient. To meet the need to purchase medical skill the public must be assured an adequate income and thus the problem becomes one of general economics, demanding special recognition, study and correction of the insufficiency in wage earning power of the public, thus not deteriorating the purchasable commodity furnished by the physician to the public by cheapening it. Should the industrialist care to place the profession of medicine on the basis of return from investment and take into account the expenditure of time and money necessary to equip the modern physician to practice his profession, he will quickly conclude that many other commercial fields offer more favorable inducements.

But how is it possible to evaluate the intrinsic worth of a human life? A monetary valuation can be placed upon the weekly, monthly or yearly earning capability of an individual in a given line of work but it is impossible to specifically place a monetary value upon an individual as a member of a family or as a citizen to his state.

Approximately 3 per cent of the income of this country is spent because of illness. Much less than one-half of one per cent goes to make up the income of the medical profession, the far greater proportion goes to allied professions, self medication, cultists and institutional care. Practically all sickness is unexpected yet almost inevitable, and too few make any provisions for it in their financial arrangements.

There is reason to look forward in the near future to the time when we shall take nearly as good care of our bodies as we do of our autos. This will mean that medical service must be made available not as a luxury, not as a requirement in time of dire necessity, but as a precautionary necessity. Medicine is not on such a basis at the present time. The well-to-do are the only people who can afford to pay for medicine on this basis; it can be had on a philanthropic basis by the very poor; only in cases of extreme need do the middle classes ever obtain it, they cannot afford in general, to have medical service on a preventive basis, and serious illnesses in a large proportion of cases leave behind them a wake of financial distress, either on the part of the patient, where the distress may be extreme, or on the part of the doctor in the form of unpaid bills, where the distress may and often is also extreme.

Some system is evidently needed by which medical service can be paid for when one is up and not down and out. Not only therefore must the people of the great middle class be put in such a position that they may obtain sufficient preventative medical attention as well as curative treatment in dire necessity and ample arrangements must be made for them to pay for it, neither as a luxury nor as an emergency requirement, but in such a way that it can be absorbed into the family budget as a regular item of expense, and this would suggest some form of insurance provision.

It is advisable however that a large variety of

experiments should be made with medical insurance. Medical or sickness insurance encompasses certain vital features which are not determining factors in other forms of insurance. It requires a spread sufficient to provide for the satisfactory working of the law of averages, it requires ample reserves to meet all obligations both in times of average sickness as well as during epidemics, and above all it requires careful handling of certain features of the human problem. Doctors should not embark on insurance enterprises without competent actuarial guidance any more than insurance companies should embark on providing medical service without competent medical advice.

It behooves the members of the medical profession to take cognizance of similar protective measures to protect themselves and their dependents from the vicissitudes of old age, at a time when their waning faculties and debilitated physical powers shall curtail the abilities of the old doctor to earn his daily bread. That the actual state of want and deprivation, very often endured in silence by the indigent physician, exists more frequently than is suspected by the patients whom he serves or the public at large, is due to the fact that his intimate contacts are with many human beings in similar circumstances or possibly worse off in the possession of worldly goods, and his inherent pride forbids that the world shall know his plight.

Government agencies, in the form of Public Health units and Veteran Hospitals as well as private philanthropists are encroaching on the practice of medicine. The medical profession always has and always will take care of the deserving poor, but free clinics and free hospitals are growing like mushrooms until they have outdistanced the needs of the poor. Many of these institutions because of political prestige are vieing with one another by erecting luxurious buildings which result in increasing the per capita tax for their erection and maintenance. When it comes to killing the goose that lays the golden egg, the physician is certainly the master executioner by having to pay these increased municipal and state taxes for the maintenance of an institution to which he gladly gives his best services gratis. These agencies in many instances are extending their free medical services to a large class of patients who are able

to pay. Many social and welfare workers are encouraging this practice by indiscriminately referring patients to free institutions without regard to their financial status. It is claimed by competent statisticians that physicians treat one eighth of the population of the United States free of charge.

The building up of free medical service for veterans, the extension of all forms of government aid for physical conditions totally unrelated to their service to their country is a disgrace to our law makers, and an unjust imposition upon an enduring tax burdened citizenry. With due regard to what is termed patriotic service, it is only fair to remind our veteran group that the great majority of them were drafted for their service and in return for that drafted service they were granted certain definite insurance rights and certain guarantees of familial and personal protection in the event of injury or death. Called to service in the same draft and then exempted for service industrially, were tremendous numbers of men who performed more valiantly perhaps than a considerable proportion of those who wore army clothes but who never got beyond the confines of our shores. Those who were injured in battle or suffered diseases incidental to military or naval duties are entitled to the utmost care requisite to restore them to normalcy so far as it is humanly possible.

The part of the medical profession in the war is one of its glorious traditions. Do not their indefatigable efforts in the interests of victims of battle, injuries and disease attest a patriotic service? Does not such public service merit greater recognition than taking from them in times of peace their means of livelihood? Is there to be a continued policy of increasing free medical service at the expense of the medical profession? Are physicians to be ruthlessly sacrificed in the interest of government aid to civilians? The veterans may have been soldiers, but nonetheless they are now civilians. Are they entitled to free doctoring, drugs, nursing and hospital care when they chance to be ill with civilian diseases, acquired by civilian methods of living, and arising all too frequently from civilian indiscretions, inebrieties and inadequacies? The solution of such medical problems should call for a more gen-

erous cooperation between the profession and the laity.

There is a rapidly growing tendency for philanthropy and charity to exploit the physician in their undertakings. Large sums of money are spent on buildings, administration and a well paid personnel. The doctor whose service is the commodity that these organizations offer, works without compensation and is usually denied any voice in how or to whom his service is given. It must be remembered that the doctor is the only vital part of these organizations, and that they only exist to distribute the free service which they exact from him. Charity should again become what it originally was, a fine thing in itself and strictly individual. It should be dispensed at the option of the physician.

The medical profession is not responsible for either poverty or sickness. Contrary it leads all professions and groups of citizens in the prevention of disease, and this in spite of the fact that the physicians gain their income from the care of the sick. Likewise the profession is no more responsible for the care of the indigent sick than is any other member of society. Society as a whole is responsible for the entire care of the sick and poor and not just for food and shelter and clothing. It has no right to exact services from the doctor without compensation.

STATE MEDICINE

Any plan or system which affects the medical profession detrimentally will inevitably be detrimental to the public as well. Any plan, system or activity which tends to destroy or lessen scientific research, individual initiative, ambition, adequate remuneration for effort and ability, scientific independence, reasonable competition; personal responsibility; which would lower the standards of medical education or inculcate unsound ideas in the public mind toward scientific medicine are wrong, unwise, impractical and will inevitably be doubly costly to the public.

A trustful public, the professions pride
When once destroyed can never be
supplied.

Medicine more than ever before is a career of public responsibility. It is the duty of the medical profession to extend medical knowledge, to elevate the standards of medical educa-

tion, to encourage the enactment and enforcement of just medical laws, to promote friendly intercourse amongst physicians and to direct and enlighten public opinion to the great problems of medicine, so that the profession will become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

The service rendered by physicians infiltrates with its influence the destinies of individuals and families, and in the aggregate the destinies of communities and the nation. It is vital that physicians being best informed on welfare health procedures, take a direct interest in and a guiding influence over such matters.

The doctor is of all professional men the only one who is really indispensable. And taken for granted. Whether he can provide for himself and his dependents, the essential three meals a day and a roof over his head, does not invade the consciousness of those who bring relief to the needy. The doctor is expected to carry on. And he has. How, only those can tell who have lived close to the doctor and his family and have known at first hand their unaccustomed and dire straits. The doctor is nobody's business.

Medicine must be actuated by lofty principles. Medicine is the trustee of society in the care of the sick and injured; its policies must always be governed by this fundamental fact. The good of society must be the sole aim of its public policies and the good of the patient the first consideration in the relations between physician and patient. Medicine must see that its services are available to all men. Medicine must be an attractive profession to attract to its ranks only the ablest aspirants with lofty ideals. From the standpoint of a livelihood medicine is a business and must accept competitive conditions of practice, but as a profession of high ideals it must not encourage selfish commercialism. The vast majority of disease conditions afflicting man can be most economically cared for by a competent individual general practitioner. Medicine should be conscious of its responsibilities. These constitute the practice of medicine, the promotion of preventive medicine and the public health, and the fostering of research and the acquiring and dissemination of knowl-

edge. The quality of service which is given must be of the best and is a direct individual responsibility as to the competency of the physician who gives it.

Medicine is entitled to its just rights. The profession asks for its practitioners freedom of opportunity to develop to the limit of their individual capacities. It asks a career of independence under conditions of free and dignified competition.

Medicine asks remuneration sufficient for reasonable comfort for the individual doctor and his family.

Medicine demands the right to control its own affairs. Its history of capacity, achievement and altruism justifies this demand.

TRIBUTE TO DEPARTED MEMBERS

JOHN L. SCALES, M. D.
SHREVEPORT, LA.

With each succeeding meeting of this Louisiana State Medical Society, we are reminded of the sad, but inevitable fact, that during the year just passed a number of our associates have answered the last roll call and passed from the limited activities of time, to the larger engagements of eternity.

This year the list is a large and devastating one, including some close friends of mine—some of yours, but each one missed and mourned by all those assembled today.

Knowing them as I do, I cannot believe that a single one would have us surrender to overwhelming sorrow; but I am sure that they would all have us pause long enough in the midst of our busy affairs, to pay our respect to their memories, recall their virtues, emulate whatever good example they have set us, press on to the accomplishment of a bigger and better life, because they have lived and labored among us.

It is a worth while achievement to live up to the ethics and the best tradition of the medical profession—and not easy to do, requiring the full cooperation of head and heart and hand, manifested by a trained and alert mind, an understanding and sympathetic heart, an industrious and tireless body. There is no proper place in the ranks for an ignorant man, a selfish or a lazy one.

These departed friends and associates have served their day and generation well, done their full duty, and gone with a dauntless and intrepid spirit on the "great adventure."

I imagine that with a smile they beckon us to follow. May we do so, contented and unafraid.

"So live that when thy summons comes to
join

The enumerable caravan, which moves,
To that mysterious realm, where each shall
take

His chamber in the silent halls of death,
Thou go not, like the quarry slave at night,
Scourged to his dungeon, but sustained
and soothed,

By an unfaltering trust, approach thy grave,
Like one who wraps the drapery of his
couch

About him and lies down to pleasant
dreams."

I have here intimate biographical sketches which have been prepared to be incorporated in the minutes of this Society.

Will you stand, while I call the roll of those whom we honor today.

Dr. H. V. Jones.....	Bogalusa
Dr. J. A. Packer.....	Alexandria
Dr. James Wofford Sanders....	New Iberia
Dr. Joseph George Dempsey..	New Orleans
Dr. Louis E. Bergeron.....	Baton Rouge
Dr. Charles W. Loomis.....	Lake Charles
Dr. Adrian Hava.....	New Orleans
Dr. Waldemar Theo. Browne..	New Orleans
Dr. Henry Dickson Bruns....	New Orleans
Dr. Emil Regard.....	Mansura
Dr. Louis A. Murdock.....	St. Joseph
Dr. Irby Benjamin May.....	Columbia
Dr. Pierre Leonce Thibaut....	New Orleans
Dr. Louis A. Gaudin.....	Convent
Dr. Edmund Denegre Martin..	New Orleans
Dr. James Phares O'Kelley....	New Orleans
Dr. Thomas Marion Butler.....	Trout
Dr. Edward Joseph Debergue..	New Orleans
Dr. Henry Allen King, Sr.....	New Iberia
Dr. Michael Shelly Picard.....	Shreveport
Dr. Edward McCormac.....	New Orleans
Dr. Julius Stagg.....	Eunice
Dr. Buford K. Parrish.....	Mansfield
Dr. George Farrar Patton....	New Orleans

SYMPTOMATIC AGRANULOCYTIC ANGINA FOLLOWING NEOARSPHENAMINE THERAPY*

JOHN C. CULLEY, M. D.

B. S. GUYTON, M. D.

J. R. SIMMS, JR., M. D.

OXFORD, MISS.

Schultz¹ in 1922 called attention to the symptom complex now known as agranulocytic angina, but often referred to by a variety of terms as agranulocytosis, malignant neutropenia, and granulocytopenia. It is characterized by (1) oral sepsis and pharyngitis with angina, (2) marked prostration, (3) profound reduction to complete disappearance of the polymorphonuclear leukocytes of the peripheral blood, and (4) in most cases, a fatal termination.

Since that time there has been an increasing interest in the neutropenic state as evidenced by the number of articles on the subject that have appeared in the literature in the last few years.

Aside from the true idiopathic agranulocytic angina is a group of similar cases but of a definite etiology, and usually referred to as symptomatic agranulocytic angina. These cases have been described as caused by such toxic agents as arsenic, benzene, roentgen-rays, etc. It is with this group of cases that this paper is concerned, and with special reference to a case following neoarsphenamine.

Arsenic poisoning affecting the nervous system, liver, alimentary tract, skin and other organs has frequently been encountered, but there have been but a very few cases of symptomatic agranulocytic angina reported. Various blood dyscrasias following arsenic therapy have been described; for example, aplastic anemia, purpura hemorrhagica, bone marrow depression, granulocytic aplasia of the bone marrow, and agranulocytic angina. Of the latter conditions Farley² found thirty-nine cases in the literature and recorded case histories of seven patients. Dodd and Wilkinson³ found twenty-two cases showing this type of reaction to the arsphenamines and added two cases. Of the twenty-four cases fourteen proved fatal. Sodium

thiosulphate was not used in any of the cases in this group; Farley reported using it in one case but the patient died.

CASE REPORT

A white male, university student, twenty-two years of age, weighing one hundred and ninety pounds, presented himself on November 7, 1932 complaining of sore throat. Examination revealed a deep ulcer on a small remnant of the left tonsil. It had a punched-out appearance, a dirty gray membrane around the edges, and when wiped off there was some bleeding. A stained smear showed Vincent's organisms in large numbers.

On November 8, 1932 he was given 0.6 gm. neoarsphenamine intravenously. There were no ill effects and he continued football practice, contrary to the advice of the attending physician. November 12, 1932 he went through a tough scrimmage as he was feeling quite well. The throat was much improved. November 13, 1932 he came to the University Hospital at 9:00 A. M. when he was given a second injection of neoarsphenamine 0.6 gm. intravenously. At 8:00 P. M. he had a chill followed by a fever of 102° F. The leukocyte count was 5,400 with 65 per cent polymorphonuclears and 35 per cent small lymphocytes. At this time he was put to bed in the University Hospital where he remained until November 28, 1932. During this time the throat was much worse, a confluent scarlatinal rash had developed over the body, the cervical lymph glands were enlarged and the urine gave evidence of a nephritis. A culture from the throat was negative for *B. diphtheriae*, but showed staphylococci and streptococci. The temperature reached 100° to 103° in the afternoon during the period while in the University Hospital. At this time scarlet fever was suspected but was ruled out by the blood count and subsequent course.

The family history on admission to the hospital was irrelevant; the past history included measles, mumps, whooping cough and malaria when a small boy. He had also had influenza and in 1927 had pneumonia. There was an attack of jaundice in 1930. The tonsils had been removed.

On November 28, 1932 at 8:00 P. M. he was admitted to the Oxford Hospital on a stretcher, at which time the patient was markedly prostrated and suffered from a generalized headache with pain in the back of the neck. He was very restless. There was no opisthotonos and no rigidity. The cervical glands were much enlarged and somewhat tender. The throat lesion was still worse; much edema of the pharynx and naso-pharynx had developed. The temperature was 102° F. and the pulse 135. Laboratory: white blood cells 6,600, red blood cells and hemoglobin normal. Coagulation normal. Urine showed a trace of albumin. Throat culture showed staphylococci and streptococci. Blood culture negative.

*From The Oxford Hospital and the University of Mississippi Department of Pathology. Read before The Central Medical Society, Jackson, Mississippi July 5, 1933.

Treatment: Throughout the stay in the hospital the throat was painted once daily with silver nitrate 20 per cent and every two hours with argyrol. He was given 2 cc. of omnadin daily, and beginning with the second day (November 29, 1932) he received 1 cc. nuclein (containing 5 per cent nucleic acid) daily. On November 29, 1932 at 4:30 P. M. he received 15 grains of sodium thio-sulphate intravenously. This was the only time that this drug was used. During the entire time potassium chlorate was used as a mouth wash. The diet was liquid until he was free of fever on December 1, 1932 at 6:00 P. M.

Clinical Course: The daily blood picture and temperature chart reflect the progressive improvement from day to day until he was discharged from the hospital on December 3, 1932.

COMMENT

All of the arsphenamines have caused this type of reaction, but it does not appear to be due to the unusual toxicity of any one batch of the drug.⁴ The syndrome has occurred after from two treatments with an arsenical, as in our case, to a series of treatments with arsenicals over a period of more than two years. The effect on the bone marrow is said to be first a stimulation, but this is followed by depression of varying degree, and in the very severe depressions the cells of the granulocytic series may disappear entirely from the peripheral blood. Autopsies on those dying from this condition show aplasia of the bone marrow with complete absence or almost complete absence of granulocytes. Farley suggests the reason for this response to the arsphenamines is a congenitally weak hemopoietic apparatus. The similarity of this reaction of the blood to that in benzene poisoning has been pointed out, and the double benzene ring of the arsphenamine molecule has been thought of as a possible explanation of this toxic effect. Kracke⁵ has shown experimentally in rabbits that benzene injected subcutaneously in very small doses over a long period of time seems to exert a selective action on the myelocytic division of the marrow but does not affect the erythroblastic or thrombocytic elements. It is only when large doses are used that all three divisions of the bone marrow are depressed. It seems unlikely, however, that through the benzene ring of the molecule the arsphenamines exert this type of toxicity, because this disease may follow the administration of inorganic arsenic. Wheelihan⁶

reported such a case in a child following the prolonged use of potassium arsenite; there was a sudden onset, pharyngitis, high fever, and leukopenia. The differential blood count showed only 3 per cent polymorphonuclear leukocytes. The patient recovered.

It is interesting to analyze for a moment a gradual and progressive return to normal in the blood picture. On admission to the Oxford Hospital on November 28, 1932 there were no mature polymorphonuclears present in the blood smear, however at this time there were present 37 per cent myelocytes. The presence of these indicate that the bone marrow had not been entirely depressed insofar as the manufacture of cells of the myelocytic series (granulocytes) was concerned: at any rate an attempt was being made to form granulocytes, but they were not able to reach maturity before being discharged into the peripheral blood. On the next day, November 29, 1932 when treatment with thio-sulphate and nuclein was started there were still no mature polymorphonuclears present, but within twenty-four hours segmented forms (mature) of these cells were present to the extent of 5 per cent and there were still more of the younger forms present. The total leukocyte count had risen to 8,600. From this time on the number of mature polymorphonuclears gradually increased from day to day, but it was more than a month before they reached a normal figure. Clinical improvement ran parallel with the hematological improvement; on the first day after nucleic acid (nuclein) and sodium thio-sulphate were started the fever had dropped from 104° F. to 102° F., and to normal on the second day. A case has been reported by Wright⁷ showing this same early hematological improvement, but as a rule improvement does not take place under nucleic acid (or nucleotide) therapy until about the fifth day.^{8, 9}

The part played by each of the drugs, nucleic acid and sodium thio-sulphate, as given in this case is to be evaluated. In view of the experience of others with the nucleic acid derivatives (nucleotides), and the time at which improvement is to be expected from their use, it would appear that the sodium thio-sulphate was in a large measure responsible for the quite sudden change for the better in our patient. Still

there is a question of a spontaneous recovery. Wright¹⁰ in commenting on his case raised the question, "Did improvement take place before medication was effective"? While spontaneous recoveries do take place, both in the true agranulocytic angina and in the type caused by the arsphenamines, we feel that in this case we were not dealing with such a recovery because of the dramatic improvement in the face of a condition that was growing worse with alarming rapidity before the administration of nucleic acid and sodium thiosulphate.

Our case showed some minor differences from the average case of agranulocytic angina following the arsphenamines, in that there was no spontaneous bleeding from the gums, nose, or other mucous membranes. There was no decrease in the red blood cells, and no decrease in hemoglobin; hence the erythroblastic function of the marrow was not disturbed. The dysfunction of the bone marrow involved only the myelocytic division, and in this respect our case more closely resembles true agranulocytic angina.¹¹

With a failure of the bone marrow to produce granulocytes there is a considerable loss of resistance to infection and therefore in a large number of these cases, as well as those of true agranulocytic angina, there is a blood stream infection or some other secondary infection that plays a large part in the destruction of the patient. Under these conditions organisms that are ordinarily relatively harmless may gain entrance to the blood and cause a septicemia; *B. pyocyaneus* and even *B. subtilis*¹² have been isolated from the blood stream in this disease. Organisms of the Vincent's group are very likely to invade the tissues. Very likely

this explains why the throat lesions in our patient improved at first, and then at a later time (at the time of the failure of the bone marrow to deliver granulocytes) suddenly spread over the pharynx, naso-pharynx, and parts of the oral cavity.

The treatment of agranulocytic angina has been to a large extent empiric because of the obscure etiology. In those cases with a definite cause, as this one, treatment depending upon definite chemical specificity may be demanded. but even then we still have the agranulocytic state of the blood with which to deal and to treat along the lines usually employed in true agranulocytic angina. Prominent as therapeutic measures one finds in the literature blood transfusion, nucleic acid (or nucleotide), mild stimulating doses of roentgen rays applied over the long bones, the arsphenamines and recently Foran, Sheaff, and Trimmer¹³ have reported the use of liver extract in five cases. It is interesting to note that of these therapeutic agents used in the treatment of agranulocytic angina two of them have been given as the cause of a neutropenic state of the blood; these two are the roentgen rays and the arsphenamines.

CONCLUSIONS

A case of symptomatic agranulocytic angina following the administration of neoarsphenamine for Vincent's angina is reported.

Under sodium thiosulphate and nucleic acid therapy the case recovered.

The daily change in the blood picture is given, and a progressive improvement from day to day is beautifully illustrated. From a beginning with no mature polymorphonuclear leukocytes in the peripheral blood and only the

Date	11/13/32	11/28/32	11/29/32	11/30/32	9 a. m. 12/1/32	6 p. m. 12/1/32	12/2/32	12/3/32	12/5/32	12/7/32	12/8/32	12/14/32	1/7/33	1/14/33	5/13/33
Total leucocytes	5400	6600	6000	8600	7600	7400	6000	6800	6600	7000	7400	7650			
Small lymphocytes	35	31	34	35	28	29	33	36	36	37	36	33	22	26	35
Large lymphocytes	0	8	6	0	1	6	3	0	2	2	2	1	5	1	3
Myelocytes		37	29	17	5	7	3	5	5	5	3	2	0	3	0
Juveniles		22	20	23	26	10	7	8	6	7	3	2	1	3	3
Bands		1	6	14	24	29	27	28	16	19	17	18	16	14	10
Segmenters	65	0	0	5	8	11	17	22	29	28	37	43	49	47	48
Eosinophils		0	0	0	0	0	1	0	0	2	1	0	3	2	1
Monocytes		1	5	6	10	8	9	1	6	0	1	1	4	4	0
Temperature ° F.	102	102	104	102	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6

Daily Blood Picture

very young forms of this series present, the cells step by step in the order of increasing age made their appearance from day to day until the normal number of mature polymorphonuclears were present. Clinical improvement paralleled the hematological improvement.

REFERENCES

1. Schultz, W. quoted by Thos. Ordway and L. W. Gorham in Cecil, "Text-Book of Medicine," 2nd. Ed. Philadelphia, W. B. Saunders Co., 1930, and O. H. Perry Pepper: The History of Agranulocytic Angina, *J. A. M. A.* 97:1100 (Oct. 10) 1931.
2. Farley, D. L.: Depressed bone-marrow function from the arsphenamines including type of so-called agranulocytosis, *Am. Jour. Med. Sc.* 179:214, 1930.
3. Dodd, Kath and Wilkinson, S. J.: Severe granulocytic aplasia of the bone marrow, *J. A. M. A.* 90:663, 1928.
4. Farley, D. L. *ibid.* (2).
5. Kracke, R. R.: Thrombopenic granulocytopenia, *Sou. Med. Jour.* 25:448, 1932.
6. Wheelihan, R. Y.: Granulocytic aplasia of bone marrow following the use of arsenic, *Am. J. Dis. Child.* 35:1024, 1928.
7. Wright, D. O.: Report of a case of agranulocytic angina treated with pentose nucleotide K 96; *New Orleans Med. & Surg. Jour.* 85:682, 1933.
8. Jackson, H. Jr., Parker, F. Jr., and Taylor, F. H. L.: The nucleotide therapy of agranulocytic angina, malignant neutropenia and allied conditions, *Am. Jour. Med. Sc.* 184:297, 1932.
9. Jackson, H. Jr., Parker, F. Jr., Rinehart, J. F. and Taylor F. H. L.: The treatment of malignant neutropenia with pentose nucleotides, *J. A. M. A.* 97:1436, 1931.
10. Wright, D. O.: *ibid.* (7).
11. Roberts, S. R. and Kracke, R. R.: Aganulocytosis, *J. A. M. A.* 95:780, 1930.
12. Doan, C. A.: The neutropenic state: its significance and therapeutic rationale. *J. A. M. A.* 99:194, 1932.
13. Foran, F. L., Sheaff, H. M. and Trimmer, R. W.: Agranulocytic angina, treatment by use of parental and oral liver extract: preliminary report, *J. A. M. A.* 100:1917, 1933.

HYPERINSULINISM*

With Report of a Case

SYDNEY JACOBS, M. D.

NEW ORLEANS

Hyperinsulinism, the syndrome first described by Harris¹ in 1923, is the condition in which the pancreas produces so much insulin that hypoglycemia and its attending symptoms occur. It must be immediately distinguished from all other causes of lowered blood sugar, just as diabetes mellitus is distinguished from all other causes of elevation of the blood sugar. The term "spontaneous hypoglycemia" should not be used for the syndrome because hypoglycemia means simply lowering of the blood sugar, a state produced by diseases of

other organs than the pancreas. The syndrome herein described should be known as hyperinsulinism to indicate that all the symptoms are a function of the excessive production of insulin by the pancreas.

Hyperinsulinism is considered to be due to overactivity of the islands of Langerhans; in this respect, the islands act as do all the other members of the endocrine system; overactivity may be due to adenoma formation or diffuse hyperplasia; if neither of these conditions can be demonstrated at autopsy or biopsy, the condition is supposed to be that of over-activity of a normal-appearing epithelium. At times, the individual cells of the islands are found to be larger than normal. It has been claimed² that hyperinsulinism is more frequent today because the average pancreas at autopsy is larger than that of 20 years ago; if this is true, hyperinsulinism should be encountered more frequently in the future.

CASE REPORT

A 14-year-old colored boy had begun to have periods of weakness, generally before breakfast, at the age of 4 years and had had them at intervals of 2-3 weeks until first seen in February, 1933. Although the attacks were no more frequent than at the onset, they had become more severe; on occasion, he was unconscious as long as 20 minutes; recovery was always spontaneous. At no time did he have epileptiform seizures. He was a highly favored youngster who ate sparingly at meals but consumed candy and large quantities of other carbohydrates between meals. Apparently no antecedent illness bore any relation to his attacks of unconsciousness; there was no physical abnormality detected.

His fasting blood glucose was 50 mgm. per one hundred cubic centimeters of blood; 60 minutes after the ingestion of 100 grams of glucose, it was 95 mgm.; 90 minutes after the ingestion of the glucose, the boy suddenly became unconscious; unfortunately no blood could be collected at this moment. He recovered quickly before any carbohydrate could be administered. Routine blood and urine studies, basal metabolism, and serum calcium were normal.

He was given a high fat diet and immediately began to feel better. In a period of 5 months from the institution of therapy, he has had only one seizure and that occurred when he had been fasting all morning in observance of a religious rite. It was not possible for him to obtain a high fat diet longer than 2 months because of the expense entailed; he was therefore allowed to eat the usual dietary of his family and gained 12 pounds in 5

*Read before the Orleans Parish Medical Society, November 13, 1933.

months. He now eats 4 well balanced meals daily and can exercise with impunity although he was formerly afraid to play because of fear of precipitating an attack. A recent glucose tolerance curve is shown; although it indicates a step nearer the normal than does the first, it is perhaps not normal yet. Glucose tolerance curves are not always easy to interpret. It may be that the approach to normal 4 months after the first indicates improvement and is related to changes in the dietary. Once again, the fasting blood glucose was found to be 74 mgm.; he was given 10 units of insulin subcutaneously and one hour later his blood glucose was 60 mgm. He was observed as long as 3 hours after the administration of the insulin, but he did not manifest any of the symptoms for which he had come to the hospital. This fall in blood sugar is almost exactly the same as that of 2 controls, other colored boys his age and weight. A mid-afternoon blood glucose was 104 mgm.

From the above observations, it may be inferred that there is an increased production of insulin but also that there is not an increased sensitivity to insulin. It has been repeatedly shown⁶ that the symptoms of hypoglycemia do not occur at the same level for blood sugar. Although some symptoms have been reported in patients with a blood sugar of 70 mgm., when this boy's blood sugar was reduced to 60 mgm. by insulin, he was entirely at ease and complained only of hunger.

This case is reported as one of true hyperinsulinism; i. e. hyperfunction of the islands of Langerhans. The pathological basis for the symptoms is, of course, unknown at the present time. Although there have been reported sufficient cases⁵ of this condition to indicate that there is more than one form of abnormality responsible, no one has thus far been able to predict which cases are functional and which cases harbor adenomata or other pancreatic lesions.

In view of the fact that marked improvement followed so sharply upon the administration of a high fat diet, one would be led to attribute the good results to this form of therapy. It must be admitted at once that a spontaneous remission cannot be excluded as a causative factor, because many such spontaneous remissions have been recorded; none-the-less it would appear rather strange for him to have a spontaneous remission lasting 5 months after 10 years of periodic attacks of weakness or unconsciousness. It is true that at no time was a state of

ketosis demonstrable; again, after only 2 months of a high fat regime, he returned to an ordinary well-balanced diet without recurrence of symptoms. The high fat diet was advocated by Harris⁵ because fat delays the emptying of the stomach and therefore the pancreas receives less vigorous stimulation than it would receive from a meal rich in carbohydrate. It is of interest that the purpose of the high fat diet is just counter that of the low fat, high carbohydrate diet now advocated for the treatment of diabetes mellitus. This patient generally ate two or more candy bars between meals; it is possible that such constant carbohydrate feedings stimulated the pancreas to the production of so much insulin that hypoglycemia resulted; correction of the dietary errors may have played a large part in the amelioration of his symptoms.

Establishing a diagnosis of hyperinsulinism consists first in demonstrating a sufficiently low blood sugar level at the time that symptoms are produced. This condition should be suspected whenever there is a history of convulsions, epileptiform seizures, marked weakness or any manifestation of abnormality of the central nervous system for which the cause is not apparent. Although many varying symptoms have been reported as the initial complaint, most of them are referable to the central nervous system. Frequently, the diagnosis cannot be easily established and prolonged observation is necessary. No arbitrary level can be termed the "hypoglycemic level," but most cases record blood sugars of 60 mgm. or less. It may be necessary to omit breakfast and lunch, determining the blood sugar at 8 a. m., noon, and 4 p. m. When hypoglycemia is demonstrated, all other causes must be first eliminated; this implies a search for disease of the liver, thyroid gland, pituitary or the suprarenal body. It must be recalled that starvation³ in itself does not cause sufficient lowering of the blood sugar level to elicit symptoms. One prominent feature of all recorded cases of uncomplicated hyperinsulinism has been the absence of informative physical signs, but occasionally the syndrome is complicated by the presence of hypertension.^{9, 10}

There was recently reported a series of cases of hyperinsulinism in which operation was performed in the expectation of finding adeno-

mata; because no adenoma was found portion of an apparently normal pancreas was removed in each instance. The hope was that removal of part of a hyperactive pancreas would diminish insulin secretion just as subtotal thyroidectomy diminishes the output of thyroid secretion. Improvement was too inconstant to justify the hopes that future attacks had been averted; perhaps surgeons are now faced with the problem of the amount of pancreas to be removed; again, there is a parallel with the early days of thyroid surgery.

From the few papers concerned with the intensive study of such cases, one learns that those patients with an adenoma of the pancreas differ not at all from those with no demonstrable pancreatic lesion. There is no way of knowing which patients should be subjected to early surgical intervention or which should be given the benefit of medical treatment. It has been suggested that all patients be treated medically from the onset; if no improvement occurs after a suitable interval, laparotomy should be performed. Obviously, what constitutes a suitable interval varies greatly with the individuality of the clinician. As always, the suspicion of malignancy justifies early surgical intervention. Differences of opinion as to the opportune time for operation are many; since some patients, such as the one whose history is herein recorded, recover either spontaneously or with the aid of dietary measures, and since many patients have no adenomata to remove, perhaps it is well to practise conservatism until the indications for surgery are more clearly drawn. The choice of therapy is not markedly clarified by the decision to adopt a medical regime; some have advocated high fat diets and have reported success; others have reported success with frequent carbohydrate feedings; still others have recorded lack of success with any form of therapy. The reasoning of those who advocate a high fat diet seems the more sound; repeated carbohydrate feedings would tend to cause excessive production of insulin by a gland already hyperfunctioning.

BIBLIOGRAPHY

1. Harris, Seale: The etiology and prevention of diabetes, *Virginia Medical Monthly*, 50:672, 1924.
2. Wilder, Russel: Hyperinsulinism, *Int. Clin.* 43rd series Vol. II, 1933.
3. Harris, Seale: Hyperinsulinism and dysinsulinism (Insulinogenic hypoglycemia) with a chronological re-

view of cases reported in the United States and Canada, *Int. Clin.* 42nd series, Vol I, 1932.

4. Weil, Clarence K.: Functional hyperinsulinism, *Int. Clin.* 42nd series, Vol. IV, 1932.

5. Harris, Seale: Epilepsy and narcolepsy associated with hyperinsulinism, *J. A. M. A.*, 100:321, 1933.

6. Wauchope, G. M.: Hypoglycemia, *Quart. J. Med.* Vol. II, No. 5, (Jan.) 1933.

7. Lemann, I. I. and Liles, R. T.: Glycolysis at varying blood sugar levels, *J. Lab. and Clin. Med.* 11:339, 1926.

8. Love, Julian: Dysinsulinism, *J. A. M. A.* 100:814, 1933.

9. Mosenthal, H. O., Ashe, B. I., Pointdexter, C. A., and MacBrayer, R.: Spontaneous hypoglycemia occurring in the course of essential hypertension, *Med. Clin. N. A.* 17:41, 1933.

10. Silverman, D. N.: Personal communication.

THE CAUSE OF PRIMARY DYSMENORRHOEA AND ITS TREATMENT BY HORMONAL THERAPY*

A Preliminary Report.

J. THORNWELL WITHERSPOON, M. D.

The cause and treatment of primary dysmenorrhoea is one of the most important unsolved problems of gynecology. Much human suffering, chronic invalidism, ill health, neurosis, as well as expenditure of money and loss of time result from this condition. The associated pain usually begins a day or so before the onset of the menstrual period, is of a colicky and spasmodic character, and may last for a day or so during the actual menstrual flow. It occurs most frequently in young unmarried women or in married nulliparae.

One of the oldest theories as to the etiology of primary dysmenorrhoea is mechanical obstruction of the menstrual blood due to blockage of the internal cervical canal. Often marked anteflexion of the uterus would be associated. Within recent years this theory has generally been abandoned because of the many arguments which refute its hypothesis. Uterine anteflexion is often present without dysmenorrhoea; dysmenorrhoea is likewise frequently present without anteflexion. Novak has passed a probe into the uterine canal at the height of the dysmenorrhoea, demonstrating no obstruction to be present.

Hypoplasia of the pelvic organs, especially of the uterus, has been advanced as a cause of primary dysmenorrhoea, but this theory like-

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wise is being discarded. Primary dysmenorrhoea is often present in normal sized or even slightly enlarged uteri. The most important argument, however, which refutes this theory is that primary dysmenorrhoea does not necessarily have its origin at puberty; it can be acquired a few or several years after puberty. If hypoplasia of the uterus be the underlying cause, all primary dysmenorrhoeas would have to originate with puberty; no later, acquired primary dysmenorrhoea would be possible.

A third cause advanced as the origin of primary dysmenorrhoea is psychogenic disturbance. The Germans tend to view this as a very frequent cause, suggesting psychic trauma with a sexual background as the igniting factor. Undoubtedly psychogenic disturbance explains some cases, but it offers no ready explanation as a cause of primary dysmenorrhoea in patients who are psychically stable, and who have a phlegmatic nature.

Likewise constitutional factors explain this condition in a few patients in whom the threshold of pain stimulus is lowered. These women tend to magnify the slight discomfort associated with the menstrual flow into severe pain.

The most important cause of primary dysmenorrhoea, and the one dealt with extensively in this paper, is the result of endocrine imbalance. Undoubtedly the immediate and actual cause of the pelvic cramps and pain is the spasmodic contraction of the uterine muscle; the very nature of the pain suggests this as the cause. Only recently has uterine contractility been investigated; Knaus in Austria and Reynolds in this country have been the main investigators. The latter studied the uterine contractions of experimental animals in the unanaesthetized condition. The advantage of this is obvious in view of the recognized influence of practically all forms of anaesthesia on uterine motility.

Through an abdominal incision in rabbits, Reynolds cut across the vagina below the cervix. The vaginal cuff was then turned downward, and the cervical end was brought through the abdominal incision and sutured in situ, thus creating a uterine fistula. A small balloon was then introduced into the uterus and connected to an air-water manometer and kymograph.

By this arrangement the action of drugs and hormones on uterine contractility could easily be studied.

Reynolds' investigations have shown that the oestrous phase in the non-pregnant rabbit is associated with marked uterine activity, while anoestrus is characterized by only feeble motility, if any at all. Translated to the human problem, uterine rhythmic contractions become increasingly more active as the graafian follicle develops. After rupture of the follicle and corpus luteum formation, the uterine contractions are inhibited, so that during the last half of the menstrual cycle, the progestin phase, the uterine muscle is relatively quiescent. Castration produces complete quiescence of the uterine muscle. Activity can be restored by substitutional therapy with the follicular hormone, again showing that this hormone stimulates uterine activity. Experiments with other endocrine preparations show that the follicular hormone alone possesses this property.

In these castrated animals whose uteri have been whipped into activity by the follicular hormone, the administration of the hormone derived from pregnancy urine, like that of progestin, inhibits uterine motility. This observation is noted even in normal rabbits when the pregnancy urine hormone is given in such small doses that it does not cause any ovarian change. Hence it may be concluded that the action of the hormone of pregnancy urine is a direct one on uterine muscle. The action of this pregnancy urine hormone however is not specific to the rabbit, since it produces ovarian stimulation in the mouse, rat, guinea-pig, ferret, monkey and other animals.

Knaus in Austria studied uterine motility in man by a technique based on the responses to posterior pituitary extract (pituuitrin) exhibited by the uterine muscle at different phases of the cycle. He found the uterus responsive to stimulation by pituuitrin in the first half of the menstrual cycle. After ovulation the uterus is refractory to pituuitrin and is quiescent.

The pain in primary dysmenorrhoea, as noted, is characteristically of a spasmodic, colicky nature: it begins a day or two before the onset of the menstrual flow, theoretically the time when the lutein body begins to degenerate, and when the follicular hormone stimulation again comes

into its own. The height of the corpus luteum activity is several days before the onset of the menstrual flow, not at the time of flow. This is well illustrated by excision of the corpus luteum; the menstrual flow occurs 24 to 48 hours later. The pain of primary dysmenorrhoea can be explained by the withdrawal of the progestin influence, which results in whipping into marked uterine activity, by the action of the follicular hormone, a uterus which has been lying in a quiescent state for 10 days to two weeks. In fact, according to Knaus' work on human subjects, a day or so before the onset of menstruation is the period of maximum uterine muscular activity.

That this hormonal sequence occurs in all women is undoubtedly true, but only a comparatively few women suffer with dysmenorrhoea. Two explanations can be offered: 1) a heightened sensitivity to the pain stimuli because of psychogenic or constitutional factors, and 2) a real endocrine imbalance acting on uterine motility: This imbalance may be a quantitative factor, marked uterine contractions resulting from excessively large amounts of the follicular hormone over progestin; or it may be to a chronological factor, the follicular stimulation coming on too abruptly, not a gradual stimulation, after the withdrawal of the corpus luteum influence.

The aim of treatment in this condition is either to counterbalance the excess of the follicular hormone by substituting additional corpus luteum influence, or to withdraw the corpus luteum influence slowly, so that the follicular hormone stimulation of the uterus will not be precipitated, but will appear gradually.

The corpus luteum hormone, progestin, is not available for commercial use, but the luteinizing factor obtained from the urine of pregnant women is prepared in an aqueous glycerin solution by several of the large drug houses. The preparation used in this series of cases is termed Follutein, and was made available for our use by the kindness of Dr. J. F. Anderson of E. R. Squibbs and Sons. One c.c. equals 250 R.U.

The method of treatment employed was to inject intramuscularly and daily, from 3 to 4 days previous to the expected flow and 1 to 2

days during the flow, 250 R.U. (1 c.c.) of Follutein. After the period was passed no treatment was given until just before the next expected period. Ten patients were so treated; in 7 cases the results were very satisfactory. In one only slight relief of pain was noted; in the other two patients the dysmenorrhoea continued in its severe form.

The only untoward symptoms noted were an occasional local reaction at the site of the injections. This unpleasant symptom could be somewhat alleviated by lessening the dosage given or by diluting the amount of injection with an equal volume of sterile normal saline. Occasionally the menstrual periods were delayed 3 or 4 days. This is easily explainable, since it is generally accepted that the progestin influence is the inhibitor of menstruation.

Hormonal therapy will be of value in the treatment of primary dysmenorrhoea if permanent benefit results from its use. The time which has elapsed since the cessation of hormonal treatment in this series of cases has been too short to determine whether or not the relief of pain obtained in some patients will be permanent. In general we carried each patient over three series of injections, that is over a 3 month course of treatment at monthly intervals, and then stopped all hormonal therapy. Seven patients have been asymptomatic, without any hormonal therapy for one to ten months.

Recent work by Evans, Leonard, and Collip, working on hypophysectomized rats have shown a dissimilarity of action between the hormone of pregnancy urine and the sex hormone contained in the anterior pituitary extract or whole gland transplants. In the hypophysectomized rat the former gives rise only to thecal cell luteinization, while the latter causes follicular activation and maturation and the formation of fresh corpora lutea. Evans, however, drew attention to the synergistic action of the hormones of pregnancy urine and anterior pituitary extracts. The effect on the experimental ovaries is much greater than when either is administered alone, and is greater than the additive effect of the two combined. This synergism of the pregnancy urine hormone is demonstrable with either the gonad stimulating factor of the anterior pituitary extract or with the pituitary growth hormone. In fact its pres-

ence is found in either of the above, but the substance responsible for this synergistic action has not at present been identified with any of the known pituitary hormones. Evans theorizes of the existence of this factor in the pituitary gland in a prohormonal state. With the action of the pregnancy urine hormone upon it, the pituitary sex stimulating hormone is released, which results in the typical Aschheim-Zondek picture, production of ripe follicles and fresh corporo-lutea. If this be true, the hormone of pregnancy urine is a pituitary stimulating rather than an ovarian stimulating factor.

In view of the greater ovarian response by the administration of the anterior pituitary extract in combination with the hormone of pregnancy urine over the latter alone, we have recently been testing this method of therapy in

cases of primary dysmenorrhoea. The time of administration of injections in relation to menstruation is similar to that when the pregnancy urine hormone was used alone. The dosage is 2 to 4 c.c. of the anterior pituitary extract in combination with 1 c.c. of the pregnancy urine hormone. A later paper will report the results of this series.

SUMMARY

1. The older theories of origin of primary dysmenorrhoea, mechanical obstruction, hypoplasia of uterus, psychogenic and constitutional factors are discussed.

2. The theory of origin of primary dysmenorrhoea, due to endocrine imbalance is entered into in detail.

3. The treatment of primary dysmenorrhoea by hormonal therapy is described.

TABLE I

Age	Menarche	Duration of Symptoms	Fertility	No. of Injections	Duration of Observations	Subjective Results	Objective Results
22	12	6 yrs.	0	10	5 mos.	No pain.	2 periods without treatment asymptomatic.
16	14	2 yrs.	0	10	7 mos.	No pain.	5 periods without treatment asymptomatic.
14	13	1 yr.	0	17	5 mos.	Happy over results.	1 period without treatment asymptomatic.
16	13	2 yrs.	0	23	6 mos.	Not much better.	No improvement.
22	15	5 yrs.	0	15	5 mos.	Still has cramps.	Slight improvement.
30	18	6 yrs.	0	10	9 mos.	Entirely cured.	7 periods without treatment asymptomatic.
18	12	4 yrs.	0	15	4 mos.	Severe cramps.	No improvement.
21	11	8 yrs.	0	15	12 mos.	Does not suffer at all any more.	10 periods without treatment asymptomatic.
17	13	2 yrs.	0	15	6 mos.	Cured.	2 periods without treatment asymptomatic.
19	15	2 yrs.	0	15	5 mos.	Periods painless.	1 period without treatment asymptomatic.

BIBLIOGRAPHY

1. Collip, J. B., et al.: Production of estrus, *J. A. M. A.*, 101:1553, 1933.
2. Evans, H. M. et al.: Relation of prolactin to anterior hypophyseal hormones, *Am. J. Phys.*, 100:141, 1932.
3. Knaus, H.: *Zent. f. Gynak.*, 53:2193, 1929.
4. Leonard, S. L.: The nature of the substance causing ovulation in the rabbit, *Am. J. Phys.*, 98:406, 1931.
5. Novak, E., and Reynolds, S. R. M.: The cause of primary dysmenorrhoea, *J. A. M. A.*, 99:1466, 1932.

6. Reynolds, S. R. M.: Studies on uterus, *Am. J. Phys.*, 94:705, 1930.

7. Idem: Humoral factors affecting uterine motility, *Endocrinology*, 16:193, 1932.

8. Witherspoon, J. T.: The treatment of menstrual disorders by the injection of blood from pregnant donors, *New Orleans Med. and Surg. J.*, 86:85, 1933.

9. Idem: The treatment of menstrual disorders by hormonal therapy, *Ibid.*, 86:659, 1934.

CERVICAL DISCHARGE, STERILITY,
ARTIFICIAL INSEMINATION*JOSEPH COHEN, M. D.
NEW ORLEANS

Cervical discharge produces sterility.¹ Not all women, however, with such discharges are sterile, the percentage depending on the cause, the type, the character and the duration of the discharge.

The causes for cervical discharge both local and constitutional need not be enumerated here, nor is it necessary to discuss the reasons, some proven, some speculative, given to explain the production of sterility by this discharge. We are now concerned only with the relief of the sterility as distinct from curing the discharge.

The usual procedures in vogue today to overcome this sterility may be classified under two main headings, office and hospital. In the office an attempt is made to clear up the discharge first and thereby cure the sterility, with all manner of local gynecological treatments accompanied by general constitutional supportive measures. This requires weeks and months and sometimes years. Much money is spent and many disappointments are encountered. When these office methods fail, hospital procedures are then employed, such as dilatation and cauterization of the cervix or one of the various plastic operations. These, too, are costly, and in addition they are accompanied by the usual risk attending such operative measures and also a certain percentage of failures with their recurring discharges.

These practices are in universal use throughout the world today and the above results are common knowledge. From my observation on sterility, I have concluded that these methods can and ought to be supplanted by one more rational and more effective and less dangerous. I propose, therefore, artificial insemination.

No woman should be subjected to an operation for the relief of sterility produced by a cervical discharge without first attempting artificial insemination, for, contrary to current opinion, by this method the cure of the discharge is not necessary. Though the discharge may

cause sterility, it is possible to get beyond that cause without eliminating it.

The histological structure of the cervix or the pathology produced which manifests itself in the discharge need not be reviewed here. Suffice it to say that the endometrium is comparatively immune to infection. Why this is so, is nicely explained by R. Schroeder.²

Therefore, the production of the discharge and the discharge itself is limited as a rule only to that portion extending from the muco-cutaneous border of the cervical lip to the utero-cervical junction.

This area furnishes the barrier to the successful entrance of the live spermatazoa. If then, normal spermatozoa in sufficient numbers can find their way into the uterine canal beyond the discharging area, impregnation will result. Artificial insemination fulfills just such a requirement.

The following two cases are offered as examples:

CASE REPORTS

Case 1 was referred to me on June 7, 1932 by Dr. W. A. Reed, who had treated the husband for a specific infection. She was 23 years old, and he was 28 years of age. They were married three years and both had several sisters and brothers. She had had three operations, a T. & A., appendectomy and haemorrhoidectomy. Her menstrual history was irregular but became very regular after her marriage. As a girl she developed a discharge that had never completely responded to treatment. Lately it had become worse. Her physical examination revealed among other things a low blood pressure, a bilateral salpingitis and peri-salpingitis, with an anteflexed uterus pulled to the left and an eroded discharging cervix. The smears were negative.

Since this was a case of primary sterility the routine procedure I employ in determining the cause was carried out.

The husband was ruled out first and this was done on June 29, 1932, by a Huhner post-coital examination of the vagina to see whether there were any live spermatozoa and to make a study of them as suggested in a former paper.³

Satisfying myself that the husband was not at fault, I then attempted to find out whether there was any obstruction in the uterine canal from the cervix to the ovaries, besides the cervical discharge. A Rubin insufflation test was therefore done, on July 13, 1933. The tubes were found to be patent. The mode of living of this couple was regulated without restricting intercourse, but no conception followed. An artificial insemination was

*Read before the Orleans Parish Medical Society, December 11, 1933.

therefore performed on September 19, 23 and 27, but she menstruated from October 6, to October 9.

These inseminations, however, were unsatisfactory because too much time elapsed between actual intercourse and insemination and too much moving about with the loss of spermatic fluid. Other arrangements were then made, and on October 13, 17, and 20, she was again inseminated, and conception followed in spite of the discharge. Throughout her pregnancy this cervical discharge persisted and even now after her delivery the discharge is still present.

Case 2, is one of secondary sterility. Her first baby was born on November 18, 1931. This child subsequently died and both parents were very anxious to have another one. Her examination, among other things revealed a retrodisplaced uterus with an eroded, discharging cervix. Normal intercourse had taken place for the past ten months without any conception. She menstruated from November 30 to December 3, 1932. On December 21, 1932 an artificial insemination was done and pregnancy followed, in spite of her discharge. She too, retained her cervical discharge throughout her pregnancy, and though she has delivered, her discharge is still present.

CONCLUSION

Cervical discharge causes sterility.

Methods employed today to cure this sterility aim at wiping out the discharge. This is neither necessary nor are the results always satisfactory.

Artificial insemination is proposed as the one method that will cure the sterility in spite of the discharge, as the two cases, one of primary and the other of secondary sterility, cited above, illustrate.

REFERENCES

1. Cohen, Joseph: Sterility, *New Orleans Med. and Surg. Jour.* 83:401-405, 1930.
2. Graves, William P.: *Gynecology*, Fourth Edition Philadelphia, W. B. Saunders Co., 1929. PP. 215.
3. Cohen, Joseph: Artificial insemination. *New Orleans Med. and Surg. Jour.* 85:817-822, 1933.

DISCUSSION

Dr. J. A. Lanford: I do not know if I have anything at all to offer except to warn those who might be inclined to adopt the work of Dr. Cohen in his artificial insemination, to guard against possible introduction of infection. Dr. Cohen said the mucosa was resistant to infection, and must be traumatized before infection takes place, but in artificial insemination it is quite possible that severe trauma may be done and infection occur. Of course, in the hands of a careful individual that is a more or less negligible feature.

It seems that he has definitely shown that it is possible under ideal conditions to bring about artificial insemination and conception, and realizing the yearnings of certain individuals and families

who are anxious for children this procedure is practical.

Dr. Joseph Cohen (In conclusion): The only thing I want to add is that we are dealing in very fine fundamentals, and I believe, in a measure, that some of the men in the Society are deserving of rebuke, if they cannot keep the work that is being done on the scientific level with which we are trying to do it.

I have nothing more to add except that I feel very keenly about this. I feel that 10 per cent to 15 per cent of our population throughout the United States, who are married and to whom sterility is a very close subject indeed, have the right to have medical attention focused on them the same as we pay attention to fibroids, appendicitis, whooping cough, and other medical conditions. They also have a right to be helped. I just want to throw out this thought to some members of the Society.

THE ABDOMINAL TRINITY IN INFANTS AND YOUNG CHILDREN*

R. M. STEPHENSON, M. D.

LEXINGTON, MISS.

There is ample evidence that gastro-duodenal ulcer, cholecystitis, cholelithiasis and appendicitis occur much more frequently in young patients than we formerly believed. From the histories of seventy patients with peptic ulcer coming under my observation within the last two years I found more than 50 per cent giving a history of symptoms dating back to childhood and in no case was a correct diagnosis made until the patients had reached adult life,—except one.

CASE REPORT

G. B., Jr., aged 7 years, white male. Examined August 12, 1931.

Present illness: Indigestion, vomiting after nearly every meal, blood observed frequently, pain in upper abdomen, relieved somewhat by taking food.

Past history: Appendix removed in 1927, seemed to improve for several months, though abdominal pain of somewhat less severity occasionally occurred after eating. In the summer of 1930, pain in upper abdomen returned with increased severity, blood was vomited frequently, child began losing weight, and was taken out of school.

Physical examination: A fairly well developed boy, rather thin and anemic. On palpation considerable tenderness over the right epigastrium was elicited. No enlargement of the spleen, kidneys could not be palpated, no tenderness over kidneys.

*Read at the October 1933 staff meeting of the Jackson Infirmary, Jackson, Miss.

Hemoglobin 60 per cent. R. B. C. 3,700,000, whites 7000. Urine showed no pus, blood or casts, sugar negative, a trace of albumen, accult blood was present in feces.

Without roentgen-ray examination, a diagnosis of ulcer, probably of the duodenum, was made.

Pitkin's synergistic treatment was instituted and the child relieved of all his symptoms for four months, at which time he complained of some gas after meals, but no vomiting. A restricted diet for two weeks, seemed to clear that up, and a year later was apparently well, having gained 12 pounds.

This patient had symptoms prior to his appendectomy at the age of four years. On searching the literature we find a surprising number of cases of ulcer in young patients reported.

Shore¹ reports an acute, fatal, perforated ulceration of the stomach in an infant of 22 months. A history of only two days illness, and lack of all signs of chronic ulcer led him to assume the changes noted were of an acute and rapidly destructive nature. This case is especially interesting in that the perforation measured 3 cm wide at operation, before post-mortem digestion became manifest.

W. A. Downes² had occasion to operate for perforated duodenal ulcer in a child aged 3 years. A diagnosis of acute appendicitis was made, which seems to be the usual diagnosis in these cases. Immediately upon opening the abdomen a large quantity of bile stained fluid escaped. Upon exposing the duodenum a perforation about 1-8 inch wide was found on the anterior surface just distal to the pylorus—the child recovered.

Lee and Wells³ placed on record the perforation of a gastric ulcer in utero. A colored boy baby 10 days old, was admitted with symptoms of pyloric obstruction, a small perfectly round hole in the posterior wall near the greater curvature was revealed. The child died 12 hours later.

L. Norrlin⁴ saw a perforated ulcer in a girl of 7 years who gave a history of having had stomach pains and occasional vomiting after meals for 3 years. Operation disclosed a callous ulcer on the anterior surface of the pylorus, with a pea-sized perforation. It was closed in two layers and the child recovered.

Norrlin believes this complication, perforation, is relatively frequent in nurslings, is rare

between the age of two and puberty, and after puberty again becoming more frequent.

A young subject with gastro-duodenal ulcer was seen by G. de Toni.⁵ A boy aged 10 years, who, without any preliminary symptoms whatever, had a sudden onset of evident gastric ulcer, with profuse hemorrhage, which ended fatally in 15 days, the condition being deemed inoperable. At necropsy, ulcer was found close to the great curvature, and by histologic examination apparently recent. He refers to 40 other examples collected, and observes in young subjects the course is so rapid, once it is recognized, immediate operation is necessary.

It will be observed that in all these cases incorrect diagnoses were made, the true condition being discovered only when the abdomen was opened, for the reason that gastro-duodenal ulcer is rarely considered in the intestinal and gastric upsets of very young patients, even by able diagnosticians. One can imagine the number of unreported cases because of incorrect diagnosis, likewise the wrong causes of death on many death certificates. It behooves us to keep the possibility of this condition in mind when dealing with sick children.

The incidence of gall-bladder disease is much more prevalent in young subjects than is commonly believed.

Shewan and Long⁶ recently recorded two cases of cholecystitis and cholelithiasis in young children in a comparatively short period and in a rather restricted pediatric service. One was that of a negro male, three years of age: On operation a very much enlarged gall-bladder was exposed, it was 7 cm long, the tip extending 3 cm beyond the edge of the liver. The gall-bladder wall was thickened and fibrotic. There was a frank ulceration of the mucosa. A diagnosis of chronic ulcerative cholecystitis was made. The second case was that of a one week old white male infant, admitted to the hospital because of excessive bleeding from the umbilicus and jaundice. His condition on admission was poor, and despite supportive treatment he rapidly became worse and expired seven hours later.

At necropsy the gall-bladder was found to be small and contained two calculae. The calculae were ovoid and measured 1 cm in greatest di-

ameter. One of the calculi acted as a ball valve. A final diagnosis of cholelithiasis associated with severe icterus was made.

Potter⁷ was able to collect from the literature 200 cases of gall-bladder disease in young children under 15 years of age, of this number 42 occurred in infants. Kellogg⁸ reports 64 cases ranging in age from the fetus to 15 years, 7 of this number being in the newborn.

On reviewing the literature it was found that although gall-bladder disease in children is classed as a rarity by many writers, at least 112 cases are reported in the same age group as the two cases here described—from the newborn up to 3 years.

As to the etiology of the condition, still found a greater tendency to formation of gall-stones during early infancy than in later childhood, and felt that in most of the newborn cases the calculi had been formed during intra-uterine life. A considerable number of autopsies on infants showed that the bile in the gall-bladder is often very viscid in early childhood, that calculous formation in the gall bladder is often associated with congenital narrowing of the common duct, and that stagnation may exist as a result of the muscular inactivity of the intra-uterine period.

Farr suggests bacteriemia secondary to appendicitis as an etiological factor. The work of Eisendrath and Wharton, as well as Snyder, supports this contention because in their cases appendicitis was found concomitant with the gall-bladder involvement. The inter-relation of cholecystitis and appendicitis has been stressed by a number of writers. So we find that gall-bladder disease does occur in young subjects, and despite its apparent rarity, should be considered in the diagnosis of intra-abdominal pathology in children.

The possibility of gall-bladder disease in children should be kept in mind since the local symptoms being often unobtrusive, are frequently overlooked, and despite its apparent rarity, gall-bladder disease should be considered in the diagnosis of intra-abdominal pathology in young patients. In appendicitis the younger the child the more serious the disease and likewise the greater the difficulty of diagnosis.

Wright⁹ tells us that appendicitis in childhood, though presenting the same pathology, often manifests itself in a manner quite different from that observed in the adult. The most striking characteristic of acute appendicitis in children is the much greater rapidity with which the disease may progress. The larger amount of lymphoid tissue, the thinness of the appendix wall, and the imperfectly developed omentum of the child undoubtedly are factors. Perforation of the appendix or gangrene during the first 24 hours of symptoms is not rare, and by the temporary relief of distress following the perforation, has been the cause of many deaths, especially when the appendix was located in the pelvis.

Suppurative appendicitis may give the same symptoms as in the adult. In other cases, however, the diagnosis may be exceedingly difficult, and persistent nausea and vomiting may be practically the only symptoms. By this is meant the vomiting of everything taken, even water.

Wright especially stresses the point that although pain is in the vast majority of cases the first symptom of an acute appendicitis in both child and adult, it is not always so, and the statement often made that unless the initial symptom in an acute abdominal illness be pain, appendicitis may be definitely excluded, is misleading and absolutely wrong. Abdominal pain, muscle spasm, fever and leukocytosis may all be absent and yet the case be one of suppurating appendicitis. Fortunately, he says, such cases are not common, but in any child with such vomiting extending over a period of thirty-six hours the appendix should be suspected if other causes of vomiting have been ruled out.

Muscle spasm or rigidity is absent in a greater proportion of cases in children than in the adult. The pelvic location of the appendix is more common in childhood than in later years. Pelvic examination will often be of aid, but here again too much value must not be placed on negative findings. A recent case of mine demonstrated that point very clearly. When the inflamed appendix lies in the right lower quadrant in an anterior position, we find the muscles over this quadrant rigid; when it lies retroceally, we usually find but little rigidity and only a reflex spasm on deep palpation, but we

do find rigidity in the flank. When the inflamed appendix lies well within the true pelvis we may and usually do find rigidity of the abdominal muscles absolutely lacking. They have nothing to protect and therefore are not on guard. It is later when the peritonitis caused by the perforation of the appendix has spread beyond the pelvis that rigidity appears.

Another type more often met with in children than in adults is the acute hypertoxic variety in which the virulence of the infection is most marked and the toxemia out of all proportion to the local abdominal signs. This type is frequently accompanied at the outset by offensive diarrhea, and, unless early operation is performed, runs a rapidly fatal course.

Particularly difficult to differentiate from appendicitis are the so-called umbilical colics of small children. M. Borchardt, *Clinical Medicine*, Berlin, does not accept the view that these colics are due merely to a neurogenic functional disturbance. He warns against delay in operating, as pain localized about the umbilicus is often the only evidence of appendiceal disease.

There is reason to believe that a large percentage of the abdominal complaints of childhood, the belly aches, the mild or moderately severe attacks of so called enteritis or colitis, are in reality attacks of appendicitis. A large percentage of children who have finicky appetites and are under-nourished and suffer from vague digestive disturbances, are really suffering from chronic appendicitis, and that many cases of recurrent vomiting of the so-called cyclic type as well as many cases of so-called acidosis are due to this disease.

A word or two regarding the diagnosis of chronic appendicitis, and this applies both to children and adults. An appendix that is causing reflex disturbance, pylorospasm, epigastric distress, or any of the various complaints it may produce, is not necessarily a tender appendix and, in fact, is rarely so. In chronic appendicitis tenderness over the appendix is the exception rather than the rule. Tenderness at

McBurney's point belongs to acute appendicitis, not to chronic. Pressure over the region of the appendix may cause pain or distress in the epigastrium or other location where discomfort has been present, but not in the location where pressure is exerted.

There is, however, a tender point found in a very large percentage of cases that is at a spot about an inch to the right of the naval. Deep finger point pressure at this spot will elicit pain, when pressure at a corresponding point to the left of the umbilicus, or over McBurney's point causes no discomfort. This is called the Morris point, being first observed by R. T. Morris.

Another sign is a thinning of the skin and fat over the appendiceal area—on comparison, these tissues are thinner than those on the corresponding side. Marked tympany of the right half of the abdomen is partly due to the relaxation of the walls of the cecum and ascending colon.

Pain when present in the right lower quadrant in the child is more significant than in the adult, because the psychoneurotic element is less apt to play an important part in a child's complaints.

We conclude therefore that we are justified in operating upon every child suspected of having an acute appendicitis *when we cannot exclude its presence*, though it may call for a great deal of moral courage. Chronic appendicitis should be more frequently and seriously thought of as a possible cause of ill health in childhood; that muscle spasm or rigidity is absent in a greater proportion of cases in children than in the adult; that the pelvic location of the appendix is more common in childhood than in later years; that the hypertoxic variety, usually accompanied at the onset by an offensive diarrhea runs a rapidly fatal course—the only hope for recovery being early operation; that gall-bladder disease occurs rather frequently in infants and young children; that despite the apparent rarity, gall-bladder disease should be considered in the diagnosis of intra-abdominal pathology in children; that gastro-duodenal ulcer does occur in infants and young children,

and that a careful history will elicit the information that most adults presenting this condition can trace these symptoms back to childhood, and I believe within the next few years this condition will be classed among the diseases of childhood.

REFERENCES

1. Shore, Benjamin Rice: Acute ulceration of the stomach in children. *Ann. Surg.* 92:234-240, 1930.
2. Downes, W. A.: Perforated duodenal ulcers in a child. *Ann. Surg.*, 77:756, 1923.
3. Lee, W. E. & Wells, J. R.: Perforation in utero of gastric ulcer. *Ann. Surg.* 78:36-41, 1923.
4. Norrhlin, L.: Cholecystectomy with immediate suture. *Acta chir. Scandinav.*, 56:289-304, 1923.
5. de Toni, G.: *Graham's General Surgery*. Chapter on "The stomach and duodenum", 2:379, 1931.
6. Shewan, Harold K., and Long, Edgar C.: Gall-bladder disease in young children. *Am. Jour. Surg.*, 21:43-46, 1933.
7. Potter: Quoted by Shewan and Long, *loc. cit.*
8. Kellogg: Quoted by Shewan and Long, *loc. cit.*
9. Wright, Thew: Appendicitis in children. *Am. Jour. Surg.*, 21:397, 1933.

A HEAD BAND*

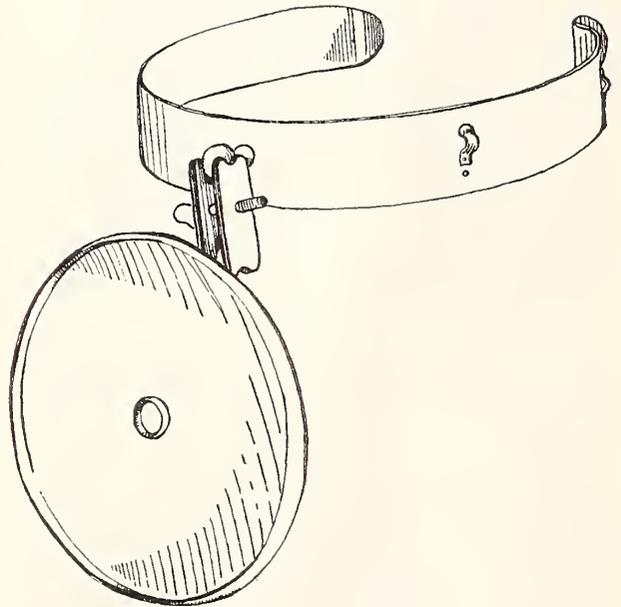
OSCAR W. BETHEA, M. D.
NEW ORLEANS

Every hospital usually has on each floor an "E. N. & T. tray" which contains among other equipment a head band and mirror. Each of these is employed by many physicians and must be adjusted every time it is used on a different head.

The specialist in his office adjusts such per-

sonal equipment once for all. In the operating room the surgeon must have a band that can be fitted so that it will remain firmly in place for an indefinite time. The band here submitted is not intended to replace these but rather to serve a useful purpose where many use the same equipment, and in an office where the mirror is infrequently employed.

This device consists of an elastic metal band that does not entirely encircle the head and is so adjusted as to cause it to remain in place and to be perfectly comfortable. It has the advantages of fitting a head of any size or shape and of being easily put on or removed. It can be readily sterilized and its very simplicity makes possible its being marketed at a reasonable price.



*Presented before the Orleans Parish Medical Society, January 22, 1934.

NEW ORLEANS Medical and Surgical Journal

Established 1844

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SUBSCRIPTION TERMS: \$3.00 per year in advance, postage paid, for the United States; \$3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

NEW OFFICERS OF THE LOUISIANA STATE MEDICAL SOCIETY

The list of officers and the elective committees who were selected at the meeting of the Louisiana State Medical Society in Shreveport last month will be published in detail in the June issue of the Journal. We wish, however, to take the opportunity of extending our felicitations and congratulations to those who have

taken over the important executive duties of the State Society.

Dr. C. P. Gray, Sr., of Monroe, was made President-Elect of the organization. This is a well merited honor to an enthusiastic, loyal, and active member of the State Society. Almost from the time Dr. Gray was licensed in Louisiana in 1904 he has been a member of the organization. He had been for some years Councilor from the Fifth District, and under his leadership and guidance one of the most active District organizations has functioned capably and efficiently. The election of Dr. Gray to the position of President-Elect insures for the year after next an officer who will be capable, conscientious, and active in his duties.

Three vice-presidents were also elected for the coming year at this meeting in Shreveport. For the position of First Vice-President, Dr. Marcy J. Lyons of New Orleans was the choice of the House of Delegates. Again we can say that this is a well deserved honor, because Dr. Lyons has been for nearly twenty years active in the State Society. He has been one of the leaders of the medical profession in New Orleans, both from the point of view of surgical skill and ability and from the viewpoint of his interest in organized medicine. For the Second Vice-President, Dr. J. M. Gorton of Shreveport was elected. The men who attended the recent State Meeting can attest to his geniality, cordiality, and skill in organization. Much of the success of the meeting was due to the untiring energies of Dr. Gorton, who was the Chairman of the Committee on Arrangements. The Third Vice-President's seat was given to Dr. Rhett McMahan of Baton Rouge. One of the younger men in medical practice, he has been a power of strength to the East Baton Rouge Parish Medical Society where he has been continuously active in the affairs of the organization, appreciation of which was shown by his election as President of this organization.

Since 1918 Dr. P. T. Talbot of New Orleans has been re-elected bi-annually Secretary-Treasurer of the State Society. As has been the experience in the past, except at one time, Dr. Talbot was unanimously re-elected to this position of responsibility. His selection for this important executive office for so many years attests to the value of the man to organized

medicine. The Society does well to maintain in office a man who carries out his duties so enthusiastically and so tactfully.

The Councilors of the First, Second, and Fifth Districts respectively, Dr. H. E. Bernardas of New Orleans, Dr. Daniel N. Silverman of New Orleans, and Dr. J. B. Vaughan of Monroe, were re-elected. These men have made an impression on their local organizations which virtually insures their re-election. Dr. M. D. Hargrove of Shreveport was elected as Councilor of the Fourth Congressional District. Dr. Hargrove is one of the intelligent, faithful, and sincere workers in organized medicine. He has been a member of the Caddo Parish and the State Society ever since he graduated and served his internship. He is one of the coming men of Shreveport, and one whose selection reflects credit on the good sense of the House of Delegates.

The various elective committees were returned by unanimous vote from the House of Delegates except in the several instances where the committeemen had been elected to other positions. The selection of these men again is an endorsement of the splendid work that they have accomplished.

The genial, likable, and able Dr. W. H. Seemann of New Orleans was re-elected as delegate for two years to the American Medical Association, with Dr. A. A. Herold of Shreveport as his alternate.

Dr. Charles M. Horton of Franklin, a member of organized medicine for seventeen years and a member of the House of Delegates for years, was made Chairman of the House of Delegates. Dr. Horton's knowledge of parliamentary law, and his unquestionable fairness will provide an exemplary presiding officer for the meetings of the House of Delegates next year. Dr. King Rand of Rapides Parish as Vice-Chairman of the House of Delegates is thoroughly capable of taking Dr. Horton's place should occasion arise.

As has been the custom for many years, the President-Elect will not take office for one year. Dr. Chaille Jamison of New Orleans, as President-Elect the past year, was installed in office at Shreveport to serve for the coming year. We can speak most enthusiastically of the future of the medical society when a man of Dr.

Jamison's attributes and characteristics is to serve as President. Next year looks bright for the Society with such a splendid, capable and agreeable chief executive to depend upon.

PNEUMOTHORAX IN PNEUMONIA

As a method of treatment of pneumonia pneumothorax has been used in a few European clinics for some fifteen years. At no time has this procedure obtained the popularity either here or in Europe which the results would seem to warrant. Possibly this may be due to the unwillingness of the American physician to use this form of treatment rather than to unfamiliarity with the European literature. In England most satisfactory results have been reported by Coghlan, who reports five recoveries in six cases so treated. In the patient who died the results might have been attributed to unfamiliarity with the method of treatment. Jamison, in a personal communication, states that he has treated several cases of pneumonia with pneumothorax at the Charity Hospital with splendid results.

A recent publication by Lieberman and Leopold (*Therapeutic Pneumothorax in Experimental Lobar Pneumonia in Dogs*, *Am. Jour. Med. Sci.*, 187:315, 1934) has to do with this form of treatment in experimental pneumonia. These observations were made on 36 dogs divided equally between those which were used as controls and those in which pneumonia was produced by the method of injecting directly into the lungs virulent pneumococci through a soft rubber catheter. The pneumococci were types 1 and 3. The experimental pneumonia was a severe and rapidly progressive infection, the control dogs dying the second or third day after inoculation. Sixteen of these dogs showed the presence of pneumococci either in the blood stream during life or in the heart's blood post mortem. Of the 18 untreated, 5 recovered and 13 died. In the treated dogs artificial pneumothorax was induced on the second day of the disease. Of these dogs 15 recovered and 3 died. Immediately following the injection of the air into the thoracic cavity, in the majority of cases there was marked improvement in the condition of the animal. More air was injected into the pleural cavity on the day following the first

injection without any subsequent injections. Of the three animals that died, one developed a lung abscess, one had a hemorrhagic enteritis and the other died apparently entirely from his pneumonia. The authors state that they are not prepared to offer any explanation for the *modus operandi* of this method of treatment. They state that they do not recommend it as a routine procedure in all cases nor do they think the procedure should be carried out unless one has experience in the technic of artificial pneumothorax.

The results of this form of treatment in the human, 47 recoveries and 3 deaths; in the ex-

perimental animal, 15 recoveries and 3 deaths as contrasted with 13 deaths in the controls, certainly would present definite evidence of the efficacy of this method of handling a patient with lobar pneumonia. The results really are quite astounding; it seems remarkable in view of the published reports that this method of treatment has not been more generally used. Certainly in selected cases of pneumonia of the lower lobe the clinical results would warrant utilization of pneumothorax. The experimental results further substantiate the benefits that obtain in this form of therapy.

HOSPITAL STAFF TRANSACTIONS

TOURO INFIRMARY

The regular monthly meeting of the Medical Staff of Touro Infirmary was held Wednesday, April 11, 1934 at 8 P. M. Dr. Henry Blum presided over the meeting in the absence of the Chairman, Dr. Sidney K. Simon.

Dr. R. E. Stone spoke on a case of Anemia Infantum. This case had been treated by splenectomy with an uneventful recovery. The case was typical in every respect including the radiographic findings of the skull and skeleton. The roentgenograms were shown and explained by Dr. Rodick. The case under discussion was one of three cases in the same family; one other had also recovered following splenectomy while the third had died after operation had been refused.

Two unusual cases of nephrolithiasis were presented by Dr. Jos. Hume and staff. Dr. Burns gave the resumé of the first case and Dr. Vickery that of the second. Dr. Hume then discussed both cases. These cases were interesting from many aspects and were discussed fully.

Dr. L. H. Strug spoke on a case of Spontaneous Rupture of Large Endometrial Cyst of the Left Ovary. The cyst of the ovary had been recognized but the patient had refused operation. Suddenly there was an acute abdominal accident necessitating laparotomy. The peritoneum was found to contain a large quantity of old blood and the cyst appeared to be within the broad ligament. The left ovary and the tube were removed—the right ovary left intact. Pathological examination showed the cyst to be an endometrial one. The patient had an uneventful recovery and will be carefully observed for possible seeding.

Willard R. Wirth, M. D.

CHARITY HOSPITAL MEDICAL STAFF MEETING

The regular monthly meeting of the Medical Staff of Charity Hospital was held Tuesday, April 17, 1934, at 8:00 P. M., Dr. P. H. Jones presiding. Dr. J. H. Connell presented a case of primary tuberculosis of the mediastinal glands with involvement of the pericardium. The heart of this case was shown.

Dr. M. T. Van Studdiford demonstrated a case of lupus, proven by histological section. This patient had been treated for various types of skin conditions including syphilis.

A case of Still's disease was presented by Dr. S. Phillips.

Willard R. Wirth, M. D.

MERCY HOSPITAL STAFF MEETING

A meeting of the Mercy Hospital Staff was held at Mercy Hospital on March 15, 1934.

Drs. De Verges and Zander told of the visit of Dr. Ponton, of the American College of Surgeons, to the hospital recently in his survey of the hospitals of the country for rating purposes. They stated that Dr. Ponton approved the hospital and the only suggestions he made were with regard to changing the chart system. Dr. Ponton stated they were trying to establish a uniformity of system throughout the whole country in chart keeping.

Dr. Oriol reported there were five deaths, with one autopsy.

Cases: The following cases were discussed:

(1) Pyelonephritis with urine retention; pregnancy six months gestation. The patient was admitted February 2. On admittance she showed the presence of pus and a pregnancy of six months gestation. She was cystoscoped and permitted to go home. On February 17 she was readmitted in con-

vulsions. The blood chemistry showed total nitrogen protein of 129, creatinin of 5; urine showed heavy trace of albumin and practically pure pus in urine. She was having pains at this time and manual dilatation and extraction was performed. That night she lost a considerable amount of blood following delivery and died the following day. Dr. J. Brierre in discussing this case stated that he did not think that death was due to toxemia and expressed the belief that probably the patient died of hemorrhage as a result of injury at the time of delivery. Dr. Hauser, in discussing the laboratory reports, stated that the urine was loaded with pus; that on account of the thickness of the pus the patient was unable to void and there was a retention of urine as a result, and that in his opinion death was unquestionably the result of uremia. Dr. Mailhes suggested that cases of pyelitis of this type should be drained and if possible the catheter left in place after such treatment if the pus did not clear up; that such cases should have the pregnancy interrupted as cases not responding to catheter drainage usually always end 100 per cent fatally. Dr. Richards thought that probably the delivery had been too rapid.

(2) Carcinoma of lung with metastasis of spinal cord; cardiac failure; edema of lungs.

(3) Hypertension; arteriosclerotic nephritic heart disease.

Dr. Brierre presented two case histories from the Obstetrical Surveys.

(1) Pregnant patient who came to the Hospital with 100° temperature. Two hours after admittance, she delivered a child stillborn. The placenta was delivered and was green in color, suggestive of syphilis. Following delivery patient showed evidence of puerperal infection, even though case was an easy delivery. The total red cell count dropped down to one million red cells. Blood culture was negative. Leukorrhoea was foul in character. Patient was in such bad condition that drastic measures were deemed necessary. Intra uterine douches under aseptic precautions were given. Seven days after delivery blood transfusions were given as the red cells had fallen to 800,000. Several days later a second transfusion was given and liver extract was given the patient. The liver and spleen were enlarged. On the basis of the placenta, the Wassermann test being negative, red iodide of mercury was given. A few days later remarkable improvement was shown by the patient, and fifteen days after starting treatment the patient left the hospital practically well, the blood count having risen to 2,000,000. This case was diagnosed as a case of puerperal infection and endometritis with syphilis as a complication, being the most probable cause of death in the fetus; the puerperal infection very probably having originated before admittance because the patient came in with the membranes ruptured. Dr. Brierre was interested in the question

of whether the intra uterine douche helped in this case and whether anyone still advocated this treatment at the present time and what part the syphilitic treatment had in the rapid improvement of the patient.

Edwin L. Zander, M. D.,
Secretary.

BAPTIST HOSPITAL

The Clinical Staff of the Southern Baptist Hospital met in conjunction with the St. Tammany and Washington Parish Medical Societies on March 27, 1934 at 6:00 P. M., with Dr. J. P. Wahl, Chairman, presiding. Following a dinner the following program was rendered:

1. Prophylaxis and Treatment of Diarrhea in Infants, Dr. Rene Crawford. Discussion opened by Dr. John Signorelli.

2. Intestinal Obstruction, Dr. Carroll W. Allen. Discussion opened by Dr. M. J. Magruder.

3. The Importance of Prenatal and Postpartal Care in Preventing Invalidism, Dr. Thomas B. Sellers. Discussion opened by Dr. E. L. King.

4. Some Abnormalities in Origin of Cystic Artery as Illustrated in Drawings, Dr. E. Z. Browne. Discussion opened by Dr. E. A. Ficklen.

5. Agranulocytosis, Dr. Robert H. Potts.

HOTEL DIEU

The regular monthly meeting of Hotel Dieu Staff was held March 19, 1934 at Hotel Dieu at 8 o'clock P. M. Dr. P. B. Salatich, President, presided at the meeting, with Dr. Frank Chetta, Secretary, at the desk.

Dr. C. E. Gorman presented a case report of Dr. J. E. Landry's. This patient had typical prostatic hypertrophy symptoms. Due to poor physical condition, particularly low P.S.P. approximately 5 per cent and less, only a cystotomy was done which later resulted in a vesico-abdominal fistula. Readmitted two years later complaining of urine draining through fistula and unable to void. Positive B.coli and staphylococcus cultures and smears were obtained. With the use of oils, fistula stopped draining and patient was voiding naturally but frequently. Feeling so much better he insisted on going home. During interim at home, family physician inserted a retention catheter. Patient was readmitted with very severe cystitis, was irrigated for one week with boric acid solution. Albumin ranged between 30 per cent and 40 per cent during this week and no clinical improvement. When oils were started, albumin was 33 per cent. After approximately one week under this treatment, the albumin varied between 1 per cent and ½ per cent. Cultures were negative for B.coli and staphylococcus in catheterized specimen. Patient becoming homesick insisted on leaving hospital against our wishes.

Dr. J. E. Landry: This was an old case that we

did a suprapubic cystotomy on about two years ago for an enlarged prostate. From a retention catheter he developed a marked cystitis.

Dr. J. A. Danna: I wish to report the case of a man who has had a uretero-sigmoid anastomosis done for carcinoma of the base of the bladder with obstruction to both ureters and especially the right. When his abdomen was opened, the right ureter was found to be larger than my thumb and the left larger than a lead pencil.

Dr. Ruth G. Aleman presented a paper on "Post Operative Treatment of Perforative Appendicitis in Children." The mortality of perforative appendicitis is still amazingly high. The appendix is found gangrenous and ruptured most often in children because of the added difficulty in diagnosis in the child. The treatment of the perforated appendix has just begun after proper drainage is established, that is, after the various peritoneal pouches and the appendiceal region have been drained.

In my opinion, the post-operative treatment is practically the same in the child as in the adult. The aim of post-operative treatment should be to secure adequate drainage, to treat shock if it exists, to prevent it if it has not occurred, to prevent starvation, and to prevent or treat ileus. Anatomical and physical rest of the body and the alimentary tract should be maintained. Rest of the body should consist in keeping the patient quiet and preferably in the sitting position by means of the special bed. Body rest is further maintained by giving small doses of morphine. Physiological rest of the alimentary tract is obtained by giving nothing by mouth for twenty-four hours, except bits of cracked ice sparingly, or sips of hot water. Hypodermoclysis of normal saline or glucose, two and one-half per cent in saline solution is repeated every four to six hours, the quantity varying with the size of the child, the degree of starvation, acidosis and other variable factors. Intravenous infusion should be resorted to in severe cases and occasionally a continuous intravenous drip of glucose solution should be maintained until shock has been successfully overcome. The heat tent over the abdomen is often used to combat shock, to stimulate peristalsis, to accelerate the hemic and lymphatic circulation, especially if there is much distention, impending ileus or ileus.

When peritonitis exists, some peritoneal areas of bowel are distinctly purulent, therefore conditions are ideal for the development of ileus. The least amount of obstruction at the ileo-cecal valve may cause ileus above that point. It is imperative to remove the strain at this site. This is often accomplished by using the nasal tube, by limiting fluids, and by flushes and irrigations. When these fail, manipulation of drainage tubes or the insertion of the index finger at or near the ileocecal valve junction will frequently release the obstruc-

tion. Daily moving of the drainage tubes will also prevent the formation of fecal fistula. Six cases of perforative appendicitis in children under ten years old are described in this paper with cure in every case.

Dr. A. L. Levin: There must be something sound and logical in the plan of treatment as outlined in an excellent manner by Dr. Aleman. She has reported six cases with recovery. There is nothing to add to what Dr. Aleman said except to claim priority for the so-called abdominal decompression method and to call attention to the fact that when duodenal regurgitation develops as a result of an impediment below the duodeno-jejunal angle, the fluid used for gastric lavage must not contain sodium bicarbonate. Plain tap water should be used and then dilute hydrochloric acid, 30 minims in two ounces of water should be introduced to close the pylorus. This procedure is to be repeated every two hours. The plug from below must be taken out to re-establish peristalsis by the use of warm retention oil enemas.

Dr. J. Signorelli: Children do not report pain as definitely as adults. Abdominal pain resulting from appendicitis is often not limited to the McBurney area in children and most cases have no pain over the McBurney point. The pain is more often indefinite in location and may even be reported over the left side. One should be guided more by the resistance and rigidity felt on palpation over the right side. So, in children, a diagnosis of appendicitis should not be based on the history of the location of pain, but one should depend more on palpation because the resistance or rigidity of the muscle is of particular significance.

J. T. NIX CLINIC

New Orleans

At a meeting in April, 1934, Doctor L. S. Hill, presiding, presented the following:

MEDICAL PSYCHOLOGY

At the present time almost anywhere one goes one can hear people speaking glibly about "complexes," "conflicts," "repressions," "the unconscious," and numerous other concepts of psychology. Pseudo-psychological books have become extremely popular. Occasionally someone will present a dream and expect a complete analysis of the dream and his entire life, as though the psychiatrist or psychologist were a magician who, by means of a few magic words, could unfold the past, present, and future. Now, since even psychologists differ rather markedly concerning the meaning of these terms, and analysis is by no means a simple, rapid affair, it has been thought that perhaps a brief summary of the three principle concepts of medical psychology at the present time might not be untimely, and might perhaps be of some service to us as physicians. These concepts of psychology have been most useful from a therapeutic

point of view, and indeed were developed largely because of the necessity of finding some helpful method in the treatment of the neurosis. They have been designated by their originators respectively as psychoanalysis, analytical psychology, and individual psychology.

Late in the nineteenth century Doctor Sigmund Freud of Vienna in treating cases of hysteria and other forms of neuroses by means of hypnotism, came to the conclusion that, although his results were good, they were apt not to be permanent and often were variable. He conceived the idea that the reason for these defects in the treatment was that ideas and memories, which could be revived in the hypnotic state, were not remembered in the post-hypnotic state, and so the results were apt to vary as to permanency and result. Because of this he began treating his patients, while in the conscious state, by means of "free-association," the one basic rule of which was, that during the conferences the patient should tell every thought which entered his consciousness, no matter how crude, disagreeable, or shameful it might appear to the patient. From this beginning Freud has developed what we today know as psychoanalysis, and which has caused such a storm of protest and criticism by psychologists, physicians, and laymen as to prevent its being accepted as a definite school of psychology until almost 1930. Through his development of the psychology and the technique of psychoanalysis, Freud has given to the world very valuable information, regarding the development of the human mind and its normal and abnormal states.

Psychoanalysis, as we know it today, has five basic principles: (1) the idea of mental conflict and repression, which is accepted by most psychologists, (2) the conception of an unconscious, (3) the theory of the libido, (4) the doctrine of infantile sexuality, and (5) the doctrine of transference.

Each individual has thoughts, ideas, desires, and memories, of which he is not aware. When some memory or desire, which is unacceptable, which will cause pain to the individual, attempts to enter consciousness, there is a definite mental conflict, with the result that the unwanted memory is repressed or driven out of consciousness. This mental conflict, causing a repression of the unwelcome emotion, results in a feeling of anxiety or uneasiness on the part of the individual, if the conflict is sufficiently severe.

Following directly on the idea of conflict and repression is Freud's conception of the unconscious. The unconscious is visioned as a vast storehouse of all the past memories, experiences, and desires of the individual, many of which are unacceptable in his present state of development. Because of the pain and discomfort which these memories would give if brought into consciousness, re-

pression is represented as the doorkeeper who refuses to allow ideas to pass freely from the unconscious into consciousness.

The libido is considered by Freud as the driving force behind all the activities of the individual,—its development beginning with the beginning of the life of the individual. Originally it was considered as essentially a craving for pleasure and for the satisfaction of the sexual instincts. Now however, in addition to its sexual side, the libido is considered as being actuated also by the instinct of self-preservation. This addition to the theory of the libido was brought about through a study of the war neuroses, most of which were not explainable on the theory that the libido is accentuated only through the sex instinct. As our present state of social development precludes the direct state of social libido, we see its effect in many fields of activity in a sublimated form, such as in brilliant, intellectual achievements, in art, in professional life, in literature.

Freud's fourth basic principle, that of infantile sexuality, has received probably as much criticism as any part of his psychoanalytic structure. He considers the infantile conduct, which finds pleasure in sensation derived from various sensitive parts of the body, in curiosity, in the exercise of mastery or the infliction of pain, as definitely sexual in character. When these childhood habits are carried over into adult life they do have a definite sexual coloring, which is admitted and recognized as such by everyone, thus giving a great deal of support to this theory.

The fifth basic condition of psychoanalysis is that of transference. By this is meant the displacement of the libido from its former objectives and its transference to the analyst. The feelings directed toward the analyst may be emotions of affection or hate. In fact, there are always feelings of hate before the transference is finally broken and the patient is freed of dependence on the analyst. Without the development of a favorable transference or rapport between physician and patient, no analysis can be made.

Disagreeing with Freud's idea of psychoanalysis, two of his pupils, who were at one time psychoanalysts themselves, have developed their own view points along psychological lines until now we have the school of analytical psychology, which has been developed by Jung, and the school of individual psychology, developed by Alfred Adler, as view points of medical psychology differing from psychoanalysis.

Jung differs with the psychoanalytic doctrine in a number of important points. First, his idea of the libido differs from that of Freud's. He believes that the libido is not originally sexual at all, but represents a primal life force, from which the various instincts issue,—sexuality being a rather late part of its application. Again, Jung di-

vides the unconscious into a "personal unconscious," which is made up of the personal experiences of the individual, and a "collective unconscious," which is formed from the past experiences of the race. This collective unconscious, carrying traces of racial experience, provides the material for dreams and phantasies which are ancient in their mode of thought. Jung also differs in his idea of repression,—the personal unconscious to him being due, not to a repression of the various memories and experiences, but to the tendency of each individual to develop mentally in a one-sided manner. In the process of adapting to life, one part of the individual is developed while the remainder settles into the personal unconscious. In this connection Jung has established the idea of *introverts*, that is, those whose fundamental function is thought, who withdraw within themselves with their own thoughts,—and of *extroverts*, that is, those whose fundamental function it is to feel, to project their feelings outward on the surroundings. In each one of these types the opposite function is neglected and tends to become a part of the personal unconscious. Another fundamental departure is in Jung's idea of the purpose of the libido,—this primal life force having for its main purpose the *will-to-live*, and an adaptation to life, whereas, Freud considers the desire for pleasure and the avoidance of pain as the driving force behind all mental activity. In these fundamental concepts, Jung has built up what he terms as analytical psychology, in contradistinction to psychoanalysis.

Alfred Adler has termed his method of investigation and treatment of mental conditions individual psychology. This, like analytical psychology, is based on different principles from psychoanalysis. To Adler, the driving force of life, the purpose of life, is in the acquisition of power and superiority over one's fellows. This he considers as especially prominent in the life of the neurotic, as a reaction against feelings of inferiority. Any inferior organs, or poorly developed organs, serve as an impetus to increase the individual's efforts to overcome this defect and to cause him to make an effort to copy those whom he considers as all powerful. When a child or adult feels inferior he becomes uncertain and insecure in his actions and the entire purpose of life then becomes centered in an attempt to secure power and superiority. When, because of the actual situation, this superiority is impossible, then a neurosis sets in, and the very disabilities of the neurosis are made use of in continuing the struggle for control and power, and also furnish justification for the withdrawal from life which would itself point to failure. Adler rejects the unconscious altogether, and therefore also the concept of repression.

In comparison of the three schools of psychology, one may be justified in saying that the concepts

and practices of psychoanalysis have given us the greatest amount of insight into the human mind, and has really been the starting point from which all really beneficial forms of psychotherapy have developed. Psychoanalysis, itself, is not fixed, but has been constantly changing, as experience has led Freud to see the fallacy of some points, as is illustrated in the extension of the term libido to include in addition to its sexual aim the instinct of self-preservation, thus permitting an explanation of the war neuroses, most of which it was impossible to explain on a sexual basis. It is this ability of Freud's to change as experience proved the incorrectness of his theories, which has kept psychoanalysis virile and alive, and has proved the sincerity of its originator. Undoubtedly all three schools of thought have been beneficial in advancing our knowledge of the motivation in neurotic patients and enabling us to treat these patients more intelligently, whatever may be our opinion of these differing psychological viewpoints.

THE OSCAR ALLEN TUMOR CLINIC OF CHARITY HOSPITAL NEW ORLEANS

The scientific meeting of December was called by Doctor J. T. Nix, Director. The essayist was Doctor Albert L. Culpepper who presented the following:

ORAL SURGERY IN NEOPLASIA

Despite the much heralded use of roentgen-ray and radium, reports from various radiological institutes, and hopes based on 4 gm. radium packs along with superpowered roentgen-ray machines, we feel that there is offered no better means of eradicating carcinoma of the buccal cavity, or of most locations in fact, than by complete early surgical removal. Furthermore we feel that any lesion important enough to arouse suspicion to the extent of using radium or roentgen-ray, is important enough to justify biopsy with microscopic examination.

Simons¹ summarizes 376 cases of carcinoma of the mouth saying:

2. Primary cases with surgery 35 per cent (3 years), against 15 per cent cures with irradiation.
- b. Primary cases with clinical metastasis by surgery 5 per cent as against no cure by irradiation.
- c. That life is prolonged by either method but especially so with surgery.

Fischel² reports that by employing radical neck dissection on all cases:

- a. No demonstrable metastasis—surgical cures 18 per cent (5 years).
- b. With demonstrable metastasis—surgical cures 35 per cent (5 years).

The sites of incidence in malignant disease of the buccal cavity according to Fraser³ are as follows:

gum of the lower jaw, 13.5 per cent; gum of the upper jaw 4.7 per cent; anterior 2-3 of tongue, 40 per cent; base of the tongue, 9 per cent; palato glossal sulcus 20 per cent; floor of the mouth 10 per cent; and cheek 2.8 per cent.

Discounting the rodent ulcer which is usually well controlled either by surgical removal, radium or roentgen-ray, the most common type of malignant lesion of the face is found on the lip. This forms 2 per cent of all deaths from carcinoma. It is twenty times commoner on the lower than on the upper lip. Ninety-five per cent of the cases are found in men. If not treated it terminates fatally in from two to five years, but when the tumor is completely removed along with the infected glands, cures vary from 5 to 80 per cent, depending on the type and age. It is a local malignant process, spreading to the glands, but seldom metastasizes to the internal organs.

Vilray P. Blair⁴ is an exponent of the radical treatment of carcinoma of the lip. He advocates (a) early lesions of uncertain type to be excised completely the wound being approximated at once. (b) Small, active obvious lesions are excised and skin flaps used, with plastic operation following. (c) Advanced lesions are widely excised with cautery and are repaired if possible. If there is bone involvement extensive cautery is used, because bone metastases never heal and demand surgery. (d) Advanced, inoperable cases are treated by external and interstitial radiation. Radical neck dissection is done in every case of carcinoma of the lip if the patient will consent.

Prognosis: (a) Any person who has a carcinoma of the lip may have gland recurrence even up to 8 years, regardless of the brilliance of local cure. (b) There is absolute necessity for frequent careful examination of the neck for lumps, if a dissection has not been done originally.

Tongue: The age incidence is from 45 to 60 years, 90 per cent being in males. Microscopically it is usually squamous cell with transitional cell from the base of the tongue in fewer numbers and rarely a basal cell carcinoma. The duration of life after operation is from eighteen months to two years. The most frequent locations are, in order: (a) the border of the middle third, (b) the tip, (c) the base. Bloodgood⁵ excises widely with cautery and does a gland dissection of the neck. He removes the floor of the mouth and the jaw bone if necessary. Often the cheek must be split and the teeth removed.

Floor of the Mouth: These tumors occupy the mid-lateral and the base. If there is an extension towards the tonsillar area or towards the base of the tongue the prognosis is extremely bad. But in the mid or lateral zones with wide resection by cautery and block dissection of the neck and lower jaw, the probability of cure is enhanced.

Cheek: Carcinoma of the cheek is notably

malignant. Bloodgood says "operate as early as possible, excising widely with cautery." He reports very few cures. His hopes for cure are based upon diagnosing it as a precancerous lesion. Brewer⁶ reports three (3) year cures in 117 cases by surgery. It has been found that radiation is, perhaps, the best means of approach as three cures in 67 have been reported.

Gums: When carcinoma of the gums spreads towards cheek the prognosis is extremely bad. If to the floor of the mouth or even to the bone, it is more hopeful condition. Block resection is recommended.

Hard Palate: Carcinoma in the region of the hard palate offers the best prognosis of any in the mouth, because of the slow growth and rare glandular metastasis. Its entrance into the antrum is usually very late. Electric cautery is the method of choice.

Tonsils: Bloodgood has never cured one of this region, nor of the uvula or of the soft palate because of the extension to the glands and to the pharynx.

Jaws: Adamantine carcinoma is more common in the lower jaw. It springs from the embryonal enamel epithelial organs and while it does not metastasize, it recurs and ultimately kills by infiltration into the brain. These should be removed completely at the first operation. Electric cautery is the choice in this procedure.

Giant cell epulis (not the bone tumor) springs from the sub-epidermal connective tissue of the gums and alveolar border. It is not essentially malignant, but the electric cautery should be used with wide excision to prevent recurrence.

Osteochondroma, chondroma, and myxochondroma must be carefully removed or not at all, for with each recurrence the likelihood of sarcoma increases.

Fibroma, fibro-spindle cell fibroma or sarcoma, fibromyxoma and fibromyxosarcoma are the only types of sarcoma in the jaw that are amenable to treatment, for the true cellular sarcoma is very rarely, if ever, cured.

Giant cell tumors: These are similar to those found near the epiphysis of long bones. Bloodgood has done original work on this type of tumor, and he feels that they can be eradicated by complete curetting with the thermo cautery. He holds that this is superior to irradiation. This procedure may be done even in the antrum.

Sarcoma: Sarcoma is extremely difficult to cope with in these locations, be it central or periosteal. In the antrum, it is almost as frequent as carcinoma. Use of extensive cautery followed with heavy doses of roentgen-ray offer, perhaps, the best choice.

Antrum: The sarcomata seen here are usually the angioid type. Carcinomata are usually basal cell, many of them papillary in type, few are squam-

ous cell with occasional adenocarcinoma. It is strongly recommended that biopsy be taken through the nasal route, that the mucous membrane over the gum be incised as is done in radical sinus operation, and that by heavy thermo cautery, the contents be removed, also that the nasal wall be broken down. This allows good drainage and healing as well as eradicating disease. If the process is extensive, an incision is made through the lip to the inner canthus of the eye and the anterior wall of the sinus is destroyed.

Larynx: Carcinoma and sarcoma represent 1 to 5 per cent of all malignant tumors and about 16 per cent of laryngeal tumors. The age incidence is the fifth decade. The earliest appearance presents a broad thickening of the mucosa, (b) a projecting white nodule, (c) a broad warty excrescence. The chief location is in the anterior portion and commissure of the vocal cords and vicinity. The structure is usually adult acanthoma with abundant keratosis and pearl formation. These are locally destructive but of slow growth. A few are of the transitional cell type with no keratosis and arise from the folds and sinuses, these last named being the source of extensive tumors in the lymph nodes.

Sarcoma of the larynx represents 11 per cent of malignant laryngeal growths appearing in about the same location and resembles carcinoma as sessile or papillary, intrinsic or extrinsic. Most frequently they are of the spindle cell, mucoid, round cell and giant cell types. In late stages there may be ulceration but less so than in carcinoma. Lymph nodes are invaded in 15 per cent. C. Jackson⁷ strongly advises biopsy, and removes only the small lesions in the anterior portion. He reports 80 per cent cures.

F. O. Lewis⁸ praises laryngofissure in early cases, but in advanced or extrinsic carcinoma he advises total laryngectomy. He performed this operation on 63 per cent of eighty-three patients who are alive, thirty-two having passed the five-year mark. He also reports seventy-five cases with extrinsic carcinoma, verified by biopsy with 21 per cent five-year cures.

Naso-pharynx: Of seventy-nine cases presented by New⁹ of the Mayo Clinic, thirty-four were epithelioma, and thirty-three lymphosarcoma. Surgery is dangerous in this area due to the nearness of the intracranial cavity, the eustacian tubes and to the internal carotids. He advises the use of radium. Internasal tumors are similar to those found in the naso-pharynx with the exception that more fibro-sarcoma and epithelioma are found.

Pharynx: Carcinoma and sarcoma are more common here. These usually originate in the tonsils and invade the pharynx secondarily. Basal cell carcinoma rarely metastasizes here and good results are to be had from local excision, radium, or the two combined. The permanent cure of squamous

cell carcinoma or lymphosarcoma in this region is rarely affected by either surgery or radium.

Lymphatic extension: To achieve beneficial results either in surgery or irradiation, a thorough knowledge of the lymphatic extension is absolutely necessary. Local extensions of buccal carcinoma are usually early and wide. In the tongue the arrangement of blood vessels and lymphatics may somewhat restrict the growth to one lateral half or to the base, but in advanced lesions there is invasion of both sides. Lesions of the cheek are particularly malignant; those of the tonsil invade the pharyngeal wall, larynx, nares, soft and hard palates, and base of the tongue, those of the buccal floor extend actively to the tongue, gums, lips and deeper structures. The transitional cell type invades early, the squamous cell later, while the basal cell and the papillary or leukoplakic forms are slower in extension.

Metastasis is favored by, (a) malignant atypical structures, (b) origin from the deep rather than the superficial structures, (c) by deep ulceration, (d) by long duration of the illness, (e) by the presence of inflammatory conditions.

The affected nodes are usually those draining the diseased focus, but in many cases may invade both sides.

Ewing¹⁰ concludes that the mode of extension of buccal and lingual cancer to the lymph nodes is chiefly by embolism, and bases his conclusions on: (a) the very early invasion of nodes in some cases, (b) the appearance of infected nodes at anomalous points while intervening nodes escape, and (c) the failure to find permeated lymphatics in sections of tissues leading from the original lesion.

The distribution of metastases is determined by the course of the cervical lymphatics, the main groups of which are: (a) the submaxillary group drains the border of the tongue as far back as the fauces, the middle section of the anterior half of the tongue, and under surface of the tip, and the floor of the mouth. (b) The superior deep cervical group lying on internal jugular vein and carotid drains all parts of the mouth, tongue and fauces and upper part of the pharynx. (c) Nodes at the lower end of the carotid drain the anterior surface of the palate. (d) The inferior deep cervical nodes lying on the jugular vein and extending down behind the clavicle receive branches direct from the apex and base of tongue and anterior portion of the floor of the mouth. (e) Submental nodes drain the lips, the anterior portion of the buccal floor. (f) The submaxillary gland is rarely invaded.

SUMMARY

It appears: (a) That the public is still not educated to the point of bringing to the surgeon precancerous or very early lesions. (b) That biopsy is almost indispensable. (c) That very early

lesions be excised widely with the electric cautery and radiation be applied to the tumor site and also to the lymphatic drainage areas. (d) That irradiation alone be used on extensive inoperable cases, and (e) that infection hinders effects of radium or of surgery and should be cleared up if possible before proceeding.

In conclusion, no separate series on surgery or on irradiation has been so impressive that we can discard one for the other. The best results appear to be derived from the combined procedures, and I suspect that our own results will be more gratifying if both methods are employed, but always remembering that certain types of neoplasia are highly radiosensitive, others very little—even though all classes of tissues are affected to some extent.

BIBLIOGRAPHY

1. Simmonds, C. C. Carcinoma of the mouth: The results of treatment by operation and radiation. *Surg. Gynec. & Obst.* 43:377, Sept., 1926.
2. Fischel, E. Surgical treatment of metastasis to cervical lymph nodes from intra oral carcinoma. *Am. J. Roentgen, and Rad. Ther.*, Feb., 1933.
3. Fraser, John. *Ann. Surg.*, October, 1932.
4. Blair, V. P. Summary of 65 cases of carcinoma about the mouth. *Surg. Gynec. Obst.*, 56: February, 1933.
5. Bloodgood, J. C. W. F. Prior Co., Inc., vol. 4., 1930.
6. Brewer, G. E. Carcinoma of lip and cheek. *Surg. Gynec. & Obst.* February, 1923.
7. Jackson, C. Laryngeal carcinoma. *South. Surg.* 1:223. 1933.
8. Lewis, F. O. Laryngeal carcinoma. *Surg. Gynec. Obst.* 56: 466. 1933.
9. New, G. B. Tumors—Anamantinoma of lower jaw treated with surgical diathermy. *Surg. Clin. N. Amer.* 9:80-82, February, 1929.
10. Ewing, James. Extension and gland drainage. W. B. Saunders Co., ed 2. p. 845. 1922.

HOUSTON HOSPITAL STAFF MEETING

The regular monthly Staff Meeting of the Houston Hospital was held March 29, at which time Dr. G. G. Armstrong had a very interesting paper on "How to Remove Foreign Bodies From the Eye, Ear, Ear, Nose, and Throat," which was freely discussed by all doctors present. Music was furnished by Miss Lutie Temple and Mr. Carl Johnston, Jr., of Calhoun City. Refreshments were served by the hospital nurses.

W. C. Walker.

Houlka, April 10, 1934.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING. GREENVILLE, MISS.

The regular monthly meeting of the King's Daughters' Staff was called to order by the chairman, Dr. J. F. Lucas, at 7:30 P. M. April 4.

The following program was presented:

(1) Paper on Review of Patients with Fractures from Hospital Records.—Dr. J. A. Beals.

(2) Paper on Extra-Uterine Pregnancy.—Dr. T. B. Lewis. John W Shackelford, Greenville, April 7, 1934. Secretary.

ABSTRACT.—REVIEW OF PATIENTS WITH FRACTURES FROM HOSPITAL RECORDS.—Dr. J. A. Beals.

With the help of the record clerk, Miss Van Norman, I am able to furnish the following statistical report on fracture cases treated at the new King's Daughters' Hospital building.

There are records of 279 fracture cases. This represents one in every 46 hospital cases (2.16 per cent) or one in every 55 hospital admissions (1.75 per cent) (many patients of all types have more than one admission).

The average patient spends about 7.7 days in the hospital, but the average fracture patient spends 17 days. From the hospital standpoint the 2 per cent plus or minus fracture patients require 4 per cent of the total hospital days.

There were 17 deaths (mortality 6.1 per cent). There were 14 males and 3 females. The average age was 53 years, only 4 being under age 20. The fractures were skull 8, femur 5, spine 2, multiple long bones, 2.

There were 25 patients having fracture of more than one region, i. e. leg and arm, skull and ribs, etc. The average age was 40 years. The average sojourn in hospital was 38 days, more than twice the average.

Skull.—There were 33 patients, (11 per cent) recorded as having skull fracture; 26 m., 7 f., average 32; average days 15. There was no roentgen-ray examination in 12 cases, examination was pronounced negative in 7, and questionable in 1, i. e. 13 of the 33, less than 40 per cent, were roentgen ray positive.

The reasons seemed to be three-fold:

(1) A few head contusions, usually having a short stay in the hospital were recorded as skull fractures, which might have been more correctly listed as concussions. This had no importance except in the accuracy of records, or in case of litigation arising out of injury, or perhaps in the event of cerebral symptoms later in life.

(2) A number were cases of severe, compound, cranial disruption, very rightly treated surgically without roentgen-ray examination.

(3) Perhaps most of the roentgen-ray negative cases were so mis-diagnosed because of emergency or incomplete roentgen-ray examination. This kind of examination is in my opinion not only justifiable but commendable. To exclude all fracture of the skull demands stereoscopic films, in about six positions of the head, some of them a strain on well persons. This is contrary to all accepted principles for treating brain injuries.

Face.—Fractures of the bones of the face (nose, maxilla, mandible) comprise 20 cases (7 per cent) average age 34, average days 8. There was no roentgen-ray examinations in 30 per cent, generally fractures of the nose which are well diagnosed clinically.

Ribs.—There were 25 cases (9 per cent) listed with rib fracture, 20 m., 5 f., average age 44 years, average days in hospital 23. Seven cases were combined with other fractures. Six (24 per cent) had no roentgen-ray examination, and three others were roentgen-ray negative. These nine cases spent an average of seven days in the hospital. These nine cases represent, I believe, clinically positive rib fractures; at least the usual treatment by strapping is comforting and justified.

Here as in the skull the serious question is not the fractured bone, but the damage to more important underlying structures.

Spine.—There were 17 spine fractures, (6 per cent), 5 cervical, 11 lower dorsal and lumbar, 10 m., and 7 f., average age 39 years, average hospital days—cervical spine 9, lower spine 33. Two died.

Two were fractured processes, one a fracture dislocation which recovered after operation; two (12 per cent) did not have roentgenograms made; the remaining 12 cases were compression fractures.

Pelvis.—There were 12 cases (4 per cent) of fractured pelvis; 8 m., 4 f., average age 31, average days 35. One case was in the hospital 18 days without roentgen-ray examination.

Humerus.—(13 per cent). There were 38 cases with fracture of the humerus; 19 m., 19 f., average age 31, average days in the hospital 12; seven were combined with other fractures. Eight cases (21 per cent) did not have roentgenograms and had an average of 5 hospital days.

Some of these cases not examined with the roentgen-ray were undoubtedly reduced and splinted in the physician's office; others may have been green stick or doubtful, one was amputated, and at least one had an open reduction. Several fractures were not checked after reduction.

Forearm and hand.—There were 47 cases (17 per cent) of fracture of the forearm or hand; 34 m., 13 f., average age 31; average hospital days 10. Fifteen or 30 per cent were not radiographed; and these spending 5 days, on the average in the hospital. However, exception is made in one case of compound fracture of the radius and ulna, having open reduction and three admissions, totaling 106 days; without a roentgen-ray examination in the hospital. This case prompts a remark on the unwisdom of supposing that an open reduction is the surest reduction.

The other fourteen cases without roentgenograms must be explained in part at least by the surgeon's reliance upon his clinical judgement of diagnosis and efficient reduction.

Hip and femur.—There were 39 cases (14 per cent) in this group; 22 m., 17 f. The average age was high, 41 years. The average days in the hospital, highest of any group, 36 days. Six were

in the hospital over 80 days; five were aged 85 to 91. There were six deaths, 15 per cent for the group.

Leg and foot.—The largest group of fractures are those occurring below the knee, including the patella. This group numbers 54 cases (19 per cent) m. 31, f. 23; average age 33; average days in the hospital 24 plus. There were 13 cases, 24 per cent without roentgenograms, having an average of fifteen hospital days.

Impression.—Fracture cases are a relatively small proportion, about 2 per cent of hospital cases, but take up about 4 per cent of hospital days. The small proportion of fracture cases, the relatively low mortality, 6 per cent plus, and the impression of relatively low severity of injury, must be influenced largely by the non-industrial character of this community.

My belief is that the roentgen-ray is used rather fully, especially in the diagnosis of the exact site and extent of the fracture, although it is well known that much of this examination is made in the doctor's office before admission to the hospital. The failure to note such examinations merely lowers the value of the hospital records, without detriment to the patient. There are, however, a few cases wherein the surgeon relies entirely upon his clinical acumen. That he should be possessed of such acumen is a fine thing, but to neglect the precaution of a radiogram is like operating a car without a spare tire.

If any criticism is really in order, it is in the fairly frequent neglect, which many display, to check up their reductions at intervals in order to make doubly sure that position and alignment are being maintained by whatever device is being used for immobilization. During the course of several days in the hospital splints, casts, and traction appliances do get out of adjustment. The result is sometimes most discouraging. While the cost of these check ups is a consideration, it is always well to remember that a corrected reduction may save the patient or hospital a greater sum by shortening his stay in the hospital.

Abstract—EXTRA-UTERINE PREGNANCY—Dr. T. B. Lewis.

I find that I have within the past month had two cases of extra-uterine pregnancy, each woman less than 30 years of age.

One case was diagnosed tubal pregnancy and the other double salpingitis (chronic). Both were proven to have double chronic salpingitis and both had right tubal pregnancy. These women had suffered rather severely for two to four weeks, requiring sedatives. Neither one had ruptured although in each case the tube was filled with old clotted blood. Oozing of blood was not controlled on account of

lack of time and as it seemed impossible to do so, red blood came out through the cigarette drain for 48 hours thus adding to the stormy recovery which both experienced.

Personal and family histories were not important in either case except the fact that both had borne children and each gave a history of pelvic attacks. This bears out the theory that we do not have false conception in women with perfectly normal pelvic organs.

Both cases naturally had a stormy few days but recovered and went home in good condition, a definite and consoling promise from me that neither one will ever have another similar attack.

NATCHEZ SANATORIUM

The regular monthly meeting of the staff of the Natchez Sanatorium was held on March 14 at 7:30 P. M. After a most enjoyable luncheon the meeting was called to order by Dr. Dixon, presiding, and the following named members were present for roll call: Drs. Dicks, Beekman, Nelkin, Sessions, Benoist, Logan, Dixon, Gaudet, Whittington, Aikman, Stowers.

Dr. Benoist, moved that dues of 50 cents per month be assessed to pay for meals, dues to be paid at intervals designated by the secretary. This motion was carried.

Dr. Sessions presented a case of automobile accident resulting in right sided sub-dural hemorrhage, cerebral concussions and fracture of the left humerus with fatal termination.

Dr. Dicks, presented a case of chronic myocarditis and nephritis.

Dr. Stowers, presented a case of empyema in a child of 8 years.

W. K. Stowers,
Secretary

Natchez,
April 9, 1934.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on April 9. After a consideration of the reports from the records department and analysis of the work of the hospital, Dr. F. Michael Smith, Director, Warren County Health Department, presented the report of vital statistics for the month of March.

Cancer Clinic—Case for discussion: Squamous Cell Carcinoma (Grade I) of Hand.—Dr. A. Street.

Special Case Reports—(1) Hypertrophy of Prostate With Multiple Bladder Calculi; Litholapaxy and Transurethral Resection.—Dr. A. Street.

(2) Strangulated Umbilical Hernia in a Child.—Dr. J. A. K. Birchett, Jr.

THREE MINUTE REPORTS OF THE LITERATURE OF THE MONTH

(1) Dr. G. M. Street: Induction of Labor by Rupture of the Membranes; and Raising the Metabolic Rate for Amenorrhea and Metorrhagia.

(2) Dr. A. Street: Osteitis Fibrosa Cystica Treated by Deep Roentgen Ray Therapy to Parathyroid Region; and the Division of the Isthmus Early in Thyroidectomy.

(3) Dr. L. S. Lippincott: Treatment of Underdevelopment of the Male Sex Organs with Anterior Pituitary-like Hormone.

(4) Dr. J. A. K. Birchett, Jr.; Direct Inguinal Hernia.

(5) Dr. H. H. Johnston; The Importance of Laryngoscopic Examination Before and During Thyroidectomy.

Demonstration of selected radiographic studies: (1) Carcinoma of Lungs, Metastatic (2 cases); (2) Spondylolisthesis; (3) Osteitis Fibrosa Cystica; (4) Cholelithiasis (3 cases); (5) Duodenal Ulcer.

The meeting closed with a lunch. The next meeting of the staff will be held Monday, May 14, at 6:30 P. M.

Leon S. Lippincott,
Secretary

Abstract—STRANGULATED UMBILICAL HERNIA IN A CHILD—Dr. J. A. K. Birchett, Jr.

Patient—Colored male, aged 3 years, admitted to Vicksburg Sanitarium, February 2, 1934.

Chief Complaint—Crying with pain, "lump size of orange in naval."

History of Present Complaint—Yesterday afternoon, February 1, at 7:30, a mass appeared on surface of patient's abdomen in region of umbilicus. Mass was size of small lemon. About ten minutes after mass appeared patient began to complain of pain in that region and became nauseated and vomited. There was no diarrhea, no passing of blood from bowel; vomiting continued throughout the night and up until present. There has been no bowel movement. There was no other complaint such as urinary, respiratory or circulatory disturbance.

Past History—Chicken pox, no other serious illness; has had protrusion of umbilicus ever since birth and has been wearing band to retain protrusion; has not been wearing band lately.

Family History—Father, aged 42 years, living and well; mother, aged 36 years, living and well; three brothers living and well; one sister living and well. No tuberculosis or cancer in family.

Physical Examination—Well developed and nourished male negro child, crying with pain. Temperature 99°, pulse 110. Cause of pain was found

to be a tumor the size of a lemon protruding from the umbilicus, which was smooth and covered with normal skin and firmly fixed at base by constricting ring of the umbilical opening of the abdominal wall. The mass was immovable and tender. Abdomen was distended and tympanitic and was painful to palpation. Remainder of general physical examination was negative.

Clinical Laboratory—Urine, normal. Blood not remarkable.

Procedure—A diagnosis of strangulated umbilical hernia with acute intestinal obstruction was made and immediate surgical treatment was advised. Under ether anesthesia a transverse elliptical incision was made about the protruding mass and the fascia of the ring was exposed. When the fascia of the ring was incised releasing the ob-

structing constriction the hernia was easily reduced. Before the ring was incised the sack was opened at the fundus and its contents inspected. The incarcerated and strangulated intestine was deep purple in an area of three to four inches but there was no evidence of gangrene and hot applications readily restored good color to this area and it was permitted to drop into abdomen. The opening was closed by longitudinal suture of the umbilical ring.

The convalescence was uneventful, bowels moving well on second post-operative day; no vomiting or nausea. Patient was discharged on sixth post-operative day. Has since been seen in outpatient department. The wound healed by primary union. There is no feeling of weakness of abdominal wall and general condition is excellent.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

MAY 2 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

MAY 2 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

MAY 4 Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

MAY 7 Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

MAY 9 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

MAY 9 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

MAY 9 Touro Infirmary Staff, 8 P. M.

MAY 11 Pathological Conference, Hotel Dieu, 11 A. M. to 12 NOON.

MAY 11 French Hospital Staff, 8 P. M.

MAY 14 ORLEANS PARISH MEDICAL SOCIETY 8 P. M.

MAY 15 Charity Hospital Medical Staff, 8 P. M.

MAY 16 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

MAY 16 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

MAY 16 Charity Hospital Surgical Staff, 8 P. M.

MAY 17 Eye, Ear, Nose and Throat Club, 8 P. M.

MAY 18 Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

MAY 18 I. C. R. R. Hospital Staff, 12 Noon.

MAY 18 Mercy Hospital Staff, 8 P. M.

MAY 21 Hotel Dieu Staff, 8 P. M.

MAY 22 Baptist Hospital Staff, 8 P. M.

MAY 23 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

MAY 23 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

MAY 28 ORLEANS PARISH MEDICAL SOCIETY Clinical Meeting at the United States Marine Hospital, 8 P. M.

MAY 30 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

MAY 30 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

During the month of April but one meeting of the Society was held—a joint Scientific and First Quarterly Executive Meeting. The meeting scheduled for April 9 was dispensed with because of confliction with the meeting of the Louisiana State Medical Society at Shreveport.

The following program was presented at the meeting held April 23:

SYMPOSIUM ON DIETS

Dr. I. I. Lemann—A Simple Method of Prescribing Diets for Diabetics.

Dr. Manuel Gardberg—High Carbohydrate Diets in Diabetes.

Dr. Joseph D'Antoni—Diet in Treatment of Migraine.

Dr. Sydney Jacobs—Diet in Avitaminosis.

Reports of the Officers and special and standing committees for the First Quarter, 1934, were read.

Dr. A. L. Metz was proposed for Honorary membership.

The following communication from Dr. W. H. Robin, Superintendent of Public Health of the City of New Orleans, was read, and the members were urged to cooperate with the City Board of Health:

Dear Doctor:

We are sending a copy of this confidential communication to every physician in New Orleans.

Reports reaching us through authentic lay sources, such as school principals, parents, and children applying for certificates to return to school, indicate that there has been a city-wide outbreak of supposed varicella. We also understand that some of the alleged varicella has been very severe in character.

Our object in sending this communication is to direct the attention of the medical profession to the law governing the reportable diseases. The reporting of cases of varicella is just as mandatory as the reporting of smallpox, scarlatina or other communicable diseases. Unfortunately, we have not been receiving the co-operation of the profession in this matter, as very few cases have been reported to this office.

It is against the policy of this office to file affidavits against physicians. We feel that, in view of this attitude on our part, the profession should be more responsive in co-operating with us, and we are making this direct appeal in order that we may effectively combat this outbreak without being forced to prosecute offending physicians.

Fraternally,

W. H. ROBIN, M. D.,

Superintendent of Public Health.

Two members of the Society were signally honored this month. Dr. Chaille Jamison was installed as President of the Louisiana State Medical Society for 1934, and Dr. Randolph Lyons was elected Vice-President of the American College of Physicians.

A large delegation from the Orleans Parish Medical Society attended the Louisiana State Medical Society at Shreveport and participated in the deliberations of the convention.

In addition thereto several important legislative matters were passed vitally affecting the members of the Orleans Parish Medical Society and the members are urged to carefully consider the proceedings of the convention when same are published in the New Orleans Medical and Surgical Journal.

We regret to report the loss by death of three of our members during April—Drs. Carroll W. Allen, Henry Bayon and G. Farrar Patton.

Drs. Manuel Gardberg and Neal Owens were elected to Active Membership.

The following members attended the recent meeting of the American College of Physicians Drs. J. M. Bamber, J. A. Bradley, B. G. Efron, B. R. Heninger, Randolph Lyons and J. H. Musser.

Drs. C. C. Bass, Charles F. Craig and Ernest C. Faust were made fellows in the American Academy of Tropical Medicine. This honor comes in recognition of interest in and contributions to the advancement of tropical medicine. The academy has a limited membership of 50 persons in the United States and Canada.

TREASURER'S REPORT

ACTUAL BOOK BALANCE	\$1,386.56
CREDITS:	1,862.18
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TOTAL CREDITS:	\$3,248.74
EXPENDITURES:	1,365.89
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ACTUAL BOOK BALANCE:	\$1,882.85

LIBRARIAN'S REPORT

During March 73 books have been added to the Library. Of these 38 were received by binding, 13 from the New Orleans Medical and Surgical Journal and 22 by gift. A notation of new books of recent date is given below.

Worthy of particular mention are four cases of gift material from the St. Louis Medical Society, during March. All of this was new in our collection, since a list of the material offered had been checked before shipment was made. We can not be too appreciative of such cooperation on the part of other Medical Society libraries.

The list of subjects on which material has been collected, again shows the diversity of interests which this library serves.

Neosalvarsan in urinary tract infections.

Biography of Dr. Dean Lewis.

Geographical tongue.

Bismuth in syphilis

Pneumoperitoneum

Papillary cystadenoma

Chemistry of neosalvarsan

Hoarseness

Ascites in ovarian tumors

Coleman-Schaffer diet in fever

Vasomotor balance

Ascheim-Zondek test

Butyric acid fermentation

Physical therapy

Seasickness and carsickness

Hypertension

Amebiasis

Absorption of cerebrospinal fluid

Personality adjustment

Pituitary diseases in the adult

Mercury poisoning

Diagnosis and treatment of sterility

Stein-Bock unit in treating rickets
 Chemical blood volume
 Atticotomy
 Celiac disease.

NEW BOOKS

Year book of General Medicine. 1933.
 Joslin, E. P.—Diabetic Manual. 1933.
 Brown, Porter—The Pregnant Woman. 1933.
 Bassett, Clara—Mental Hygiene in the Community. 1933.
 Noble, R. A.—Psychiatry in Medical Education. 1933.

Massie, Grant—Surgical Anatomy. 1933.
 Graef, Erich—Metabolic Diseases and Their Treatment. 1933.

Dandy, W. E.—Benign Tumors in Third Ventricle of the Brain. 1933.

Rose, M. S.—Foundations of Nutrition. 1933.

Moore, J. E.—Modern Treatment of Syphilis. 1933.

Nicholson, Daniel—Laboratory Medicine, 1934.

First International Congress on Mental Hygiene. Proceedings. v. 1-2. 1933.

Frederick L. Fenno, M. D.

Secretary

LOUISIANA STATE MEDICAL SOCIETY NEWS

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. For the week ending March 24, a very large number of measles cases was reported, there being 408 scattered throughout the State. Other diseases occurring in double figures include 38 cases of syphilis, 34 of gonorrhoea, 30 each of pneumonia and scarlet fever, 27 each of diphtheria and chickenpox, 26 of pulmonary tuberculosis, 18 of influenza, 14 each of typhoid fever and cancer, and 12 of malaria. Five of the 14 cases of typhoid fever were reported from Terrebonne Parish, and 24 cases of scarlet fever developed in Orleans Parish. In the following week, ending March 31, there were 223 cases of measles, 30 of syphilis, 29 of chickenpox, 26 of tuberculosis, 24 of gonorrhoea, 16 of pneumonia, 18 of diphtheria, and 15 of scarlet fever. One case of smallpox was reported from DeSoto Parish, and 2 cases of undulant fever from Orleans Parish. For the fourteenth week ending April 7, measles had jumped to 401 cases. There were also reported in double figures the following diseases: Thirty cases of gonorrhoea, 27 of syphilis, 25 of scarlet fever, 23 of pneumonia, 22 of influenza, 21 of tuberculosis, 19 of diphtheria and 11 of typhoid fever. One case of smallpox was reported from Pointe Coupee Parish, 4 cases of typhoid fever from Terrebonne Parish, and 20 cases of scarlet fever from Orleans Parish. The epidemic of measles was still raging as shown by the figures for the week ending April 14, when 365 cases were listed. There also occurred 29 cases of pneumonia, 24 of tuberculosis, 22 of gonorrhoea, 21 of diphtheria, 20 of malaria, 18 of syphilis, 17 of scarlet fever, 16 of cancer, and 13 each of typhoid fever and chickenpox. One case of tularemia was reported from Ascension Parish.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, has issued the following weekly reports concerning the health of New Orleans. For the week ending March 17, there were reported in New Orleans 156 deaths, divided 86 white and 70 colored, giving a death rate for the three groups of 16.9, 13.1, and 26.2. The negro infant mortality rate was 179, which contrasted with the white rate of 94. For the week ending March 24, the total deaths had fallen to 142, of which 82 were in the white and 60 in the colored race. The death rate for the three groups was: Total rate 15.4, for the white 12.5, and for the negro 22.4. The infant mortality rate this week had dropped to 64. There was a slight increase in the number of deaths for the week ending March 31. The death rate was 16.4 as a result of 151 deaths, divided 91 white, with a rate of 13.9, and 60 colored, with a rate of 22.40. The increase in the total number of deaths was undoubtedly due to the high infant mortality rate, which was 212 in the colored population as contrasted with 94 in the white. There was a marked drop in the number of deaths in the first week in April, there being only 119 reported, divided 66 white and 53 colored, with a rate for the total population of 12.9, for the white of 10.1, and for the colored of 19.8. The infant mortality rate had fallen to the remarkably low figure of 38. For the first fourteen weeks of the year the death rate is somewhat higher than it was in 1933. It is smaller among the white population of the City, but the negro rate is 23.5 as contrasted with 20.9 in 1933.

EAST & WEST FELICIANA BI-PARISH MEDICAL SOCIETY

The Bi-Parish, East & West Feliciana, Medical Society met in the East Louisiana State Hospital, as the guests of Drs. G. J. Smith and staff.

After a bounteous repast in the dining room of

the Hospital, the society repaired to the Staff room for the scientific program. The essayists for the evening were Drs. J. W. Lea and C. S. Miller of Jackson, Louisiana. Subjects "Hypertension" and Psychiatric Problems and Psychotherapy in General Medicine. Both papers were freely and favorably discussed by physicians present. Drs. Lea and Miller were tendered a vote of thanks for the presentation of their most excellent and interesting papers. Members and guests present were: Drs. Shaw, Miller, Shaw, Lea, Blakeney, Odom, Stafford, Roberts, Smith, Robards, Toler, Mrs. Smith, Mrs. Robards, Mrs. Burnham, Mrs. Ocloure and Miss Cambell.

The society adjourned to meet in the East La. State Hospital as the guests of Drs. Glenn J. Smith and staff.

J. A. Thames, Pres., (pro tem)

E. M. Toler, Secty.

Dr. H. W. E. Walther, head of the department of urology, Southern Baptist Hospital, read a paper entitled "Azo Dyes as Internal Urinary Antiseptics" before the Western Branch Society of the American Urological Association in Los Angeles on April 27. Before the California State Medical Association he is to discuss "Transurethral Prostatic Resection" on May 2, this meeting being held at Riverside.

VENEREAL DISEASE INFORMATION

For a number of years the U. S. Public Health Service has been publishing, for the information of physicians, health officers, and others, a monthly abstract journal known as "Venereal Disease Information." This publication contains usually one original article on a subject of general interest in connection with the venereal diseases and numerous abstracts from the current literature pertaining to these diseases. In the preparation of this abstract journal more than 350 of the leading medical journals of the world are reviewed and abstracts made of the articles on this subject.

The cost of "Venereal Disease Information" is

only fifty cents per annum, payable in advance to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is desired to remind the reader that this nominal charge represents only a very small portion of the total expense of preparation, the journal being a contribution of the Public Health Service in its program with state and local health departments directed against the venereal diseases.

COMING MEETINGS

The American Golfing Association will hold its twentieth annual tournament at the Mayfield Country Club in Cleveland on Monday, June 11, 1934.

The Tenth Scientific Session of the American Heart Association will be held on Tuesday, June 12, 1934, from 9:30 to 5:30 P. M. at the Cleveland Hotel, Cleveland, Ohio. The program will be devoted to arteriosclerotic heart disease.

The American Association for the Study of Goiter will have their annual meeting in Cleveland, Ohio, June 7, 8, and 9. A splendid program has been provided, the essayists including a list of men who have made outstanding contributions to the study of goiter.

NEWS ITEMS

The following members of the faculty of the Graduate School of Medicine of the Tulane University of Louisiana attended the meeting of the Louisiana State Medical Society held at Shreveport, La., from April 9 through April 12, 1934:

Prof. H. W. Kostmayer, Dean, Prof. Allan Eustis, Prof. P. T. Talbot and Dr. Frederick L. Fenno.

Prof. Randolph Lyons of the faculty of the Graduate School of Medicine of the Tulane University of Louisiana, attended the meeting of the American College of Physicians held at Chicago, Ill., April 16 through April 20, 1934. At this meeting Prof. Lyons was elected vice-president of the American College of Physicians for 1935.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

FROM OUR PRESIDENT TO THE MEMBERS OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION

In this my last communication as your president, I wish to express to all the members of the Mississippi State Medical Association my sincere appreciation of the splendid cooperation you have given me. I shall always remember with a great deal of pleasure my tenure of office as your president. It has been my endeavor to work for what

I believed to be the best interest of organized medicine in Mississippi.

Believing that the medical profession must present a united front if we wish to achieve success for any plans that we may foster, I have striven to increase our membership. We have, I am sorry to say, many eligible physicians in Mississippi who are not members of organized medicine. These physicians should be brought into our local medical societies.

Why are these physicians in the ranks of non-members? I cannot believe that the financial depression is entirely to blame. If we look through the statistics of membership during the days of prosperity we find a large number of eligible physicians were outside the ranks of organized medicine. There must be another reason for this non-membership. We must look further for our answer to the question.

Our plan of organization, I believe, may have an effect on our membership. First, the average physician will not travel a long way to attend a meeting; second, the meetings of medical societies should be monthly to maintain the interest of membership; third, there must be some material benefit accruing for the individual member as a result of his membership in the society; fourth, the programs must be of interest to the general practitioner. We must remember that these general practitioners form the vast majority of our members.

I believe county medical societies will tend to encourage a spirit of comradeship among our physicians and rid us of that intense individualism that has hindered rather than aided the members of the medical profession in the past. There are none of us perfect. The only perfect Man was crucified many centuries ago. A perfect knowledge of the science of medicine does not repose in any single physician. It is only by the interchange of ideas and the cultivation of a spirit of comradeship among our physicians that we may hope to achieve professional and material success.

I believe the physicians in each county should organize a medical society. These county societies should be the unit of organization of our State Medical Association. They should manage their own local affairs and elect delegates to the House of Delegates of the State Medical Association. They should manage their own local affairs and elect delegates to the House of Delegates of the State Medical Association. I am a firm believer in home rule and democratic organization. Our large component societies should be councilor district societies and should be devoted to purely scientific purposes.

In order to qualify for FERA medical practice, county medical societies were essential. The council at a meeting held in November, 1933, decided to begin the organization of county medical societies. I trust that this rule of the Council has occasioned the organization of a society in each county. These new societies should send in their applications for charters to the Council in time for presentation to the House of Delegates for their meeting on May 8, 1934.

Those county societies that have not already

made application to the Council for charter should do so at once.

In conclusion I wish for each member of organized medicine in Mississippi many years of health and prosperity. I wish to bespeak for Dr. E. C. Parker, our in-coming President, the loyal and active support of each member of the Mississippi State Medical Association. Let us all give him a helping hand in order that he may accomplish the greatest possible advancement of organized medicine in Mississippi during the incumbency of his presidency.

PROGRAM

MISSISSIPPI STATE MEDICAL ASSOCIATION
NATCHEZ, MAY 8, 9 and 10, 1934.

MEETING OF THE HOUSE OF DELEGATES
Tuesday, May 8, 8:00 A. M., Roof Garden, Eola Hotel.

GENERAL MEETING

May 8, 1934, Roof Garden, Eola Hotel.

Session 1:30 P. M. to 6:00 P. M.

Call to Order—President J. W. D. Dicks, Natchez.

Invocation—Rev. Joseph Kuehnle, Natchez.

SECTION ON SURGERY

L. B. Otken, Chairman, Greenwood.

1. The Role of Glucose in Surgery—P. B. Brumbly, Lexington, discussion to be opened by Paul Gamble and J. P. Wall.

2. The Present Status of Surgery in Gall-Bladder Disease—Leslie V. Rush, Meridian.

Discussion to be opened by A. G. Payne and A. E. Gordin.

3. Some Problems Frequently Encountered in the Treatment of Fractures.—H. Earl Conwell, Fairfield, Ala.

4. Stricture of Ureter.—Robert H. Brumfield, McComb.

Discussion to be opened by Frank Van Alstine and J. A. K. Birchett, Jr.

5. Carcinoma of the Breast and What is Before Us.—Otis H. Beck, Greenville.

Discussion to be opened by W. W. Crawford and E. C. Parker.

6. Appendicitis During Pregnancy.—J. P. Culpepper, Jr., Hattiesburg.

Discussion to be opened by J. W. Barksdale and J. C. Culley.

7. Retrocaecal Appendices.—Thomas Wolford, Columbus.

Discussion to be opened by A. Street and T. G. Hughes.

8. Treatment of Oesophageal Strictures with Air and Water Pressure.—J. C. Rice, Natchez.

Discussion to be opened by Robin Harris and D. C. Montgomery.

EVENING SESSION, TUESDAY, MAY 8, 1934,
EIGHT O'CLOCK

1. Invocation.—Rev. George Booth, Natchez.
2. Addresses of Welcome:
On behalf of the City of Natchez.—Mayor S. B. Laub, Natchez.
On behalf of the Homochitto Valley Medical Society.—J. C. Rice, Natchez.
3. Response to Addresses of Welcome.
4. In Memoriam.—By the Secretary.
5. President's Address.—J. W. D. Dicks, Natchez.
6. Annual Oration.—J. M. T. Finney, Baltimore.

SECTION ON EYE, EAR, NOSE AND THROAT
H. L. Arnold, Chairman, Meridian.
Wednesday, May 9, 1934.

- Session 9:00 A. M. to 12:30 P. M.
Gold Room, Natchez Hotel.
Chairman's Address.—H. L. Arnold, Meridian.
1. Chronic Sinusitis.—W. L. Hughes, Jackson.
Discussion to be opened by C. A. McWilliams and R. T. Smith.
 2. Glaucoma.—K. W. Constantine, Birmingham, Ala.
Discussion to be opened by B. S. Guyton and J. G. Pegues.
 3. Dietary and Glandular Deficiencies in Eye, Ear, Nose and Throat Diseases.—D. W. Hamrick, Corinth.
Discussion to be opened by J. P. Wiggins and Edley H. Jones.
 4. Follicular Conjunctivitis.—W. F. Cotten, Meridian.
Discussion to be opened by R. H. Pegram and E. Q. Withers.
 5. Acute Infections of the Antrum.—G. W. Bounds, Meridian.
Discussion to be opened by L. S. Gaudet and Geo. E. Adkins.
 6. Summary of Refractive Conditions and Causes of Blindness in Mississippi.—A. G. Wilde, Jackson.
Discussion to be opened by C. C. Buchanan and L. W. Dotson.
 7. The Acute Mastoid.—R. A. Clanton, Grenada.
Discussion to be opened by E. Leroy Wilkins and J. C. Adams.
- Luncheon.—Round Table Discussion of Eye Conditions.

SECTION ON HYGIENE AND PUBLIC HEALTH
R. D. Dedwylder, Chairman, Cleveland.
Wednesday, May 9, 1934.

- Session 9:00 A. M. to 12:30 P. M.
Roof Garden, Eola Hotel.
1. Some Observations on the Newer Methods of Malaria Control.—A. M. Wynnee, Merigold.
Discussion to be opened by Geo. E. Riley and Geo. W. Owen
 2. An Analysis of the Hookworm Problems in

- Mississippi.—W. S. Leathers, Nashville, Tenn.
Discussion to be opened by H. F. Garrison and D. A. Ratliff.
3. A Practical Tuberculosis Case—Finding Program.—B. D. Blackwelder, Hattiesburg.
Discussion to be opened by V. B. Harrison and T. Paul Haney, Jr.
 4. The Importance of an Epidemiological Investigation.—A. L. Gray, Jackson.
Discussion to be opened by H. L. McCalip and Nathan F. Kendall.

SECTION ON MEDICINE

- W. H. Frizell, Chairman, Brookhaven.
Wednesday, May 9, 1934.
Session 2:00 P. M. to 6:00 P. M.
Roof Garden, Eola Hotel.
1. The Importance of History Taking and Complete Examination.—A. B. Harvey, Tylertown.
Discussion to be opened by Leslie V. Rush and O. N. Arrington.
 2. Congenital Syphilis.—Guy C. Jarratt, Vicksburg.
Discussion to be opened by R. E. Wilson and Joe E. Green.
 3. The Handicapped Child.—B. S. Waller, Silver Creek.
Discussion to be opened by D. W. Jones and Felix J. Underwood.
 4. Allergic Phenomena.—Geo. W. F. Rembert, Jackson.
Discussion to be opened by W. A. Dearman and R. B. McLean.
 5. Lambliasis (Giardiasis).—A. H. Little, Oxford.
Discussion to be opened by J. M. Acker, Jr., and G. Y. Gillespie, Jr. (To be continued Thursday morning.)
- EVENING SESSION, WEDNESDAY, MAY 9, 1934,
8 P. M.
Medical Care in the Family Budget.—C. Rufus Rorem, Chicago.

SECTION ON MEDICINE
(Continued from Wednesday.)

- Session 9:00 A. M. until completed.
6. The General Practitioner and Tuberculosis.—Henry Boswell, Sanatorium.
Discussion to be opened by W. A. Toomer and S. E. Eason.
 7. The Principles Underlying the Rational Treatment of Malaria.—William Krauss, Meridian.
Discussion to be opened by L. B. Austin and W. B. Dickins.
- The Physician of Yesterday and Today.—Jas. S. McLester, Birmingham, Ala.

MEMBERSHIP STILL GOING UP!

The Mississippi State Medical Association showed a gain of 63 members in the month from March 5

to April 5. The outstanding increase was made by the Harrison-Stone-Hancock Medical Society, with a gain in membership from 29 to 44 or 65.9 per cent. This brought the Ninth Councilor District from fifth to second place in comparative membership standing. The percentage of Mississippi physicians now members of the Association is 63.9.

STANDING BY DISTRICTS

District and Councilor	No. of Phy.	No. of Mem.	Per Cent Mem.
1. Third—M. W. Robertson.....	215	180	83.7
2. Ninth—D. J. Williams.....	69	54	78.3
3. Second—L. L. Minor.....	109	77	70.6
4. Eighth—W. H. Frizell.....	121	84	69.4
5. First—J. W. Lucas.....	240	164	68.3
6. Fifth—W. H. Watson.....	237	133	56.1
7. Fourth—T. J. Brown.....	86	44	51.2
8. Sixth—H. Lowry Rush.....	130	62	47.7
9. Seventh—Joe E. Green.....	160	75	46.9
Totals	1,367	873	63.9

STANDING OF SOCIETIES

Society	No. of Phy.	No. of Mem.	Per Cent Mem.
1. Pike County.....	26	26	100.0
2. Claiborne County	15	6	85.7
3. Northeast Mississippi.....	215	180	83.7
4. Jackson County.....	12	10	83.3
5. Tat County.....	12	10	83.3
6. Harrison-Stone-Hancock	57	44	77.2
7. Homochitto Valley	50	35	70.0
8. North Mississippi	85	59	69.4
9. Clarksdale & 6 Counties.....	79	54	68.4
10. Delta	161	110	68.3
11. Issaquena-Sharkey-Warren	53	36	67.9

12. DeSoto County	12	8	66.7
13. Central	177	91	51.4
14. Winona District	86	44	51.2
15. Tri-County	45	23	51.1
16. East Mississippi	119	59	49.6
17. South Mississippi	153	73	47.7
18. Clark-Wayne	18	5	22.2
Totals	1,367	873	63.9

COUNTIES SHOWING GAIN IN MEMBERS
MARCH 5 TO APRIL 5, 1934

County	No. of Phy.	No. of Mem.	Gain Mem.
Amite	7	2	1
Bolivar	40	27	1
Choctaw	7	5	4
Hancock	6	3	2
Harrison	46	39	13
Hinds	105	61	12
Holmes	22	13	1
Humphreys	13	6	1
Jackson	12	10	1
Jones	35	14	3
Lafayette	17	12	2
Lamar	7	4	1
Leflore	40	26	1
Montgomery	11	8	1
Pearl River	12	6	1
Perry	5	4	1
Simpson	16	8	5
Smith	11	3	1
Sunflower	31	20	1
Warren	37	26	1
Washington	37	27	2
Wayne	7	2	1
Webster	12	10	1
Yazoo	21	11	5
Total Gain			63

TREASURER'S REPORT

December 31, 1933.

ASSOCIATION FUND

RECEIPTS

BALANCE—Association Fund as Shown by Last Report	2,012.60
2/28/33 Dr. T. M. Dye, Secretary.....	1,000.00
8/30/33 Dr. T. M. Dye, Secretary.....	350.00
12/30/33 Dr. T. M. Dye, Secretary.....	403.25
Total Receipts	1,753.25
Total Available Funds	3,765.85

DISBURSEMENTS

12/20/33 N. O. Medical & Surgical Journal Printing Transactions.....	193.13
3/15/33 Dr. L. S. Lippincott, Editor Salary	75.00
3/17/33 N. O. Medical & Surgical Journal Cuts and Printing Transactions	202.44
3/17/33 Miss. Engraving Co.—Historian's Account.....	4.60
5/12/33 Dr. E. L. Wilkins—Treasurer's Expense	26.00
Dr. J. W. D. Dicks—Hospital Expense	6.00
Dr. W. H. Anderson—Hospital Expense	30.00

	Dr. E. R. Nobles—Hospital Expense.....	52.50
	Dr. R. W. Smith—Hospital Expense.....	7.50
	Dr. C. M. Speck—Hospital Expense.....	15.00
	Dr. W. R. Frazill, Secy, Councilor's Expense	19.50
	Dr. J. B. Culpepper—Hospital Expense.....	15.00
	Dr. V. B. Philpot—Hospital Expense.....	70.00
	Dr. E. F. Howard—Historian's Expense.....	11.72
	Dr. R. R. Caldwell—Hospital Expense.....	30.00
	Dr. J. M. Acker, Jr., President's Expense	100.00
	Dr. M. L. Flynt—Hospital Expense.....	15.00
	Dr. L. L. Minor—Councilor's Expense.....	12.12
	Dr. W. H. Watson—Councilor's Expense	7.10
5/29/33	J. H. Johnson & Co.—Bond of Treasurer's	75.38
6/13/33	N. O. Medical & Surgical Journal—Publishing Journal	176.40
6/15/33	Miss Leila Webb—Reporting.....	8.00
	Mrs. Geo. Anderson—Reporting.....	150.00
6/19/33	Miss Mai Whitehead—Reporting	18.13
6/22/33	Clarksdale Daily News Printing Transactions	100.00
6/19/33	Dr. L. S. Lippincott—Editor's Salary.....	75.00
7/ 1/33	Vollinger Floral Co.—Flowers for Howard Funeral	10.20
7/10/33	Clarksdale Daily News Printing Transactions	185.00
7/19/33	Dr. Felix J. Underwood—Commission P. P. & L.	248.00
9/ 4/33	Dr. L. S. Lippincott—Editor's Salary.....	75.00
9/12/33	N. O. Medical and Surgical Journal Publishing Journal.....	175.00
12/20/33	N. O. Medical & Surgical Journal, Publishing Journal, Tax and Check.....	.64
	Total Disbursements	2,373.30
	BALANCE ON HAND—Association Fund	1,392.55

TREASURER'S REPORT

December 31, 1933

Medico Legal Fund

BALANCE ON HAND—As Shown by Last Report 11,198.94

RECEIPTS

1/13/33	Interest on Certificate of Deposit. No. 667.....	45.10
1/13/33	Interest on City of Meridian Bond.....	12.50
1/ 3/33	Interest on Wayne County Bond.....	25.00
1/18/33	Discount on 3% Gov. Bonds.....	9.08
2/ 9/33	Interest on Certificate of Deposit No. 388 Bank of Winona	2.22
3/28/33	Interest U. S. Government Bonds.....	30.00
4/ 4/33	Interest on Wayne County Bonds.....	50.00
4/27/33	Coupon 29, 4th Liberty Loan	21.25
6/21/33	Coupon 10, Bond 24, Lauderdale County.....	12.50
	Coupon 10, Bond 25, Lauderdale County.....	12.50
	Interest on U. S. Gov. Bonds.....	130.00
7/14/33	Coupon 10, Bond 13, City of Meridian.....	25.00
9/26/33	Interest on U. S. Treasury Bond.....	30.00
10/17/33	Coupon 30, 4th. Liberty Loan.....	21.25
12/30/33	Dr. T. M. Dye, Secretary.....	804.00
	Total Receipts	1,242.90
	Total Available Funds.....	12,441.84

DISBURSEMENTS

1/12/33	Wayne County Interest—Default.....	25.00
4/30/33	Dr. J. Rice Williams—Lee Case.....	125.00
5/16/33	Dr. C. T. Burt—Coke Case.....	250.00
7/25/33	Bank of Clarksdale—Rent on Safety Dep. Box	5.00
6/17/33	Dr. V. B. Martin—Whitfield Case.....	125.00
7/ 6/33	Lauderdale County Interest—Default.....	25.00
	Tax on Checks.....	.06
	Total Disbursements	555.06

BALANCE ON HAND—MEDICO-LEGAL FUND	11,886.78
BALANCE ON HAND—ASSOCIATION FUND.....	1,392.55
Total Fund Balance	13,279.33

THESE FUNDS ACCOUNTED FOR AS FOLLOWS

Bank of Clarksdale	22.58
Cash on Hand.....	1,207.25

SECURITIES

Wayne County Bond No. 17.....	1,000.00
Louderdale County Bonds Nos. 24 and 25.....	1,000.00
City of Meridian Bond No. 13.....	500.00
Fourth Liberty Loan Bond No. K00705340.....	1,000.00
Certificate of Deposit No. 389.....	49.50
Treasury Certificate 4% No. J00169839.....	1,000.00
No. K00169840.....	1,000.00
No. A00169841.....	1,000.00
No. E00053085.....	500.00
No. A00183841.....	1,000.00
No. B00183842.....	1,000.00
No. C00183842.....	1,000.00
10123C.....	1,000.00
10124D.....	1,000.00
Total Securities	12,049.50

Total Fund Balances	13,279.33
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E. Leroy Wilkins,
Treasurer.

Clarksdale,
March 29, 1934.

SECOND COUNCILOR DISTRICT

Owing to incomplete returns from secretaries, I am unable to make a full report. Our District now stands second in the state.

Suffice it is to say that the report will be better and more optimistic than for the past three years.

We are looking forward to a great time in historic old Natchez, May 8, 9, 10, 1934.

L. L. Minor,
Councilor.

Memphis, Route, 4,
April 9, 1934.

FIFTH COUNCILOR DISTRICT

Pelahatchie, Mississippi,
April 9, 1934.

House of Delegates,
State Medical Association:

I herewith hand you my report for the Fifth

Councilor's District. This district is divided into three component societies, namely:

ISSAQUENA-SHARKEY-WARREN Counties Medical Society, composed of the three hyphenated:

CENTRAL MEDICAL SOCIETY—Composed of Hinds, Madison, Scott, Simpson, Rankin, and Yazoo Counties;

CLAIBORNE COUNTY MEDICAL SOCIETY constitutes a one-county medical society.

All counties in this district show a slight increase in membership over this date of last year, but still are far short of all the available material in the district.

As your Councilor, I attended the meeting of the Council held in Jackson on November 9, 1933 to work out a fee schedule for the FERA and submit to the State Board of Public Welfare, with the result of which I am sure that you are all familiar.

I visited all counties in the district perfecting organizations to work with the welfare workers in their respective counties, with the exception of Claiborne County which had a local county organization and I did not deem it necessary to visit the county for that purpose.

Each medical society in this district has been holding meetings with splendid scientific programs.

I have gone before the societies urging them to put on membership campaigns and the few most faithful members have entered heartily into this program, but the results have been rather discouraging both to them and to me.

There have been seven deaths of physicians in my district during 1933.

During last year there were two lawsuits filed against physicians in this district.

On the whole, things are beginning to look better to the doctors, and we expect before the end of the year to increase our membership in the societies.

Respectfully submitted,
W. H. Watson, M. D.,
Councilor, Fifth District.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The fifth annual session of the Mississippi State Hospital Association and the first joint meeting of the Hospital Associations of Arkansas Louisiana, Mississippi and Tennessee will be held at Natchez, Monday, May 7.

TENTATIVE PROGRAM

MONDAY MORNINNG

8:00 A. M. Registration—Eola Hotel.

9:00 A. M. Meeting called to order by the president, Dr. R. J. Field, Centreville—Roof Garden, Eola Hotel.

Invocation

Roll Call

Reading of minutes of last meeting

President address

Report of Board of Directors

Report of Secretary

Report of Treasurer

Announcements

Introduction of distinguished guests

Unfinished business

Reports of Committees (each to be followed by round-table discussion):

1. COMMUNITY HOSPITALS.—Dr. C. M. Speck, New Albany, Chairman.

Discussion opened by Dr. E. R. Nobles, Rose-dale and Dr. J. R. Hill, Corinth

2. LEGISLATION.—Dr. H. A. Gamble, Greenville, Chairman.

Discussion opened by Dr. Felix J. Underwood, Jackson and Dr. L. W. Brock, McComb.

3. CHARITY HOSPITALS.—Dr. B. E. Martin, Vicksburg, Chairman.

Discussion opened by Dr. G. Lamar Arrington, Meridian and Dr. C. A. Everett, Natchez.

4. INSANE HOSPITALS.—Dr. H. Lowry Rush, Meridian, Chairman.

Discussion opened by Dr. M. J. L. Hoyer, Meridian and Dr. Charles D. Mitchell, Jackson.

5. MEMBERSHIP.—Dr. A. M. McCarthy, Electric Mills, Chairman.

Discussion opened by Dr. Frank P. Ivy, West

6. PUBLIC RELATIONS.—Mr. W. Hamilton Crawford, Hattiesburg, Chairman.

Point and Dr. N. C. Womack, Jackson.

Discussion opened by Dr. V. B. Philpot, Houston and Miss Mary H. Trigg, R. N., Greenwood.

7. MINIMUM STANDARDS.—Dr. W. Jeff Anderson Meridian, Chairman.

Discussion opened by Dr. J. Gould Gardner, Columbia and Dr. George E. Brown, Water Valley.

8. NURSES AND NURSING.—Dr. A. Street, Vicksburg, Chairman.

Discussion opened by Mr. G. D. Stanley, Greenville and Miss Kate Lou Lord, Hattiesburg.

9. CONSTITUTION AND BY-LAWS.—Dr. J. S. Ullman, Natchez Chairman.

Discussion opened by Miss Sue Collins, R. N., Biloxi and Dr. M. Q. Ewing, Amory.

During the forenoon, the Hospital Associations hold individual association meetings.

of Arkansas, Louisiana and Tennessee will also
MONDAY AFTERNOON—ROOF GARDEN—EOLA HOTEL—2 P. M.

Dr. R. J. Field, President, Mississippi State Hospital Association, Presiding.

1. Arkansas Hospital Association, Miss Ella M. Shaw, President.

2. GROUP HOSPITALIZATION.—Round-Table.—Dr. B. C. MacLean, President Louisiana Hospital Association, Leader.

3. Mississippi State Hospital Association, Dr. R. J. Field, President.

4. HOSPITAL PUBLICITY.—Mr. B. P. Moffatt,

5. Business.

Secretary, Tennessee Hospital Association.

6. Adjournment.

MONDAY EVENING—ROOF GARDEN, EOLA HOTEL 6:45 P. M.

BANQUET—Dr. Louis J. Bristow, Vice-President, SPEAKERS

Louisiana Hospital Association, TOASTMASTER.

Dr. Bert W. Caldwell, Executive Secretary, American Hospital Association, Chicago.

Dr. C. Rufus Rorem Associate Director of Medical Services of the Julius Rosenwald Fund and Consultant on Group Hospitalization for the American Hospital Association, Chicago.

Mr. Paul H. Fesler, Superintendent, Wesley

Memorial Hospital and Past President of the American Hospital Association, Chicago.

All members of the Mississippi State Medical Association are privileged and invited to attend all sessions, including the banquet.

MISSISSIPPI STATE PEDIATRIC SOCIETY

The Mississippi State Pediatric Society will hold its annual banquet and meeting May 7 at 7 P. M. at the Eola Hotel, Natchez.

Dr. E. C. Mitchell of Memphis, Tenn., a guest speaker, will speak to us on "A Synopsis on What Is Being Accomplished In The Academy Of Pediatrics For Region Two."

Dr. R. A. Strong of New Orleans, La., will open a round-table discussion on "Empyema In Children."

All members in good standing of the Mississippi State Medical Association are eligible for associate membership in the Mississippi State Pediatric Society and are cordially welcome to attend this meeting. Kindly inform Dr. Guy C. Jarratt, Vicksburg, for reservations.

This is the first meeting of the Mississippi State Pediatric Society and it is the hope of the members that all or as many of the members of the State Association will apply for membership.

MEETING OF COUNTY EDITORS

There will be a meeting of the County Editors of the Mississippi Section of the New Orleans Medical and Surgical Journal during the session of the Mississippi State Medical Association at Natchez. The time has tentatively been set for Wednesday night, May 9, at 6 P. M. It has been suggested that there be a supper followed by a general discussion of Mississippi's part in the Journal. There are 82 County Editors and much good can come from an exchange of ideas. Every County Editor is urged to be present and take part. Others interested in the Journal will be welcome.

COUNTY EDITOR APPOINTMENTS

The following have been appointed as editors for their respective counties:

Harrison County—Dr. E. A. Trudeau, Biloxi.
Hancock County—Dr. M. J. Wolfe, Bay St Louis.
Stone County—Dr. E. W. W. Green, Wiggins.
Forrest County—Dr. R. H. Clark, Hattiesburg.

EXAMINATION NOTICE

THE MISSISSIPPI STATE BOARD OF HEALTH
WILL HOLD EXAMINATIONS

FOR

LICENSE TO PRACTICE MEDICINE

AT

THE NEW CAPITAL
JACKSON, MISSISSIPPI
ON

JUNE 26 and JUNE 27, 1934

Examination on first two years—June 26

Send or bring certificate for verification.

Examination on last two years—June 27.

Send or bring Diploma for verification.

Write for Application Blanks

To

R. N. Whitfield, M. D., Assistant Secretary.
Jackson,

April 12, 1934.

MISSISSIPPI STATE BOARD OF HEALTH

A total of 81 nurses have been placed in 73 Mississippi counties for instruction of hygiene classes. Of the nurses engaged five are supervisors. The State Board of Health is cooperating with the Civil Works Administration in the project.

These classes are being conducted in schools and colleges giving 19 hour courses in home, personal, and community hygiene.

Dr. W. F. Walker and Dr. Clarence F. Scamman of the Commonwealth Fund are in Mississippi now engaged in making appraisals of the public health work done by the full-time health departments in Pike and Lauderdale counties. The appraisal form used is the form adopted by the American Public Health Association. Work preliminary to the appraisals was done in these counties by Miss Caroline Randolph and Mr. Roger A. Crane, also representatives of the Fund.

While in Memphis attending the Mid-South Post-Graduate Assembly, on February 14, Dr. R. N. Whitfield of the State Board of Health addressed the Kiwanis Club at the Peabody Hotel.

Mr. J. A. LePrince, representative of the U. S. Public Health Service, stationed at Memphis, Tennessee, made a trip to Mississippi early in February. Dr. George Riley, malariologist, accompanied Mr. LePrince to Vicksburg for inspection of mosquito-breeding places and a conference relative to CWA work on these locations.

Mr. LePrince and Engineer H. A. Johnson were in Mississippi again early in March to confer relative to a blood survey as a part of the Federal malaria project.

On January 18 and 19, Dr. Juanita M. Jennings of the U. S. Children's Bureau, Washington, was in Jackson to confer with health officials relative to health activities among children. While here Dr. Jennings visited Lauderdale County to view the CWA child health activities.

Felix J. Underwood,

Executive Officer.

Jackson,

March 19, 1934.

MISSISSIPPI STATE BOARD OF HEALTH

Since January 1, 1934, 127 heads of animals supposed to have rabies have been examined by the State Hygienic Laboratory of the State Board of Health. Rabies was found to be present in 70 of

these heads. Since January 1, the Laboratory has sent out 570 rabies treatments to persons in Mississippi who have been bitten by rabid animals.

On April 2 and 3, the State Board of Nurses Examiners conducted examination of nurses at the Robert E. Lee Hotel, Jackson.

Dr. H. C. Ricks, of the Mississippi State Board of Health attended the meeting of the Northeast Mississippi Medical Society at Pontotoc on March 20. Dr. Ricks drove up with Dr. W. A. Dearman, member of the State Board of Health, Gulfport.

During March, the following were visitors to the Mississippi State Board of Health: Dr. J. N. Baker, State Health Officer, Montgomery, Alabama; Dr. John A. Ferrell, International Health Division, Rockefeller Foundation, New York, New York; Dr. C. ST. C. Guild, National Tuberculosis Association, New York, New York.

Miss Gladys Eyrich, supervisor of mouth hygiene work for the State Board of Health, addressed the Woman's Club at Magee on April 5.

The Faculty Committee on Commonwealth Fund Scholarship Awards after a careful study of the qualifications of 53 applicants from Mississippi selected the following four students for scholarships: Henry Clay Dorris, Jackson; Warren Candler Jones, Magnolia; Marshall Louis Michel, Jr., Biloxi; John Andrews Murfee, Becker.

Dr. Bass in announcing the awards said: "Our committee has taken its responsibility seriously and has put forth every effort to make the best selections. We have had personal interviews with one of them will prove entirely satisfactory and each of the students and feel confident that every that they will fit well into the program of promotion of better rural health service in Mississippi, to which the Commonwealth Fund is contributing to generously.

There are now in Tulane Medical School fifteen deserving young men who have been awarded scholarships under the Commonwealth Fund plan of cooperation with the Mississippi State Board of Health and Tulane Medical School. Each boy in return for the financial assistance he is given, promises to practice medicine for at least three years in a Mississippi town with a population of not over 5,000.

The awards are based largely on previous scholarship record, financial need, good health, personality and character.

MORBIDITY AND MORTALITY FOR TYPHOID FEVER, DIPHTHERIA, AND PELLAGRA IN THE STATE OF MISSISSIPPI FOR 1932 and 1933.

As a result of the splendid work done by the health forces and physicians and the cooperation of the general public of the State of Mississippi, the deaths for typhoid fever as reported to the State Board of Health showed a decrease of 15 per cent in 1933 under 1932 and a 42 per cent decrease

in the cases, diphtheria showed a 20 per cent decrease in deaths and a 2 per cent increase in cases.

Several counties in the State showed deaths occurring from typhoid fever in their reports. These deaths occurred in cases that were brought in from outside of the State and from other counties within the State. This is to be expected for the reason that all counties do not have hospital facilities for the severe cases of typhoid fever which occur. The following counties showed no deaths from typhoid fever for the year 1933: Amite, Benton, Calhoun, Choctaw, Claiborne Clay, Covington, Forrest, Franklin, Greene, Grenada, Hancock, Holmes, Issaquena, Kemper, Lamar, Lawrence, Leake, Montgomery Oktibbeha, Panola, Pearl River, Sharkey, Stone, Tallahatchie, Union, Walthall, Wayne, Yalobusha, and Yazoo.

Bolivar County showed the greatest decrease in cases and deaths. Until intensive immunization and sanitation were carried on routinely in Bolivar County, there were annually reported approximately 200 cases and 20 deaths as an average for typhoid fever for this county. Since 1923, there has been a gradual decrease in cases and deaths. For 1933, Bolivar County reported 12 cases and 5 deaths.

Since 1930, on a basis of previous experience, Mississippi has been due for a marked increase in cases and deaths from typhoid fever. The health forces and general public have become "typhoid conscious" and, as a result, this anticipated increase has not occurred. It is hoped that all persons will avail themselves of the opportunity to be inoculated against typhoid fever during 1934, beginning immediately as the season for typhoid fever is here. The increase in cases begins in March and reaches its peak in July with a gradual decrease thereafter. Persons who have not been inoculated in the past three years should go to their physician or to the county health officer and have themselves and all members of their families, two years of age and over, inoculated. Typhoid vaccine is available without charge to any physician in the State. The physician should make a request direct to the State Hygienic Laboratory, State Board of Health, Jackson, Mississippi. People should avail themselves of this service at the earliest possible date for the reason that a period of approximately one month is required for immunity to develop following administration of vaccine. People should not expect private physicians to administer typhoid vaccine without charge as this is a true service given by the physicians for the protection of the health of the individual. The State Board of Health will provide the vaccine without charge and the physicians of the State Board of Health will administer the vaccine for a very reasonable fee. As a demonstration of the value of typhoid vaccine as practiced in Mississippi, an investigation of 169 cases showed

that only five of these cases had had even one dose of typhoid vaccine within three years. There was no record available on four of the five cases to determine whether or not they had typhoid vaccine. The word of the individual was accepted as the record. The record showed that one out of the five cases had had one dose two years prior to the onset of the attack of the disease.

Diphtheria showed a remarkable decrease. Diphtheria is also controllable by immunizing. It is gratifying to note that there was a 20 per cent decrease in deaths in 1933 under 1932. It is felt that the splendid immunizing program promoted by the Parent Teachers Associations' organization over the State is in a large measure responsible for this gratifying decrease in deaths and cases. "Immunization of All Children From Six Months to Six Years" has been the May Day motto for three years in Mississippi. It is felt that results obtained through this program promoted by the Parent Teachers organizations is well worth the efforts required. Children from six months to six years should be immunized.

At the present time, there is available through most drug stores diphtheria toxoid which requires only one dose for immunization of the individual. This toxoid should be purchased from drug stores where it is kept in a refrigerator at a temperature between 38° and 50° F. Toxoid that has been kept in an ordinary candy case or on the merchandise shelves is of no value as the toxoid is very sensitive to heat and rapidly loses its power to immunize through prolonged exposure at room temperature. Diphtheria cases reach their maximum number during the month of October, shortly after the schools open in the State of Mississippi.

The State Board of Health appreciates the splendid cooperation given by the general public and the physicians of the State in bringing about this warranted reduction in deaths and cases of this deadly disease.

Pellagra showed a 2 per cent increase in cases during 1933 which is undoubtedly due to the economic status of the people. It is gratifying to note that there was a 20 per cent decrease in deaths reported in 1933 under 1932, which is good evidence that the general population is becoming educated as to the proper diet for the cure of pellagra once it has occurred.

Jackson
April 11, 1934.

Felix J. Underwood,
Executive Officer.

ADAMS COUNTY MEDICAL SOCIETY

A called meeting of the Adams County Medical Society was held at the Natchez Hospital on March 20, with fifteen members present.

The business of the meeting was limited to the adoption of constitution and by-laws and to perfecting the organization of the Society in prepara-

tion for application for charter at the meeting of the State Association in May.

Natchez,
April 9, 1934.

W. K. Stowers,
Secretary.

CENTRAL MEDICAL SOCIETY

The April meeting of the Central Medical Society met as usual the first Tuesday in the month in the Convention Hall at the Robert E. Lee Hotel. This meeting was without a doubt one of the liveliest and most interesting meetings that the Society has put on in a long time. The discussions were as good as we have ever had and a lot of good ideas were exchanged.

There was one case report and this was given by Dr. Van Dyke Hagaman. Dr. Hagaman's report dealt with osteomyelitis in frontal sinus disease. He presented two patients on whom he had operated and the patients are now well. Discussion by Dr. Robin Harris.

The visiting essayist for the month was Dr. W. P. Robert of Vicksburg who read an excellent paper on "Infantile Eczema." Dr. Robert covered his subject fully. His paper was discussed by Drs. Womack, Garrison, Sr., Bullock, and Robert closing. Dr. D. T. Brock, formerly of McComb, but now of Jackson, read a detailed paper on "The Acute Abdomen." His paper was discussed at length by Drs. Crisler, Gordin, Barksdale, Frank Hagaman, with Brock closing. The opinions and ideas brought out in this discussion were various and interesting. Dr. J. C. Walker was scheduled to talk on "Conservative Obstetrics," but he was not present at the meeting.

The Executive Committee suggested that the Society have its regular meeting in May even though the State Association meets just a week later. This was put to a vote and found to be agreeable with the entire membership. The Executive Committee suggested a plan to the Society whereby it can have meals served at each meeting. The plan is to have a group of doctors who will underwrite each meeting. In other words each doctor can give as much as he wants to and if he does not choose to give anything then that is all right too. His meal will be paid for just the same. It was announced by Dr. Rembert that there is to be a very interesting medical meeting held in Chicago in May about the 16th to 20th. Motion was made by Dr. Wall that the secretary write Dr. Dye a letter inviting the State Association to meet with us next year. Adjournment at 9:30. There were 43 members and guess present.

Jackson,
April 7, 1934.

L. W. Long,
Secretary.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY

As a prelude to the 64th, and probably the last, meeting of the Clarksdale and Six Counties Medi-

cal Society held in Clarksdale on March 28, Dr. and Mrs. A. W. Rhyne, Coahoma, invited a number of their doctor friends to meet at their beautiful home for, what the doctor chose to call, an Irish Tea.

At the appointed hour the spacious lawn and home began to take on the appearance of a real medical convention. There were lots of doctors there. Plenty of doctors.

The only mystery of the occasion, was to find the reason for the name IRISH TEA. The only thing Irish we saw was the good doctor himself, and he's only a wee bit so. We did find lots of other countries represented, however, such as Scotch, Holland, French, Spanish, Virginia, Russian (caviar), Swiss (cheese), Brazil (nuts), Jerusalem (olives), Alaska (salmon), Norway (sardines), Cuban (sugar), California (lemons), Maryland (mint), and abundance of Southern (hospitality), and a liberal sprinkling of Tennessee and Mississippi (beautiful femininity).

When all had PARTAKEN and were in a jovial and appreciative mood, a delightful skit of especial interest to doctors was presented by Mrs. Sewell, portraying in her most efficient and fetching manner a busy (?) doctor in his office handling a patient, while Mrs. Smith in the role of the patient, certainly had been there, or at least heard about it. Miss Roberta Rhyne as the office nurse made all present envy her doctor dad by her efficient service. Miss Hilda Pierce presided at the Baldwin accompanying in a touching manner, with music to soothe the heaving breast or aching brow.

Then, another tour through the library, BREAKFAST-ROOM, dining-room, and it was time to start back to Clarksdale and the meeting. While I was present at both gatherings, perhaps Dr. V. B. Harrison, our genial secretary, can and will, tell you more about what happened in the Medical Society.

Any way, I'M FOR IRISH TEAS.
Clarksdale, A. Doctor M. D.
April 7, 1934.

MERGER

Merger of the Delta Medical Society with the Clarksdale and Six Counties Medical Society is expected to be effected at the meeting to be held in the Brown Memorial Auditorium of Delta State Teachers College, Cleveland, Wednesday, April 11.

The combine of the Clarksdale and Six Counties Medical Societies with the Delta Medical Society, to give one large Medical Society in the Delta, has been recommended by the committee appointed to investigate this matter and formal approval of the committee's report is expected to be acted upon at the Bolivar city assembly.

New officers of the combined society will be

elected and plans are being made to entertain 150 people. The counties at present included in the Clarksdale and Six Counties Society are Coahoma, Tallahatchie, Quitman and Tunica and in the Delta Medical Society the counties of Bolivar, Washington, Sunflower, Leflore and Humphreys.

The program for the joint meeting is as follows:

PROGRAM

Meeting called to order at 2:00 P. M.—Dr. R. C. Smith, President, Delta Medical Society.

Invocation—Dr. I. D. Eavinson.

Address of Welcome—Mr. Joe P. McCain.

Response—Dr. G. Y. Gillespie.

Business Session

Scientific Program

Prophylactic External Version. Dr. John Lucas, Greenville.

The Effect, on the Human Body, of Changes in Barometric Pressure.—Dr. H. B. Cottrell, Indianola.

The Bite of Latrodectus Mactans (T-Dot Spider)—Dr. T. J. Barkley, Isola.

Report of Syphilitic Project Conducted at Scott, Mississippi.—Dr. I. I. Pogue, Scott.

Migraine.—Dr. I. B. Bright, Greenwood.

Allergic Diseases; Diagnosis and Treatment.—Dr. Ray M. Balyeat, Oklahoma City, Oklahoma.

Banquet

Legion Hut
Greenville,
March 31, 1934.

7:30 P. M.

F. M. Acree,

Secretary,

Delta Medical Society.

DESOTO COUNTY MEDICAL SOCIETY

The DeoSoto County Medical Society met in regular order Monday, April 2, 1934, at 10 A. M. There was a good attendance.

Our latest and youngest member is Dr. Hunter Cox of Eudora. Dr. Cox has well prepared himself for his profession and with a fine personality he will succeed in his chosen work.

Dr. C. M. Hammond of Walls was the essayist. He is the inventor of the respirator that has proven to be of material aid in diseases of the chest. He explained it to the society in detail. In time, we think that the hospitals of the country will be equipped with Hammond respirators. Dr. Hammond has given this instrument almost a life time study. It is endorsed by leading physicians of Memphis, Tenn. and an experimental model has proven satisfactory in every way at the hospitals in the city. It has a number of lives to its credit.

This is a remarkable humanitarian device and Dr. Hammond is a loyal member of our medical **an apparatus** of proven worth. We are glad that society.

Dr. A. J. Weissinger was elected delegate to the state association: Dr. A. L. Emerson alternate delegate

We expect to have every active physician a member of his local medical unit.

Memphis,
Route 4,
April 10, 1934.

L. L. Minor,
Secretary.

EAST MISSISSIPPI MEDICAL SOCIETY NIGHT BANQUET NEXT MEEETING

It will cost you one dollar. But wait until you have seen the menu. If you like wines your favorites will be served—sauterne with the foods, claret with the red meats. If you like shrimp there will be shrimp romoulade cooked with that delicious sauce of country butter and eggs, seasoned just to that point of exquisite delight, with maybe just a touch of garlic. And fish—tenderloin of trout with tartar sauce to soothe us to the point of biennaise. And steak—thick western—man's size filet mignon, with butter gravy and served with baked stuffed piping hot Idaho potato capped with cheese and delicately browned to stimulate our gastric mucosae to ecstasy, Et cetera, bon vivants!

And there will be a program. We'll keep that for a surprise, but will tell you this much—it will be snappy, devoted entirely to diagnosis and practicality; things that you will need constantly in your practice. The program committee has worked diligently and this program will be revolutionary, different from anything we've had before. No long papers—in fact no papers at all.

DATE—Thursday, April 19.

TIME—7:00 P. M.

PLACE—Weidmann's, Meridian.

BANQUET—Delicious with all the tassels.

PROGRAM—Practical, snappy.

COST—\$1.00. Bring it with you.

FINISH—10:00 o'clock promptly.

Meridian,
April 15, 1934

Leslie V. Rush,
Secretary.

HARRISON-STONE-HONCOCK COUNTIES MEDICAL SOCIETY

The Harrison-Stone-Hancock Counties Medical Societay met in regular session Wednesday evening, April 4, 7:30 P. M. at the Biloxi Hospital, Biloxi.

Meeting called to order by Dr. G. F. Carroll, President.

Roll Call—23 members present.

Paper—Dr. E. B. Van Ness—Roentgenray Therapy.

Discussion—Dr. Dan J. Williams, Dr. W. A. Dearman, Dr. G. F. Carroll.

1. Fracture of patella by muscular violence in a negro, during a wrestling match.

Discussion Dr. E. C. Parker, Dr. D. G. Rafferty, Dr. W. A. Sheely.

2. Perforated Peptic Ulcer.

The society passed a resolution to instruct the

delegates to invite the state society to hold its annual meeting at Biloxi in 1935.

Immediately following the business session refreshments were served by the nurses of the hospital.

Society adjourned to hold its May meeting at the beautiful home of Dr. D. G. Rafferty at Pass Christian.

H. K. Rouse, Jr.,

Layman,

Secretary.

April 9, 1934.

ISSAQUEMNA-STARKEY-WARREN COUNTIES MEDICAL SOCIETY

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Elks Club, Vicksburg, Tuesday, April 10, at 7 P. M. with 17 members and two guests present. Dr. W. H. Scudder, president, presided. After supper, the following scientific program was presented under the direction of Dr. G. Y. Hicks, chairman:

(1). CLINICAL CASES: Acute Appendicitis Caused By Parasites; and Acute Appendicitis in an Alcoholic.

(2). APPENDICITIS:

Introduction—Dr. G. Y. Hicks.

Symptoms—Drs. L. J. Clark and T. P. Sparks, Jr

Differential Diagnosis—Dr. G. C. Jarratt.

Etiology—Dr. J. A. K. Birchett, Jr.

Pathology—Dr. W. H. Parsons.

Predisposing Causes—Drs. H. H. Johnston and W. C. Pool.

Prevention.—Drs. W. P. Robert and G. M. Street.

Treatment—Dr. A. Street.

Complications—Dr. F. M. Smith.

General Discussion—Dr. E. C. Parker.

A surprise guest at this meeting was Dr. E. C. Parker, Gulfport, president-elect of the Mississippi State Medical Association'

The next meeting of the society will be held Tuesday, June 12, at 7 P. M.

NORTH MISSISSIPPI MEDICAL SOCIETY

The quarterly meeting of the North Mississippi Medical Society was held at New Albany, March 28, at 2 P. M., in the Methodist Church. The program included the following:

Invocation—Rev. J. H. Holder, New Albany.

Business:

(1) Intestinal Obstruction with Special Reference to Its Treatment—Dr. J. L. McGehee, Memphis.

Discussion opened by Drs. C. M. Speck and J. C. Culley.

(2) Tularemia—Dr. Ira B. Seale, Holly Springs. Discussion opened by Drs. A. P. Alexander and J. W. Williams.

(3) Uterine Displacements—Dr. D. R. Moore, Hyhalis.

Discussion opened by Drs. G. A. Brown and E. S. Bramlett.

(4) Case Report—Dr. H. P. Boswell, New Albany.

Frank Ferrell, President,
Ashland, Miss.
March 31, 1934.

A. H. Little,
Secretary,
Oxford, Miss.

ADAMS COUNTY

The Homochitto Valley Medical Society and the Adams County Medical Society extend to Dr. John W. D. Dicks, President of the State Medical Association, greetings and congratulations and words of appreciation on his outstanding efforts in behalf of the Mississippi State Medical Association, in the great amount of work that he has done in the past year for the uplifting and upbuilding of organized medicine in our state. He is to be highly commended on his efforts to increase the membership of both the State Association and County Societies.

We extend greetings to the incoming president, Dr. E. C. Parker, and give him assurance of our whole hearted support and co-operation during the coming year.

Natchez is still looking forward to a large attendance and extends greetings and welcome to all the members and their families.

Lucien S. Gaudet,

Natchez,
Mississippi,
April 9, 1934.

CHICKASAW COUNTY

Drs. Williams, Armstrong, Philpot, Baugh, Hood, and I attended the meeting of the Northeast Mississippi Thirteen Counties Medical Society at Pontotoc, March 30. A very interesting and beneficial program on cancer was rendered, the principal speakers being Drs. Crisler, Abernethy and Hennessey of Memphis. Miss Dolly Ruth Dalton, R. N. Superintendent of Nurses of the Houston Hospital, was also on the program, her subject being "The Nursing Profession Works for Recovery."

Dr. and Mrs. J. M. Hood of Houlka are the happy parents of a fine baby boy, James M. Hood, Jr., born at the Methodist Hospital, Memphis, a few days ago.

Dr. J. Rice Williams of Houston attended the Grand Commandery meeting at Vicksburg April 9-16.

Houlka,
April 10, 1934.

W. C. Walker,
County Editor.

DESOTO COUNTY

Ten of the eleven active physicians in this county are members of our medical organization which gives us a percentage of 91. There are two retired physicians in the county.

We like the suggestion of County Editor Ims and others of having an informal luncheon or meeting of the county editors during the meeting in Natchez.

We are anticipating with pleasure the Natchez meeting. Dr. J. W. D. Dicks has made good as our president and we graciously greet our incoming president, Dr. E. C. Parker, and will help him to make his administration successful.

James Rhodes Hughes is the young son of Mr. and Mrs. D. C. Hughes, born February 20. Mrs. Hughes is Ruth, the daughter of Dr. and Mrs. James A. Rhodes of Horn Lake.

Dr. Clifton B. Flinn of Birmingham, Ala., a Desoto County reared boy visited his parents in Hernando, Mr. and Mrs. T. P. Flinn.

We note appreciatively the presence of Mrs. Hammond and Miss Strickland.

Memphis, Route 4,
April 9, 1934.

L. L. Minor,
County Editor.

HARRISON COUNTY

Drs. McCall and Van Ness are taking to the footlights as a means of diversion. They did themselves proud in the minstrel show put on by the Gulfport Young Mens Club. Mac did a couple of vocal numbers that were plenty good. Van went in for heavy dramatics and the way he played Ophelia surpassed Shakespeare's foremost dream.

Biloxi, April 10, 1934.

E. A. Trudeau,
County Editor.

HINDS COUNTY

Of much interest to the profession was the recent announcement of the engagement and approaching marriage of Dr. John K. Bullock and Miss Mary Louise Mayers. Dr. Bullock is a practitioner of pediatrics here in Jackson and Miss Mayers is from Brandon, a graduate of the University of Mississippi. The marriage is to be the latter part of April and this couple will make their home in Jackson.

The Central Medical Society met the evening of April 3 at the Robert E. Lee Hotel. A good crowd was there and the program was excellent. The guest speaker was Dr. Pierre Robert of Vicksburg, who presented a most excellent paper on "Infantile Eczema." We enjoyed having Dr. Robert with us and hope that he can be with us again real soon.

Dr. E. W. Holmes of Winona was a most welcomed guest at the meeting of the Central Medical

Society. Dr. Holmes is a frequent visitor and is always welcomed.

Dr. Coursey of Raleigh was in Jackson Thursday, April 5, attending strictly to business. We hope he will come to the capital city more often.

The staff of the Baptist Hospital held its regular meeting March 6. A good dinner was served and an excellent program was enjoyed.

The staff of the Jackson Infirmary met March 27 with a good attendance and all enjoyed the dinner and most excellent paper presented by Dr. Werkheiser.

Hinds County wants to thank and at the same time congratulate Dr. J. W. D. Dicks on the wonderful work he has done for the State Medical Association during his term of office. As Dr. E. C. Parker takes his place as president at the next meeting of the State Medical, which meets in Natchez in May let us give him every means of support we can and help make it the best year ever. Congratulations and best wishes to Dr. Parker.

On to Natchez is the slogan now! Let us all meet our friends there in May.

Wm. F. Hand,

Jackson April 5, 1934.

County Editor.

ISSAQUENA COUNTY

After a short stay in one of our Vicksburg hospitals where an operation was done to relieve him of an over-supply of bile, Dr. J. B. Benton, of Valley Park, is now at home, and "Richard is fully himself again." In verification of the success of the operation the doctor is now busily engaged in making tri-weekly trips to Vicksburg and planting cotton.

Dr. W. H. Scudder, of Mayersville, who has also been on the sick list is now recovering from a common, ordinary, old fashioned spell of the "Yaller janders," which was not due to atabrine, though the doctor took a prescribed course of this little dynamite a month before for a refractory case of malaria. It is considered THE thing now to have jaundice follow a course of atabrine. Even fashion and styles in medicine.

Over 65 per cent of our county medical men have been on the sick list the past three months, but there are only three of us. The other 35 per cent, Dr. Huey, have stayed at home and kept well. In the eyes of the laity this is not flattering to the doctors, as their medical knowledge is supposed to keep them well. Therefore, if once sick, "Physician heal thyself," and that quickly.

Dr. T. W. Huey, of Grace, was receiving so many cash calls on April 12 that he refused a complimentary trip to the big meeting and banquet of the Delta Medical Society at Cleveland, on that day, and this despite the fact that he was given a tip

that an abundance of the "makings" was to be had free in every drug store in the city.

At its April meeting the Issaquena-Sharkey-Warren Counties Medical Society had as its guest our state president-elect, Dr. Parker, of Gulfport. Besides joining in the discussions of the medical topics at the meeting, the doctor made some very timely and interesting remarks on some of the vital questions now before the medical profession of Mississippi.

Recently, also, our Society had the honor of a visit from our president, Dr. Dicks, of Natchez. The doctor made a very interesting address. He touched on some important matters to come before our meeting in Natchez in May. His genial smile and courtly manner always make him welcome.

W. H. Scudder,
County Editor.

Mayersville,
April 12, 1934

LEE COUNTY

We have done our best but we have two doctors that we cannot get to join the society and make us 100 per cent. But we are proud of our bunch for we do not think there is a finer bunch of men and doctors than we have in LEE COUNTY. Excuse me for bragging on my homy doctors but I have to tell the truth.

Our county society will meet the 20th and a very interesting program is being arranged. Dr. W. A. Toomer is president and Dr. J. A. Stacy, secretary.

It will be my pleasure to attend the Alabama state meeting at Birmingham April 17 to 19 this month and I am carrying as my spokesman one young man who is nationally known and always equal to the occasion and some times he is pretty wild and hard to handle and I shall always appreciate the forethought of Dr. Dye in having a special police escort to help me care for Dr. G. S. Bryan on this trip. But don't ask us if we had a good time in Alabama, just ask how big a time we did have.

Our county certainly feels a great loss in the death of Dr. Lilly of Tuplo who was one of the best and most competent eye, ear, nose and throat men that the State had and a prince of a gentleman and one of the most enthusiastic supporters of organized medicine we have ever had. "Peace be unto his ashes."

Mrs. R. D. Kirk, wife of Dr. R. D. Kirk, Baldwin, and mother of Dr. R. D. Kirk of Tupelo, is in hospital at Memphis and has undergone the second operation today; first some two weeks ago and condition very serious at this time.

Dr. L. A. Ford, of Guntown has had a serious infection in his hand for some weeks; is some-

what improved for the last week and hopes to be in harness soon.

Dr. W. A. Dearman from down by the briny deep was our guest at the meeting of the North-east Mississippi Thirteen County meeting at Pontotoc and read a very interesting paper and had a good time and left for home duly sober and a number of doctors to long remember his visit and to welcome him back any time he can come.

So long till I see you at the State Meeting in May and hoping that this will be the best meeting that we have ever had.

Baldwyn,
April 10, 1934.

R. B. Caldwell,
County Editor.

LEFLORE COUNTY

Miss Sara Elizabeth Kimbrough daughter of Mrs. P. M. Kimbrough and the late Dr. P. M. Kimbrough of Morgan City, died at the Greenwood-Leflore Hospital, March 11.

Mr. George Wilson, son of Dr. W. D. Wilson of Schlater, was a patient at the Greenwood-Leflore Hospital in March.

Dr. Neill Alexander of Washington, member of the national committee for birth control, addressed the staff meeting of Greenwood-Leflore Hospital at the March meeting. At this meeting Dr. L. B. Otken, Greenwood, was elected chief-of-staff for 1934, and Dr. Ira B. Bright, Greenwood, secretary.

Dr. J. A. Crawford, Greenwood, made a business visit to Nashville recently.

Dr. George Baskervill, Greenwood, visited his sister and other relatives in Alexandria, La. March 24 and 25 and in Jackson March 31.

Dr. W. E. Denman, Greenwood, visited relatives in Blytheville, Ark. the week end of March 23 and 24.

Dr. Fred Sandifer University of Chicago, spent the Easter holidays with his parents here. He will serve his internship at the Charity Hospital in New Orleans, La.

Dr. Tate Carl, Memphis, visited relatives here Easter Sunday.

Dr. R. E. Yates visited his old home at Philadelphia, March 28 and was in Jackson on March 31.

Dr. Theodore Austin, Greenwood, was recently appointed first resident surgeon of the Rochester General Hospital New York.

On March 29, a daughter was born to Mrs. Everett Aldridge of Duck Hill at the Greenwood-Leflore Hospital, Greenwood. Mrs. Aldridge is the youngest sister of Dr. G. Y. Gillespie, Jr. Dr. G. Y. Gillespie, Sr., of Duck came over March 30 to see his daughter and grand-daughter.

We extend sympathy to Dr. B. B. Harper of Itta Bena in the recent death of his father, Mr. F. P. Harper, at Jackson.

Leflore county doctors wish to extend thanks and congratulations to President J. W. D. Dicks for outstanding. We send our greetings to the

new president, Dr. E. C. Parker, and assure him of our support.

W. B. Dickens,
County Editor.

Greenwood,
April 5, 1934.

MONROE COUNTY

Another link in friendship's chain is broken. Another friend of many years is gone from the haunts of men. Dr. James Ringold of Winona is dead. We shall miss him sorely and our heads are bowed in sorrow. To his family, I extend my sincere and profound sympathy. Would that I might help them bear their grief. May the flowers bloom, the grass grow green and the birds sing sweetly o'er his resting place.

Two weeks ago the earth was covered with a beautiful blanket of snow—icicles were hanging from the eaves—grim winter held all nature in his cold embrace. Even so, we were cheered by the knowledge of the fact that when winter comes spring is not far away. Behold with amazement a transformed world! A tint of emerald touches every thing. How can a reasoning man doubt that there will be a resurrection day when "all the dead shall live again." While the thoughts of the young (men and women too) lightly turn to love, I am sure that truant youth is dreaming of hooks and lines and cans of worms as well as of many an "old swimming hole." I wonder if some of us, whose locks are turning grey, ever breathe this fruitless prayer "backward, turn backward, oh time in your flight?"

The North East Mississippi Thirteen Counties Society held its first quarterly meeting for the current year, at Pontotoc on March 20. It was a fine day and a good meeting. The finest of fraternal sentiment pervaded the body. The Pontotoc members were gracious hosts and the Pontotoc ladies were more than gracious. A splendid feast was spread in the dining hall of the Methodist church—it is needless to say that the doctors present enjoyed the spread to the fullest. A nice program of a unique type was put on for our entertainment while we ate. We were honored by the presence of some distinguished visitors. Among those were Dr. J. A. Crisler, Sr., Dr. Shields Abernathy and Dr. Russell A. Hennessey of Memphis and Dr. W. A. Dearman of Gulfport. These took part in the program. Drs. Culley and Guyton of Oxford and Dr. R. M. Adams of Ripley, members of North Mississippi Society, were there too. There were other visitors who were more than welcome. Your scribe sponsored and led the scientific program. While I felt considerable disappointment in that I did not get all the information on cancer that I felt I so much needed, still there was much interest manifested, and I hope that more real thought will be given this most important

subject than has been our wont. I have received some very kind and flattering letters from some who were present. I want to acknowledge my appreciation for these letters and their authors. I wish to repeat what I stated on the floor, that I did not pose as a teacher but as an earnest seeker for light and information. Our editor-in-chief was extended an invitation to be present and take part in the program. We all were sorely disappointed that he could not be with us. So much has been said and written about special types of cancer and the different ways of treating these different types with special reference to technic of surgery and radiation and so little about the nature of the malady, its etiology, etc. Personally, I have long felt that the biochemistry and, possibly, the endocrinology of the condition were being overlooked. In spite of the fact that trainloads of printed matter have been distributed and tens of thousands of speeches have been made before lay and medical audiences, looking to the control of cancer, I am convinced cancer is spreading to an alarming extent. It certainly is not being controlled. Nor do I think it will ever be controlled until we learn more than we know of its nature and cause. Once we used squads of soldiers armed with army rifles to control yellow fever. Still yellow fever raged. I believe the day is coming (may God speed its coming) when cancer will be understood and controlled. I have had thoughts that would be unlawful to express in words, but this is neither the time nor place to even hint at them.

By the time this squib shall be ready to read in the pages of our journal, we shall be heading towards Natchez. I hope all who read my lines will go and I hope I shall meet them there. Natchez is a glorious old place and it tugs on my heart-strings because of the fact that some of my much prized friends live there. Any place that is home to Dr. Dicks and Dr. Ullman, not to mention others who live there, would be attractive to me. Is it possible that it has been twenty years since we met there before?

I have just read the current letter of the Warren County Editor. In this interesting letter there are certain references to me that are both flattering and maddening. After thanking him (the writer) for the flattery implied, I shall challenge him to mortal combat. I should like to spill his blood on the grave of the immortal Prentiss. I want Dr. Dicks and Dr. Ullman to second me. By way of explanation, permit me to say that, while my heart is green and my thoughts are gay no man will be allowed to class me among those who are growing old. Even tho' my head be frosted, I am, and shall always hold myself to be "one of the boys."

G. S. Bryan,
County Editor.

Amory,
April 4, 1934.

PANOLA COUNTY

I regret to state that the past month was a rather sad one for Panola County. Dr. W. C. Lester of Batesville was found in a dying condition early one Sunday morning and was dead in a short while after being found. Dr. Lester had been married only a short time and his death was quite a shock to his wife, the former Miss Allie Seales of Batesville and his many friends.

Dr. H. R. Elliot, also of this city, was forced to undergo a gallbladder operation, but I am glad to report that he is doing nicely now.

Dr. A. J. McIlwain, former practitioner of Merigold is now located at Batesville, occupying the former office of the late Dr. W. C. Lester.

G. H. Wood,

Batesville,
March 9, 1934.

County Editor.

PEARL RIVER COUNTY

Things are rather quiet down this way. The C. W. A. is a thing of the past and we do not know just what the F.E.R.A. is going to do. I see a good deal of young corn growing and cane is sprouting too. Guess we will have plenty of corn bread and molasses. The prospects are for a large crop of satsuma oranges this year. Apparently there will be a good crop of peaches, pears and other fruit. Guess we have a lot to be thankful for.

The South Mississippi Medical Society met in Laurel on March 8. An excellent program had been arranged and it was rendered in such way as to be of much value to those attending.

We feel very keenly the loss suffered by this county due to Dr. Thornhill having moved away.

We are looking forward to the meeting of our State Medical Association in Natchez soon. Congratulations to Dr. Dicks for the good work that he has done during the most trying year. And we hope for Dr. Parker and the profession a better year during his term as president.

G. E. Godman,
County Editor.

Poplarville,
April 10, 1934.

PONTOTOC COUNTY

The Northeast Mississippi Medical Society met at Pontotoc, March 20 with about 75 doctors present. The whole afternoon was devoted to cancer.

The Pontotoc County Medical Society met March 3 with two-thirds of the physicians of the county present.

Dr. and Mrs. T. H. Rayburn are the proud parents of a fine girl that was born March 23.

We are having very little sickness except for measles, mumps and whooping cough.

R. P. Donaldson,
County Editor.

Pontotoc,
April 9, 1934.

TALLAHATCHIE COUNTY

Dr. J. E. Powell, Charleston, attended the meeting of the Clarksdale and Six Counties Medical Society on March 21 at Clarksdale. Continuing his journey from there he visited Greenville where he attended the Shrine assembly. He was accompanied by Mrs. Powell.

The Tallahatchie County Medical Society met in the Rotary room in Charleston at 7:30 Friday evening where dinner was served which was followed by an interesting program. There were 13 present.

Miss Ruth Offman of Greensboro, N. C., who has been superintendent of the Charleston Hospital for the past two years, was married to R. C. Shelby of Charleston on March 18. They will reside in Charleston.

Tallahatchie County has had quite an epidemic of measles which has interfered markedly with the attendance at the schools. Very few deaths have been reported.

Indications point to a good crop in Tallahatchie County for the coming fall. The weather for the last week has been ideal and much corn has been planted.

Though conditions generally seem better, the medical profession of this district has not felt the affects of it. They are hoping that this fall will show better collections.

J. W. Moody

Charleston,
April 7, 1934.

TIPPAH COUNTY

I am sorry not to have gotten anything to you for some time, and have planned each month to get a few lines anyhow, only to let something I thought could not be delayed interfere.

Our Tippah doctors have been unusually attentive in matters of going to medical meetings this season most of them being at Mid-South in Memphis, then we were represented at the Houston meet of the Northeast Mississippi 13 County Association, next two of us were in Jackson, G. M. & N. R. R. Surgeons meet, and next week at our own gathering at New Albany we were creditably represented. Such attendance speaks well for our men, and it is to be hoped there will be shown the same interest in our meeting at Natchez.

We did not get an organization for this county as was desired by some, since the welfare head said he would give the same treatment, in matter of pay to all regardless of whether members of so-

ciety or not, thus making it non-essential to affiliate. Had his position been different we think we would have gotten a few who so far have not been willing to join.

Dr. Milton Adams, who has been in New York for months, has been home for some days on a visit, leaving last night. It was reported that he expected to locate in Memphis to do plastic surgery, in which he had specialized for a time.

Dr. R. M. Adams and family have been on a visit to Mrs. Adams' sister, in Shelbyville, Tenn., and they brought this sister and family back with them. This sister is the daughter of the late Dr. W. M. Murry of Ripley and was raised here. Her many friends are glad to have her back.

Miss Eudora Murry, who is in Grenada College, spent the Easter holidays with her parents.

C. M. Murry,
County Editor.

Ripley,
April 10, 1934.

WARREN COUNTY

"Mark Twain" is quoted as saying, "A few fleas are good for the dog, they entertain him, keep him from forming habits of laziness, from brooding, and melancholia." In the absence of bubonic plague, we wonder if they would help the doctor.

"Town Talk" has it that our past county editor, Dr. Nathan B. Lewis, has laid down his pen for an audition, and with eloquence did he proclaim, when as invited speaker he addressed the Y's men's Club of the city at a recent meeting.

Dr. George M. Street, wife, and two interesting daughters, made a pleasant trip to the fascinating tropical resort, Havana, Cuba.

The Good Book says, "In the evening time there shall be light." In partial keeping, the mellow glow from eighty brightly burning candles shed a halo of superb radiance as they bespoke the happy return of Dr. H. H. Haralson's birthday that he in the presence of his children, grandchildren, and great grandchildren celebrated on the eleventh of March, 1934. May the pathway of Dad's remaining days be bright and happy in the presence of "the light that cannot fail."

Dr. Walter Johnston of Shreveport, Louisiana, was a recent visitor in the home of his parents, Dr. and Mrs. Sydney W. Johnson. Dr. Walter was present at the celebration of the birthday of his grandfather, Dr. H. H. Haralson.

Dr. Gaines, of Tailulah, Louisiana, and Dr. H. S. Goodman, of Cary, were visitors at the March staff meeting of the Vicksburg Sanitarium.

Dr. Jack Birchett, Jr., desiring to enlarge the "arena" of his activities, early in March made a casual survey of New Orleans.

Dr. Guy P. Sanderson, our "bachelor" friend, says he has been turned down as often as a bed-spread, but he is "putting all his earnings into a

mattress, so that in the coming years he will have something to retire on."

Not many days since, it was frequently noted in the news items that doctor "So and So" had made a "flying trip" to a near-by town, meaning the doctor in a hurried business visit had spurred "old Dobbin" up the hills and whipped him into a trot down the hills, but not so with Dr. Edley H. Jones and wife, who recently made a "flying trip" to New Orleans. The doctor left "old Dobbin" and the "Shay"—the "Tin Lizzie" at the aviation field and looked down on the rest of us the remainder of the way.

Some two hundred years ago, 1729, a mighty chieftain of the powerful Natchez tribe called together his many braves to make his final and exterminating attack on Fort Rosalie, the first Natchez Settlement. History records this fateful massacre. Today Big Chief Paleface Dicks is calling his "Medicine Men" from all parts of Mississippi that they may assemble at historic Natchez, May 8-10 inclusive, for War Council and maneuvers that they may at all times present a more solid phalanx in an impenetrable defense and in an irresistible attack against the unseen enemy of his people, which as a pestilence in epidemic or endemic form or as a silent, insidious, degenerative process, stalks by day and night his beloved "Hunting Grounds," jeopardizing the health and happiness of his people. Will every faithful "Medicine Man" of Mississippi hear and heed the tom-tom's calling beat?

D. H. T. Ims,
County Editor.

Vicksburg,
April 9, 1934.

WASHINGTON COUNTY

All Washington County doctors are urged to attend the Mississippi State Medical Association in Natchez, May 8-10. If you once attend one of these meetings you will never miss another one. Let's be there one hundred per cent strong, and show Dr. J. W. D. Dicks our appreciation for the wonderful work he has done this past year, and pledge our support to our incoming president, Dr. E. C. Parker.

Dr. H. A. Gamble attended the Southeastern Surgical Congress held in Nashville, Tenn., the first week in March.

On March 5, Dr. C. R. Patterson, Rosedale, spent several hours mingling with friends in Greenville.

Dr. R. C. Finlay, Glen Allen, was seen quite frequently in Greenville during March, must to the delight of his many friends. His son Bob, who is a student at Ole Miss, spent the spring holidays at home.

Dr. G. J. Mancill, Indianola, made several trips to Greenville this past month.

On March 12, Dr. H. A. Gamble, Greenville, went to Jackson on a business trip.

Dr. W. E. Wiggins, Indianola, and Dr. H. B. Cottrell, Indianola, were frequent visitors in Greenville during the first two weeks of March. Dr. Cottrell is doing public health work with the public health unit of Sunflower County.

On March 12, Dr. C. L. Field, Shaw, honored his many Greenville friends with a short visit.

Dr. and Mrs. A. G. Payne, Greenville, motored to the Mississippi Coast for a two weeks' visit. They were the guests of Mrs. Alfred Stone and Miss Aimee Stone for the Garden Club Convention in Pass Christian.

Dr. and Mrs. R. E. Wilson and children, Greenville, spent a week with Dr. Wilson's parents in Guntown.

Dr. W. P. Shackelford, Hollandale, who is taking a post graduate course at Tulane, was called home on account of the serious illness of his mother-in-law, Mrs. Durst. The many friends of Dr. and Mrs. Shackelford, wish to extend their deepest sympathy in the loss of Mrs. Durst, who died Sunday, March 25 after a ten-day illness.

Dr. and Mrs. A. G. Payne, Greenville, enjoyed having their daughter Miss Ethel Payne of Jackson and Dr. and Mrs. Virgil Payne and children of Pine Bluff, Ark., home for Easter.

Dr. and Mrs. T. C. Oliver spent Easter Sunday with their son Ferris who is at Sanatorium. They report that Ferris is improving steadily.

Dr. and Mrs. John Lucas, Greenville, were called to Longview, Texas, on account of the death of Dr. Lucas' life long friend, Mr. S. M. Craig, of Dallas, Texas. Mr. Craig was fatally burned when the hotel at Longview burned.

Dr. and Mrs. John Lucas, Greenville, Mr. and Mrs. R. H. Lake, and Mr. Lynn Harrison attended the funeral of Mr. S. M. Craig in Indianola, Sunday, April 1

Dr. E. J. Hudspeth, Doddsville, who has been at the King's Daughters' Hospital, Greenville, was able to leave the hospital on March 29. His many friends are delighted over his recovery.

Dr. W. H. Weeks, Doddsville, has been a frequent visitor to Greenville this month.

Dr. B. H. Higdon, Sunflower, has visited several times in Greenville this past month.

The many friends of Dr. and Mrs. J. W. Jackson, Belzoni, are delighted to know that Mrs. Jackson is improving steadily. Mrs. Jackson has been a patient at the King's Daughters' Hospital, Greenville, and her early recovery is hoped for.

Deepest sympathy is extended to the family of Dr. T. D. Allen, Shaw. Dr. Allen died at the King's Daughters' Hospital, Greenville, March 29 following an illness of only six days. Dr. Allen was loved by all who knew him, and will be greatly missed not only by the profession, but by all who came in contact with him. He was most success-

ful in his chosen profession, his efforts were untiring, and work far reaching. His memory will be as a towering monument to all who knew him.

Dr. S. D. Newell, Inverness, was in Greenville with his son, Dean, recently. It is great to know that Dean is able to be up and about after a rather prolonged illness.

Dr. W. L. Erwin, Inverness, spent a short visit in Greenville with friends.

Dr. B. H. Campbell, Indianola, spent a few hours visiting in Greenville recently

Dr. E. G. Martin, Benoit, was also a visitor to Greenville this past month.

Dr. and Mrs. T. B. Lewis, Greenville, are enjoying a visit of their daughter and grand-daughter, Mrs. Rhea Blake and little daughter Berkley of Bluefield, West Va.

Mrs. T. B. Lewis, Greenville, has just returned from Jackson where she was the guest of her daughter, Mrs. James Franklin. While in Jackson she attended the Spring Music Festival, in which Mrs. Franklin was one of the soloists.

Mrs. T. B. Lewis and daughter, Mrs. Rhea Blake, enjoyed a trip to Pass Christian to the State Garden Club Convention. They also motored over to Mobile, enjoying the Azalea Trail. On their way home they were met by Dr. Lewis in Jackson.

Dr. J. A. Beals' son Tom, a student in E. E. Bass Junior High School, Greenville, has been showing exceptional ability on the track, this spring.

Dr. and Mrs. J. R. Baldwin, Greenville, enjoyed a motor trip to Jackson and Canton.

Mrs. D. C. Montgomery, Montbury, Greenville, attended the Natchez Pilgrimage the first week in April.

It is my intention to attend the Mississippi State meeting in Natchez, and nothing would give me more pleasure than to attend a special meeting of county editors. Such a meeting would I believe do much to stimulate the interest of the county editors and would prove of much benefit to us all.

John G. Archer,
County Editor.

Greenville,
April 5, 1934.

WINSTON COUNTY

Dr. W. W. Parks carried a patient to Jackson Hospital this week.

Dr. T. C. Suttle was in the city on business Thursday of this week

Dr. W. S. Pearson and the writer attended Aberdeen Court both last week and today.

The doctors are having but little to do since an epidemic of measles has abated.

Dr. E. L. Richardson, our county health officer, is off on a fishing trip. We are sure he will have luck as he is a good fisherman.

We met our good friend, Dr. L. T. Parks on the street today.

Our good friend Dr. W. W. Parks was honored by election to the office of vice-president of the G. M. & N. Medical Association.

The writer also attended the meeting and we had a great time, splendid papers and good eats.

M. L. Montgomery,
County Editor.

Louisville,
April 12, 1934.

THE WOMAN'S AUXILIARY
to the
MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Frank L. Van Alstine, Jackson
President-Elect—Mrs. Henry Boswell, Sanatorium.
Secretary—Mrs. Adna Wilde, Jackson.
Treasurer—Mrs. E. C. Parker, Gulfport.
Press and Publicity—Mrs. Leon S. Lippincott,
Vicksburg.



MRS. L. L. POLK
Purvis

President, 1930-1931

Frances Avent Polk, daughter of Judge John Smith Avent and Sarah Elizabeth Avent, was born at Macon, Georgia, August 2, 1880. She was educated at Sidney Lanier High School and Wesleyal College, Macon, Georgia.

She was married to Dr. L. L. Polk, Purvis, in

1916. They have continued to make Purvis their home.

In 1925, Mrs. Polk was elected councilor of the ninth district of the Auxiliary to the Mississippi State Medical Association, which office she continuously filled until her election to the presidency of the Auxiliary in 1930.

Mrs. Polk has been of great service in her county in all civic undertakings, serving as organizer for the Red Cross and Citizens Relief organizations.

HISTORY OF WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

1930-1931

The eighth annual session of the Woman's Auxiliary to the Mississippi State Medical Association was held in Jackson at the Edwards Hotel May 13, 1931, with the president, Mrs. L. L. Polk presiding.

Mrs. Polk gave a very comprehensive report of the work done along organization lines, having written 92 letters and prepared maps, of the various districts, furnishing each councilor with a map and names of auxiliary members in her district, and instructions for organization.

This resulted in re-organization of Jackson Auxiliary to Central Medical Society, and the organization of North Mississippi Auxiliary, and more than doubling the membership.

Mrs. Dan J. Williams, chairman of the Preventorium fund, reported \$227.25 donated by organizations and individuals for use at the Preventorium.

A very delightful and educational feature of this meeting was the luncheon given by the Preventorium. The Jackson Auxiliary furnished transportation for about 75 members and friends who very much enjoyed the luncheon and visit about the building and grounds, observing the children at rest, at supervised study and play; then a short meeting in the assembly hall at the Sanatorium where Mrs. Sut Stewart Brame, director of the Preventorium, and Miss Elizabeth Robinson, chairman of the State Library Commission, presented the great need of a library for the children in the Preventorium.

Upon recommendation of the nominating committee the following officers were unanimously elected:

President, Mrs. Mabel Mason, Lumberton; President-Elect, Mrs. Henry Boswell, Sanatorium; 1st Vice-President, Mrs. Augustus Street, Vicksburg; 2nd Vice-President, Mrs. W. C. Pool, Cary; 3rd, Vice-President, Mrs. R. M. Adams, Ripley; 4th Vice-President Mrs. J. P. Culpepper, Hattiesburg; Recording Secretary, Mrs. F. L. Van Alstine, Jackson; Treasurer, Mrs. E. C. Parker, Gulfport; Historian, Mrs. M. H. Bell, Vicksburg; Parliamentarian, Mrs. Dan J. Williams, Gulfport.

Councilors:

1st District, Mrs. H. L. Cockerham, Gunnison; 2nd District, Mrs. J. C. Cully, Oxford; 3rd District, Mrs. W. H. Cleveland, Tupelo; 4th District, Mrs. W. H. Curry, Winona; 5th District, Mrs. E. F. Howard, Vicksburg; 6th District, Mrs. W. G. Gill, Newton; 7th District, Mrs. L. L. Polk, Purvis; 8th District, Mrs. W. R. May, Brookhaven; 9th District, Mrs. P. E. Werlein, Biloxi.

FROM OUR PRESIDENT

Dear Auxiliary Members:

As another Auxiliary year hurries to a close I find myself looking forward to our annual meeting with such a mixture of emotions that it is difficult to express my thoughts.

I shall be happy to see you again and enjoy the friendship that I have learned from experience is to be found at the convention meetings.

There has been no conspicuously outstanding work done this year; but I am sure our organization has made a healthy growth, which I believe is in the root system of friendship and co-operation rather than in more showy leaves and blossoms, beautiful as they may be, and because of this co-operation the ground work is more firmly placed for any constructive program which may be adopted at the convention, and I know you will give Mrs. Boswell, as your president, your full support during the coming year.

This issue of the Journal carries our program and from word I am receiving from Auxiliaries and individuals there will be a good attendance at Natchez.

In closing this, the last message as your president, I wish to express my thanks to Dr. J. W. D. Dicks, president of the Mississippi State Medical Association; our councilors, Dr. E. C. Parker, Dr. G. S. Bryan and Dr. Leon S. Lippincott; Dr. T. M. Dye, Secretary of the Medical Association; and the editors of the New Orleans Medical and Surgical Journal for the help and guidance they have given me.

To our own officers and members I will express my appreciation as best I can when I see you at Natchez, May 8, 9, 10.

LET'S ALL GO!

Mrs. Frank L. Van Alstine.

PROGRAM

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

Eleventh Annual Meeting, May 8, 9, 10, 1934

Eola Hotel, Natchez, Mississippi

Tuesday May 8, 3:00 P. M.

Meeting of the Executive Board.

Wednesday, May 9, 9:00 A. M.

Opening general session.

All women attending Medical Association meetings are invited to attend.

Invocation: Dr. George D. Booth, Pastor of First Presbyterian Church.

Address of Welcome: Mrs. Edwin Benoist, Natchez, President of Homochitto Valley Auxiliary.

Response to Address of Welcome: Mrs. C. C. Hightower, Hattiesburg, President of South Mississippi Auxiliary.

Order of Business:

Reports of Officers and Standing Committees.

Message from Dr. J. W. D. Dicks, President of the Mississippi State Medical Association.

Message from Dr. E. C. Parker, President-Elect of the Mississippi State Medical Association.

Report of Delegates to A. M. A. Auxiliary.

Report of Delegates to Southern Auxiliary.

Wednesday, 2:00 P. M.

A drive to places of interest about Natchez has been arranged. Doctors wishing to make this tour are cordially invited.

Cars will leave the Pearl Street Entrance of the Eola Hotel at 2:00 P. M.

Wednesday, 6:00 P. M.

Tea at D'Evereux, the home for Dr. and Mrs. Raymond Smith.

Thursday, 9:00 A. M.

Invocation: Dr. George D. Booth.

Roll Call and report of auxiliaries.

Reports of Committees.

Election of officers.

Introduction of new officers.

Adjournment.

Post Convention Board meeting, Mrs. Henry Boswell, president, presiding.

HINDS COUNTY

The Woman's Auxiliary to Hinds County Medical Society held its regular monthly luncheon today. Officers for the new year were elected. They are: President, Mrs. H. C. Ricks; Vice-President, Mrs. J. O. Segura; recording Secretary, Mrs. Guy Verner; Treasurer, Mrs. Dudley Jones; Historian, Mrs. N. C. Womack; Parliamentarian, Mrs. C. F. McKenzie.

Meetings have been discontinued until the beginning of the new club year in October.

Mrs. H. C. Sheffield,

Reporter pro tem.

Jackson,
April 10, 1934.

AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

Members of the Issaquena-Sharkey-Warren Counties Medical Auxiliary met in the Monroe Room of the Hotel Vicksburg for the March meeting with Mrs. I. C. Knox as hostess and Mrs. L. E. Martin of Anguilla as leader.

A delightful luncheon was served. The table was attractively decorated by the hostess. The luncheon was followed by a short business session.

In the absence of the president, Mrs. H. S. Goodman of Cary, Mrs. D. A. Pettit presided.

The meeting was then turned over to the leader for the interesting program. In the absence of Mrs. A. Street substituted and read an entertaining and instructive paper on the "Preventorium."

Dr. and Mrs. Benson Martin spent several days in New Orleans with their son, Dr. Benson Martin, Jr., who is house physician at the Baptist Hospital.

Mrs. Davidson spent a month visiting her daughter, Mrs. A. Street. Mrs. Davidson during her visit here was the recipient of numerous social attentions, among them a beautiful tea in the home of Mrs. A. Street.

Dr. and Mrs. Edley Jones motored to Jackson and from there took a plane for a vacation in New Orleans.

Dr. and Mrs. Guy Jarratt motored to New Orleans for the week-end to enjoy a vacation.

Mrs. Benson Martin, Jr., resigned her position here to be in New Orleans with Dr. Martin, Jr.

Dr. and Mrs. W. H. Parsons motored to New Orleans for the week-end.

A number of the doctors' wives motored to Natchez to attend the Garden Pilgrimage.

Dr. and Mrs. Pierre Robert spent a week in Birmingham. Their visit was one of great pleasure as they had lived there for several years.

The friends of Mrs. W. C. Pool of Cary were saddened by the news of the death of her father. All join in extending sympathy to her in her great loss.

Mrs. Laurance J. Clark.

Vicksburg,
April 10, 1934.

JACKSON MEDICAL AUXILIARY

The Jackson Medical Auxiliary held a very enjoyable meeting at the Edwards House, Tuesday, March 13.

Mrs. F. L. Van Anstine gave a short talk on the state meeting to be held in Natchez, May 8, 9, and 10, and urged all members to be present if possible.

Mrs. Van Dyke Hagaman, a recent bride, was introduced and welcomed as a new member of the Auxiliary.

A vote was made that an offering be given to the Preventorium at Magee and each member was asked to contribute.

Mrs. Temple Ainsworth.

Jackson,
April 10, 1934.

JACKSON

Dr. and Mrs. J. H. Fox are receiving congratulations on the arrival of a grandson, William Ross Brown, Jr., Mrs. Fox spent some time with her daughter, Mrs. Brown, in Oxford.

Mrs. Van Dyke Hagaman nee Sue Griffith, is

being welcomed as a new member of the Auxiliary.

Mrs. F. L. Van Alstine enjoyed a trip to Hattiesburg recently where she went to address the members of the Woman's Auxiliary to the South Mississippi Medical Association.

Plans are being made for an interesting trip to Natchez in May to attend the state meeting of the Auxiliary.

Mrs. Harley Shands has returned from Colorado Springs where she has been for several months.

Among those journeying to Mobile to see the Azalea Trail were Dr. and Mrs. G. W. F. Rembert, also Mrs. Guy Verner.

Dr. and Mrs. L. B. McCarty are the happy parents of a baby son, Luther Scott McCarty.

Mrs. Temple Ainsworth.

Jackson,

April 10, 1934.

WOMAN'S AUXILIARY TO THE DELTA MEDICAL SOCIETY

The following is the program of the semi-annual meeting of the Woman's Auxiliary to the Delta Medical Society, held April 11, at Cleveland, beginning at 2:30 P. M.:

Opened by Mrs. A. W. Wynne, vice-president for Bolivar County.

Invocation, Rev. Melville Johnson.

Address of Welcome, Mrs. Walter Merritt.

Response, Mrs. G. W. Mancell.

Music, Piano, Mrs. Paul Girard; violin, Father Ro'ando.

Guest Speaker, Mr. W. M. Kithley, president of the Delta State Teachers College.

BUSINESS PERIOD

Mrs. T. J. Barclay, president of the Auxiliary to the Delta Medical Society, presiding.

The outstanding business was the merger of the Auxiliaries of the Delta Medical Society and of the Clarksdale and Six Counties Medical Society, the new organization to be called the Woman's Auxiliary to the Delta Medical Society.

Officers were elected as follows: President, Mrs. L. B. Otken, Greenwood; President-Elect, Mrs. T. B. Holloman, Itta Bena; First Vice-President, Mrs. T. J. Barclay, Isola; Second Vice-President,

Mrs. H. L. Cochrane, Gunnison; Third Vice-President, Mrs. V. B. Harrison, Clarksdale; Secretary and Treasurer, Mrs. L. A. Barnett, Greenwood; Parliamentarian, Mrs. John A. Beals, Greenville.

After adjournment, the guests were beautifully entertained at a tea at the home of Mrs. E. E. Farmer.

At 6:30 P. M., the Auxiliary and the Medical Society were jointly entertained at a banquet at the Legion Hut.

Mrs. L. B. Otken,
President

Greenwood,

April 12, 1934.

HONOR ROLL

The following were contributors to the Mississippi Section of the Journal this month:

COUNTY EDITORS: Lucien S. Gaudet, W. C. Walker, L. L. Minor, E. A. Trudeau, Wm. F. Hand, W. H. Scudder, R. B. Caldwell, W. E. Dickins, G. S. Bryan, G. H. Wood, G. E. Godman, R. P. Donaldson, J. W. Moody, C. M. Murry, H. T. Ims, John G. Archer, M. L. Montgomery.—17.

SOCIETIES: Adams County Medical Society, W. K. Stowers; Central Medical Society, L. W. Long; Delta Medical Society, F. M. Acree; DeSoto County Medical Society, L. L. Minor; East Mississippi Medical Society, L. V. Rush; Harrison-Stone-Hancock Counties Medical Society, H. K. Rouse, Jr.; Issaquena-Sharkey-Warren Counties Medical Society; North Mississippi Medical Society, A. H. Little.—8.

WOMAN'S AUXILIARY: Mrs. Frank L. Van Alstine, Mrs. H. C. Sheffield, Mrs. Laurance J. Clark, Mrs. Temple Ainsworth, Mrs. Leon S. Lipincott, Mrs. L. B. Otken.—6

HOSPITALS: Houston Hospital, W. C. Walker; King's Daughters Hospital, Greenville, John W. Shackelford; Natchez Sanatorium, W. K. Stowers; Vicksburg Sanitarium.—4.

OTHERS: J. W. D. Dicks, T. M. Dye, E. Leroy Wilkins, L. L. Minor, W. H. Watson, G. C. Jarratt, R. N. Whitfield, Felix J. Underwood, J. A. Beals, T. B. Lewis, J. A. K. Birchett, Jr.—11.

GRAND TOTAL—46.

YOUR EDITORS THANK YOU.

BOOK REVIEWS

Diabetic Manual for the Mutual Use of Doctor and Patient: By Elliott P. Joslin, M. D. 5th ed. rev. Philadelphia. Lea & Febiger, 1934. pp. 224.

This completely revised edition of Dr. Joslin's manual is heartily welcomed. While he has intended it always primarily for the patient, and has dedicated it to "Those individuals who have conquered diabetes by living longer with it than they were expected to live without it," the manual is of perhaps even greater use to the doctor. Practically all of the problems with which he is confronted in his management of diabetes would be answered by a perusal of this small volume, and by the use of it as a constant handy reference. Patients unfortunately have at times been unduly depressed by the detailed account of complications of diabetes as outlined in the manual, and this is perhaps the only criticism that could ever have been made. Dr. Joslin has made his texts in each succeeding edition ever more optimistic so that the patient and the mother of the diabetic child should find on nearly every page some word of encouragement. As already pointed out the very dedication should make them confident and buoyant.

I. I. LEMANN, M. D.

Benign Tumors in the Third Ventricle of the Brain: Diagnosis and Treatment. By Walter E. Dandy, M. D. Springfield, Ill. Charles C. Thomas, 1933. pp. 171.

This is a small book of only one hundred and sixty-nine pages but carrying something of the same relation of power to size as a stick of dynamite. It contains a short introduction, case reports, an analysis of signs and symptoms with discussion of diagnosis, pathology and treatment and a bibliography. Mechanically it is well done and there are profuse illustrations.

From his own clinic the author has collected twenty-one cases, five colloid cysts and sixteen solid tumors, although many of the latter were associated with more or less cystic formation, one particularly so. Forty-seven additional cases have been collected from the literature and are reviewed. There are concise histories by each of the authors and these case reports occupy the major portion of the book. The records include the surgical treatment.

In the following section the signs and symptoms of these lesions are analyzed in detail and there are described briefly the operative approaches. The two principal ideas one may bring from this work are first that these lesions are amenable to treatment and second that the diagnosis rests almost necessarily upon ventriculography. Many of

these lesions seemed to be utterly impossible of correct localization by other means.

GILBERT C. ANDERSON, M. D.

The Foundations of Nutrition: By Mary Swartz Rose, Ph. D. Rev. ed. New York. The Macmillan Co., 1933. pp. 630. figs. 101.

A revised edition of a work that appeared in 1927. The following quotation from the Preface will indicate the purposes and scope of the book. "Like running an automobile, eating can be done by rule of thumb, without any understanding of what the food is doing to the body beyond the passing pleasure of the meal; or it can be managed with intelligence and foresight, avoiding in course of time many disabilities and saving the body unnecessary wear and tear, which insidiously but inevitably cut down its efficiency and impair the value of the individual to himself and to society.

"This book is written for those who wish to live more intelligently. An effort has been made to present within a small space some of the fundamental principles of human nutrition in terms which call for no highly specialized training in those natural sciences upon which the science of nutrition rests. The selection of topics and the relative amount of space devoted to each are based on much experience in presenting the subject of nutrition to beginners whose object is to be well informed as to the significance of food in daily life so that they may order their own lives more successfully and may have a better understanding of the part which nutrition plays in health in the world at large.

"Each essential factor in an adequate diet is discussed in detail with many references to animal experiments which help to make clear the reasons why it must have a place in the daily program."

The book is written for the layman and should interest everyone who wishes to be up on the modern views of Metabolism. The dietetic expert, the physiologist, the internist, particularly the pediatrician, will find much of interest and value.

HENRY LAURENS, Ph. D.

International Clinics: December, 1933. Philadelphia, J. B. Lippincott Co. 1933. pp. 317.

The high quality of this volume is in keeping with its predecessors. This issue contains a splendid symposium devoted to the endocrines. A most scholarly clinico-pathological conference on a case of rupture of aorta with aortic regurgitation is presented. There are several other excellent essays among which may be mentioned obesity and Paget's disease of the nipple. A good index completes the book.

I. L. ROBBINS, M. D.

Surgical Anatomy: By Grant Massie, M. B., M. S. (Lond.), F. R. C. S., (Eng.) 2d ed. Philadelphia. Lea & Febiger 1933. pp. 458.

A casual perusal of this small volume is likely to leave the impression that it represents a cursory treatment of the subject; but a more careful study will reveal a thoroughness in keeping with the best English tradition. The style is simple and pleasing, conveying the facts clearly and emphatically. Over four hundred illustrations are particularly well chosen, and serve well their function of visualizing the contents for the reader. Most of the illustrations are diagrammatic and many are colored.

On the whole this work is well balanced and excellently presented. It should prove a valuable reference book for the student,—the surgeon, however, in many instances will require a more exhaustive treatise for his needs.

RAWLEY M. PENICK, JR., M. D.

Nervous Breakdown: Its Cause and Cure. By W. Beran Wolfe, M. D. New York. Farrar & Rinehart, Inc., 1933. Price, \$2.50.

A very readable book of common sense advice written for the patient suffering from a minor mental disorder, and the medical practitioner who does not care for a technical exposition on the subject. The author writes about nervous breakdown which, by the way, may mean any mental disorder one wants it to mean except a major psychosis. There is always danger in giving a book to a patient suffering from a psycho-neurosis, so frequently harm results. Dr. Wolfe's book is well adapted to the need of many neurotics. It is a very helpful book and I heartily recommend it for the purpose for which it was written.

C. S. HOLBROOK, M. D.

Treatment of the Commoner Diseases: By Lewllys F. Barker, M. D. Philadelphia. J. B. Lippincott, Co., 1934. pp. 319

This book is the result of a series of post-gradu-

ate lectures and is primarily intended for the use of the general practitioner. With this intent constantly kept in mind, the author endeavors to present those diseases most commonly met with by the practitioner. Frankly, the book is somewhat of a disappointment. Too much space is allotted to some subjects and too little to others and yet they are all brief. The author, in the opinion of the reviewer, has suggested new therapy of a proprietary nature (intravenous medication) to too great an extent. One wonders if so many preparations are available to the general practitioner and whether intravenous and oral medication of the several comparatively new and little time-tested therapy is practicable or desirous.

Some portions of the book are very interesting and worthwhile. They reveal flashes of the real Barker whose scientific papers are always a medical treat. A splendid bibliography in the form of footnotes to the subjects discussed is a feature of the book.

All in all, I believe that this book is no real contribution to therapy. I believe that the therapeutic helps are in the main too fragmentary and general for the average physician.

I. L. ROBBINS, M. D.

PUBLICATIONS RECEIVED

William Wood & Company, Baltimore: *The Study of Anatomy*, by S. E. Whitnall, M. D., Second Edition.

Whittlesey House, New York: *You Must Relax*, by Edmund Jacobson, M. D.

The American Anthropological Society, New York: *Passional Psychology*, by Dr. Jacobus X.

Farrar & Rinehart, New York: *Medicine, a Voyage of Discovery*, by Josef Lobel, M. D.

The American Academy of Political and Social Science, Philadelphia: *The Medical Profession and the Public*.

Milbank Memorial Fund, New York: *The Milbank Memorial Fund Quarterly*.

New Orleans Medical

and

Surgical Journal

Vol. 86

JUNE, 1934

No. 12

PRESIDENT'S ADDRESS*

J. W. D. DICKS, M. D.

NATCHEZ, MISS.

This annual meeting of the Mississippi State Medical Association brings to a close my tenure of office as your president. Words fail me in my efforts to express to you my appreciation of the great privilege of being your leader during the year that is now drawing to a close. I know of no greater honor that could come to any physician than to be selected as president of a state medical association. It is the crowning event of a physician's professional life. I also realize that associated with this high honor there is a great responsibility not only to the organization as a body but to every individual member thereof. How well I have fulfilled the great confidence you have reposed in me only you can judge. I can only say that I have labored with an eye single to what I believed to be the best interests of the State Association and its individual members.

Realizing the importance to the medical profession of a strong organization, I have striven by every means to increase the membership of organized medicine in Mississippi. During the past year we have had to deal with questions affecting the welfare of the medical profession in our state. Aided by the officers of the State Medical Association, a solution of these problems was obtained that I trust was satisfactory to all concerned.

Complying with the mandate of our Constitution and By-laws, I have visited as many

of our medical societies as it was possible for me to attend. Professional duties, I regret to say, prevented my visiting other such societies from which I received invitations. I have endeavored to reach all of the profession through the columns of the "New Orleans Medical and Surgical Journal" and "The Mississippi Doctor."

In this my final address to you I wish to bring to your attention certain problems that I consider of vital importance to the welfare of the medical profession of our state.

By way of introduction to the subject it may not be amiss to sketch briefly the origin and the subsequent history of the practice of medicine as it relates to the economic position of the physician throughout the ages that have passed.

The practice of medicine had its origin in the far distant past. Primitive man, the ancient ancestor of the present generation, was a savage who roamed the earth, ignorant of the phenomena of his existence or of his surroundings. Fear of death was uppermost in his mind. He feared his fellow man, the wild beasts that inhabited the mighty forests, and fled in terror from such natural phenomena as thunder and lightning. He attributed all of his misfortunes, including disease, to evil spirits that in his imagination peopled the air about him. To protect himself from these evil spirits he invented good spirits, charms, and mystic rites. In due time some one member of the clan or tribe appeared to be more successful than others in combating these evil influences. This man became the magician or medicine man of the clan. He was the progenitor of the physician.

Later, as primitive man became more

*Read before Mississippi State Medical Association, Natchez, May 8-10, 1934.

enamored with the idea of good spirits aiding him in his fight against the evil ones, this medicine man became a priest who served the good spirits or gods. Religion was therefore added to the practice of medicine. The origin of medicine was, therefore, mysticism, magic, and religion. Primitive man believed that spirits inhabited all animate and inanimate objects. Some of these objects he thought contained good spirits, hence certain herbs and parts of certain animals were given to the patient in order that the good spirits might enter into their bodies and drive out the evil ones that were causing disease.

As man's intelligence gradually increased his desire better to protect himself from disease and its sequence, death, was manifested in other additions to this early art of medicine; namely, astrology and the science of numbers which were thought to influence his health. The numbers four, seven, and thirteen were considered of especial importance. The rays of light from Luna, the moon, under certain conditions were supposed to produce insanity, hence the designation "lunatic" was applied to an insane person. From these old beliefs we of the present generation have inherited superstition, such as the belief that a child born at seven months was more likely to live than one born at eight months. Throughout many ages the art of medicine was a mixture of religion, mysticism, and magic.

About four hundred years before the birth of Christ there lived in Greece a physician, whose name was Hippocrates. He became the greatest physician of his age. He was the first to recognize the error of mysticism, magic, and religion in medicine. He taught that disease was cured by the natural powers of the body. He practiced bedside observation of symptoms, examined the secretions of the body, and investigated the digestibility of various foods. He established the practice of medicine on a rational basis. He also composed a code of ethics to govern the conduct of physicians. He declared that the true physician must be a man of honor, true to himself, and honorable in his dealing

with all men. This ancient code is the basis for the present code of ethics that is in use today by the medical profession. In this day of many codes we of the medical profession can point with pride to this ancient code of ours that has been a lamp to guide the members of our profession throughout all the centuries of the past.

Gradually the science of medicine progressed until today we find not a finished product but a system that has reduced the incidence of disease to a point that is nothing short of miraculous. The death rate from disease has dropped to 9.6 per 1000, and nearly twenty years has been added to man's age of expectancy. The number of newborn infants that may reasonably expect to reach maturity has been vastly increased. Trench after trench of man's great enemy, entrenched disease, has been taken in our war on that dread enemy of the human race. There remains much more to be done before disease will be entirely under control.

During all of these centuries past the physician has never faltered in his endeavor to serve suffering humanity. Many of the great achievements of modern civilization would not have been possible without the aid of scientific medicine. I will mention only one of many—the construction of that marvel of engineering skill, the Panama Canal. Many thousands of lives and dollars have been saved annually by the almost complete eradication of typhoid fever, diphtheria, and the great reduction in the cases of tuberculosis, also by the banishment of that great scourge of our Southland, yellow fever.

What position has the physician occupied in the body politic during all these years of the history of medicine? During the early days of primitive civilization he was exalted to a place of great influence among his fellow men. In the writings of the ancient people, the earliest of which we have any record, the physician is frequently mentioned as a man high in the esteem of the people. He continued to occupy a strong position in society down to the time of the Dark Ages some centuries after the birth of Christ.

This period of man's history witnessed a retrogression in civilization to a state of semi-barbarism. Naturally the practice of medicine was affected by the changed conditions of civilization. Medicine again passed into the domain of religion and the physician lost prestige. He gradually reverted to a menial position in society. The clergy began again as in primitive days the practice of medicine. Medical service was dispensed by the monks largely free of charge, a form of state medicine.

About the beginning of the sixteenth century a few great thinkers in the profession in the face of grave persecution lighted again the lamp of knowledge and gradually led the medical profession out of the darkness and ignorance that had engulfed it. Once again religion and the practice of medicine were divorced. The economic status of the physician was gradually brought up from the lowly position he had occupied to one of influence and material betterment. From this time dates the beginning of modern, scientific medicine.

During the seventeenth, eighteenth, and nineteenth centuries we see the development of a spirit of intense individualism in all lines of human endeavor. Trade boundaries were far flung; much of the world's surface was unexplored and undeveloped. It was an age that required rugged individualism as a guiding star in the realm of economics in order that civilization might progress. Again we see the influence of the times on the medical profession. The medical profession became the most individualistic of all professions.

Gradually as civilization moved forward frontiers disappeared, unexplored lands of yesterday became the prosperous communities of today. Great cities were reared in former barren wastes. The railroad and later the automobile joined all sections of our nation closely together; the telegraph, telephone, and finally the radio and aeroplane completely banished isolation and knit the population together into one composite mass. We find ourselves in this new age trans-

formed from a nation of widely scattered communities and individuals into a great united family where the interests of the individual are bound up in the composite mass that we call society.

Man has by his intelligence harnessed the powers of nature and made them his servants to such an extent that in this new age, the so-called machine age, we are facing a condition of over-production in the world's commodities rather than under-production—the condition that existed in former ages. This changed condition has brought about its natural sequence, a collapse of our economic structure. The result of this collapse has been the greatest financial disaster that has ever occurred in our history.

What role has the physician played in these trying days of financial storm? While some twelve millions of his fellow citizens have been thrown out of employment and some forty-eight million more have been so reduced in income that they have to all practical purposes been relegated to the indigent class, requiring bread lines in our cities and entailing untold suffering throughout the land, the physician has never faltered in his war on disease. He has been found at his post of duty, doing all that is humanly possible to alleviate human suffering, never sparing himself physically or financially in his efforts to relieve the sick and injured. This he has done under a tremendous handicap. The average physician is dependent largely on the artisan, the farmer, and the average salaried man for his income. The buying power of this large class has been practically wiped out and in consequence the income of the average physician has almost reached the vanishing point. I know of no class of our citizens that has felt the depression more than the average physician. He has met the financial storm with face to the front, chest out, and chin up; knocked down many times he is soon up and fighting again. Let it be said, however, to his eternal credit he has never asked aid from any source. When many classes of our citizens have given up the fight and asked for government aid, I

have yet to hear of a single instance where the physician has asked for or received aid from any source.

What is the economic position of the average physician in our body politic today? I designate this physician as the average to distinguish him from a small group of his brother practitioners whose financial reward in the past has been derived largely from our wealthy and moderately wealthy class and have achieved financial independence as a result of a lucrative income during the days of our prosperity. The average physician belongs to a large majority of our profession whose income even in days of prosperity was around fifteen hundred to three thousand dollars per year. Out of this income he must support his dependents in a decent manner, educate his children, and keep up the expense of his practice. There was never a chance for the physician to save any money above his expenses; not a possible chance for him to set aside a fund to take care of himself and his dependents when he reached old age.

The economic status of the average physician today is extremely bad. He is carrying a tremendous load. Unable to collect from his former patients because they have been transferred to the indigent class, he cannot see them suffer when sickness is added to their misfortune; he does not refuse them aid in their hour of need, even though he knows full well that he will expend his time, professional services, and money from his meager supply without hope of being paid. The load is rapidly becoming too heavy to be carried any longer. We cannot shut our eyes to this situation; to do so would be the height of folly and only bring disaster. We must give the subject the consideration it deserves. We cannot plan a solution unless we study the situation intelligently, constructively, and dispassionately.

There are several factors not entirely the result of the financial debacle that are threatening the economic status of the average physician. Let us analyze the situation briefly. During the past fifty years our knowledge of the science of medicine has increased by leaps and bounds. The great advance in medical science has brought many new and necessary procedures into the diagnosis and treatment of disease. I will mention a few of the aids in diag-

nosis—roentgen ray, pathological, bacteriological, and serological laboratory examinations, all absolutely necessary in order that a correct diagnosis be made and proper treatment instituted. The general tendency to hospitalize the sick in order that the best interests of the patient be served and in many instances the employment of specialists have combined to increase the cost of medical care to a point beyond the reach of the moderately salaried man, the artisan, and the farmer. This large class of our citizens, constituting over seventy per cent of the population, have erroneously attributed this increased cost to a sort of profiteering on the part of the medical profession. This charge has no foundation in fact. The amount received by a single individual physician is small. It is no greater than the wages of any skilled artisan and in some instances not as large. Propaganda has been busy and the rumblings of discontent among our great middle class population were heard even before the financial storm began. The storm has tended to fan the flame into a large fire of dissatisfaction with our present methods of medical practice.

To find evidence of the growing revolt against the cost of medical care we have only to look around the country and see the number of free clinics that have been established by public and private philanthropy. The number of these free clinics has materially increased and the amount of money appropriated for this purpose has been multiplied many times. These clinics were established originally for our pauper population but their activities have been extended until now we find all classes of the population receiving free medical treatment at the expense of the tax-payer and private philanthropy.

The wholesale withdrawal of such vast numbers of our population from the clientele of the average physician constitutes a serious menace to the medical profession and would seem to point the way to an ultimate absorption by the state of the practice of medicine. The solution of this problem calls for constructive planning on the part of the medical profession. It is beside the question to pass resolutions at our meetings condemning this or that plan for the solution of the problem. The public expects the medical profession to justify its right to

leadership in matters pertaining to the practice of medicine by presenting a solution of the problem that will be satisfactory to both the public and the medical profession.

It has been said by many writers during the past few years that people were starving in a land overflowing with all of the commodities of life. Over-production has been blamed for most of our economic ills. The medical profession is facing a similar situation in the over-crowding of our ranks. Statistics show that in order to insure a living income the ratio of physician to population must not exceed one physician to sixteen hundred of population. Now let us see what the present ratio is. We find that we have today in the United States one physician to seven hundred eighty of population and at the present rate of graduation from our medical colleges we will have in 1940 one physician to seven hundred sixty of population, a number far in excess of the needs of our populace. This over-crowding can lead to only one result, a marked deterioration in medical service rendered the public and a lowering of the standards of the practice of medicine.

In the mad scramble to obtain a livelihood, human nature will assert itself as it has always done. The trusting public will find itself victimized by the unscrupulous in the over-crowded ranks of the profession. This situation should be largely corrected at its source, the medical colleges. The number of students admitted to the study of medicine should be kept at a minimum sufficient to supply the vacancies that occur in the profession. It is not enough to require a high degree of educational attainment before admission as a medical student. The adaptability of the applicant for a medical career should be thoroughly studied and only those who have proven to measure up to a high standard of adaptability should be accepted. Bearing in mind the qualification of a physician enunciated by the Father of Medicine, Hippocrates, I do not believe any young man who indulges in excesses of any kind or who does not measure up to a high standard of honor has any place in the ranks of the medical profession. Our state licensing boards can also aid in this campaign to prevent over-crowding. A general tightening up of the re-

quirements for a license will aid materially. The moral character and adaptability of the applicant especially should be stressed. Our state licensing boards should also be clothed with authority to revoke the license of any physician who is found to be dishonorable, immoral, or addicted to the use of any of the habit-forming drugs or alcohol.

This subject should receive careful attention at the hands of our state medical associations in order that our national organization may be able to effectually solve this problem.

One other problem confronting the medical profession will be found in the field of specialization. It is a debatable question whether we are tending to over-specialization. The specialties have been multiplied many times during recent years. It is probable that combinations of two or more into one specialty could be accomplished without detracting from the service rendered the public and thereby reducing the cost of medical care.

Entrance into the specialties should be legally restricted to those who demonstrate their ability to engage in a special branch of medicine. The designation "specialist" in medicine implies a greater knowledge and training in the particular branch of medicine than is possessed by the general practitioner. In order that this qualification be complied with the specialist must have had special training in a post-graduate college and in addition served an apprenticeship under a master in the specialty that he aspires to enter. At the present time there are no legal obstacles in the way of any practitioner announcing his entry into these special branches of medicine without in any way meeting the qualifications mentioned above. This is largely true in the field of surgery, one of the most important and exacting specialties of medicine—a specialty where life and death are more delicately balanced than in any other field of medicine. The results following surgical operations by poorly trained, inexperienced surgeons, even if not fatal, are frequently disastrous to the health of the patient. There should always be a definite indication for operation to justify its employment. No physician should enter into this specialty until he has acquired that greatest of all assets of a competent surgeon, surgical judgment. As a prere-

quisite one must have a thorough knowledge of all branches of medicine, especially diagnosis, surgical pathology, and operative technic. These qualifications can only be acquired by special training in a post-graduate school and in addition by serving an apprenticeship under a master in surgery. Surgical judgment requires a correlation of all these subjects plus practical experience under the tutelage of a master surgeon. I do not believe that anyone should be allowed to practice a specialty until he has met these requirements. The right to practice medicine granted to recent graduates by licensing boards should not carry with it the privilege to practice a specialty. Licensing boards should require special training and the ability to pass a special examination before granting the legal right to practice a specialty. The public has the right to know when they consult a specialist that he is competent.

This question deserves the careful consideration of organized medicine to the end that some plan may be evolved to safe-guard the interests of the public and protect the competent specialist.

From ancient days we of the medical profession have inherited a burden that has been carried through the many centuries. This burden is an inheritance from the days of feudal lords. During the days of the middle ages the physician's economic position depended upon the goodwill of the lord who ruled in his homeland. The lord's retainers, who were little more than serfs, were treated by the physician without recompense at the command of the lord. To refuse meant degradation or even death to the unfortunate physician. As the scenes of history changed throughout subsequent centuries these over-lords shifted their mantle in respect to this burden to two other lords of this present day civilization—state and privately organized charity.

I speak now of the burden imposed upon the physician by state and privately organized charity. I wish to emphasize the words "organized charity", be it national, state, county, city, or public philanthropy. I do not include personal charity. I trust the day will never come when any physician will refuse to dispense charity in his private practice. It is one of the greatest privileges of our profession to relieve suffering

humanity regardless of the ability of the patient to pay for such service.

Service to organized charity is an entirely different matter. The physician as a citizen pays his taxes and contributes his money to the various charity organizations in our land. He discharges his duty in this respect in the same manner as do other classes of our citizens and should be entitled to receive the same treatment accorded these other classes of citizens. Does he receive equal treatment in this respect? History answers, "No." An additional burden is laid upon him. Organized charity collects from him his money in taxes and in voluntary contributions and then brings to him their indigent sick for a further contribution of his time and professional knowledge. This double tax is neither fair nor just. Do these various agencies expect to obtain food, clothing, drugs, other commodities of life or personal service from artisans without paying the cost? They expect and do pay for these commodities and personal services. However, they expect the physician to give his time and professional knowledge gratis.

Some may use the time-worn argument that the physician is "only giving his time and that costs him nothing." The idea also seems to prevail that in some manner the medical profession is endowed from some mysterious source with a sufficiency of this world's goods and therefore, does not need recompense for services of this character. Apparently they do not realize that it has cost the physician an initial investment of about twenty thousand dollars to obtain his medical education; that in order to carry on his practice he must expend a large sum of money each month, and that he has dependents to support out of his income. His time and his professional knowledge are his stock in trade that he offers for sale in order that he may meet his financial obligations. The physician is certainly entitled to a fair return on his investment. Recent statistics gathered after a careful survey of the United States reveals the fact that the medical profession contributed last year, in services to the indigent for which they received no pay, the stupendous sum of \$375,000,000.00. This survey revealed another fact that 24.58 percent of the physician's time was given outright to charity.

I am sure that the sense of justice and fair play of our American people will aid in correcting this situation. We of the medical profession are partly responsible for the continuation of this custom. We have encouraged in the minds of the public that we have some special mission on earth to alleviate all human suffering regardless of conditions. I would again give emphasis to the fact that I am only alluding to public charity dispensed by state or private charitable organizations and not in any way referring to personal charity that the physician dispenses in his private practice.

Another problem in which the medical profession should be interested is the problem of private hospitals. During these days of readjustment of our economic system, the privately owned hospital has suffered a loss of revenue that has practically reduced them to penury. A recent survey in this field has revealed thousands of beds in the pay department of these hospitals empty. The charity beds are full to overflowing. The hospitals devoted entirely to charity, owned and operated by the national government and the political subdivisions of our country are crowded to full capacity with waiting lists well filled.

The hospital has been called the doctor's workshop. It is the place where he may practice medicine and best conserve his patient's interests. The hospital has become an essential part of every community. The physician and the public both realize its great importance if the sick and injured are to be given every opportunity to recover normal health.

In the vast majority of small communities of our land these hospitals have been established by physicians in order that they may better serve their patients and give them all the advantages of modern medical treatment. The establishment and operation of these small hospitals requires a large outlay of money, more than the average group of physicians can afford. During the days of prosperity these institutions had just about made expenses. I have never heard of one that declared a dividend. During our days of plenty not one of these hospitals refused a charity case, although the public made very little if any effort to pay for the indigent sick and injured. Now that we are in the midst of financial storm these small hos-

pitals have endeavored to carry on in order that their communities might not be deprived of hospital facilities. Struggling along with their income almost at the vanishing point, unable to meet their obligations, these hospitals are in danger of closing their doors. The physicians who own them have carried the load until they have come to the end of the road. They can no longer maintain them. These communities must either be deprived of hospital facilities or some other plan must be evolved to solve the problem.

I do not believe it is incumbent upon the physician to furnish hospital facilities. I believe this is the duty of each community. It is a duty these communities have shirked in the past because they believed the medical profession would carry on for them. Our communities are ready and willing to expend thousands of dollars on community luxuries, such as paved roads, expensive courthouses, and school buildings, but they revolt at the idea of providing a place to treat their sick and injured. I think it is time that the medical profession refuse to carry this load any longer. There is no more reason that the physician should provide the hospital than there is for our lawyer friends to provide the courthouses. One is a workshop for the doctor and the other is a workshop for the lawyer.

There should be a community hospital in each community, owned and operated by the community with both free and pay wards. Only bona fide charity cases should be admitted to the free wards, all others to be placed in pay wards and treated by the physician of their choice as his private patient. Our State Medical Association has a community hospital committee that has done excellent work in studying the situation. They have amassed a great deal of valuable data. I believe this subject should continue to receive our earnest consideration in order that the problem may be solved.

What does this new age in which we are living portend for the physician? We have seen in our resumé of the history of the practice of medicine how the social and economic status of the physician has changed in the different ages of our civilization. It is logical to expect a change in this age. We are living in an age of mass production and collective bargaining. New

economic ideas are rapidly taking the place of our old ones. We see a participation of government in all lines of business to a greater extent than ever before in our history. Whether we shall ever retrace these steps remains to be seen. It is possible that we shall continue to have a large measure of government control of business. Will this control extend to the professions? It is logical to think that in a measure it will. I believe it is the duty of organized medicine to be on guard in order that such government control may be limited to a minimum and not inconsistent with the best interests of the public and the profession.

A recent medical writer has well stated, "Today medicine stands at the cross-roads, one road leading directly to state medicine and the other to some form of our present method of practice modified to meet present day conditions." What road shall we take? It is my opinion that the unanimous answer of the profession will be the road to our present plan of practice modified perhaps to suit the age in which we are living. No thinking physician would want state medicine with all of its attendant bureaucratic evils, nor do I think our American people would tolerate it for any length of time. I can think of no greater prostitution of a great and noble profession than would be accomplished by state medicine. Honeycombed by politics, shackled by bureaucratic regulations, both the public and the profession would suffer irreparable damage. We have but to look across the seas to countries where it is in operation to see its baneful results.

The medical profession should not pursue a policy of ignoring the signs of the times. We should study the economic situation in all of its relations to the practice of medicine. The subject should be approached in an ethical manner and a well thought out plan evolved to guide the profession in readjusting the physician to the new age in which we are living. National, state, and county leaders should plan constructive leadership in order that the rights of the individual physician be safe-guarded, the public protected, and the high ideals that have guided the conduct of our profession in the past preserved.

How can we of the medical profession solve

these problems? I think the answer lies first in thorough organization. As individuals we can accomplish nothing. This is an age of organization. The day of complete individualism is gone perhaps never to return.

The foundation of organized medicine in the United States is the county medical society. Upon this foundation rests the entire structure of medical organization. The importance of a strong foundation cannot be over estimated. Our county medical societies must be thoroughly organized. Every eligible physician in the county should be enrolled as a member. In order to enlist his interest in organized medicine there must be a material advantage to be gained by each individual physician. None of us like to admit that there is a material side to medicine, nevertheless it is present and we may as well admit the fact. This is an age where materialism plays a large part in men's lives; men are not attracted to any proposition that does not promise them some benefit. Likewise medical societies must give some real tangible return for the time one gives to it and the money one pays in as dues.

How can a medical society fulfill its mission? First, in order that interest may not lag as the result of infrequent meetings, the society should meet monthly. Second, the territory covered by the society should not be large in order that the place of meeting shall always be convenient to all of its members. Third, the program should always contain subjects of interest to the general practitioner, remembering that these societies are not composed of specialists. Fourth, economic problems both local and general should have a prominent place on the program. Fifth, round-table discussion of clinical cases I believe is of more value than prepared papers in stimulating interest of the members. Sixth, medical ethics should be stressed and an effort made to establish a spirit of comradeship among the members.

I believe the county society should be the unit of organization of our State Association. Some may argue that there are counties that contain only a few physicians, not enough to form a society. It is true that we have a few counties in this state where this condition obtains. The situation in these counties can be met by allowing the physicians to join adjacent

county societies. I believe that the organization of county medical societies will materially increase the membership in organized medicine in this state.

I would not interfere with our present splendid component societies. I would make of them councilor district societies, meeting quarterly, semi-annually, or annually, their function being purely scientific. They should furnish interesting and instructive programs of a professional nature. There should be no dues for the larger societies; membership in the county society should carry with it membership in the councilor district society. The expense of the larger society meetings can be pro-rated among the county societies of which it is composed. This plan has been in operation in the Eighth Councillor's District for several years with very satisfactory results.

Let us analyze the statistics of membership in our State Association at the beginning of my term of office. We had five single county societies with a combined membership in their territory of seventy-seven plus percent, while our component societies only showed a combined membership of fifty-five plus percent. These facts would seem to emphasize the value of county societies over the component society in the matter of enrolling our eligible physicians in organized medicine. We must not lose sight of the fact that the State Medical Association is the organized medical profession of our state. It has other functions than a purely scientific function. It is the organization that represents and speaks for the entire profession in *all* matters pertaining to the practice of medicine both economic and scientific.

I believe the plan to make the county society the unit of membership for the Mississippi State Medical Association is worthy of a trial. It is the plan in vogue in practically every state in the Union. I recommend the question to you for your careful consideration.

The study of economic problems confronting the medical profession should receive your attention. I recommend the appointment of a committee from the State Medical Association to gather information on this important subject. This committee should study the question and be prepared to make recommendation to the House of Delegates on matters pertaining to

medical economics to the end that constructive action may be taken. An appropriation should be made in order that such committee may do effective work.

In conclusion I wish to again stress the importance of organization and your careful consideration of the economic problems that confront the medical profession. Let us develop a spirit of comradeship among our members. Let us throw away some of that intense individualism that has in the past encased the average physician in a shell of self-sufficiency. Let us encourage team-work among our members and each member do his part to the best of his ability.

I wish to thank the officers and members of the Mississippi State Medical Association for their whole-hearted aid and support during my occupancy of the presidency. I shall always retain a very happy remembrance of the honor and confidence you have conferred upon me. If I have erred in my leadership, you may be sure it was an error of mind and not of heart. May health, happiness, and prosperity attend each individual member of the State Medical Association in the future.

May the Mississippi State Medical Association go forward in its mission to hold high the torch to guide the medical profession of Mississippi along the road of honor and professional achievement to a greater destiny in the days that lie before us.

THE FAILING HEART OF MIDDLE LIFE*

J. E. KNIGHTON, M. D.
SHREVEPORT, LA.

Since heart disease stands at the head of the list of causes of death, and since a great majority of these deaths occur during and after what is commonly referred to as middle life, it is surely not out of place to consider this subject in the section devoted to public health.

It is somewhat difficult to divorce the heart diseases of middle life from the heart diseases of early life for the reason that they are so intimately related that when we consider one

*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

phase of the subject we must naturally think of the etiologic relation the one may have had upon the other.

If we are to enjoy good health in middle life we must give attention to preventive measures in early life. It is a well known fact that many of the infectious diseases of childhood may result in serious damage to the valves of the heart or to the heart muscle which may be permanent if not properly cared for at the proper time. Children should be very carefully watched during the period of convalescence following diphtheria, measles, whooping cough, scarlet fever, and especially influenza as well as recurring tonsilitis and acute rheumatic fever. Cardiac valvular lesions in children which result from any of the above named conditions may be carried through the years of a long life without proving to be a serious handicap if the condition is recognized early and given proper care and attention. Regular periodic physical examinations should be adopted as a health measure for everybody but especially should such measures be observed for the child who has been so unfortunate as to acquire a heart lesion.

In considering the failing heart of middle life we naturally think of the appalling number of men who die at an age when they might be most useful to their families and to their communities.

We boast of having been able to extend the average span of life during the past few decades through the teaching and practice of public health and sanitary measures which our scientific leaders have brought to light. However, when we view the mortality rate during the various decades of life we find that the average length of life has been extended by reducing the death rate of infants and young children. We have made no improvement in the death rate of middle life for many years and this condition has become a most serious problem. All around us we see our friends, our neighbors, our associates, our most valuable citizens of middle age becoming victims of angina pectoris, coronary occlusion or congestive heart failure from hypertensive heart disease. Such occurrences have become so common that it occurs to me that we have become in a meas-

ure indifferent to the gravity of the problem that confronts us.

When we face these facts, the question should naturally suggest itself, what can we do about it? Are we simply to become resigned to our fate or shall we as members of the medical profession consecrate ourselves anew to the task of combatting this monster that is taking such a heavy toll from our citizenship of middle life.

I think there is much that we may do. We should earnestly and enthusiastically advocate periodic health examinations as a means of discovering the early signs of degenerative changes in the cardio-vascular system. The value and importance of these examinations should be taught by us to our patients in our personal contact with them and also in public appearances when proper occasions arise. Our public health agencies should also be encouraged in the dissemination of information along this line.

What has been said regarding the proper care of children during the period of convalescence following infectious diseases applies with equal or even greater force in the case of adults who are recovering from acute illness. Business and professional men in their anxiety to return to their offices or places of business are often too much inclined to disregard the advice and warning of their medical attendant and suffer relapses and often serious heart changes as a result of their indiscretion. This is especially true in cases of influenza, pneumonia, typhoid fever, rheumatic fever and even in the severe forms of the common colds. We should be very positive and unequivocal in our instruction to those convalescents if we are to prevent the unnecessary heart complications.

Another disease which I have not mentioned up to this time and which is one of the most fertile causes of heart and vascular disease is syphilis. In dealing with this disease we must keep in mind the fact that safety depends upon thoroughness of treatment. Inadequacy of treatment at the proper time is responsible for practically all syphilitic cardio-vascular diseases.

Focal infections such as those involving the accessory sinuses, the tonsils and peridental abscesses must be given proper consideration, for we must recognize these as possible etiologic factors in relation to heart disease. What we all

need to recognize more fully is that the tendencies of our modern civilization are carrying us rapidly toward physical as well as nervous bankruptcy. The high tension which characterizes our activities from morning to night, day after day, and year after year must inevitably lead to arteriosclerosis and hypertrophy of the heart muscle. The next step is a dilated heart and the associated passive congestion of the lungs, liver, kidneys and other organs; and we are then no longer healthy, virile, efficient, individuals but invalids when we should be in the prime of life. How are we to overcome these tendencies? The remedy is simple if we would only face the facts as we know them to exist and get away from the strenuous life with all its unnecessary worries and anxieties and adopt a less complex and more rational course for our lives. Every individual should have a certain measure of diversion and rest from the monotony of the regular routine.

Doctors, lawyers, executives, office workers, stenographers, housewives and laborers of every class should have time for wholesome recreation, and this should be enjoyed regularly, and systematically and not spasmodically as we so often see. What types of recreation and diversion are most wholesome? That depends entirely upon the temperament or capacity of the individual for play. Some take to golf, some enjoy seeing a game of baseball or football, while others can completely divorce themselves from the responsibilities of business or professional life by seeking the placid waters of the lake or the rippling mountain stream with rod and reel and favorite collection of lures to match wits with the resourceful bass or other species of the finny tribe. If none of the above appeal to you, allow me to commend for your consideration, nature study, as one of the finest and most wholesome diversions that can claim our attention. What could be more fascinating than a stroll through the woods in the spring-time when nature's resurrection has brought to life again the things that have lain dormant during the winter season?

If our attention should be fixed upon one flower of rare beauty and fragrance, we interest ourselves by asking such questions as the following: How was this plant able to select from the earth the proper chemical elements and com-

bine them in the proper formula to produce the gorgeous colors and the richness of its perfume? How was another plant growing in the same soil able to produce another flower of different type and of entirely different colors and fragrance?

In this connection I would suggest that by the time we have answered these questions satisfactorily to ourselves, we will have forgotten the burdensome tasks that are left behind us and can conclude that we should take our tasks and ourselves less seriously. I say that nature study is one of the finest and most wholesome diversions because it takes us away from ourselves and enables us to get God's message through the voice of nature.

In conclusion, if I may make use of a thought expressed by Dr. David Riesman, of Philadelphia, I would state that while cardiology has become a very highly specialized branch of medicine, this does not mean that the general practitioner is not capable of taking care of a great majority of cases of heart disease. It is the family physician who first sees these patients, and if he has adopted the policy of always getting a careful history, and taking time to make a thorough general physical examination, he may be fully trusted to give proper advice.

After he has made a careful analysis of the case he is in a position to determine whether or not he is capable of meeting all indications for treatment and general management. If not he may be depended upon to refer the patient to one who has the required skill and facilities for giving him what he has a right to expect at the hands of the profession.

DISCUSSION

Dr. Allan Eustis, New Orleans: Dr. Knighton has presented a very important phase of preventive medicine, and one, in which I have been particularly interested for many years. Some of you may remember my paper before this Society at the Monroe meeting several years ago. The early diagnosis of a failing heart muscle is not as difficult as some seem to think. Dyspnea on slight exertion such as mounting stairs, should at once demand a thorough cardiologic examination. Canby Robinson several years ago called attention to an alteration, or variation in the systolic blood pressure as a sign of beginning heart muscle weakness, and I found this an unfailing sign. By

means of the cardio-respirator of Frost it is possible to determine the cardiac efficiency as accurately as one can test the pressure in an automobile tire or a steam boiler. The test is simple and can be completed in ten minutes.

ENDEMIC DYSENTERIC INFECTIONS IN LOUISIANA*

DANIEL N. SILVERMAN, M. D.
NEW ORLEANS

Renewed interest in amebic dysentery has recently manifested itself throughout the country. This awakening has unfolded itself gradually as the result of an epidemic which took root in Chicago during the past summer. Paralleling the dissemination of amebic infection, and for some time antedating the increased incidence of that disease, the writer has been calling attention to the prevalence of an entirely different type of infection, namely, the bacillary type.

In 1924, at the suggestion, and with the cooperation of Doctor Duval, my studies of dysenteric cases with and without ameba, for possible bacillary involvement, were begun. Up to that year, bacillary dysentery was considered an unusual disease in the South and had been reported as occurring in sporadic form in comparatively few instances. At the present writing, I have had over 125 cases in the acute and chronic stages. Since the publication of our earlier reports, many cases have been discovered and reported in several Southern states, including Louisiana and Maryland, as well as in New York, Illinois and Massachusetts.

It is my purpose at this time to call your attention to the fact that both bacillary and amebic infection of the bowel are and have been endemic in this state, and that either or both these diseases may be present without typical symptoms of colonic infection such as diarrhea. Craig has emphatically stated, and the writer wishes to agree with him, the fact that amebic infection of the bowel is not always characterized by dysentery. Furthermore, the same principle holds for bacillary infection of the intestine. This fact is evidenced in my series of bacillary infections which included many cases that were

devoid of dysentery. In some instances, the bacillary infection was of the acute type and there was an absence of dysentery. Presumably, in these cases the infection was of the lower part of the small bowel, at least not lower than the cecum of the large bowel. This, of course, is appreciated when we consider that infections of the small bowel are not commonly characterized by diarrhea, while those of the large bowel are more frequently associated with frequent bowel movements. A very good illustration is typhoid fever and tuberculous enteritis, in which instances the infection is in the ileum as a rule.

Whenever there is a diarrhea, the physician nearly always suspects the presence of ameba, and only sometimes thinks of the possibility of a bacillary infection. This is true to such an extent that most cases of diarrhea coming under our care are considered amebic and are given treatment for ameba without an examination being made for diagnosis. This is obviously wrong and may lead to serious consequences, especially in instances where it is a bacillary infection, because it will go over into the chronic stage and make it very difficult to effect a cure.

One of the big problems concerning amebiasis in this state and country is the occurrence of so many unsuspected cases of the disease in which there are no relevant subjective or objective signs. Sometimes these cases make one suspect chronic appendicitis or cholecystitis, the spastic colon with long-standing constipation often attributed to a neurotic condition. Therefore, the public health question resolves itself into the recognition and eradication of the endemic dysenteric infections, particularly amebic and bacillary forms. It is all the more important from the public health standpoint because of the frequency of both these types of infection in Louisiana.

Regarding the diagnosis or detection of these infections, I wish to illustrate by enumerating a number of cases which were not diagnosed because of the absence of any characteristic symptoms.

Case No. 1: Dr. W. P., a white male, gynecologist, admitted to the hospital on March 6, 1934, complaining of gaseous distention and pain over the right iliac fossa, onset of which had been gradual and associated with heartburn, eructation and

*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

lassitude. His symptoms were not related to food intake or to the quality or type of food ingested. There was no history of diarrhea, in fact he was markedly constipated. Partial control of his symptoms was obtained by change in diet and nightly doses of petrolagar. His symptoms had persisted for six months. Repeated examinations, which included stool examinations, were negative. On March 7, 1934, examination of purged stool showed the *Amoeba histolytica*, confirmed by Dr. Craig. Physical examination was negative with the exception of slight abdominal distention. Blood count:

(3/7/34) 5,000,000 red blood cells; 8,500 white blood cells; N. 50 per cent; S.M. 40 per cent; L.M. 2 per cent; E. 8 per cent.

(3/11/34) 5,000,000 red blood cells; 6,000 white blood cells; N. 53 per cent; S.M. 43 per cent; L.M. 3 per cent; B. 1 per cent; E. 0 per cent. Urine negative. Stool *Amoeba histolytica*.

3/12/34 negative for ameba—occult blood 3 plus.

The patient was discharged after the ninth day of treatment. Two weeks later, no ameba were found upon stool examination.

Case No. 2: Dr. A. E., a white male, an oculist, admitted December 9, 1933. Fifteen months prior to admission he became markedly constipated. There were no other gastro-intestinal complaints, but he had an associated tachycardia and occasional ectopic. No pathology was found at that time. Two months prior to admission, he developed a severe pain in the lower right quadrant and an appendectomy was done. He made an uneventful recovery, but since then he has had repeated marked abdominal tenderness with the absence of any other complaints, including diarrhea. Examination of stool showed many vegetative *Amoeba histolytica*. Physical examination was essentially negative with the exception of diffuse abdominal tenderness, especially over the cecum and about the umbilicus. Blood count: 9,750 white blood cells; hemoglobin 80 per cent; N. 66 per cent; S.M. 21 per cent; L.M. 11 per cent; E. 5 per cent. Urine negative. Stool examination revealed many vegetative *Amoeba histolytica*. Patient was discharged on the eighth day of treatment after examination of stool had proved negative. Since then, repeated examinations of stools have been negative.

Case No. 3: Dr. A. O., white male, a surgeon, admitted to the hospital on December 2, 1933, complaining of abdominal pain. Fourteen months prior to admission patient had an attack of pylorus spasm which was thought to be due to a peptic ulcer and was entirely relieved by belladonna. The condition lasted about one month. Roentgen-ray study was negative. One month prior to admission, the patient had a diarrhea for one day associated with occasional lower right quadrant pain and almost constant tenderness in the region of the umbilicus. The patient gave a

history of having been more constipated than usual during the past year, also that ingestion of even a couple of alcoholic drinks was followed the next day by nausea and diarrhea. During the month prior to admission, he had suffered with lassitude and had to force himself to complete a day's routine. Pain in the lower right quadrant on several occasions simulated an acute appendicitis. A few days prior to admission, stool examination showed many *Amoeba histolytica*. Proctoscopic examination revealed an inflamed bowel wall but no ulcers. Physical examination was essentially negative with the exception of tenderness just above the umbilicus and in the lower right quadrant.

Blood Count: 4,660,000 red blood cells; 7,875 white blood cells; N. 71 per cent; S. M. 20 per cent; L. M. 5 per cent; E. 3 per cent; B. 1 per cent. Patient was discharged on the eleventh day.

Case No. 4. N. P., white male, admitted to the hospital on March 1, 1934, complaining of tenderness in the lower right quadrant of abdomen, which had commenced eighteen months prior to admission but was considered by him to be inconsequential. There was also at that time an associated constipation and gaseous distention. He had had no attacks of diarrhea. He had had a feeling of lassitude during the past few months with as he expressed it, "a rubbed out feeling." The surgeon by whom the case had been referred to the writer diagnosed the condition as chronic recurrent appendicitis. Stool examination was made and *Amoeba histolytica* found. Physical examination was negative with the exception of a slight distention and definite tenderness over ileocecal junction and descending colon. Liver was also enlarged and palpable below the costal margin for about 1.5 fingers.

Blood Count: (3/5/34) 5,000,000 red blood cells; 5,000 white blood cells; N. 70 per cent; S. M. 25 per cent; E. 5 per cent; (3/12/34 on day of discharge) N. 64 per cent; S. M. 31 per cent; L. M. 2 per cent; E. 4 per cent. Urine was negative.

On the eleventh day of treatment, the patient was discharged, examination of stool being negative.

As I mentioned before with regard to amebic colitis, the symptoms of this disease may sometimes resemble the development of an acute abdominal condition, which not infrequently suggest the necessity for surgical intervention. Illustrative of this fact, one may cite the following examples:

Case No. 1. A. B., a white male, age 51 years, admitted to the hospital on December 16, 1933. The day previous at two o'clock in the morning, he was seized with severe pain in the left side of abdomen. This pain gradually became more intense and apurgative was taken. There was no relief

and the pain continued until the patient was seen on December 18. At that time, there was a localized tenderness in the left hypochondrium with rigidity of the overlying muscles. Urine was negative.

Blood Count: Total red blood cells 4,440,000; total white cells 14,750; hemoglobin 80 per cent; color index 0.9 plus; S. M. 20 per cent; L. M. 0 per cent; neutrophiles (segmented cells) 80 per cent; eosinophiles 0 per cent; basophiles 0 per cent.

Blood Chemistry:

Non-Protein

Nitrogen	33 Mg. per 100 cc.
Urea Nitrogen	16.5 Mg. per 100 cc.
Creatinine	0.8 Mg. per 100 cc.
Sugar	96 Mg. per 100 cc.

Roentgen ray examination with barium enema showed that the barium enema flowed in readily filling the entire colon. There was marked spastic condition of the descending colon and sigmoid. No evidence of tumor or obstruction was seen. Digital examination of rectum together with proctoscopic and sigmoidoscopic examination revealed:

1. Prostate and rectum palpably normal.
2. The mucous membrane of the rectum and sigmoid normal. Spastic fecal scbellae were found in the rectum.

On physical examination of the abdomen, there was extreme tenderness on pressure along the left inter rectus muscle (from the costal margin to level of the umbilicus) making a suspicion of descending colon disease very likely. On December 21, the sixth day after admission, following a purgative, specimens of the liquid stools were collected and smears made. These were examined personally and some smears sent to the Pathological Department. Many cysts and a very few motile vegetative forms of *Endamoeba histolytica* were found.

Case No. 2. A young woman, aged 21 years, while riding in an automobile suddenly turned around and thought she had injured her left side because of the pain she immediately experienced. The slight pain passed away until the next day when there developed a sudden and severe left upper abdominal pain, very sharp in character and associated with almost continuous vomiting of biliary contents. There had been no change in the bowel evacuations, they being constipated.

On examination, the left upper abdominal muscles were rigid and the patient was very sensitive just below the ribs in the back as well, and it was suspected there might be a left kidney lesion. The temperature ranged around 100°. The blood count revealed: Total white blood cells, 22,500, with 90 neutrophiles. There was no difficulty in getting the bowels to move with enemata. Proctoscopic examination showed an inflamed rectal mucous membrane with a number of irregular and discrete ulcers. The stool contained many cysts of *Endamoeba histolytica* and following a sa-

line purgative many motile forms of the parasite.

The acuteness of the symptoms subsided within three days without any treatment. Total white count dropped to 7,500 and the neutrophiles to 70 per cent. The barium enema showed a very redundant sigmoid and descending colon, the patient being of the extreme asthenic type, with much dilatation of the entire large bowel.

The above case, I believe, emphasizes the necessity for thorough investigation for dysenteric infections in the acute as well as in the chronic abdominal conditions, which are not always characteristic but which may resemble inflammatory diseases of the abdominal organs.

BACILLARY INFECTIONS

These are commonly dysenteries that are acute and are typically characterized by diarrhea, fever, and leukocytosis, as well as abdominal distress. However, there are many cases that are chronic from the beginning. There are others which often are unrecognized and pass over from the acute to the chronic form. These acute cases of bacillary infection occur concurrently with typhoid fever and amebiasis. It is far more common with amebiasis than it is with typhoid fever. This fact explains the failure to entirely clear up the case with antiamebic therapy. It is my opinion that when amebiasis does not clear up with adequate treatment one must suspect the presence of bacillary dysentery concurrent with the ameba.

Where bacillary infection is suspected, and often where it is not suspected, the stool should be cultured and the blood examined for specific agglutinins, for as in the following case, it is sometimes difficult to even suspect the presence of a bacillary dysenteric infection on account of the absence of characteristic symptoms even in the acute stage of the infection.

L. E., a white male, aged 52 years, was admitted complaining that for six days pain had been present in the left side radiating to the lower left quadrant and the midline. The onset of symptoms was acute. Apparently, the pain, which the patient described as "heavy, sharp and stabbing," seemed to bear some relation to food ingested. Enemas had given relief once or twice. Although the urine had been highly colored and cloudy there had been no blood. Proctoscopic examination revealed ulceration in the rectum, about 5 cm. in diameter, with a mucopurulent exudate. The grayish membrane was of an angry red base throughout. The purged stool showed many *Trichomonas hominis*. The prostate was normal, except for a slight hard-

ness. The urologist reported that the temperature, which was consistently above normal, rising as high as 102.6°F., was not due to disease of the prostate.

Blood agglutinations made on July 23, showed no agglutinating power against Hiss, Duval, Flexner, or Shiga in dilutions of 1-40, 1-80, and 1-160. On July 25, a culture of the stool revealed among other organisms a Gram-negative non-motile bacillus, which morphologically, serologically, and culturally was *B. dysenteriae* Shiga. On August 2, serum agglutination showed positive reaction in dilution of 1-80 with the organism isolated from the bowel. On August 6, culture revealed a variety of organisms, predominant among which was *B. coli*, but none of the typhoid or dysentery group was present. On August 17, bacterial allergens showed positive reactions to two Shiga strains intradermally injected. On August 26, cultures from scrapings from the colon ulcer showed no organisms of the typhoid-dysentery group. At this time, the arm became red, swollen, and tender, but as no local reaction took place immediately, allergy was eliminated.

The temperature was constantly high the first week; the second week, it was almost consistently subnormal, going to 97°F.; the third week, there was intermittent high fever as high as 104°F., but the temperature shortly dropped to 98°F. From then on, the temperature was normal or a bit below; only once did it rise to 100°F.

To be noted in this case is that while the diagnosis was positive for *B. dysenteriae* of the Shiga type, at no time during the course of the illness was there diarrhea.

TREATMENT

In considering bacillary treatment we must separate the acute from the chronic because there is considerable difference in the response to specific therapy. Bacillary dysentery in the adult, especially when due to the Shiga type of the organism, responds promptly in most instances to dysentery antitoxic serum. The sporadic cases of bacillary dysentery, caused by any other members of the dysentery group, respond better to the homologous or polyvalent dysenteric serum. It has always been my practice in every case of bacillary dysentery to determine the exact type of organism that is responsible. This I regard as very important in the specific treatment of the disease, since by such a determination the proper antidysenteric serum may be employed. We know that bacillary dysentery treatment with antitoxin has not met with universal support, and more than likely the poor results can be directly attributed to the use of the wrong serum.

In the chronic form of the disease, antidysenteric serum should be used in conjunction with specific vaccine therapy. However, vaccine in the treatment of the chronic type of the disease is beyond doubt the superior treatment. Antitoxin may be eliminated in the chronic type of the disease. It is important to bear in mind that the antitoxin gives a transient immunity and is useful only in the neutralization of toxins. These patients with chronic bacillary dysentery have the infection because they have been unable to establish their own immunity by which they themselves could cause the destruction of the bacilli.

By the use of specific vaccine, the patient is stimulated to produce an immunity which destroys the foci of bacilli in the intestinal tract. Furthermore, it is very necessary in the vaccine therapy of these cases to employ an autogenous vaccine. Careful search of material obtained from the mucosa by proctoscope yields the particular offending dysentery bacillus. From this the autogenous vaccine is prepared. Where it is not possible to obtain a culture from the patient and a stock vaccine is resorted to, it is best to test the patient's blood against all types of dysentery bacilli, since only in this way can we be sure of using in our stock vaccine the particular type of bacillus that is infecting.

THE TREATMENT OF CARDIO-VASCULAR SYPHILIS*

J. H. MUSSEY, M. D.†
NEW ORLEANS

The frequency of cardiovascular syphilis apparently varies very much in different sections of the country. It is as low as 3½ per cent in the New England states¹ to as high as 19½ per cent in Texas². The incidence of cardiovascular syphilis in the wards of the Charity Hospital may be adjudged in a very general way from the number of cases that have been seen in the white medical wards which have been assigned to Tulane University by the authorities of the hospital. While it is true that

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*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

the negro race is excluded from these figures, nevertheless the relative frequency of the several etiologic types of heart disease in the white race can be given. In a period of five years there have been observed 32 cases of syphilitic heart disease, 16.5 per cent of all the heart cases admitted to the wards. During this same period there were 113 patients admitted with a diagnosis of arteriosclerotic heart disease, or 58.5 per cent of the total number, whereas there were 34 cases of rheumatic heart disease, 17.6 per cent, and 12 subacute bacterial endocarditis, or 6.6 per cent, with a few cases of other types of heart disease to make up the total number. It may be seen from these figures that syphilitic heart disease is a relatively common condition, but these figures do not indicate how frequent is cardiovascular syphilis. These ward patients for the most part represented individuals in the last stages of syphilitic heart disease with its concomitant aortic insufficiency. They do not represent nor indicate how large a number of patients can be seen at any time in the out-patient clinic with syphilitic aortitis or syphilitic heart disease without failure. Aortitis is common and valvular heart disease is by no means uncommon amongst the white population. The incidence among the negro race, of course, is much higher than amongst the white population.

DEFINITION OF CARDIOVASCULAR SYPHILIS

When the term cardiovascular syphilis is employed it may mean to one physician one thing, to another something entirely different. It might be well, therefore, to explain that this comprehensive term includes: first, uncomplicated syphilitic aortitis; second, aortic dilatation, and aneurysm with or without failure; third, aortic insufficiency without failure; fourth, aortic insufficiency with failure. The necessity of stressing these definite divisions of cardiovascular syphilis lies in the fact that the treatment for the several types differs very considerably. The diagnosis of the several types of syphilis of the heart and vessels is simple with this exception, that early syphilitic aortitis is frequently not recognized. I should like to stress two diagnostic signs that sometimes are of value in determining whether or not the aorta is involved. The first is a low pitched, very

soft systolic basal murmur, often overlooked, and the second is the characteristic hollow metallic accentuation of the second aortic sound.

PATHOLOGY OF CARDIOVASCULAR SYPHILIS

Very briefly, the pathology of this condition will be outlined. There occurs first involvement of the vasa vasorum of the adventitia of the aorta. This in turn is succeeded by involvement of the intima with subsequent destruction of the elasticity of the aorta, making it impossible for this tissue to retain its normal ability to recoil with each systolic thrust. Eventually dilatation takes place to a greater or less degree. If this dilatation is localized an aneurysm develops. The syphilitic mesaortitis extends towards the aortic valve. Inflammatory changes involve the commissures and through the commissures extend out to the valve margins. Ultimately there develops widening of the commissures associated with secondary fibrotic contraction of the valve leaflets which brings about an insufficiency of the whole valve. This produces a mechanical effect on the heart which is responsible for the eventual and ultimate high degree of hypertrophy. It is an open question whether or not the syphilis involves directly the myocardium except under unusual circumstances and this despite Warthin's forceful writing. It would seem that heart failure depends, first, on the mechanical effect of the insufficient valve and, secondly, upon insufficient blood supply to the myocardium as a result of the involvement of the ostia of the coronary arteries by the syphilitic process, preventing a sufficient supply of blood going to the heart muscle, abetted by the associated low diastolic pressure. The coronaries, except at their mouths, are not directly involved. When the two factors are sufficiently intense or pronounced, then only does heart failure ensue; but when it does occur the response to treatment is usually ineffectual and unsatisfactory.

PREVENTION OF CARDIOVASCULAR SYPHILIS

There is only one way that cardiovascular syphilis can be prevented and that is by adequate and complete treatment of early syphilis. This statement is substantiated by the figures of the cooperative clinical group who found that of nearly 3,000 patients with early syphilis who

were adequately treated, only 30 have developed cardiovascular syphilis.

TREATMENT OF SYPHILITIC AORTITIS

In the treatment* of this condition, when uncomplicated by aortic regurgitation or aneurysm, there are few limitations upon the active anti-syphilitic therapy which may be employed. It is recommended by Moore³ that a course of heavy metals and potassium iodide should be given for two or three months before arsphenamine is utilized. This precaution is taken because there is no way of telling whether or not there may possibly be involvement of the mouths of the coronary arteries. Arsphenamine should then be started cautiously, 0.1 gram, and increased up to 0.3 gram, or in the case of neoarsphenamine an initial dose of 0.2 gram, slowly going up to 0.6 gram. Arsenicals are then alternated with bismuth, steadily and without remission, for at least twenty-four months. The importance of not having periods of rest should be stressed. With this treatment it is possible materially to affect the incidence of the more severe forms of syphilitic heart disease.

At the end of the two-year period the patient should be observed every three to six months. It is advisable to give every six to twelve months another course of treatment, that is to say, bismuth for six weeks, then neoarsphenamine for six weeks.

THE TREATMENT OF DILATATION OF THE AORTA AND ANEURYSM

In so far as the treatment of aortitis with dilatation or aneurysm without failure is concerned, the rules for the treatment of aortic regurgitation without heart failure hold good. Consequently the treatment of this type of cardiovascular syphilis will not be discussed here in detail. I would like to accentuate the importance of minimum treatment in the early stages of therapy, exemplified beautifully in a recent report by King⁴ on the therapeutic paradox of a patient with dilatation of the aorta who in a few months developed an aneurysm prob-

ably as a result of too active treatment, in which there was too rapid healing of the syphilitic inflammatory tissue which in turn was replaced by inefficient scar tissue which yielded readily to intra-aortic pressure.

THE TREATMENT OF VALVULAR DISEASE WITHOUT FAILURE

I should like to stress, accentuate and emphasize the fact that the treatment of syphilitic valvular heart disease is primarily the treatment of the cardiac condition, and only secondarily is it the treatment of the underlying cause of the disease. This statement does not mean to imply that syphilis should not be eradicated in a person with syphilitic heart disease. If it is, the duration of the life of the individual will be longer, but unless the cardiac condition is primarily and always in the mind of the physician the treatment of syphilitic lesions may do more harm than good. In fact, it may kill the patient. Even in the absence of congestive heart failure general medical care is of extreme importance. Bed rest is highly desirable and under any circumstance physical effort should be deleted permanently from the life of that individual. Digitalis is not indicated. Extreme caution, then, is essential in the treatment of these patients. As Moore says, "Treat the patient in such a way as to do no harm." Start the syphilitic treatment with potassium iodide in large doses daily and bismuth salicylate, 0.2 gram hypodermatically weekly. Keep the patient on this therapy for three months in order to avoid the danger of Herxheimer's reaction or the therapeutic paradox. The following twelve weeks use neoarsphenamine in small doses starting with 0.1 gram and not exceeding 0.3 gram. Give the treatment once a week. Arsphenamine is absolutely to be avoided. For the next twelve weeks repeat the bismuth and iodides. The following twelve weeks repeat the neoarsphenamine in the same size doses. Keep on this way, alternating every twelve weeks, without any rest periods for at least two years. To quote Moore again: it may be said that "treatment may profitably be continued perhaps indefinitely."

THE TREATMENT OF VALVULAR DISEASE WITH HEART FAILURE

If it is necessary to consider the heart condition primarily when aortic regurgitation is pres-

*The discussion of the treatment of syphilis in any form by Moore in his book on the Modern Treatment of Syphilis is extremely full and complete. Many of the facts in this paper have been gleaned from this book, which gives a magnificent survey of the treatment of syphilis.

ent but not congestive failure, even so much more is it advisable to treat with extreme caution the man with aortic regurgitation (or aneurysm) when congestive failure is present. Herrmann and Jamison⁵ have outlined a most satisfactory regimen for the patient with heart failure due to syphilitic valvulitis. They state that the treatment of the myocardial insufficiency is the first indication. They suggest in extreme cardiac failure the immediate use of ouabain, 0.25 milligrams (1/250 grain) intravenously. Digitalis, if ouabain is not used, should be administered in full doses, from 15 to 20 c.c. of the tincture in the first twenty-four hours, followed by smaller doses of digitalis in order to keep the patient thoroughly digitalized. Add to digitalis metaphyllin in doses of 0.1 to 0.2 (1½ to 3 grains). For the relief of edema mercurial diuretics are indicated, such as salyrgan or novasurol. General medical measures, as a matter of course, are to be followed. Absolute rest in bed, not for days but for weeks, is demanded. Subsequently, physical activity should be reduced to the irriducible minimum. Proper dietary, the state of the bowels and so on should be taken care of as a matter of course.

During heart failure no effort is made to give any spirocheticidal drug. Potassium iodide in doses of 4 to 10 grams (60 to 150 grains) a day should be given unless there is nausea. After a period of eight weeks, if compensation is fully restored, start with small doses of bismuth. Moore recommends 0.1 gram of bismuth salicylate every fourth or fifth day for three to four doses. Then increase to 0.2 gram once a week for twelve weeks. For the following twelve weeks neoarsphenamine should be given in very small doses beginning with .05 gram of neoarsphenamine intravenously and increasing by this same dosage every week until 0.3 gram is being given. At the end of twelve weeks return again to weekly injections of bismuth salicylate for a period of twelve weeks and then back again to the arsenicals for another twelve weeks. Under no circumstance use neoarsphenamine as long as the patient is in a state of failure. Continue with bismuth and

potassium iodide only. Treatment should be persisted in almost indefinitely. This remark is made with the tongue in the cheek, because at best the prognosis of syphilitic heart disease once failure of the heart has occurred is extremely poor and indefinitely may mean a period of only a comparatively few months. The above outline of treatment is indicated in aortic aneurysm.

CONCLUSION

1. In aortitis due to syphilis treatment is of definite value.
2. In aneurysm and aortic insufficiency treatment of the syphilis is indicated, but therapeutic measures should be directed primarily to the results of the syphilis.
3. Treat every case of cardiovascular syphilis with caution.
4. Be patient, painstaking and not unduly optimistic in treating advanced cardiovascular syphilis.

REFERENCES

1. White, Paul D.: *Heart Disease*, N. Y. Macmillan Co., p. 302, 1931.
2. Stone, C. T., and Vanzant, F. R.: *Heart disease as seen in a southern clinic*, J. A. M. A. 89:1473, 1927.
3. Moore: *Modern Treatment of Syphilis*, Baltimore, Charles C. Thomas, 1933, pp. 535.
4. King, M. K.: *The therapeutic paradox*, New Orleans Med. & Surg. J. 86:664, 1934.
5. Herrmann, George, and Jamison, Chaille: *Amer. J. Syph.* 15:1, 1931.

Dr. John B. Elliott, New Orleans—I find it often extremely difficult to make a diagnosis in late cardiovascular syphilis: a very small percentage of these cases give a positive Wassermann, either blood or spinal fluid. A therapeutic test is always justifiable and can do no harm. In cases with high blood pressure with loss of compensation it is remarkable to watch the heart come back to almost perfect compensation after a course of mercury and potash, if syphilis be the underlying cause.

I am very glad to hear Dr. Musser warn against the indiscriminate use of the arsenicals. They should be used with great caution in tertiary syphilis where the arteries, or kidneys, or liver are involved.

TREATMENT OF NEUROSYPHILIS*

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The treatment of neurosyphilis is discussed at all medical gatherings and the methods advocated vary with the individual presenting the subject. Unfortunately, in the recent years the methods suggested are usually ones beyond the reach of the average medical man practicing in the average community and are methods requiring hospital supervision and close observation of the patient during treatment. Long before the depression, few cases of neurosyphilis were referred to the neurologist for treatment unless advanced psychotic manifestations were evident and since the depression it is unusual for even these cases to be sent to the psychiatrists for treatment. It is, therefore, my intention in this discussion to offer suggestions for the treatment of neurosyphilis that can be used by every medical man in any community and contend that if properly carried out will assure a good percentage of restorations and a high percentage of improvement and arrest of the progress of the disease.

If syphilis is a difficult disease to cure, neurosyphilitic syndromes must be regarded as being even more difficult. In accepting the theories that inadequately, poorly treated, cases of early syphilis are the ones that develop neurosyphilis, we must contend that in all probability the increased incidence of neurosyphilis today is due to the fact that we are better trained to recognize the early indications of neurosyphilis than were our predecessors. Every physician believes himself thoroughly capable of treating syphilis. However, few have any common plan for the handling of neurosyphilis and fewer use their spinal fluid findings as an indicator of the plan of treatment they intend to pursue.

Of the therapeutic agents to be advocated, tryparsamide is probably the only one with which you are not thoroughly familiar and many of you have probably avoided its use because of some of the reports distributed after its in-

roduction, particularly those referring to the optic nerve damage. In all probability you have avoided its use when any optic nerve involvement was clinically evident. By reducing the size of the doses and increasing the dilution, lengthening the interval between doses, it is possible to administer tryparsamide in the face of optic nerve involvement without increasing the condition and even arresting the progress of the disease in some cases. Syphilis is responsible for far more optic nerve damage than all of the arsenicals have ever been.

Little improvement is to be expected in treating neurosyphilis with either arsenic or the heavy metals alone, although meningovascular syphilis shows a tendency to improve under the combination of the heavy metals and iodides in a larger proportion of cases than those treated only with the arsenicals. It is advisable to combine these forms of therapy and it is suggested that this combination treatment be given in all forms of neurosyphilis and during the same course of treatment, a variance of the therapeutic agents depending upon the disease syndrome encountered.

Before beginning treatment, a spinal fluid survey should be made and, to maintain as constant the personal percentage of error that must be expected with all laboratory work, it is advisable that subsequent fluid examinations be made by the same individual.

A too intensive course of therapy in previously untreated cases of neurosyphilis is a bad policy. All these cases should be given initial courses of the arsphenamines in combination with the heavy metals before more energetic measures are employed. Particularly is this true in meningovascular syndromes. In all these disease pictures, give intensive mercury or bismuth and iodides in conjunction with the intravenous arsphenamines in the same course of treatment, such a course to last from six to eight weeks, follow this with a rest interval for a like period then give a second course of treatment followed by a longer rest period, approximately twelve weeks. Should a clinical improvement be evident, a third course of a similar combination is advocated after which a recheck of the spinal fluid should be made and contrasted with that survey made before instituting treatment. The changes noted in this

*This, the preceding and the following papers represent a symposium on the treatment of syphilis, which were read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

examination of the spinal fluid and the clinical changes the individual evidences determine the plan of treatment to be instituted subsequently.

A similar procedure should be followed in previously untreated cases of tabes and paresis. Tryparsamide is of little value as a spirocheticide, and its use is not indicated in treating primary or secondary syphilis, but tryparsamide apparently has a particular affinity for the central nervous system and should be saved to later combat the luetic invasion of that system. In cases previously treated with the arsphenamines, there is little to be expected from a continuation of these drugs even in combination with the heavier metals and it is advocated that in such cases tryparsamide in combination with mercury or bismuth be administered in the initial course. In these instances, courses of treatment should be given in periods of ten weeks each, divided by rest intervals of six to ten weeks. It is particularly important to stress the fact that no permanent improvement from tryparsamide therapy should be anticipated until after the third course or thirtieth dose of tryparsamide. The number of succeeding courses of combined tryparsamide and mercury or bismuth therapy and the length of the rest periods between such courses is determined by contrasting the patient's clinical condition with that found at the original physical survey and contrasting the subsequent spinal fluid findings with the findings in the original report; spinal fluid reexaminations being made after the third course of treatment and at yearly intervals thereafter.

Unfortunately, too many of us in the past have expected miracles from tryparsamide and failing to obtain miraculous results from one course of such therapy have discontinued treatment and lost faith in the drug. It cannot be too strongly emphasized that tryparsamide should be given with mercury or bismuth for at least three courses before you are justified in considering any other procedure. If optic nerve damage does not manifest itself after the first four or five injections of tryparsamide, it is rare for it to develop. Nitroid and Herxheimer reactions have not been encountered and this drug has been used by us since 1925. It must be admitted that the prognosis in cases of neurosyphilis has been more favorable since the

advent of tryparsamide. Some authors contend that tryparsamide has but little effect on spinal fluid Wassermanns and on other spinal fluid reactions. Such has not been our experience.

Before initiating any combined courses of treatment of the arsenicals and heavy metals, it is advisable to attempt to obtain a moderate degree of saturation with the mercury or bismuth preparation to be used before combining it with the arsenical. This procedure seems to prevent the severe reactions sometimes obtained from the arsphenamines.

No plan of treatment of neurosyphilis can be expected to bring good results unless the wholehearted cooperation of the patient is obtained and his religious adherence to instruction is secured, nor can permanent beneficial results be expected unless the patient remains under observation from three to five years. The difficulties of securing the cooperation of many of these patients needs no comment here, by minimizing the unpleasantness and disagreeableness of the routine treatments, and this can be done, an increase in the cooperation of the patient and his attention to treatment invariably results.

Purposely, diathermy, malaria, relapsing fever, intravenous injections of typhoid vaccine, intraspinal injections of arsenicalized serum, etc., have been omitted from this discussion. As was stated at the onset, it is intended to present to you a plan of handling cases of neurosyphilis that can be carried out under any and all circumstances in any and all communities.

To summarize, all previously untreated cases of neurosyphilis should be given initial courses of treatment with the arsphenamines, in combination with heavy metals during the same course of treatment, and in meningovascular syndromes such a combination treatment can be given even in those cases previously treated with the expectation of a certain amount of improvement. Where such improvement is not manifested, the combined therapy should be continued, substituting tryparsamide for the arsphenamine. In paresis and in tabes, tryparsamide in combination with mercury or bismuth should be given, in courses of ten doses at weekly intervals continued from three to five years with rest intervals between each course. In all cases of neurosyphilis the sero-

logical findings should be given as much consideration in continuing the plan of treatment as the clinical signs. The plans of treatment offered are within the reach of every medical man, do not demand special training or equipment, are economic from the patient's standpoint, easy of administration and will beget results that will compare favorably with all other forms of treatment.

DISCUSSION

Dr. Holbrook: Dr. Fenno has covered the subject of the treatment of neurosyphilis in a very thorough manner. There are only one or two observations that I would like to make in emphasizing what has been said.

In the treatment of acute meningo-vascular syphilis or syphilitic meningitis, very active treatment is necessary. The old fashioned mixed treatment, that is a combination of bichloride of mercury, potassium iodide, syrup of sarsaparilla and water, is of no avail whatsoever in the treatment of this form of syphilis. Medication by mouth, and especially the mixed treatment, might just as well be thrown out of the window as given to a patient suffering from acute syphilitic meningitis. Formerly it was thought that the involvement of the nervous system occurred rather late in syphilitic infections. It is not unusual for the meninges to be involved while the chancre is still present. In condemning the use of the mixed treatment, I wish also to condemn the use of the arsenicals, salvarsan and neosalvarsan. The patients will grow worse with the use of these medicaments. In my opinion there is one drug that stands out as being of paramount importance and that is mercury, mercury by inunctions.

When treating a case of meningo-vascular syphilis in the acute stage, I do not hesitate to use one-half ounce, fifty per cent, of mercurial ointment as a rub. This amount should be used for one or two nights only then the dose must be reduced to two drams or less. Thirty to forty rubs should be given. Possibly after fifteen rubs, treatment with salvarsan or neosalvarsan can be instituted.

The mercurial rubs and the intravenous injections can be kept up coincidentally. It is my opinion that salvarsan and neosalvarsan in the acute stage, and while there is evidence of generalized syphilis, is of more importance than tryparsamide. The latter has no effect on generalized syphilis and is best adopted to treatment in late syphilis of the nervous system. As far as I am concerned, mercury by mouth has no place in the treatment of syphilis of the nervous system at any stage.

To prevent the serious results that follow involvement of the nervous system, every case of

syphilis should have a spinal fluid examination at least once, and preferably twice, during the first few years of treatment. Adequate treatment of syphilis at the present time should be continuous for eighteen months or so. The arsenicals, as salvarsan, neosalvarsan, or tryparsamide, should be given in conjunction with heavy metals, as bismuth or mercury. Rest periods should not be permitted during the first fifteen or eighteen months of treatment. By following out such a procedure involvement of the nervous system is not nearly so apt to occur as when frequent rest periods are given.

TREATMENT OF CONGENITAL SYPHILIS*

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Included among the foremost leaders of Renaissance medicine is Girolamo Fracastoro, physician, poet, geologist and astronomer. His greatest fame rests on a poem, "Syphilidis, sive Morbi Gallici" published in 1530, from which the disease syphilis derives its name. The malady spreading over Europe in this period not yet well understood, had been called Neapolitan Disease, then French Pox or Gran Pox, and finally syphilis. The venereal origin of the disease was not at first recognized, however mercury was early introduced as one of the important remedies. The possibility of curing the disease first came with the introduction by Ehrlich of the use of arsenical compounds intravenously.

There are two varieties of syphilis recognized in the infant and children, acquired and congenital. The acquired syphilis, although far less frequent, is contracted usually by other paths than the genital tract such as kissing, nursing, contact with clothing, drinking cups, nursing bottles and toilets. Its symptoms resemble those of the adult type. Hereditary syphilis is always due to a syphilitic mother. If either parent is actively syphilitic at the time of conception, the child is almost certain to be syphilitic unless the mother receives early and efficient treatment. If the mother has secondary symptoms during the first half of pregnancy, transmission to the offspring is almost

*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

certain, but if she acquires syphilis during the second half the child may escape the disease. The absence of clinical symptoms in the mother does not insure the birth of a healthy child, and for this reason cord Wassermans should be done routinely. The Wassermann reaction in very young infants is not always reliable since syphilitic children may give a negative reaction during the first one or two months of infancy. Some syphilitic infants show delay in developing a positive Wassermann reaction and others have a four plus at birth. If a strong Wassermann is present at birth, with or without symptoms, syphilis is present; but since there is sometimes a delay in the reaction, syphilis cannot be excluded until a negative reaction is obtained after the age of two months. Between two months and two years the Wassermann is 99.8 per cent efficient and between two and fifteen years 93.3 per cent efficient, which makes it quite reliable.

The toll of syphilis is great. Fully one-half of pregnancies of syphilitic parents end in death before term or during infancy. Of the one-half surviving children only one-third remain healthy and the balance, 30 to 40 per cent of the total bear the syphilitic stigmata.

The most effective measure against congenital syphilis is the treatment of the mother during pregnancy. Specific treatment before and during pregnancy assures, to a large extent, the birth of a healthy child. It is estimated that treatment with neoarsphenamine before and during pregnancy protects 98.3 per cent while treatment only during pregnancy protects but 60 to 80 per cent.

Next in efficiency to preventing congenital syphilis is immediate postnatal treatment of all babies whose cord Wassermann is positive or with a definite syphilitic history. Since the physical signs, symptoms and Wassermann may be delayed one or two months, considerable time may be lost awaiting developments. McCord believes that all babies born with positive Wassermann reactions of the cord are syphilitic and should be treated at once. Atlee-Tyson reported the treatment of 107 babies born of mothers with positive cord Wassermans, beginning immediately after birth and continuing for fourteen weeks. Wassermans were made at completion of the treatment and only eight were

found to be positive. They used Bismuth (Water-soluble), Bismuth-Sodium Tartrate for eight injections with dosage varying from five to twelve minims and six injections of Sulpharsphenamine .1 gram in 1 c.c. of water. The high percentage of cures in such a short period of treatment is certainly noteworthy. Even though it is not possible to follow such a principle of treatment in general practice it is certainly most advisable to begin drastic treatment at the first evidence of disease, and to treat all mothers who are known to be syphilitic.

The children most often presented for treatment are those where attention has been directed to such symptoms as prematurity, rhinitis, skin eruptions, condyloma, epiphysitis, dactylitis, keratitis, osteoperiostitis and arthritis. The early symptoms of congenital syphilis in the full term baby does not ordinarily manifest itself until the third to the eighth week, these being equivalent to the secondary lesions of the adult type. Latent syphilis may appear at any time from two to fifteen years of age.

The treatment of congenital syphilis embraces all the drugs used in adult therapy but I shall only discuss those most adapted for infancy and early childhood.

The drugs generally used affect the disease by two processes. First, by spirocheticidal action in actually killing the infecting organism and second, by a non-specific stimulation of the natural body processes of resistance or immunity to the infection. The greatest spirocheticidal action is exerted by the arsenic preparations and the greatest non-specific action by the mercury and bismuth. The iodides seem to act chiefly in promoting absorption of gummatous lesions.

The role of iodides in the treatment of congenital syphilis is meager compared to the other drugs of common use. Their most beneficent results are obtained in connection with the latent cases with clinical manifestations of periostitis, arthritis or keratitis. Most authors concede the ineffectiveness of iodides in early congenital syphilis. Sodium and potassium iodide may be used in doses varying with age from two to eight grains three times daily, caution being taken not to cause a gastro-intestinal disturbance. Due to its relative lack of specificity

compared to the more effective arsenic, bismuth and mercury preparations, it is little used but for individual cases, and those which are classified as the tertiary type. When indicated, the best plan is to administer it during the rest periods or in combination with mercury. Intravenous iodides are seldom resorted to in children.

Mercury, although not a specific, for a long period was the most effective and generally used drug for syphilis and very definite beneficial results were obtained from its use. It may be administered in many forms. The three most common methods of use are by mouth, inunctions and intramuscularly. Intravenous injections are not advisable because of the sclerosing action on the vein used. The optimum results are obtained not so much from the method used as the maintenance of the system to a point of saturation. Mercury being absorbed slowly, the dose must be begun low and gradually increased, to prevent any cumulative effect. By mouth, hydrargyrum cum creta (Gray Powder) is used; $1/5$ grain t. i. d. to infants, $1/2$ grain t. i. d. to children and 1 grain t. i. d. to older children. Because of possible gastrointestinal disturbance and inadequate absorption, other preparations are most effective. Blue ointment inunctions are more satisfactory administered but more difficult to enforce the routine. In young infants a 25 per cent ointment is preferable and not so likely to cause a dermatitis. I find the mercurettes of Parke-Davis easier for the mother to measure and to use, each block contains fifty grains of mercury in cocoa-butter. Using a rubber glove, it should be rubbed in each night after a warm bath, choosing different areas of the body at each treatment. A seventh day rest is advisable, which allows any skin irritation to subside and also assist in preventing the cumulative effect of the mercury. The usual dose varies from fifteen grains for infants to sixty grains for older children.

Intramuscular injections have the particular advantage of certainty and specificity of dosage. The preparation most suitable for use with children is the bichloride, $1/2$ m. of 1 per cent solution per kilo ($2\ 1/5$ lbs.) body weight once or twice weekly. However, when arsenic is also being given, it is advisable not to use it, as

the results do not justify the fear and pain of the needle. Complications as stomatitis and albuminuria are indications for temporary discontinuance.

Bismuth therapy in all stages of syphilis has proven its worth. The early tendency to use bismuth as a substitute for mercury in the Wassermann fast cases is now replaced by its general use in connection with arsenic in the treatment of all types of syphilis. Differences of opinion exist as to its exact function, however it is thought to have a similar action to mercury. Its early use was in the form of the sodium-potassium tartrobismuthate suspended in oil and the precipitated bismuth suspended in saline or 10 per cent glycerine, the dose being 2 mg. per kilo at weekly intervals. Recently the drug houses have flooded the market with numerous preparations of bismuth and physicians have made their own selections. However, since bismuth seems to have a synergistic action when used with arsenic, and accentuates the therapeutic effect of arsenic, the two drugs have been combined into one, Bismarsen. Bismarsen or bismuth arsphenamine sulphate contains 12 to 15 per cent bismuth and 23 to 25 per cent arsenic. Clinical observations in the use of it was first reported by Stokes and Chambers in 1927, O'Leary in 1928, Kolmer in 1929 and others. Their reports, however, were mostly noted in adults. Local pain and slowness in action were the principle objections, however, the results were excellent. Chambers in 1932 reported very favorably on its use in congenital syphilis. He overcame the local pain by injecting areas in the buttocks away from any recent injection and placing a heavy pestle-like instrument over the site with rotating pressure for ten minutes. He reported favorably on twenty cases of interstitial keratitis. He advises three courses of twenty each, given twice weekly with two weeks rest between courses. Although effective, it is not without some possible ill effects. Delayed deaths due to bismuth intoxication are usually attributed to involvement of the gastrointestinal tract, the liver or the kidneys. Immediate deaths, occasionally reported from Bismarsen, were no doubt due to the failure of the operator to aspirate before injection of the drug and accidentally injecting into a vein.

To Ehrlich is due credit for the introduction of a specific therapy for syphilis, the arsenical compounds: arsphenamine, neoarsphenamine, sulpharsphenamine and acetarsol. Technical difficulties in its preparation and administration prevent the use of arsphenamine to infants and young children.

Neoarsphenamine in dosage of .015 grs. per kilo is more generally used in the treatment of congenital syphilis. However, its irritating effect in the tissue makes its use possible only by intravenous injection. When such is impossible, it is advisable to use sulpharsphenamine intramuscularly. Its stability in solution, ease of administration, rapid absorption, and lack of irritation has made sulpharsphenamine the drug of choice among the pediatricians. Intravenous use is apparently without harm. It should be given in doses of .02 gm. per kilo in conjunction with mercury or bismuth in a series of six to twelve treatments with rest periods of one to two months alternating until the Wassermann reaction is negative and remains negative. It is mentioned by some to give antisyphilitic drugs following an iron clad rule, giving a certain number to each series with a definite rest period interval. I do not think one should attempt to follow any set formula for the treatment of congenital syphilis. It is necessary to treat the patient with special reference to the disease.

The arsenical compounds have occupied the attention of pediatricians as an antisyphilitic, particularly from the standpoint of efficiency and administration. The mechanical difficulties in administering the older preparations has offered an obstacle to continued intravenous therapy, and only since the introduction of sulpharsphenamine has it been possible to offer proper treatment to all syphilitic infants and children.

With the progress of medicine comes another arsenical compound for the cure of syphilis by oral administration. Acetarzone, more specifically called stovarsal by the French and spirocide by the Germans. Among the 605 preparations with which Paul Ehrlich worked before he arrived at the formula for Salvarsan "606" was a preparation known to him as No. 594, now stovarsal and chemically similar to Levaditi's 190. Their experiments proved its unfitness for intravenous use and they discarded it, however,

since 1924 foreign clinics have employed it orally. It has been only within the past two or three years that several American clinicians have begun its use in the treatment of congenital syphilis, and only since the past eight or nine months that detailed reports have appeared in American literature. The articles by Harold Rosenbaum of Chicago, Arthur F. Abt. of Chicago, and Alfred Traisman of Chicago and the more recent report by Traisman praise its use in the treatment of congenital syphilis. The Wassermann reactions are shown to become negative in a much shorter time and with a fewer percentage of failures. The ease of administration attracts the attention of all pediatricians. The odorless white tablet is powdered and given, in water or milk $\frac{1}{2}$ hour before feeding to young infants, and in divided doses to larger children. The dosage now used is a pattern of Bratusch-Marrain treatment which is as follows:

.005 gms. or $\frac{1}{13}$ grs. of drug daily per kilo body weight for one week followed by

.010 gms. or $\frac{1}{7}$ grs. per kilo daily for one week

.015 gms. or $\frac{1}{4}$ grs. per kilo daily for one week

.02 gms. or $\frac{1}{3}$ grs. per kilo daily for six weeks.

Total of nine weeks treatment. This is followed by a rest period of one month, and the course repeated until serological tests are entirely negative; three such courses are usually required. A rest period of six months is then given and then one more course is given. Stovarsal is furnished in tablets of .05 gms. or 1 gr., .1 gms. or $1\frac{3}{4}$ grs., .25 gms. or 4 grs. The total amount given during nine weeks varies from over 4 to 42.5 grams according to the weight of the child which is equivalent to about one gram per kilo body weight for the whole course. It is advisable to administer with plenty of water prior to the meal to prevent too rapid absorption.

Comparing the results in older children, Rosenbaum obtained 57 per cent negative Wassermanns at the end of one year with stovarsal and 20 per cent negative in those treated by the older methods. In infants under one year Traisman obtained ten negatives out of fourteen

treated with stovarsol following the first course of treatment. These results are noteworthy.

Although untoward reactions have been few, only 5 per cent to 8 per cent being recorded, it is important to recognize their appearance. Maxwell and Glaser report one death and one case in which alarming toxic symptoms developed from its use. Abt and Traisman noted untoward reactions in four cases of a series of twenty-two, one of which died. Rosenbaum reports satisfactory results in forty-one children treated with stovarsol. Each of the authors advise that at the first appearance of any symptoms of arsenical hypersensitivity, the medication should be immediately stopped. Mild diarrhea, slight elevation of temperature, albuminuria, erythematous rash, abdominal pain and arsenical dermatitis are indications for temporarily discontinuing treatment, however to be again resumed after a sufficient interval of time has elapsed after the cessation of all untoward symptoms. Because of the possibility of these ill effects, the patient must be under careful supervision. Detailed instruction of outward results and dosage must be given to the parent. The drug should not be given in any larger quantity than necessary for one week's treatment, thereby protecting the patient and neighbors who are always so eager to try something new.

Because of the ease and simplicity of administration, stovarsol though yet in the experimental stage, offers at the present a most valuable defense in combating congenital syphilis. Adequate statistics are not yet available in America's literature to compare stovarsol perorally with the intravenous and intramuscular arsenic preparation. Neoarsphenamine and sulpharsphenamine, bismuth, mercury and iodides have their respective places in our armamentarium and should be given with discretion.

In conclusion, I wish to emphasize that our earliest campaign against congenital syphilis should be directed towards the treatment of the syphilitic mother, where much valuable service can be rendered. In view of the recent developments of the peroral use of stovarsol, and its incomparable advantages over the needle medication in infants and children, pediatricians may be possessed with a simple effective specific

treatment for congenital syphilis. However, it cannot be used indiscriminately, as some foreign reports would suggest, and it is my opinion that only where cases can be observed very carefully should it be employed until further investigation has definitely proven its place in the treatment of congenital syphilis. Until then we should depend upon the more common arsenicals, principally sulpharsphenamine, in conjunction with mercury or bismuth and the iodides because the continued use of these last mentioned drugs have proven very satisfactory and without such alarming complications.

REFERENCES

1. Jeans & Cooke: *Clinical Pediatrics* vxii, P. 50.
2. Abt *Pediatrics*: V5, P. 616.
3. Klasten, E.: Antisyphilitic treatment of pregnant women and newly born infants, *Wiener Klinische Wochenschrift*, 42:751, 1929.
4. McCord, J. R.: *Am. J. Syph.* 12:181, 1928.
5. Edward D. Atlee, Ralph M. Tyson: Congenital syphilis—results of early treatment, *J. Am. Dis. Ch.*, 214, 719, 1932.
6. Stokes, Miller, Beerman: An appraisal of the newest arsphenamine synthetic bismarsen, *Arch. Dermat. & Syph.*, V. 4; 624, 1931.
- 7—Chamber, S. O., Koetter, Geo. F.: Bismarsen in the treatment of congenital syphilis, *Arch. Dermat. & Syph.*, 25:1064, 1932.
8. Thornley, J. P.: Comparison of neoarsphenamine & arsphenamine. *Arch. Dermat. & Syph.*, 27:185, 1933.
9. Abt., A. F., Traisman, A. S.: Stovarsol in the peroral treatment of congenital syphilis, *J. of Ped.*, 1:172, 1932.
10. Abt. Isaac A.: Congenital syphilis, proceedings of the international post graduate Medical Association of North America for 1931, 205-208, 1932.
11. Rosenbaum, Harold A.: A survey of one hundred cases of congenital syphilis treated with stovarsol, *J. Of Ped.* V. 111:4343, 1933.
12. Beerman, Herman: Fatalities due to bismuth in treatment of syphilis, *Arch. Dermat. & Syph.* 26:797, 1932.
13. Mettel, Howard: Use of Stovarsol in the treatment of syphilitic periostitis in children, V. 47, 1931.
14. Heller, U. B.: Acetarson in the treatment of congenital syphilis, *J. of Med. Soc. of N. J.*, 30:718, 1933.
15. Antoniewirz, V. R.: Treatment of hereditary syphilis in infants, *Vrach. Gaz.*, 12:933, 1930.
16. Klasten, E.: Treatment of new born of syphilitic mothers, *Arch. fur Gynakalogie*, 134:88-128, 1928.
17. Maxwell, C. H.: Glasser, Jerome: Treatment of congenital syphilis with acetarsone given by mouth, *Am. J. Dis. Child.*, 43: pp. 1461-1489, 1932.
18. Bratusch-Marrain: The value of stovarsol treatment of syphilis in children, *Arch. F. Kinderh.* 92-26, 1930.
19. Holt, Emmitt: *Disease of Infancy & Childhood*, X Edition.
20. Griffith & Mitchell: *Disease of Infancy & Childhood*, 11 Edition.

THE PROVEN VALUE OF A STATE
NEURO-PSYCHIATRIC CLINIC
FREE TO THE PUBLIC*

CLARENCE PIERSON, M. D.

and

T. H. PARGEN, M. D.

PINEVILLE, LA.

Early in November of 1931 a State Neuro-Psychiatric Clinic was established in Alexandria. This clinic, under the direct supervision of the Central Louisiana State Hospital, and conducted by members of that Institution's Staff, holds bi-weekly sessions, each Wednesday and Friday, between the hours of 2:00 and 4:00 P. M. The Clinic was given wide publicity through the newspapers and Medical Journals of the State, together with direct appeal to the physicians of the various parishes. Due to the vast over-crowding of State Hospitals, particularly with cases that would, had they been seen early, have made proper adjustment, in all probability, and thus been able to meet their environment in such a way that institutionalization would never have been necessary, the organization of such a clinic was deemed imperative. After consideration and careful study of this situation, over a period of several years, together with trips through the East and North, where he inspected such clinics, Dr. Clarence Pierson, Superintendent of the Central Louisiana State Hospital, definitely arrived at an arrangement which he felt would meet the needs of the general public for the period necessary to develop and establish the proven value of such Neuro-Psychiatric centers.

The prime object of such a work is merely a consultation with the local physician by men who are especially trained in this line of work. There is no treatment given, nor is there any prolonged detail over the consideration of any one case. When first seen, each patient is subjected to a generalized mental examination, and with this is a corroborative statement of the patient's relatives or friends accompanying. After this, a physical examination is done, together with all laboratory work considered ne-

cessary. For such laboratory work the Clinic is exceedingly fortunate in that it not only has the benefit of the Public Health Laboratory, which is located in the same building with the Clinic, but also the very complete equipment of the Central Louisiana State Hospital, consisting of a Pathological Laboratory, Roentgen Ray Department, Electro-cardiograph, Basal Metabolism and complete Diathermy Department. A minute report is kept upon each individual case and when the doctors of the Clinic are satisfied as to the thoroughness of the examination, the patient is returned to his home. If the person responsible for the patient's visit to the Clinic is not a doctor, that person is advised to get in touch with some physician in the community. With the closing of each case a confidential report is sent to the person who referred the case to the clinic. This report sets out the findings of the clinic, together with a resume of the mental and physical condition determined by examination. In addition, it suggests the most advisable medicinal therapeutics psychotherapy, and instructions to the patient's family. Where necessary, a time limit is requested for the return of the patient to the Clinic for observation.

The response to these facilities has been most gratifying. Over a period of two years we have examined patients from twenty different parishes throughout Central and North Louisiana. Every co-operation possible has been given us by the attending physicians, and through their willingness to direct their patients, have helped the work of the Clinic appreciably.

With the beginning for a movement of this kind, statistics do not exactly reflect the benefits to be derived from a Clinic, as they will after such an adjunct is firmly established, because at first, we get not only early problems and patients from whom the Clinic could be of no possible benefit, but also completely developed cases that have passed to the stage of institutionalization. Where there can be no hope of correction of their mal-adjustment, and as with any recent innovation, there is a conflict on their own account of those disgruntled individuals who have failed to find a complete cure for alleged impossible ills; but, as time goes on, there is a gradual culling of the people not proper material for such a Clinic; then,

*Read before the Louisiana State Medical Society, Shreveport, April 10-12, 1934.

and only then, will we be able to appreciate a service of this kind. Although in its infancy, and despite the influx of mecca-seeking individuals, we are able to show such statistical information to warrant our assertion that a Neuro-Psychiatric Clinic is of indispensable value. For this purpose, I have not selected individual cases from the vast number examined since the Clinic was opened, but have taken a series of fifty consecutive cases, regardless of complaint, or of the benefit which the Clinic might render. These cases run the gamut of nervousness, mental mal-adjustment, sociological dilemma, mental mal-adjustment, so-ciological dilemma, the problem child, etc. Since the proper ironing out of these disorders and their consequences have such a serious social, medical and economic bearing, it is of extreme importance that every possible effort be made for early recognition and effective treatment.

We have classified these fifty cases as to the disposition made of each:

1st. Incomplete—3 cases

Obviously since they appeared at the Clinic only one time and one examination is not sufficient to even tentatively place them, they must remain permanently incomplete.

2nd. Institutional—5 cases

At first observation all of these cases were definite, full-blown psychoses, and in immediate need of hospitalization. They were interdicted to Central Louisiana State Hospital and are at present in this Institution.

3rd. Feeble Minded—2 cases

Both of these were children—one an idiot and the other an imbecile, and although institutional care was advised, the families in both instances, declined to act on such advice and took the patients home.

4th. Epilepsy—4 cases

Of this group, insofar as we could ascertain, the cases were all idiopathic. Three were of the petit-mal type, not apparently growing any more severe, and reasonably able to carry on in their particular walk of life. One case of grande-mal was advised to enter the epileptic colony, but whether the fam-

ily took necessary steps we are unable to say.

5th. In this group there were 13 cases, all beginning with the complaint of "nervousness" followed by innumerable alleged physical ailments. Considerable care and an unusual amount of time was given to each, and in every case we were able to find some physical abnormality which we felt was sufficient to account for the so-called "nervousness". In each instance, detailed advice was given, and so far, we have not been called upon by them for re-examination.

6th. This last, and by far the largest of the group, consisted of 23 cases, all neuroses, psycho-neuroses, and a very mild or border-line type of psychoses. Here a very thorough physical examination was given, in that the cases were re-checked in order to, insofar as possible, eliminate the slightest disability which might influence the case. Some we saw a number of times, particularly those in which psycho-therapy was being reacted to favorably. They were advised as to how to regulate their mental life—to get away from old habits of thought, and find other and newer interests. This re-education at the time of our discharge was given over to the family physician, and as yet no return to the Clinic has been noted.

Among the psycho-neuroses we found most frequently the "anxiety" and "neuro-asthenic" type. Since the origin of the trouble was not in the psychic sphere, but in a lack of proper adjustment of certain physiological functions, the digging out of submerged complexes and psychotherapy were likewise of appreciable benefit. There was, in most cases, some physical fixation of either function or organ, as demonstrated, not only by anxious expectation and general irritability, but by physical disturbances, in such fields as cardiac, respiratory, vasa-motor, etc.

In this group of fifty cases, we feel that the Clinic has been most helpful in the last two groups, consisting of 36 cases, or 72 per cent. We are not claiming cures, but not one of

these patients has returned in a period of over nine months; and, since they were all quite pleased with their progress at the time of discharge, we believe that if they had again become upset they would have returned to the Clinic.

The Clinic is of especial benefit to the community at large in such cases as the epileptic, feeble minded and frank psychoses, because attention is drawn to their potential danger and they become interdicted sooner than if left until some accident occurs.

There are three particular types of cases which I should like to mention here. They are encountered by all doctors, in all clinics, and are of such a nature that a few minutes of intelligent explanation early, by a doctor, would aid immeasurably, and a cure effected in many cases.

The first is a condition which I will term the "somatic heart" so frequently observed. These are usually deep-seated and confirmed institutional cases, from which there is seldom a recovery. For example: We have a young man, under some intense excitement which brings out an underlying cardiac arrhythmia, such as extrasystole. A pause in the pulse will be noticed, a sinking sensation in the chest, almost necessitating a gasp, a faint feeling; when touching the pulse rapid beats are noted, then again a stoppage. Such an occurrence immediately brings the idea that some type of heart trouble exists. Worry begins which, in turn, only aggravates the condition. A doctor is consulted. He is frequently too busy for more than a cursory examination, and with a pat on the shoulder, accompanied by a benevolent smile, states: "You have just a touch of heart trouble, but do not worry, it does not amount to anything." This is a most damnable piece of advice, and instead of accomplishing the purpose intended, reacts in a diametrically opposed manner, increasing worry manifold, because to the average lay mind "heart trouble" means death in a few short years; while, on the other hand, a sympathetic discussion on the part of the doctor, explaining the nervous control of the heart, would cause that individual, on subsequent occasions, to give no more than a passing thought to the condition when it becomes manifest.

The next item is "nervousness". We who are

vitaly interested and confine our activity to neuro-psychiatry, have a holy horror of the word "nervousness". It is the eczema of psychiatry, never representing an entity, but at all times a symptom of some under-lying condition. Most frequently the condition is of a simple nature, as we often observe in clinic work, and a condition which should be found by the practicing physician, and cured; however, too often the physician is busy—the patient's complaint is "nervousness" and a prescription for some sedative drug is written. Any physician would take exception to such procedure if told that in the presence of McBurney's syndrome a colleague had administered a hypodermic of morphine. His first rebuke would be "You have only masked the symptoms of a definite disease"—and, yet, that is just what is often done when a patient's complaint is "nervousness". A sedative drug frequently alleviates a nervous manifestation, allowing the under-lying condition to grow progressively, and in many cases brings the sufferer into institutional life. In our small series of fifty cases listed above, there were *thirteen* of just this type—"nervousness"—in each of which a careful examination revealed a definite cause, which, when removed, we have reason to believe alleviated the complaint, or else we feel that the patient would have returned to the clinic.

The third and last special condition which I wish to mention is one of great interest, and one to be looked out for by all physicians. I refer to what is termed the "schizo-phrenic child." Here a very careful history of early childhood and school days is vitaly necessary. At maturity it is difficult to distinguish this type of patient from the mental defective, since intelligence deteriorates and he remains on a lowered intellectual level the rest of his life; thus, simulating mental deficiency. This type of patient is not "catatonic" nor is he "paranoid"; nor "heb-phrenic". He has none of these characteristics to label him a "dementia-praecox". Superficially, both in production and appearance, one thinks of feeble mindedness, but an intelligence quotient does not bear out this thought. In childhood, however, he is not mentally deficient, but certain conduct reactions lead those about him to call him such. He is a queer, indifferant type of child—he learns very slowly

as a rule, but on close observation this does not seem an inability to learn but lack of ambition and application; and so, all too frequently, this type of child is loosely labeled "feeble minded" when his intelligence age at first developed right along with his chronological age. Two such cases came under our observation at the clinic, having broken very rapidly around the age of fourteen. Up until that time their development had progressed in a normal manner, but slowly.

During the last six months the volume of work at the clinic has increased tremendously—to such an extent that where one doctor handled the work before, two are now there on full time duty on examining days, and because of this increase the administration of the Central Louisiana State Hospital is seriously considering an increase in the number of days each week for the clinic to be open. This increase of cases is very gratifying for a number of reasons. Primarily we might say there is a beginning realization on the part of the general public that such examinations are not only helpful from a curative, but also from a preventative standpoint. Further delight is experienced when one realizes the long distance some of the patients come, particularly under existing economic conditions. Although the clinic itself is entirely and completely free, patients coming in have to stand the personal expense of the trip to and from Alexandria.

In conclusion, I wish to add that although the clinic is so far in its infancy as to hardly yet seem born, it is definitely benefitting the community and is fulfilling an important public need. The field is so broad that no one clinic could be sufficient, yet it acts as a beginner from which should grow in the order of their importance a Mental Hygiene Group, whose representatives would be distributed throughout all communities, to instruct the people along the line of proper thought, and assist in intelligent adjustment of their individual social fields.

There should also be a Child Guidance Guild, whose duty would be to examine all children, even before school age, classify them as to mental age, their ability to learn, and designate the classes wherein they should be placed. This Guild would also care for the "problem child"—one who is out of harmony, not only with its environment, but with family relations—the

"misunderstood child"; and, after a thorough analysis of him, the family should be instructed how to make of that child a normal, happy individual. And so on into our courts, where all unfortunate criminals might be analyzed and tested to see wherein lay the guilt or their crime—ever and ever under the wing of a State Neuro-Psychiatric Clinic.

DISCUSSION

Dr. C. H. Holbrook: Due to the fact that most of our people in Louisiana live in sections of the state that are far removed from large cities it is often impossible to obtain an adequate neuro-psychiatric examination. There are in Shreveport and New Orleans well qualified psychiatrists engaged in private practice and in very extensive public clinic practice.

At Touro Infirmary there is a neuro-psychiatric clinic of which I happen to be in charge. Associated with me are a neurologist and a psychiatrist, also two social service workers trained in psychiatry. All of the facilities of a modern hospital are at our disposal. During the past five years I have personally examined 2,237 new patients or about 450 new patients per year. The total visits to our special clinic amounted to over 2,500 per year. I believe we have rendered a service to our community and to the whole state during the 25 years that the clinic at Touro has been active. There are other neuro-psychiatric clinics in hospitals located in New Orleans and Shreveport.

There are so many people who would be greatly benefitted by neuro-psychiatric study and treatment, but such facilities are often not available. Our State Hospital for Mental Diseases and the State Colony and Training School have well trained staffs. The members of the staffs of these state institutions can render an important service to their respective communities by establishing as Dr. Clarence Pierson has done, well equipped clinics, manned by highly trained psychiatrists. These clinics should be encouraged by the physicians of our state. There are a number of people who can be saved from developing a serious psychosis by treatment by a psychiatrist during the developmental period of the mental disorder.

There is a distinct need in our state for clinics that should render treatment to children. Prevention of mental disorders is the goal that we strive to reach. Childhood is the golden age for mental hygiene. In our Child Guidance Clinic in New Orleans we made a careful physical examination, a psychological investigation, a psychiatric social study and a psychiatric examination of every child enrolled. This service took about 56 hours of endeavor and cost \$70. It would not be possible to make so complete a study of the problem child ex-

cept in a clinic especially formed and maintained for such a purpose. Much valuable aid can be rendered by similar clinics as that established by Dr. Pierson and his staff. These clinics should be encouraged in every way and should become more numerous.

SPONTANEOUS SUBARACHNOID HEMORRHAGE

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and

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Bleeding into the subarachnoid space is by no means an uncommon occurrence but the so-called spontaneous subarachnoid hemorrhage is of sufficient clinical interest to warrant the reporting of studied cases. Two of the three cases reported here were studied at autopsy and the third is sufficiently clear as to etiology and clinical findings.

Spontaneous subarachnoid hemorrhage is always symptomatic of some other underlying condition and therefore a symptomatic but not an etiological diagnosis. Bleeding into the subarachnoid space may occur in aneurism of the cerebral vessels, cerebral arteriosclerosis, cerebral syphilis, acute exanthemata, toxic states, neoplasm, trauma, acute meningeal inflammatory diseases, blood dyscrasia, migraine, and Karakoff's psychosis. Some authors deny that syphilis may cause spontaneous subarachnoid hemorrhage¹. However, Sands² reports two cases due to luetic meningitis and refers to two other similar reports in previous literature. The hemorrhage is usually diagnosed as spontaneous when definite precipitating factor such as trauma, acute infection, etc., is not present.

The pathology depends of course on the causative factor. Strauss, Globus and Ginsburg⁷ consider arteriosclerosis with or without aneurismal defects to be the most common finding. The changes due to the hemorrhage per se are a blood clot within the subarachnoid at the base or other brain surfaces, and ventricles and subarachnoid filled with bloody fluid. No subdural bleeding occurs. Changes in the brain substances due to pressure may be present.

The symptoms of the spontaneous subarachnoid hemorrhage are quite characteristic. The

onset is usually dramatically sudden. Severe head pains generally over the occiput and often radiating to the neck and shoulder is the initial complaint. Loss of consciousness usually occurs and may be immediate or delayed for several hours. Cranial nerve paralysis and paralysis of the extremities may occur but are not characteristic. Meningeal irritation resulting in stiffness of the neck and a positive Kernig's sign is always present.⁶ The spinal fluid is mixed with blood which does not diminish in subsequent tubes as in the "bloody tap".

Prognosis depends upon the causative factors. Bleeding due to aneurism, which is the most common cause in children and young adults, offers a fairly good prognosis so far as the immediate condition is concerned although subsequent hemorrhage is to be expected³. In a study of 24 cases Ohler and Herwitz⁴ report a mortality of 50 per cent. Seven patients had no associated disease and in this group only one died. Ten of the sixteen patients with associated disease died. Of seven cases with hypertension all but one died. We have studied only one case of spontaneous subarachnoid hemorrhage of arteriosclerotic origin that made a recovery.

Diagnosis is not especially difficult in cases in which the patient is not comatose or in which an accurate history of symptoms is available. It depends upon the story of intracranial symptoms and meningeal irritation plus a bloody cerebrospinal fluid. Intracerebral hemorrhage does not produce a bloody fluid unless the bleeding ruptures into the subarachnoid space. Neither does epidural hemorrhage produce a blood fluid and in this condition the symptoms are much slower in development. Meningitis may give a very similar picture but bacteriological examination of the spinal fluid will make the differentiation.⁵ Traumatic subarachnoid bleeding may in cases of slight trauma be differentiated only by the history.

Case 1. B. K. P., aged 45 years, white male who was apparently in good health until the development of present illness on August 12, 1933. After a normally active day, this man was occupied in doing some light work in his garage when he was suddenly stricken with excruciating head pain distributed over the occiput and radiating to neck and shoulder. His family physician was called and found the patient to be suffering intensely but able

to converse and move about normally. He was ordered to bed and morphine gr. 1/4 was given. This produced little or no relief and in one hour morphine gr. 1/8 was given. The patient continued to complain of the head pain and the physician asked for a neurological consultation. The patient was examined about four hours after the onset of the illness. He was in a coma; temperature normal; blood pressure—systolic 190, diastolic 110; pulse irregular in rate and volume; laboratory examination of the blood and urine was negative; deep reflexes were present, equal and active; superficial reflexes were not obtained; sensory examination could not be done; cranial nerves were negative except for a questionable weakness in the right face; the fundi showed some sclerosis of the retinal vessels. A tentative diagnosis of subarachnoid hemorrhage was made and spinal fluid specimen taken. All tubes were equally bloody. The patient died six hours later without regaining consciousness. No autopsy was done.

Case 2. E. W., colored female, 29 years of age. Developed pain in the head in the occipital area and complained of vertigo for about one hour before admission to the hospital. She had previously been in good health. On admission the patient was found to be comatose and there was some frothing at mouth and nose. Specimen of blood and urine was taken for laboratory examination and found to be essentially negative. Neurological examination was negative except for symptoms of meningeal irritation and dilated pupils which were equal and reacted to light and accommodation. Patient died thirty minutes after admission before spinal fluid could be taken.

Autopsy revealed a well nourished negro female, aged 29 years. The left submaxillary gland measured 4 cm. in diameter and was quite firm. The omentum was adhered to the anterior abdominal wall just above the urinary bladder. Old adhesions were present in the pelvis involving the tubes, ovaries, corpus uteri and anterior surface of the sigmoid colon. This, of course, was the residuum of acute pelvic inflammation. There was an intramural fibromyoma in the anterior wall of the corpus the size of a lemon. An old, inactive tuberculous mesenteric lymph-node was found in the upper portion of the mesentery. Old adhesions involved both lungs rather generally and there were adhesions between the pleura and the pericardium on the left. Pulmonary oedema and congestion were bilateral. The heart weighed 360 grams and other than a moderate amount of arteriosclerosis of the coronary arteries, it showed nothing noteworthy. The spleen was moderately enlarged and the capsule was thickened and involved in old adhesions. There were a few violin string adhesions

between the anterior surface of the right lobe of the liver and the abdominal wall. These are probably secondary to pelvic inflammation. The kidneys were about normal in size and, except for an occasional large depressed scar in the cortex, nothing of importance was noted grossly. Arteriosclerosis of the aorta was rather diffuse, but there was neither calcification nor ulceration. A thin layer of blood was present in the subarachnoid space generally over the hemispheres. The ventricles were filled with fluid and clotted blood. At the base of the brain there were found both clotted and free blood. The vessels at the base of the organ showed considerable arteriosclerosis.

Cause of death: Subarachnoid hemorrhage due to arteriosclerosis.

Case 3. L. E., colored male, aged 30 years, married. Admitted to the hospital with a history of suddenly developing head pain and vomiting the previous night. Previous to the development of these symptoms the patient was apparently well and active. On examination the patient was found to be a well developed and nourished negro male; comatose; temperature 100°; pulse 55; blood pressure—systolic 130, diastolic 85; pupils were dilated equally and reacted to light and accommodation; right patella reflex could not be elicited; there was a positive Kernig's sign and opisthotonus; laboratory examination was negative except for leukocytosis of 10,000; 80 per cent polys; spinal fluid was bloody. Patient remained in hospital for two days and expired.

Autopsy revealed the cause of death to be cerebral compression due to subarachnoid hemorrhage from ruptured aneurismal sac.

SUMMARY

Three cases of spontaneous subarachnoid hemorrhage occurring in adults are reported. The first two were due to arteriosclerosis and the third to ruptured aneurism.

REFERENCES

1. Ostermann, A. J.: Spontaneous subarachnoid hemorrhage. *Arch. Int. Med.*, 51:3, 1933.
2. Sands, I. J.: Subarachnoid hemorrhage as a clinical complication of neurosyphilis. *Arch. Neuro. Psy.*, 24:1, 1930.
3. Smith, W. A.: Spontaneous subarachnoid hemorrhage. *So. Med. Jour.*, 23:6, 1930.
4. Ohler, W. R., Herwitz, D.: Spontaneous subarachnoid hemorrhage. *J. A. M. A.*, 98:22, 1932.
5. Neal, J. D.: Spontaneous subarachnoid hemorrhage. *J. A. M. A.*, 86:6, 1926.
6. McIver, J., Wilson, Geo.: Spontaneous subarachnoid hemorrhage. *J. A. M. A.*, 93:2, 1929.
7. Strauss, Gobus, Ginsburg: Spontaneous subarachnoid hemorrhage. *Arch. Neuro. Psy.*, 27:5, 1932.

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Medical and Surgical Journal

Established 1844

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News material for publication should be received not later than the twentieth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

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**NEW OFFICERS OF THE MISSISSIPPI
 STATE MEDICAL ASSOCIATION**

A roster of officers and the elective committees chosen at the thirty-first annual session of the House of Delegates of the Mississippi State Medical Association at Natchez last month are published elsewhere in this issue of the Journal. It is our wish, however, here to extend our congratulations and best wishes to

those who have taken over the important executive duties of the State Association.

Dr. E. C. Parker of Gulfport, as president-elect the past year, was installed as president. Dr. Parker has been an active member of the Association for some thirty years. As chairman of organization during the past year he was instrumental in increasing the membership of the Association nearly ten per cent. He is a leader, well liked, and has the confidence of the doctors of Mississippi. His administration should be most successful.

Dr. J. R. Hill of Corinth was chosen president-elect of the organization. This is a deserved honor to a loyal member of the State Association, who has been an active practitioner of medicine in his native state for thirty-one years. His avocation is law making and he has served well his constituents and the interests of medicine in the Mississippi House of Representatives. During the recent session he was chairman of the Committee on Public Health and Quarantine. The election of Dr. Hill as president-elect insures that the State Association will have another capable leader.

Three vice-presidents were elected at the Natchez meeting,—Dr. A. B. Harvey, Tyler-town, representing the southern division of the state; Dr. Gilruth Darrington, Yazoo City, representing the central division; and Dr. R. C. Smith, Drew, representing the northern division. All have seen active service in their component societies. Organization under their direction should bring about definite increase in membership during the coming year.

Dr. Leon S. Lippincott, Vicksburg, who during the past year by presidential appointment has served as historian of the association in place of Dr. E. F. Howard who died during the year, was elected to that office.

Dr. Dudley W. Jones, Jackson, who has been an associate editor of the Journal for a number of years, was reelected for a term of two years. Dr. Jones has been an indefatigable worker for the State Association for a long period of years and his counsel and advice will mean much to the Journal in the years to come as they have in the past.

As expected Dr. J. P. Wall, Jackson, was reelected speaker of the House of Delegates. Dr. Wall is the only speaker the Mississippi

Association has ever had and his knowledge of parliamentary law and kindly way of handling difficult situations has led to a statement made on the floor of the House this year that Dr. Wall's was a life position.

Dr. J. W. Lucas, Moorhead and Dr. L. L. Minor, R. F. D., Memphis, because of efficiency and results accomplished were reelected as councilors of the first and second districts. For the third district Dr. R. B. Caldwell, Baldwin, was elected councilor. Dr. Caldwell has served the Northeast Mississippi Thirteen County Medical Society and the State Association for a number of years. He has been an active member of the Committee on Community Hospital Legislation since the appointment of the committee four years ago. The third district is in good hands.

As members of elected committees, Dr. W. H. Anderson, Booneville, was continued on the Committee on Public Policy and Legislation and Dr. W. H. Frizell, Brookhaven, on the Committee on Constitution and By-Laws. Both have seen long service in the work of the association and both are eminently fitted to continue the work which they have begun. The past session of the Mississippi Legislature saw numerous bills pertaining to practice of medicine considered and Dr. Anderson was ever watchful of the interest of the profession. Dr. Frizell, a past president and councilor of the Eighth District, has served as a member of the committee on Constitution and By-Laws for many years and has wisely aided in drafting numerous far reaching changes for the good of the Association. It seems likely that his also is a lifetime position. Dr. John B. Howell, Canton was elected to the Committee on Budget and Finance. Dr. Howell is a past president of the Central Medical Society and can be depended upon to aid in guiding the financial affairs of the association at a time when foresight and good judgment are especially necessary.

Able fraternal delegates were elected,—Dr. G. S. Bryan, Amory, to the Medical Association of the State of Alabama; Dr. P. G. Gamble, Greenville, to the Arkansas Medical Society; Dr. R. J. Field, Centreville, to the Louisiana State Medical Society; and Dr. Ira B. Seale, Holly Springs, to the Tennessee State Medical

Association. All can be depended upon to represent with honor the State Association of Mississippi.

At the meeting of the Association in Natchez, the officers of the past year and especially Dr. J. W. D. Dicks, President, were highly commended for their accomplishments during a difficult year. They set standards which were out of the ordinary. The members of the Association are confident that the new officers will keep those standards still moving upward. As was altogether fitting, Dr. Dicks was elected delegate to the American Medical Association for two years.

L. S. L.

THE TREATMENT OF OBESITY WITH DINITROPHENOL

A new drug, perhaps it would be more exact to say that a chemical substance known since 1917 to have definite pharmacological action, has recently been shown to have value in the treatment of obesity. Dinitrophenol, during the War, caused symptoms in a certain few of the workmen handling this preparation. Recently the pharmacology of this chemical has been studied anew and it has been found that the preparation acts as a marked stimulator of metabolism. This necessarily and naturally and as a correlation led to its use in the treatment of obesity. Cutting, Mehrtens, and Taintor* have shown that in therapeutic doses this drug is of considerable value. They treated a series of patients who were markedly over weight. The drug was given to them and promptly the basal metabolic rate increased to 30 per cent, keeping at this level for about twenty-four hours and then subsiding about the third day. These patients had none of the subjective symptoms of hyperthyroidism, nor was their heart rate increased. As a result of this increased metabolism weight was lost comparable to the loss of weight which follows thyroid medication.

Certain precautions should be observed in the use of dinitrophenol in the treatment of the obese patient. It is advisable to start treatment with relatively small dose, that is one-tenth gram (1½ grs.) of the sodium salt. If the patient tolerates this dose well it may be

doubled at the end of a week, and it may be still further increased until the patient is losing two to three pounds a week. If the drug is given in too large doses, or to individuals who are apparently sensitive to it, toxic symptoms may manifest themselves. These include marked itching of the skin, lethargy, headache, pigmentation of the conjunctiva, a feeling of heat, profuse perspiration, and if the drug has been given in large doses high fever. In the cases that have been reported in which death has taken place, the temperature has gone up to as high as 110°F. The most important early symptoms of a toxic infecting drug are itching of the skin and profuse perspiration. Given by a physician there is no reason why dinitrophenol should not be employed to combat obesity. Weight loss should not be too rapid, not over two pounds per week, and a proper diet should

be likewise advised. Unfortunately the knowledge of the effect of this drug has appealed to the patent medicine man. There are now a not inconsiderable number of fat reducing preparations on the market which have for their base dinitrophenol. In view of the sensitivity of some individuals to this drug, and in view of the tendency for the fat person to want to get results promptly and to take large doses of the preparation, such self medication should be distinctly warned against. The drug should be given always by a physician who can appreciate and realize when untoward symptoms arise. No drug that has the toxic effect of dinitrophenol should be permitted to be dispensed without a physician's supervision.

*Cutting, W. C., Mehrtens, H. G., and Tainter, M. L.: Actions and uses of dinitrophenol. *J. Am. Med. Assn.*, 101:193, 1933.

HOSPITAL STAFF TRANSACTIONS

CHARITY HOSPITAL MEDICAL STAFF

The Medical Staff of the Charity Hospital met at its regular monthly meeting held Tuesday, May 15, 1934. Dr. P. H. Jones presided.

Dr. Bradley briefly discussed the use of cortin in uremia, and showed a graph of blood creatinine levels demonstrating the leveling off effect or arrest of the rise in blood creatinine. This discussion was only a preliminary presentation of the work being done to investigate the possible use of cortin in such cases.

Dr. A. Granger then very ably presented roentgenograms to illustrate some of the details of normal and abnormal roentgenological diagnosis of the thorax.

TOURO INFIRMARY

The regular monthly meeting of the Medical Staff of Touro Infirmary was held Wednesday, May 9, 1934 at 8:00 P.M. Dr. S. K. Simon, Chairman, presided.

Two cases were discussed by Dr. H. L. Kearney. The first was a case of carcinoma of the larynx simulating laryngeal tuberculosis, the second a small extrinsic carcinoma of the same organ.

Laryngectomy was performed in both patients. Dr. Kearney demonstrated the use of the artificial larynx by a patient.

Dr. A. I. Weil presented a case of an unusual tracheal foreign body.

Dr. F. L. Cato's topic was thyrotoxicosis arising from an ovarian teratoma.

MERCY HOSPITAL STAFF MEETING

A meeting of the Mercy Hospital Staff was held Thursday, April 19.

The scientific program consisted of reports and demonstrations of skin cases by Dr. Oriol.

The first case presented was one of alopecia areata as a result of nervous disturbance in a child fourteen years of age. There was a total absence of hair on the head as well as the eyebrows and eyelashes. Under treatment the patient showed improvement and hair developed on the pubes and axilla. However, the slightest nervous disturbance caused complete loss of hair all over the body. This case was presented because of the fact that alopecia totalis is a rare condition. Dr. Upton discussed this case.

The second case discussed was that of a woman who had an atrophic ulcer on the foot. All treatments administered had shown no results and the woman had a very deep ulcer on the foot. The wound had been scraped for evidence of Hansen bacilli infection. However, no evidence was found of this germ. On administering chaulmoogra oil the ulcer showed marked improvement. The oil caused an erythematous rash to develop. The lesion was anesthetic in character. X-rays were developed before and after treatment. These showed an involvement of the metacarpal bones, which showed improvement with the treatment resorted to. Dr. Oriol stated that it has been thought that the germ was transmitted by a bed bug.

The third case presented was one of scleroderma

in a child. X-rays were negative for bone involvement but the foot was fixed due to the thickness of the skin. This case was presented because of the notoriety being given to these cases in the papers recently. Some pictures were shown of a case of neurofibromatous tumor which weighed sixty-five pounds and which was removed by operation. This is known also as a von Recklinhausen's disease or molluscum fibrosum.

The mortality investigations were next taken up by Dr. Campagna. A case of puerperal infection was discussed by Dr. Zander, which presented the usual history of being handled by a midwife for four days previous to being admitted to the hospital for delivery, was delivered by forceps following which the patient did fairly well, but eventually developed septic endocarditis which caused death. An autopsy had been obtained on one case in which death was caused by hemorrhage and shock. No discussion of this case was presented.

A case of malignancy of the bladder was also discussed. This case had been seen by a doctor because of frequency of urination with the presence of blood. They had been told that a growth in the bladder was papillomatous in character on examination with the cystoscope. Patient was seen several times, and impressed that he should continue the treatment but gave no cooperation. A hematuria was brought out by Dr. Chalaron as indicating evidence of either a tuberculous or malignant condition being present.

The case of a child with a diagnosis of acute influenza pneumonia was discussed in which Dr. Campagna stated there was nothing to indicate the origin being due to influenza.

Edwin L. Zander, M. D.,
Secretary.

BAPTIST HOSPITAL STAFF MEETING

The Clinical Staff of the Southern Baptist Hospital met on Tuesday, April 24th, at which time a motion was made and passed on by the Staff that the program arranged for this meeting be postponed until a later date and the meeting be dedicated to the memory of the late Dr. Carroll W. Allen, Chief of the Staff of Surgery at the time of his death.

A motion was also made and carried that fit resolutions be drawn up and a copy sent to the family of the deceased.

HOUSTON HOSPITAL STAFF MEETING

The regular monthly staff meeting of the Houston Hospital was held in the hospital building, Thursday evening, April 26, with about forty doctors and a large number of lay people attending. The address of welcome was made by Dr. W. C. Walker of Houlka.

Dr. George E. Riley, formerly of Houston, Direc-

tor of Malaria Control of the Mississippi State Board of Health, was introduced by Dr. V. B. Philpot. He showed a very interesting motion picture film on malaria control produced by the Rockefeller Foundation. He explained the work that had been done in Mississippi the past year towards malaria control, stating that, although he predicted more malaria this year than last, he predicted that the time was not far in the distance when malaria would be practically wiped out.

The address of the evening was made by Dr. William A. Evans of Chicago, who was introduced by Dr. J. M. Acker, Jr., of Aberdeen. Although Dr. Evans is no stranger in this territory, this was his first appearance before an audience in Houston. He is a native son of the adjoining county of Monroe, and is world famous for his health articles published in hundreds of newspapers.

Dr. Evans' address was chiefly on amebiasis, its causes and treatment. He also brought out the strong strides made in the past years in lowering the rate of other communicable diseases. He stated that statistics show that most communicable diseases come in cycles, and that scientists are working toward getting these diseases under control with the goal of finally preventing serious epidemics.

All through the evening, lovely musical numbers were rendered by Miss Judith Walz, Director of Music, Bennett Academy, violinist, and Brooks Haynes, pianist.

Eva Collins,
Secretary.

J. T. NIX CLINIC New Orleans

At a meeting held in May Doctor J. A. LaNasa presented the following paper.

NOTES ON UROLITHIASIS

The term "stone" is applied to any hard object that forms in the genito-urinary tract. Though many theories have been advanced, their etiology is still unknown. The predominant evidence is that infection plays a very important role; infection not only in the genito-urinary tract but from foci in various parts of the body.

It is customary to divide calculi into two groups: the primary, formed entirely from the constituents of the urine, and the secondary group, those which are formed about a foreign body. Calculi vary greatly not only in composition and rate of growth, but also in their size, shape and multiplicity.

The disturbances which stones cause vary so much in different situations that it is desirable to consider the various regions separately.

PROSTATE: The formation of multiple stones within the substance of the prostate is not unusual. They are generally small, seldom larger than a pea in size, and are thought to bear some relation to the common corpora amyloacea. They

may cause pain, due to sphincter spasm, urinary retention and abscess formation to the point of causing complete occlusion of the urethra. Since calculi in this region are usually associated with fibrosis of the gland it is seldom possible to remove the stones without sacrificing the prostate.

BLADDER: Calculus formation in the bladder is favored by any form of interference to the passage of the urine; namely: (a) stricture of the urethra, (b) the various types of bladder neck obstructions, (c) hypertrophied trigone, (d) conditions of the bladder musculature, whether of central or peripheral origin which favor stagnation as the result of atony or retention of urine.

Bladder stones announce their presence by pain and obstruction to the outflow of urine. They act as a ball-valve by rolling before the urethral orifice, affecting a sudden cessation of the flow of urine. Relaxation on the part of the patient or a change in position may cause the stone to roll away from the orifice and the flow starts again. Their presence causes inflammation of the bladder with the resultant frequency of urination, hematuria, pyuria and bladder hypertrophy. Clinically we sometimes find cases of bladder calculi that are symptomless due to the stone forming in a pouch and not being able to move freely within the bladder.

The diagnosis of bladder stones is rather a simple matter. The examination should consist of: (a) bimanual palpation, (b) intravesical exploration with instruments, e. g. the stone-searcher, sound, lithotrite and cystoscope, (c) x-ray.

The treatment of vesical calculi is accomplished in one or two ways: (a) by litholapaxy, (b) by removal through the supra-public route; (c) through a perineal incision as a part of a prostatectomy by this route of approach.

URETER. Are ureteral calculi primary or secondary? The opinion of the majority of urologists is that the ureteral calculus forms in the kidney and is found secondarily in the ureter.

A large percentage of stones after entering the ureter pass on into the bladder. When the stone is of such size and shape that it is arrested in its passage, thus blocking the ureter, a ureteral colic develops. The points of impaction correspond to the points of narrowing of the canal; (a) at a point about an inch below the pelvis of the kidney, (b) the point where the ureter crosses the iliac artery, (c) at the point of entrance into the bladder.

The prodromal symptoms of calculus in the ureter may be those of renal calculus or the passage of gravel with the urine. Often the attack comes on without prodromal symptoms. The patient is seized suddenly with an agonizing pain, radiating over the lumbar region along the course of the ureter to the end of the penis, to the testicle of the affected side and to the inner surface of

the thigh. The pain is usually continuous. The suffering is so severe that the patient becomes blanched, bathed in cold sweat and sometimes collapsed. Fever rarely develops, unless the pelvis of the kidney becomes infected. These symptoms may last a few minutes, a few hours, or one or more days, and their subsidence may be as sudden as their onset. A sudden subsidence may indicate either one of two occurrences: (a) that the stone has retrogressed into the kidney pelvis, or (b) extruded into the bladder cavity. The symptoms may subside gradually, recurring at intervals, and may be followed by the gradual development of hydronephrosis. Gradual subsidence indicates that the stone has lodged in the ureter and that the first absolute obstruction has yielded due to relaxation of the ureteral spasm and has allowed a portion of the urine to pass on.

The diagnosis of ureteral calculi is based upon a carefully taken clinical history and the results of a systematic urologic examination consisting of: (a) testing of the reflexes for a possible tabes, (b) palpation of the abdomen for a hydronephrosis or enlarged kidney, (c) the examination of the urine, and (d) the various radiographic procedures combined with cystoscopy and ureteral catheterization. Time does not permit of a discussion of the differential diagnoses in this paper.

Since most stones which enter the ureter from the kidney pelvis pass into the bladder, the early treatment of either a first agonizing attack of ureteral colic incident to calculous obstruction should be palliative. Morphine in sufficiently large doses should be given hypodermically until its quieting effect is noted. The urgent desire to micturate, from which patients suffering from ureteral colic complain, is purely reflex. If it is not relieved by hot sitz-baths and enemas the patient should be catheterized.

When it is evident, from the gradual development of an infected hydronephrosis or the persistently recurring mild attacks that a calculus is lodged, the method of procedure is to pass a ureteral catheter or at least a filiform bougie beyond the calculus. This is followed by almost immediate relief. In a small percentage of cases the calculus is so tightly impacted that neither catheter nor bougie can be passed beyond the point of obstruction. Under these conditions immediate operation is indicated.

KIDNEY: The formation of kidney calculi is due to the precipitation in the kidney tubules or pelvis of the solid constituents of the urine. Urine is a solution of crystalline elements, called crystalloids, which would be constantly precipitated, were it not for the action of certain organic elements termed colloids. Should the colloids coagulate, they lose this protective property of keeping the crystalloids in solution and form a nucleus or

framework upon which the crystalloids are deposited.

In addition to the above factors, there are certain others which favor the formation of calculi: (a) stagnation of the urinary current, (b) any surface such as an ulcer which offers favorable conditions for the deposit of the crystalloids, (c) any foreign body whose surface is rough, and (d) following injuries to the kidney proper.

The chief symptoms of renal calculus are pain, hematuria, frequent urination, fragments of calculus appearing with the urine, pyuria, oliguria or suppression, and symptoms of gastro-intestinal disturbances. A stone may, however, be present in the kidney for many years without producing symptoms.

DIAGNOSIS: The diagnosis of renal calculus is based upon the following:

1. The clinical history.
2. Radiography, including pyelography and the use of the opaque ureteral catheter.
3. The results of cystoscopy and ureteral catheterization combined with kidney function tests, bacteriological and chemical examination of the vesical and ureteral urines.

Of the three above mentioned procedures radiography is of prime importance because it enables one to determine in about eighty-five percent of all cases whether a calculus is present.

TREATMENT: The indications for operation depend upon whether one or both kidneys are involved. In unilateral cases a calculus that permanently or intermittently blocks the renal pelvis should be removed as early as possible unless there is a possibility that, due to its small size, it will eventually be expelled into the bladder cavity. Cases with multiple large calculi coupled with an infected and dilated renal pelvis are best handled by nephrectomy, unless the condition of the opposite side serves as a contra-indication.

THE OSCAR ALLEN TUMOR CLINIC OF
CHARITY HOSPITAL
New Orleans

The scientific meeting of January was called by Doctor J. T. Nix, Director. The essayist was R. H. Kampmeier, M. D., F. A. C. P., who presented the following:

DELETERIOUS EFFECTS OF IRRADIATION
ON THE ORGANISM

The untoward effects of roentgen ray and radium symptoms usually disappear in a month, but within this subject there seems to be much conflicting testimony so that clear-cut conclusions cannot be drawn. Much of the material available in the literature is related to experimental animals.

First will be considered the ill effects which may result in certain internal organs, skin, muscles, bones and hemopoietic tissues. Following this,

consideration will be given to studies referable to the interesting condition of radiation sickness.

There is much conflicting evidence upon the question of the unfavorable effects upon the heart. This has been exhaustively reviewed by Desjardins (1), whose papers are the source for the following remarks upon cardiac manifestations. From an experimental viewpoint, it has been shown that heavy irradiation may stop the heart in systole. Five to eighteen times the human erythema dose in dogs has caused coronary thrombosis, thrombosis in the auricular appendage, pericarditis with effusion, and definite electrocardiographic changes as increased PR interval, widened QRS complexes, and auricular flutter or fibrillation. Lavedon and his collaborators in several papers, report a cardiovascular syndrome in human beings of breathlessness, myasthenia, tachycardia, falling blood pressure, muffling of heart sounds, functional murmurs and duplication of the second sound. These symptoms usually disappear in a month. This syndrome is not due to direct radiation of the heart since it may appear after irradiation of other sites. Other experienced men deny such symptoms, saying they have never met with these symptoms even though large doses of X-ray irradiation had been given over the mediastinum and in carcinoma of the breast. Similarly, certain authors have reported electrocardiographic disturbances in the human, mainly those associated with conduction abnormalities. However, it has been pointed out that these findings were not controlled and may have been present before irradiation due to nutritional disturbances as a result of the carcinoma. In animal experiments it has been shown that 100 to 1000 times the erythema dose causes fatty degenerative changes in the myocardium. Thibaudeau and Mattick in 1929 examined hearts of ten patients in whom radium had been applied therapeutically to the chest. Some showed "necrosis with round cell infiltration, fragmentation of muscle fibres, brown atrophy and loss of striation in the myocardium". (Quoted by Desjardins). Those treated at a greater distance from the heart showed interstitial fibrosis. All in all it may be concluded that in ordinary therapy, no ill effects upon the heart may be expected.

A fall of blood pressure, 30-50 mm. of mercury, has been repeatedly reported following radiation therapy, but this is open to question when one considers the relaxation, and in some, the lack of fluids and vomiting.

The lungs and pleurae are as sensitive to the X-ray and radium as is the skin. Catarrhal bronchitis is frequently recognized. Plenropneumonitis following radiation to the chest is generally accepted as of not uncommon occurrence. As a result of such irradiation pleuritis, scarring, fibroid pneumonia and pleuritic adhesions are found. These may lead to functional disability in the

respiratory organs and secondarily in the cardiac sphere.

Earlam and Bollinger (2), as do others, report an X-ray nephritis resulting from unfiltered 1900 r-units. There occurs a degenerative lesion of the convoluted tubule to be followed by scarring and regeneration. If nephritis is well established it may be characterized by nitrogen retention, acidosis, hypercholesteremia, polyuria, uremia and edema.

The fact that radium and roentgen-ray have an unfavorable effect upon the germinal cells of the sex glands is generally known. This knowledge is made use of in the production of temporary sterility by irradiation of the ovaries in certain disturbances of the genital organs in the female. Protection of the body as customarily used by workers with roentgen-ray offers adequate security from any untoward effects upon the genital glands.

The deleterious effects of over-irradiation of the skin constituted unfortunate experiences to many of the early roentgenologists. The results of the exhibition of overdosage to the roentgen-ray and radium are so well known that they will be mentioned only in passing. In the mildest degree, merely an erythema similar to that of sunburn may appear. All degrees of reaction may occur up to that of gangrene and sloughing. The dermatitis appears usually within about seven days of exposure to the roentgen-ray or radium and in the mild cases, disappears in one to two weeks. As a result of long-continued sub-erythema doses, atrophic skin changes may occur, or keratoses may appear, the latter may later undergo carcinomatous changes. In the severe grades of burns, vesicles or bullae appear, to be followed by necrotic ulcers and sloughing. Irradiation ulcers are very slow in healing, in fact, some never heal, and they are also characteristically very painful. No doubt sensitivity of the individual exposed plays a part in the susceptibility to roentgen-ray and radium burns.

Finzi(3), in discussing the late effects of roentgen ray and radium therapy, calls attention to muscle changes due to heavy irradiation, as in the treatment of bone sarcoma. The muscle shows a chronic inflammation and the muscle may be replaced by a mass of fibrotic tissue. Changes also occur in bones, causing a devitalization, so that in case of subsequent fracture, union will not occur and amputation may be necessary. This author also points out that late necrosis may occur in the jaw if infected teeth are not removed before radiation. This is an important fact from a prophylactic viewpoint, since it indicates that oral hygiene should be given special attention before radium is used in malignant lesions of the mouth, tongue and jaw.

It has long been known that irradiation may cause certain blood dyscrasias. Most typical are

those associated with depression of the bone marrow such as aplastic anemia, agranulocytosis, and thrombopenic purpura. Much less commonly are seen dyscrasias due to stimulation of the blood-forming organs, as anemias of the regenerative type, leucocytosis, thrombocytosis and polycythemia. Cooper(4), has shown that gamma rays probably cause a change in the limiting membrane of the erythrocyte which leads to an increased fragility. He took ten samples of oxalated blood and exposed them to a four gram radium "bomb" for 48 hours at 1.5 cm. Increased fragility resulted, and this was shown to be due to changes in the erythrocyte itself, and not in the plasma, since untreated washed cells in irradiated plasma did not show increased fragility.

There seems to be little danger of ill effects upon the bloodforming organs even if the minimum protection is used. Serious effects are caused by the exposure of the whole body. However, Mottram (5) has made a study of blood counts in radium and roentgen-ray workers. He found that a diminution of polymorphonuclear leucocytes and lymphocytes is an early effect of exposure. Counts below 3000 polymorphonuclears and 1500 lymphocytes are significant. In a series of counts in a given individual, if there is a steady and persistent fall in these cells, though not reaching the above-mentioned levels, it indicates the worker is being affected, especially if he shows a recovery during a vacation. A mild polycythemia is an early change in the red cell count due to stimulation. Later changes are a decreased number of red cells with a high color index, this means insufficient protection for the worker. Cases of agranulocytosis have been reported supposedly due to overdosage with the roentgen-ray. This is of course not a contradiction to the fact that small doses of roentgen-ray have been known to occasionally have a favorable effect in agranulocytosis. Small doses are stimulating to leucoplasmic tissues, but large doses are depressant.

Of greatest importance are probably the biochemical effects of irradiation by the roentgen-ray and radium. These are the changes related to radiation sickness. Here again there are reported many conflicting results both in the experimental and clinical fields. The studies in the recent American and English literature are apparently few.

Sprunt(6) in experiments on dogs and monkeys found after irradiation (moderate dosage) a decrease in the concentration of base, which he presumes to be sodium, which was probably excreted; acid electrolyte lost was not bicarbonate. In animals treated with unfiltered radiations of long wave length, there were more marked toxic symptoms with diarrhea, greater decrease of base and a rise in non-protein nitrogen. The ionic concen-

tration is closely related to osmotic pressure and it is naturally of importance that this concentration be kept. (Pregnancy, nephrosis pneumonia and irradiation are the only conditions in which change of ionic concentration occurs without water loss. This is in contrast to the condition in vomiting, diarrhea and miner's cramps, which are accompanied by water loss). In his experimental work, Sprunt found that rabbits reacted differently than did dogs and monkeys.

Lang(7) thought the constitutional symptoms of roentgen sickness to be due to acidosis since he obtained relief by the use of sodium bicarbonate. Studies by a number of authors show a drop in pH after irradiation. Others, however, deny this and some even report an alkalosis. Still others report an early compensating acidosis to be followed by alkalosis which may be so severe as to lead to death. Data on serum albumin serum globulin relationships are just as confusing. This has been fully considered by Davy(8).

Some studies of interest are those by Adler(9). He carried out experiments with reference to mineral metabolism in searching for the explanation of "roentgen-ray sickness". As in all other respects, as noted above, the literature was at variance with respect to the metabolism of calcium potassium, chlorides and carbon dioxide. This author found variations in different species of animals in varying states of nutrition. He used rabbits for study, 3000 r-units being given in three hours of radiation. In less than three hours, he found changes as, definite decrease of serum calcium, potassium and sodium, and marked decrease (50 per cent) of skin calcium and potassium. There was an increased output of calcium in the urine and feces following radiation, and then beginning the second day there was calcium retention. Potassium output began the second day and reached its height on the third, accompanied by an increased fluid output. Water retention was found on the following day. He then studied the question as to whether acids were increased by irradiation and whether the increased alkali output was secondary to this. The output of phosphorus increased for forty-eight hours, and then was followed by a gradual drop. The experimental animals were all on a vegetable diet. Adler then carried out studies while the animals were on a meat diet. Thus it was found that acid was bound with ammonia and so there was less output of alkali. The same roentgen-ray dosage was followed by no loss of serum calcium or potassium and very little sodium. Ammonia definitely increased in the urine after radiation. In dogs on a carbohydrate diet, there was also a definite loss of serum calcium, potassium and sodium, and similarly rabbits on a protein diet showed no loss of these alkali elements. Thus it was shown that a definite acidosis occurs after roentgen-ray the-

rapy. The conclusions this author draws are of interest. He points out that it is usually recommended that only tea or soup be given before therapy. He says it would be made logical to give a heavy protein diet in order to make ammonia available to neutralize the acid and thus not waste body alkali. This would be of special importance if several treatments were to be given at short intervals, for under such circumstances, there might be an accumulation of acid bodies. The author found that those who stood roentgen treatment best were those who had had a good heavy breakfast rather than having received treatment while in the fasting state.

It may be noted that the American literature on the deleterious effects of irradiation is in general very sparse. Further, it is evident that opinions vary a great deal in this field. Studies related to "radiation sickness" should be of especial value because of the relationship to therapy by use of radium and the roentgen-ray.

REFERENCES

1. DesJardins, A. V.: Action of roentgen rays and radium on heart and lungs; experimental data and clinical radiotherapy. *Am. J. Roentgenol.* 28:127 (July); 271 (Aug.); 421 (Sept.); 567 (Oct.); 699 (Nov.), 1932.
2. Earlam, M. S. and Bollinger, A.: Experimental renal disease produced by x-ray. *J. Path. & Bact.* 34:603 (Sept.), 1931.
3. Finzi, N. S.: Late x-ray and radium effects, incidence etiology and medical treatment. *Brit. J. Radiol.* 6:148 (Mar.), 1932.
4. Cooper, T. V.: Effect of gamma ray irradiation red corpuscles. *Lancet* 1:1026 (May 9) 1931.
5. Mottram, J. C.: Interpretation of blood counts in radium and x-ray workers. *Lancet* 2:42 (Jan. 3), 1931.
6. Sprunt, T. P.: Influence of roentgen rays on acid-base equilibrium. *J. Biol. Chem.* 92:605 (Aug.), 1931.
7. Lange, S.: The cause and prevention of the constitutional symptoms following deep roentgen therapy. *Am. J. Roentgenol.* 3:356, 1916.
8. Davy, L.: Acid-base balance and serum proteins of dogs before and after irradiation. *Am. J. Roentgenol.* 25:255 (Feb.), 1931.
9. Adler, K.: Die Saurengiftung des Organismus durch Roentgenstrahlen. *Klin. Wehnschr.* 12:300 (Feb.) 1933.

NATCHEZ SANATORIUM STAFF MEETING

The regular monthly meeting of the Staff of the Natchez Sanatorium was held on April 14 with nine members present.

Dr. R. D. Sessions presented a case of multiple stab wounds of the chest.

Dr. L. S. Gaudet presented a case of embolus of the central artery of the right eye.

Dr. E. E. Benoist presented a case of eclampsia.

Dr. F. S. Dixon gave a resume of an article on intestinal obstruction, appearing in the *J. A. M. A.*, vol. 102, No. 14, page 1149.

W. K. Stowers,
Secretary.

VICKSBURG HOSPITAL STAFF MEETING
APRIL 12, 1934

The meeting was called to order at 6:30 P. M. by the chairman, Dr. T. P. Sparks, Jr.

The work of the various departments for the preceding month was discussed, after which the following scientific program was offered:

1. Report of Work of County Health Department for Preceding Year.—Dr. F. Michael Smith.
2. Carcinoma of the Uterus with Particular Reference to Its Occurrence in Young Women.—Dr. W. H. Parsons.
3. Recent Advances in Urology.—Dr. T. P. Sparks.
4. Demonstration of X-Ray Films.—Dr. W. K. Purks.

Abstract.—Carcinoma of the cervix uteri with particular reference to its occurrence in young women.—Dr. H. W. Parsons.

The essayist, after a general discussion of carcinoma of the uterus, presented in abstract form the histories of two patients that exemplified certain of the points previously mentioned.

Case I was that of a white female, 28 years of age, who was referred on September 13, 1932 to the Clinic by Dr. W. N. Jenkins of Port Gibson. Briefly the story was that since the birth of her last child six months previously there had existed backache, pain low in the left abdomen and a thick, purulent vaginal discharge. All of these symptoms had grown steadily more marked and two weeks ago she had consulted her local physician, who promptly suspected that a malignant condition was present and referred her to us.

The family history was irrelevant. Particular inquiry was directed as to whether or not other malignancies had occurred in any of her relatives and such was not the case.

Pelvic examination showed the perineum utterly relaxed and there was a large mass springing from the cervix, the gross appearance being that of huge cauliflower carcinoma. The mass completely filled the upper segment of the vagina. It was exceedingly friable and on slightest pressure bled freely. The fundus of the uterus seemed normal in size, but fixation was already beginning. The clinical diagnosis of carcinoma of the cervix was confirmed by biopsy, which showed a squamous celled carcinoma, grade IV.

The mass was destroyed by application of the cautery and a rather large dose of radium was applied. It was felt that the risk of recurrence certainly exceeded ninety per cent. Four months later, the patient returned. It was noted that the cervix was quite inflamed, there was a foul smelling discharge with considerable slough still separating. An effort was made by local treatment to cleanse the part and later radium was again applied.

The patient died of general carcinomatosis four months later, approximately eight months following the first treatment and fourteen months following the birth of her last child.

Case II was a white female, 29 years of age, registered at the Clinic September 5, 1933, at which time spontaneous delivery of a female child was accomplished without difficulty. Post partum convalescence, except for more than the average amount of vaginal bleeding, was uneventful and the patient left the hospital on September 9, 1933, being removed to her home by means of ambulance.

At intervals, continued vaginal bleeding occurred, so that on October 16, she returned to the hospital and was treated in the usual conservative fashion. On October 23, a diagnostic curettage was done by my associate, Dr. Knox, and the biopsy showed no evidence of malignancy. For a few days bleeding ceased, but then promptly returned in its original vigor.

It was noted in reviewing the past history of this patient that following the birth of her first child, now four years ago, marked vaginal bleeding followed delivery, so that ultimately it was necessary to pack the uterus. However, following this treatment, there was no further trouble and her menstrual history from that time to the onset of recent pregnancy was entirely negative.

Ultimately, on October 30, it was felt wise to perform a total hysterectomy and this was accomplished by the abdominal route without undue hardship. Study of the removed uterus together with upper end of vagina disclosed a malignant leiomyoma.

Post-operative convalescence was entirely uneventful and there has been so far no evidence of recurrence.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on Monday, May 14 at 6:30 p. m. After the business of the staff, reports from the records department and analysis of the work of the hospital, cases from the cancer clinic were discussed as follows:

1. Basal Cell Carcinoma of Right Lower Jaw.—Dr. A. Street.
2. Adeno-carcinoma (Grade III) of Sigmoid Colon, with Multiple Metastases to Mesentery Lymph Nodes.—Dr. A. Street.
3. Adeno-carcinoma (Grade IV) of Stomach, with Multiple Matastases to Lymph Nodes in Region of Portal Vein.—Dr. A. Street.
4. Cylindrical Cell Carcinoma (Grade IV) of Cervix Uteri.—Dr. J. A. K. Birchett, Jr.
5. Adeno-carcinoma (Grade IV) of Pancreas with Multiple Metastases to Liver and Lungs.—Dr. L. J. Clark.

Special case reports included:

1. Nephrolithiasis.—Dr. A. Street.

2. Perforated Duodenal Ulcer (atypical case).—
Dr. J. A. K. Birchett, Jr.

Dr. L. J. Cark made a report of the recent meeting of the American College of Physicians at Chicago.

Three-minute reports of the literature of the month were given as follows:

1. Dr. A. Street.—Quarantine Drainage of the Abdomen.

2. Dr. S. W. Johnston.—Use of Antuitrin in Male Sex Underdevelopment; Treatment of Salvarsan Dermatitis; and the Early Diagnosis of Cancer by Examination of the Blood.

3. Dr. H. H. Johnston.—Relationship between suppurative Nasal Conditions and Retrobulbar Neuritis.

4. Dr. L. S. Lippincott.—Causes of Agranulopenia.

The next meeting of the staff will be held Monday, June 11, at 6:30 P. M.

Abstract.—Perforated duodenal ulcer (an atypical case).—Dr. J. A. K. Birchett, Jr.

Patient.—Colored male, age 43, farmer, admitted to Sanitarium April 17, 1934.

Present Complaint.—Pain in abdomen.

Present Illness.—Pain began 24 hours before admission while walking behind plow in field, came on suddenly and so severe as to cause dyspnea; had to sit down for relief. No urinary symptoms, no cough or inability to breathe easily after the first pain, slight nausea but did not vomit at once. After pain was somewhat alleviated, walked to house about a mile; was extremely weak and pain became worse and was associated with cold clammy sweat. Doctor was called and came in about two hours and gave hypodermic for relief of pain which was felt over entire abdomen. Doctor advised him to go to hospital for it appeared that he had acute appendicitis.

Past History.—No severe illnesses, negative history for symptoms of digestive disorder or of ulcer. Constipated; general health good; has had no complaint, no loss of weight or evidence of any disease. Denies venereal diseases. Has had bad cold with cough for past ten days.

Physical Examination.—Well developed and nourished negro male complaining of acute abdominal pain and with evidence of shock.

Physical examination essentially negative except for evidence of bronchitis with rales over lungs and cough; and abdomen is distended, not markedly but with moderate rigidity of right rectus muscle. Pain elicited over epigastric region and in region of umbilicus. Pain most marked to right of umbilicus and over appendiceal region. Positive peritoneal release sign. The entire abdomen is tympanitic. Temperature 99.6°F; pulse 96.

Laboratory.—Blood, Hemoglobin 87 per cent; color index—0.79; erythrocytes 5,500,000; leukocytes 7,800; differential leukocyte count; small lymphocytes 5 per cent; large lymphocytes 2 per cent; monocytes 2 per cent; polymorph. neutrophils, mature forms 10 per cent; band forms 80 per cent; young forms 1 per cent.

Blood Wassermann test, negative; Kline and Young test, positive (1 plus); Kahn test, negative; Eagle flocculation test, negative.

X-ray findings negative, no gas bubble under diaphragm.

Procedure.—Diagnosis of general peritonitis due to perforated ulcer or appendix was made. The sudden onset with extreme shock following initial pain was in favor of perforated ulcer but the negative digestive history, the absence of marked rigidity and the negative roentgen-ray findings made this deduction appear doubtful. The sudden onset of epigastric symptoms and the subsequent development of right lower quadrant pain, most marked over appendix, and absence of marked rigidity made the condition appear to be appendicitis. Gastric crisis was suspected but dismissed after noting the marked peritoneal irritation and the marked leukocytosis.

Laparotomy was decided upon with investigation and removal of appendix after administration of glucose and saline with improvement of patient's general condition three hours after admission and 18 hours after initial attack. A McBurney incision was made under spinal anesthesia, 100 mg. of neocaine being used. Spinal anesthesia was chosen as patient had severe bronchitis. Upon opening abdomen there was a gush of yellow, odorless fluid and it was evident that the exudate was from the upper digestive tract because of the evidence of bile and the digestive secretions. Several pints of fluid were drained off from the peritoneal cavity. The McBurney incision was quickly closed after appendix was removed by simple ligation. It was acutely congested with evidence of marked inflammation as were the rest of the viscera. Upper right rectus incision was made and the upper abdominal cavity was full of the same type of fluid; the omentum was firmly adherent over the duodenum and stomach and the transverse colon was adherent to the under surface of the liver. In face of adhesions and the attempt to wall off the perforated area and the poor general condition of patient it was deemed advisable to drain this area and not look for the perforation and close it. The patient did not survive the shock of the marked peritonitis.

Discussion: We consider this a good example of how perforated ulcer can simulate appendicitis by the drainage of the stomach contents through the perforation to the lower abdomen

especially the lower right quadrant, with appendiceal symptoms developing in the lower abdomen, especially when there is an absence of rigidity of abdominal wall which we are taught is such a necessary sign in perforated ulcer. The peritoneal irritation was so general that I do not be-

lieve this patient could have survived the general peritonitis even if exploratory had not been done for the masquerading appendix and even so I feel that with the signs and symptoms as presented this unusual syndrome of perforated ulcer would be taken for appendicitis.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR

June 4—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

June 6—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 8—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 11—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M. Joint meeting with the First and Second District Dental Society.

June 13—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 13—Touro Infirmary Staff, 8 P. M.

June 15—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 15—French Hospital Staff, 8 P. M.

June 18—Hotel Dieu Staff, 8 P. M.

June 19—Charity Hospital Medical Staff, 8 P. M.

June 20—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 20—Charity Hospital Surgical Staff, 8 P. M.

June 21—Eye, Ear, Nose and Throat Club, 8 P. M.

June 22—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

June 22—I. C. R. R. Hospital Staff, 12 Noon.

June 22—Mercy Hospital Staff, 8 P. M.

JUNE 25—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

June 26—Baptist Hospital Staff, 8 P. M.

June 27—Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

June 29—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

During May one regular scientific meeting was held and the following program was presented:

Jaundice Associated with Hyperthyroidism.

By: Dr. Howard R. Mahorner. Discussed by Drs. Alton Ochsner and O. W. Bethea.

Treatment of Acute Pelvic Infection with Special Reference to the Elliot Treatment.

By: Dr. John T. Sanders.

The Rational Treatment of Diabetes Mellitus.

By: Dr. Upton Giles.

Dr. A. L. Metz was elected an Honorary Member at this meeting.

The following resolutions honoring Dr. Frank R. Gomila were adopted:

WHEREAS, a member of this Society, Dr. Frank

R. Gomila, by having been re-elected practically unanimously a member of the Commission Council of New Orleans has brought public honor on and has enlarged the influence of our profession in the affairs of our City, and

WHEREAS, Dr. Frank Gomila has always displayed untiring energy in promoting the interest of his profession, and has always been most zealous in the interest of the health and the public safety of the City, and

WHEREAS, the re-election of our distinguished colleague and his prospective administration in the Public Health Department in particular during the next four years gives our people the assurance of competent, intelligent, painstaking and enthusiastic service in behalf of public health, therefore,

BE IT RESOLVED, that we do congratulate the Orleans Parish Medical Society on this signal recognition of the work and the influence of the doctor in public affairs as evidenced by their election, and,

BE IT FURTHER RESOLVED, that we congratulate Dr. Frank Gomila on the continuation of the opportunity which is his to render further distinguished service to the community and yet shed more lustre on the medical profession, and,

BE IT STILL FURTHER RESOLVED, that we congratulate the people of New Orleans on their good judgment in choosing to serve them for a second term as Commissioner of Public Safety and particularly of public health a highly esteemed citizen, a most competent physician and an inspiring leader in the person of Dr. Gomila.

A Clinical Meeting at the United States Marine Hospital was held at the Marine Hospital, May 28. The following cases were presented by members of the Marine Hospital Staff and discussed by members of the Orleans Parish Medical Society.

Perfringens Antitoxin in Peritonitis.

By: Dr. H. L. Skinner. Discussion was opened by Dr. Alton Ochsner.

The Treatment of Gonorrhoeal Epididymitis with Pyretotherapy.

By: Dr. R. C. Arnold. Discussion was opened by Dr. C. L. Peacock.

Report of Ten Cases of Pulmonary Tuberculosis Treated with Gadusan with Negative Results.

By: Dr. B. O. Lewis. Discussion was opened by Dr. Shirley Lyons.

Some Unusual Cases.

By: Dr. F. V. Meriwether.

Epidemiological Observations on Epidemic Encephalitis.

By: Dr. L. L. Lumsden. Discussion was opened by Col. C. F. Craig.

Refreshments were served.

One of the first acts following the inauguration of the new City Administration was the appointment of Drs. Peter Graffagnino and Waldemar R. Metz to be members of the Board of Health of the Parish of Orleans and the City of New Orleans.

The Orleans Parish Medical Society was represented before the Board of Review of the PWA in Washington, May 11, by Dr. Waldemar R. Metz, President and Dr. Frederick L. Fenno, Secretary. Dr. Chaille Jamison appointed Drs. Emmett Irwin and Val H. Fuchs as representatives of the Louisiana State Medical Society.

The matter under consideration was the erection of the new Charity Hospital at New Orleans.

During the presentation of the case for the Hospital Administrators, Mr. Danziger suggested that the Hospital might be willing to accept a loan of seven or eight million dollars instead of the \$10,000,000.00 originally asked. Mr. Danziger was, however, unable to give the Board the specific total bed capacity acknowledging that he did not know whether the buildings such as Dibert, White Female, Delgado, etc. would undoubtedly be abandoned and the present White Female building converted into an infectious pavilion. Great stress seemed to be placed by the proponents upon the fact that the Medical Societies were objecting to the construction of the 26-story building contending that at no time had that number of stories been designated by the Hospital authorities, and contending that the set back floors of the upper levels did not constitute complete floors. The proponents explained to the Board that the great savings submitted and their possibility as expressed in their application were all attributable to the fact that this new structure would accommodate patients now scattered throughout the present hospital buildings. They did not explain that the retention of Dibert, White Female, etc., would still constitute scattered hospital accommodations, and that the saving alleged would not be possible with the maintenance of these buildings. Mr. Danziger continually referred to the endorsement of the hospital project by various organizations not informing the Board that the present plan as submitted was not the plan approved by various organizations, and one time during the discussion insisted that Mayor Walmsley had endorsed the project, but did not state that the Mayor was opposed to the present set-up including pay beds. Dr. Vidrine took apparently little part in the presentation of the case, Dr. D'Aunoy, Dr. Jos. A. Danna and Mr. Leon Weiss apparently having prepared most

of the information in support of Mr. Danziger's contentions. Dr. Jos. O'Hara told the Board of the need for replacing the present delapidated buildings, but after a whispered conversation with Mr. Danziger refused to make a statement Mr. Danziger evidently had suggested.

The proponents were supported in their arguments by representatives of various labor organizations who it is reported were taken to Washington at the expense of the Board of Administrators of Charity Hospital, approximately \$300.00 being placed at the disposal of each labor representative. Also a Mr. R. C. Poursine representing the unemployed spoke at length on the harrowing conditions existing in this community among the unemployed.

The case of the hospitals and the Medical Societies was very ably presented by Mr. Eldon S. Lazarus supported by Dr. Metz from the Orleans Parish Medical Society, Dr. Emmett Irwin in behalf of the Louisiana State Medical Society, Dr. B. C. MacLean from Touro Infirmary, Mr. Julian K. Byrne from Mercy Hospital, General Allison Owen, Hotel Dieu; Mr. W. R. Lence, Louisiana Tax Payers Association; Dr. Louis J. Bristow from Baptist Hospital; Dr. W. W. Alexander, Dillard University and Mr. A. W. Dent of the Flint Goodrich Hospital.

The hearing was conducted most ably by Chairman Abbott and a most impartial satisfactory presentation of facts and material was permitted. The Board secured the services of Dr. Treadway of the Public Health Service as an advisor on the technical points relative to the operation and maintenance of hospitals.

At one point during the meeting it was suggested by the Chairman that since both factions seemed agreed on the need for new structures that a conference be held to affect some compromise on the project, but as the proponents steadfastly insisted on the inclusion of pay beds and the approximate total bed capacity of 3900 it was impossible for a compromise to be even considered as the opponents could not accept the inclusion of pay beds nor the construction of a hospital of such size.

TREASURER'S REPORT

ACTUAL BOOK BALANCE: 3/28/34	\$1,882.85
April Receipts	\$7,264.75
TOTAL CREDITS	\$9,147.61
APRIL EXPENDITURES	\$7,296.53
ACTUAL BOOK BALANCE: 4/30/34	\$1,851.08

LIBRARIAN'S REPORT

During April, 77 volumes have been added to the Library. Of these 70 were received by gift, 2 by purchase and 5 by binding, bringing the total

number of books in the Library on April 30 to 20,386.

No general report has recently been made of the vast amount of material which comes to us from other medical libraries and some members of the Board may not be familiar with Exchange conducted by the Medical Library Association, through which we give from our duplicates and receive items needed to complete our own files. There are approximately 160 library members in this Association. At least once every two years, each library lists duplicate material with the manager of the Exchange. As a result, each library receives twice each month a mimeographed list, about 25 pages in length, of material offered. We check these lists very carefully, noting items which we need and return the list of our wants to the manager of the Exchange. Material is assigned according to the size of the library with the realization that the large libraries give much and ask for very little, and should thus have first chance when there is something listed which they need. The librarian of the donor library receive instructions as to what from her duplicates to send by third class express collect, thereby securing the cheapest possible rate. The receiving library pays only transportation charge from the donor library. This Exchange has been the means of our completing dozens of journal files, at the cost of only transportation of the material from the donor library. All gift parcels are acknowledged directly to the donor library. As an example of the value of the Exchange medium in the growth of our own collection, we have listed below the libraries from which we have received gift material during April alone.

University of Arkansas School of Medicine Library.

Iowa State College Library.

Queen's University Library (Kingston, Ontario).

Indiana University School of Medicine Library.

New York Homeopathic Medical College and Flower Hospital.

Vanderbilt Medical School Library.

Library of the University of California School of Medicine.

Library of the University of Wisconsin School of Medicine.

Grosvenor Library (Buffalo, N. Y.)

Rockefeller Institute for Medical Research Library.

In the interests of brevity and to avoid a report consisting of successive lists each month, we have not mentioned all these donor libraries in each report,—but wished the members of the Board to be familiar with this valuable cooperative scheme as maintained and supported by the Medical Library Association.

The members of the Library Staff have collected material on the following subjects for members of the Society during April:

Psoas Abscess.

Therapy of neurosyphilis.

Diseases of the gallbladder.

Liver function tests.

Neuralgia paresthetica.

Malignant and non malignant tumors of groin.

Illuminating gas poison.

Liver abscess.

G. W. Crile—Life and work.

Removal of tattoo marks.

Treatment of tabetic bladder.

Muscular atrophy.

Eyes and automobiles.

X-ray treatment of pulmonary tuberculosis.

Diuretics.

Prophylactic use of digitalis in middle aged.

Technique for decerebrating dogs.

Phosphatase in bone disease.

Allergy as cause of agranulocytic angina.

Dinitrophenol treatment of obesity.

Arthritis.

Measurement of great vessels above and below the heart.

Intravenous oxygen administration.

Frederick L. Fenno, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

LOUISIANA STATE MEDICAL SOCIETY, FIFTY-FIFTH ANNUAL SESSION, SHREVEPORT, APRIL 9-12, 1934

Gentlemen:

The meeting of the House of Delegates of the Louisiana State Medical Society was called together at 10:00 o'clock, Monday morning, April 9, in the Washington-Youree Hotel, headquarters for the meeting. During the session the House of Delegates held two regular meetings and one special meeting. After calling the meeting to order our President, Dr. C. A. Weiss, turned the gavel

over to Dr. J. J. Ayo, Chairman of the House of Delegates, for the transaction of business.

The Committee on Credentials, Dr. H. W. Kostmayer, Chairman, Dr. P. King Rand and Dr. W. P. Butler, then made their report, after which a roll call was had and the official membership of the House of Delegates was obtained.

The reading of minutes for 1933 was dispensed with, and the Secretary-Treasurer was instructed to read them by abstract. This was done and they were adopted as read.

Dr. C. A. Weiss, as President of the Society,

presented a report to the House of Delegates. A committee composed of Dr. Rhett McMahan, Chairman, Dr. F. J. Chalaron, and Dr. Guy A. Caldwell was appointed to review his report and bring in proper recommendations. Upon their recommendations the report was accepted, which contained the following special recommendations:

1. That the Legislative Committee be requested to confer with its legal advisor to draw up or have drawn up a bill fixing the financial responsibility for both the physician and the hospital care of an individual injured in an automobile accident. This bill to be introduced for action at the coming meeting of the Legislature.

2. The recommendation that a yearly contribution be made to the Indigent Physician's Fund from the General Fund has been incorporated and accepted in the report of the Budget and Finance Committee.

3. The suggestion that the members of the Executive Committee be reimbursed for their per diem expenses while in attendance at executive meetings is again strongly urged for adoption.

4. That we defray the expenses of our distinguished Annual Orator.

5. That the recommendation pertaining to the election of a Vice-Chairman of the House of Delegates be adopted.

The Secretary-Treasurer, Dr. P. T. Talbot, made his annual report, and upon recommendation of the Secretary-Treasurer's Report Committee, composed of Dr. Leon J. Menville, Chairman, Dr. C. C. DeGravelles and Dr. Charles M. Horton, the report was accepted, which contained the following recommendations:

1. We would like to prepare in our office a record of every member in the State Society, which would be kept as a permanent record of the State Society. This membership record would include the following: Name, residence address, office address, place of birth, date, preliminary education, academic degrees, received from and date, medical education, college and date of graduation, other degrees and dates, hospital internship and dates, graduate study, previous locations and dates, date and how registered membership in medical societies or organizations, offices held, honorary membership, practice limited to, specialty, medical school affiliations and grade (past and present), hospital staff appointments and grade (past and present), offices held in this Society, other remarks, etc. While we have always kept in our office a card index of the physicians of the State, very often the information which is desired can not be obtained from the card now in use. The information is too limited. Furthermore, this would be a wonderful record from a historical viewpoint, containing as it would the dates of different honors enjoyed by the individual member during his years of practice.

2. With the object of increasing the income and of being a great assistance to the Committee on Arrangements whereat the State Medical Society is meeting, I have considered the plan which is being used by so many other States and medical organizations so successfully that I would like to recommend it for your consideration. This is placing in the Secretary-Treasurer's office the privilege of securing contracts for commercial exhibits as part of the routine work of the office. Contracts, revenues, and etc. could be turned over to the local Arrangements Committee before the Annual Meeting when they begin to develop plans and activities to secure exhibits for the meeting. In other words, our office would be purely supportive, but with this privilege we could begin just following the Annual Meeting renewing contracts and in many other ways expedite the securing of these exhibits, which would considerably enhance the local committee in financing the meeting. As you know, it often happens that even in the larger centers the meeting of the State Medical Society is a distinct burden on the medical profession, but with this enhancement (if we are successful) not only will it relieve these burdens, but it will enable the State Society to have their meetings in smaller towns and cities with a much smaller proportionate expense thereto. This should in no way be considered as a reflection upon the untiring efforts and activities of our various Committees on Arrangements, who during good years have been most successful in the raising of funds from this source.

3. The question of medical economics has and is at present of great import to our profession. In order to secure and properly evaluate valuable information which is being collected today through the American Medical Association, I would like to recommend the appointment of a Committee on Medical Economics for the State Society, and that each Parish and District Society appoint a similar Committee. I believe in this way we would more intelligently and satisfactorily enlighten our profession on matters of deep concern on the question of economics. I am sure that our Journal would assist the Committees in carrying information or writeups from time to time.

The report of the Chairman of the Council and the Councilors were then received and accepted. The report by Dr. Jack T. Cappel, Councilor of the Eighth Congressional District, contained the following recommendation which was adopted: We have in Alexandria, one of the most efficient Health Units in the State. They work in perfect harmony with the physicians in our District. We feel that only physicians of good standing in organized medicine, should be entitled to their services. Therefore, I earnestly recommend that the House of Delegates go on record in requesting Dr. J. A. O'Hara, President of the Louisiana State

Board of Health, to limit the services of the State laboratories to doctors registered with the Louisiana State Board of Medical Examiners. Doctors who are not in good standing, and the various cults such as osteopaths, etc. will be denied such service.

The Sixth District did not make any report owing to the absence of the Councilor. The various District Medical Societies submitted reports, with the exception of the Sixth and Eighth. These reports were very interesting and showed exactly how active the various District Societies are throughout the State.

Interesting reports were made by the following committees, which were received and filed: Committee on Public Policy and Legislation, Dr. Glenn J. Smith, Chairman; Committee on Hospitals, Dr. Chas. Chassignac, Chairman; Committee on Health and Public Instruction, Dr. W. H. Seemann, Chairman; Committee on Walter Reed Memorial, Dr. A. E. Fossier, Chairman; Committee on Insurance, Dr. Oscar Bethea, Chairman; Committee to Prepare History of Louisiana State Medical Society, Dr. Rudolph Matas, Chairman; Committee on Revision and Reprinting of the Charter, Constitution and By-Laws, Dr. W. H. Seeman, Chairman; Committee on Pharmacy, Dr. Oscar Bethea, Chairman; Committee on Expert Testimony, Dr. J. T. Nix, Chairman; Committee on Boards of Health, Dr. C. Grenes Cole, Chairman; Committee to Investigate Activities of Optometrists in the State, Dr. L. W. Gorton, Chairman; Advisory Committee to the Woman's Auxiliary, Dr. Chaille Jamison, Chairman.

The Committee on Scientific Work, Dr. P. T. Talbot, Chairman, in making their report called attention to the fact that they had attempted for the first time this year to secure abstracts of articles for the program. Also that owing to the retrenchments in finances, and upon recommendation of the Budget and Finance Committee, medical reporting of discussions was dispensed with. Each individual discussor will be requested to submit a copy of his discussion for printing with the article.

The Committee on Medical Education made an extensive report containing one important recommendation which was adopted as follows: The fifth or internship year is recognized by your committee as a desirable feature of medical education, but it is felt that until facilities for approved internship are more adequate, such a requirement can not be a responsibility of the medical school. It is recommended, however, that steps be taken by the Louisiana State Board of Medical Examiners to amend the existing state law governing medical practice which prohibits internships in a recognized and approved private or voluntary hospital before a license to practice is obtained.

The Committee on Medical Defense, Dr. H. W.

Kostmayer, Chairman, submitted their report with recommendations that the Medical Defense Committee be composed of members in one location for the better functioning of the defense; this was rejected.

The Committee on Budget and Finance, Dr. F. L. Fenno, Chairman, submitted the budget for the year and the following recommendations which were adopted:

1. Your Committee would recommend that the surplus from the General Fund invested in \$1,000 bond, Tangipahoa Parish, La., Gravity Drainage District No. 2, \$500 bond, Catahoula Parish, La., Consolidated Sewerage District No. 8, and \$1,000 bond, Slidell, La., Sewerage District No. 1, St. Tammany Parish, totalling \$2,500, which were loaned to the Medical Defense Fund, be transferred to that Fund, and that the \$870.74 equity due the General Fund be given to the Medical Defense Fund, and that in addition to these the bond of the Jefferson Davis Parish, which was bought with surplus of the General Fund be also allocated to the Medical Defense Fund. Such transfers would make the Medical Defense Fund total \$10,000, the amount accepted by the House of Delegates as necessary to provide sufficient income to meet the expenses for medical defense of the Society.

2. Your Committee further recommends that the Medical Defense Fund return to the General Fund \$700.00 which has been paid to the counsel for medical defense in 1933 and 1934 from the General Fund.

3. It is recommended that the fifty cents (\$.50) per capita now appropriated for the Medical Defense Fund be allocated to the establishment of an Indigent Physicians Fund, so that it will not be necessary to appropriate money from the General Fund to the Indigent Physicians Fund in periods of emergencies. The fifty cents per capita now appropriated for the Medical Defense Fund may be dispensed with if the recommendations made above in reference to the Medical Defense Fund are adopted by the Society.

4. Your Committee would call to your attention the fact that although moneys have been budgeted for the Committee on Public Policy and Legislation in past years, but a small percentage of these amounts have been expended, the expenses for legislation being borne by the component Parish Societies. In budgeting \$500.00 for the activities of your Committee on Public Policy and Legislation for 1934, it is recommended that these funds be expended for this activity and that where such funds are spent by component societies of this Society, these component Societies be reimbursed for such expenditures. Your Committee on Budget and Finance has budgeted \$400.00 to be paid to the Orleans Parish Medical Society as part of the funds spent by that Society in fighting the erec-

tion of the new Charity Hospital in New Orleans. Dr. C. A. Weiss, President of the Louisiana State Medical Society, addressed communications to various private hospitals throughout the State requesting that they contribute to this fund, but since the opposition to the erection of this building was for the benefit of the entire medical profession in Louisiana, it is believed that this Society should defray half of the expenses entailed in such opposition.

5. Although your Committee has audited the books of the Louisiana State Medical Society and the New Orleans Medical and Surgical Journal at various periods throughout the year and found them to be at all times accurate and neat, it is recommended that these books be annually audited by a certified public accountant, and that copies of such audits be kept on file in the office of the Society and Journal.

6. In the annual budget of the past few years sums have been set aside for the printing of revised Charter, Constitution, and By-Laws. It is recommended that such money be spent to immediately bring these documents up-to-date.

The Committee on Journal, Dr. H. W. Kostmayer, Chairman, presented a very interesting report covering the activities of the Journal, which was received and filed.

The Committee on the Care of the Indigent Physicians, Dr. I. J. Couvillon Chairman; contained the following two recommendations which were adopted:

1. No physician making application, either directly or indirectly for help must expect any consideration from this Committee unless he has been a faithful member of organized medicine for many years, and that his financial status and physical fitness are in such shape as to prevent her or him from making an honorable livelihood.

2. That the Secretaries of all Parish, Bi-Parish, and District Medical Societies, as well as the Secretary of the Louisiana State Medical Society, be made ex-officio members of this Committee, since the importance of this great work will require plenty of field work and accurate information, which can only come through this medium.

The Committee on Cancer, Dr. John A. Lanford, Chairman, in making their report, which was adopted, contained the following recommendations:

1. That the President of the Louisiana State Medical Society urge upon the President of each component Society the holding of a special meeting of the subject of "Cancer Control", such as is suggested by the American Society for the Control of Cancer.

2. That the program adopted for the education of the physician, nurses, and dentists be continued.

3. That radio talks on cancer topics be made from New Orleans, Shreveport, and Monroe, and

that these talks be published the following day in one of the daily papers.

4. That other newspaper articles be published at least once a month in as many of the daily and weekly newspapers of the State as possible.

5. That the Society authorize the Scientific Work Committee to assign at least one hour's time for a symposium on the subject of "Cancer Control" to be presented before each scientific meeting of the State Medical Society.

6. That the articles which now appear in the New Orleans Medical and Surgical Journal in the space donated by the Louisiana State Board of Health, through the courtesy of Dr. J. A. O'Hara, be continued.

7. That an editorial on the subject of cancer, with special reference to the activities of the cancer Committee of the Louisiana State Medical Society, be published two or three times a year in the New Orleans Medical and Surgical Journal.

8. That there be held in the territory of each member of the Cancer Committee one or more meetings a year on the subject of cancer to which the public will be invited. These meetings to be held in cooperation with a representative of the State Board of Health, and a local representative of the American Society for the Control of Cancer.

9. That this body authorize addresses on the subject of cancer by members of the Cancer Committee before lay organizations; such as luncheon clubs and women's clubs. Every effort will be made by the speaker to assume a strictly neutral position—impressing the audience with the fact that the local medical profession is vitally interested in disseminating this knowledge to the public, because the only hope of preventing and curing cancer is the treatment of so-called precancerous conditions and the early diagnosis of existing cancer.

10. That an expense account of not more than \$100.00 be budgeted for the expenses of this Committee during the coming year.

11. That the Secretary-Treasurer of the Louisiana State Medical Society write a letter of appreciation and thanks to the following radio stations which have so generously allocated time for the radio talks made during the past fiscal year: KMLB of Monroe, KTBS of Shreveport, and WWL of New Orleans.

12. That a similar letter be written to the American Society for the Control of Cancer for their assistance and cooperation.

The Committee on School Boards and Charitable Medical Institutions, Dr. Emmett Irwin, Chairman, made a report with the following recommendations which were adopted:

1. It was found that in many instances the School Boards have refused to accept health certificates from physicians, members of this Society, in returning pupils to school after illness. This

has been probably occasioned by certain instances where physicians have issued faulty certificates or without seeing or properly examining the patient. In such cases the physicians themselves are at fault and should be reported to the office of the State Medical Society.

2. The Committee expressed disapproval of the recent practice of the Medical Director of the Parish Health Units in soliciting signed statements from the individual practitioners as against dealing with the local societies, which latter is the accepted policy of the Surgeon General.

3. The Committee disapproves of the use by School Boards of lay workers acting in the capacity of physicians; or nurses making examinations and commenting upon the diagnosis and conduct of the case; of the wholesale and indiscriminate use of prophylactics, and feels that immunization should be effected by the family physician excepting where pupils are unable to pay for such care; of spectacular free roundups which are chiefly used for newspaper publicity and we regret to learn that physicians holding these roundups have been in many instances obtained through the local medical societies.

4. The School Board Medical Staff has expressed willingness to rubber stamp all exclusion cards of pupils setting forth Boards of Health certificates are essential, where such is the case. Likewise, they have expressed willingness to limit immunization to those unable to pay and to urge pupils to seek vaccination from their family physicians; that all health certificates of physicians, members of this Society, be given the same recognition as certificates from physicians of Boards of Health and physicians of School Boards, excepting where there is specific regulation by law to the contrary, and that the physicians of the School Boards should instruct school teachers to this effect. Request was made of the School Board Medical Staff that they notify the profession of the City, through the Orleans Parish Medical Society and through the New Orleans Medical and Surgical Journal of any changes in its regulations or any new regulations.

5. The Parish Health Units working as a part of the State Board of Health and whose policy is determined by the said State Board of Health should be requested to immunize only those unable to pay. The Committee feels that those individuals who can pay should go to the private physician and the local parish society should decide as to the methods and policies used by health units employed in their respective parishes, and that such Health Units should work in full cooperation with organized medical societies of the different parishes. The Surgeon General shares in this view.

6. The Committee believes the Society should forcibly condemn the practice of physicians in

abusing the state laboratories where private laboratories may be utilized. Such practice is an imposition upon the tax payer, and detrimental to the proper development and operation of private laboratories.

7. The indiscriminate reference of patients to State charitable institutions is disapproved as there are specialists in every line in every community and these should be utilized. Cooperation between the Health Unit and the local society is the keynote.

8. It is recommended that the representative of the local Board of Health when lecturing to pupils regarding vaccination stress the idea of going to the family physicians for same and this be further emphasized upon a card handed to each child or parent at their meeting.

9. It is recommended that the physician in or near localities wherein are located State Hospitals for the Insane and otherwise, refrain from utilizing the laboratory facilities of such institutions to the detriment of private laboratories.

10. The clinics of various city hospitals do not as a rule seem to have adequate social service supervision and in those where a definite financial scale is utilized in determining one's ability to pay the scale is entirely out of proportion to our experience. The Committee feels that the arbitrary figure of \$75.00 for a single person and \$100.00 per month for a married couple is too high an income to justify such individuals to be classified as charity patients.

11. The Committee feels the Tulane Clinic should have some definite scale of income worked out according to the number of dependents and to be utilized in the determination of the individuals' capacity to pay for medical services, as at the present time there is apparently no dependable method employed to ascertain the financial status of patients admitted and treated. There should also be a constructive social service supervision to obviate the possibility of abuses by those in position to pay. The clinics should be maintained solely for the care of the indigent poor and should not assume proportions greater than necessary for the teaching of medical students.

12. The Committee further recommends that all clinics should be either all pay or all charity and that all charitable clinics should be concentrated at the Charity Hospital because to maintain them otherwise is a waste of the people's money since they are largely duplications of effort.

13. The Child Welfare Organization, insofar as the Committee has been able to determine, has lived up to the agreement with the Orleans Parish Medical Society of 1931. However, it is believed that distorted comparative mortality figures for mothers and newborn babes frequently published in the lay press by this organization have been

for the purpose of promoting welfare interest to the detriment of the profession. It is further urged that solicitation of obstetric and feeding cases by the Child Welfare Organization should be discontinued and efforts confined to charity patients. The Society should be informed of any case of solicitation of unworthy persons by the Welfare Organization.

The Committee on Technicians, Dr. Foster M. Johns, Chairman, in making their report advised that the Summary and Findings Regarding the Legal and Moral Rights of Physicians and Medical Institutions to Employ Non-Medical Technical Assistance, as reported in 1933, be printed in the Journal, and a copy be sent to a list of hospitals and clinics of Louisiana as submitted. This report was adopted.

The report of the Committee to Confer with Trained Nurses Association, Dr. Roy B. Harrison, Chairman, along with the following recommendation, was adopted: We would recommend that the House of Delegates of the Louisiana State Medical Society endorse the eight hour shift for trained nurses, the maximum charge to be \$4.00 per shift, and the nurses to take care of their own meals.

The report of the Louisiana State Board of Medical Examiners, Dr. Roy B. Harrison, Secretary-Treasurer, was read and received.

A letter from the Louisiana State Dental Society, requesting the cooperation of the medical profession in supporting a bill for the relief of the occupational tax on physicians and dentists, was referred to our Committee on Public Policy and Legislation.

Communication from Dr. D. B. Barber, Secretary of the Rapides Parish Medical Society, containing resolutions which had been passed by their Society in reference to some contract work existing in their parish, was referred to the Committee on Resolutions for report back to the House. The action of this Committee is contained in their formal report to the House of Delegates.

A communication from Dr. W. W. Bauer of the American Medical Association, requesting the appointment of a special Committee on Mental Health to cooperate with the activities of the American Medical Association in this regard, was read, and the Chairman of the House of Delegates was instructed to appoint such a Committee.

A communication from Dr. John Schreiber, Secretary of the newly organized Concordia-Catahoula Bi-Parish Medical Society, was received, a check for members accepted, and a charter to be issued to them according to their request.

A communication was received from the Orleans Parish Medical Society, Dr. Fred L. Fenno, Secretary, concerning the recent action of the Board of Administrators of Charity Hospital in removing Dr. A. E. Fossier as a member of the Visiting Staff. Sentiments as expressed by the Or-

leans Parish Medical Society in this regard were adopted, and communications asking for an investigation in the appointment and discharge of members of organized medicine from the State Charity Hospital of New Orleans, and the attitude of the Board of Administrators of Charity Hospital of New Orleans toward organized medicine be sent to the Committee on Hospitals of the American Medical Association and the American College of Surgeons.

There was considerable discussion indulged in over the appointments of recent members of the State Board of Medical Examiners following the recommendations of a special committee to the Executive Committee of the State Society after interviewing the Governor on the subject. Dr. Gessner in discussing this subject deplored the attitude which was adopted in sending ten names for each vacancy instead of two names which had formerly been the custom in the past. Upon motion duly made the subject matter was referred to the Committee on Public Policy and Legislation with the view of having the law changed if necessary.

After considerable discussion it was moved that no professors connected with the Undergraduate Schools of Tulane University or Louisiana State University are eligible for recommendation to the Governor for appointment on the State Board of Medical Examiners. This was carried.

Amendment to the Medical Defense Act, changing Chapter XIV, Section 1, to read as follows was offered by Dr. S. C. Barrow on April 9 and passed on April 12: Active members of the Louisiana State Medical Society who have paid all dues, assessments and other charges assessed or levied by the Louisiana State Medical Society, shall be entitled, on conditions here-in-after specified, to receive without personal expense therefore, legal advice and court service of an attorney or attorneys at law in the employ of the Society, or others selected by the Committee on Medical Defense, in consultation with the defendant; and witness fees for the purpose of conducting their defense in any courts of the State in which the suit may be filed or threatened to be filed.

The following amendment to the Medical Defense Act, altering Chapter XIV, Section 14, to read as follows was offered by Dr. Fred L. Fenno on April 9 and passed on April 12: Each member of the Committee on Medical Defense of this Society shall be entitled to an honorarium of \$10.00 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance of court, and these same fees shall be allowed to expert witnesses under similar circumstances.

The following motion introduced by Dr. L. C. Chamberlain was adopted: That the various hospitals of the State of Louisiana be requested

to limit membership on the Medical and Surgical Staffs of their institutions to regularly, legally registered practitioners of medicine, members of the recognized, organized, medical profession in their respective community.

The following motion introduced by Dr. S. C. Barrow was adopted: Whereas, the State Charity Hospitals of Louisiana were created for the sole purpose of providing medical care and service for the indigent sick of the State, and, Whereas, the support of these institutions is by general tax funds to which members of the medical profession are forced, as all other citizens, to contribute and, Whereas, the operation of these institutions has developed into most harmful competition with the private practice of medicine among that portion of the population well able to provide medical service for itself, and, Whereas, the popularization of these institutions through advertising means stimulates this competition and makes more difficult the suppression of this evil, and, Whereas, the Louisiana State Medical Society owns and operates a medical journal the funds for which are supplied by the profession of the State engaged in the private practice of medicine and through other means by reason of the prestige of the medical profession, and, Whereas, the purposes for which this journal are operated are the interests of the profession, therefore be it, Resolved, that it is the sense of this House of Delegates of the Louisiana State Medical Society that the use of the advertising columns of the State Medical Journal for the purpose of attracting attention to these institutions or any departments of same is an injustice to the members of Organized Medicine, a precedent dangerous in its very nature and a practice of which we disapprove.

Upon motion made by Dr. Emmett Irwin, the names of all physicians not members of the Louisiana State Board of Medical Examiners, previously submitted to the Governor as accepted by the Louisiana State Medical Society for appointment to the Louisiana State Board of Medical Examiners, are hereby withdrawn, was carried.

Motion made by Dr. W. H. Browning that the Louisiana State Medical Society prepare a die for badges for use at the annual meetings of the State Society, was passed.

The following resolution offered by Dr. Fred L. Fenno on April 11 was adopted on April 12 as follows: That it be the sense of this body to change or amend the Constitution and By-laws or both as may be needed to permit the deliberations of this Society to be so arranged as to complete the activities of the Convention within three days. Such arrangement to begin with the Annual Convention to be held in New Orleans, 1935.

Upon motion made by Dr. Bernadas a unanimous vote of confidence in Dr. Roy B. Harrison as Sec-

retary of the Louisiana State Board of Medical Examiners was passed.

Upon motion made by Dr. G. W. Gaines a vote of confidence was extended to the Journal Committee for their handling of the affairs of the Journal during the past year.

Upon motion made by Dr. Emmett Irwin and passed, that it is the sense of this body that the various medical schools reduce the number of admissions in the Freshman Class to one-half of the number admitted during their peak year for the next five years.

On reconsideration of the action previously taken by the House of Delegates on the resolutions offered by Dr. R. McG. Carruth, in regard to the appointment of a committee by the House of Delegates to confer with a like committee appointed by the Dental Society to devise ways and means for the two State Societies to cooperate in our meetings and discussions, after liberal discussion motion was made that the resolution be tabled, which was carried.

Attention was brought to members of the House of the activities of the Charity Hospital Board of Administrators and officers throughout the State in securing support for their proposed new Charity Hospital building.

According to the adoption of the recommendations of the Presidential Report as offered on April 9, Chapter IV, Section 1 of the By-Laws should read as follows: On the morning of the last day of the session the House of Delegates shall elect its Chairman and Vice-Chairman for the ensuing year, who shall preside over its session in the absence of the President.

A Committee of three was appointed upon motion made by Dr. Charles M. Horton and carried to investigate the workings of the House of Delegates with the idea of expediting their work and making the sessions of the House shorter if possible.

The Committee on Resolutions submitted their report as follows which was adopted:

The resolutions of the Rapides Parish Medical Society were referred to this Committee for recommendation, and we, therefore, present the following resolutions:

Whereas, it has come to the attention of the Louisiana State Medical Society, that in certain parts of the State, contracts have been entered into between physicians, which at their termination, prevent one of the contracting parties from practicing his profession in that community for a number of years:

Therefore, be it resolved, in regular session, that such contracts are both unfair and unethical;

Be it further resolved, by the House of Delegates, that all parties to such contracts, if there

are any between members of this Society, be notified by the Secretary of this Society, of this resolution, and be called upon to void these contracts;

Be it further resolved, that any party to such a contract who refuses to cancel such contract, or ignores the notice of the Secretary to do so, for over two weeks, be automatically expelled from membership in the Louisiana State Medical Society;

Be it further resolved; that these resolutions be incorporated in the By-Laws of the Louisiana State Medical Society, and made a part thereof.

Your Committee on Resolutions wishes to express its sincere appreciation and heartfelt thanks to the following:

To Dr. W. S. Kerlin, President, and the members of the Shreveport Medical Society, the excellent hosts at this meeting.

To Dr. J. M. Gorton, General Chairman of the Arrangements Committee, and his able sub-committee Chairmen for their excellent work in making this meeting an outstanding success, both from an entertaining and scientific standpoint.

To Dr. Dean S. Lewis, Baltimore, Maryland, the President of the American Medical Association and our Annual Orator, for his kindness in traveling such a long distance to give us the fruits of his labors in most interesting and instructive discourses. We feel that his efforts have served to consolidate more firmly the cohesive harmony which exists in organized medicine in Louisiana.

To the Shriner's Hospital for Crippled Children, and Dr. H. A. Durham, Surgeon in Chief, for the very appetizing luncheon served at this institution.

To the Medical Arts Drug Company, Mr. W. H. Bankston, Manager, for a very enjoyable barbecue, given at the Forty and Eight Club House on Cross Lake.

To Major M. F. Harmon, Jr., Field Commander, and Major Wood S. Woolford, United States Army Hospital, for the well conducted tour of inspection and reception given at Barksdale Field, where one of the finest Air Corps in the world is located.

To the Woman's Auxiliary of the Shreveport Medical Society, Mrs. J. E. Heard, General Chairman, for the tea served at the tour at Barksdale Field, and for their further cooperation with the Woman's Auxiliary of the Louisiana State Medical Society.

To the Automobile Agencies of Shreveport who so kindly furnished two cars each for the tours and to the Shreveport Police Department for the efficient manner in which the motorcycle police acted as escorts on these tours.

To the Washington-Youree Hotel, Mr. Jack Tullos, Manager, for the meeting rooms and space for exhibits so generously given, and for the courtesies shown the visiting doctors, who were guests of the hotel.

To the newspapers—Shreveport Times and Shreveport Journal—for the unlimited amount of space given to the reports of the proceedings of this meeting.

To Radio Station KTBS, Mr. Ford Pierson, Manager, for the amount of time donated over their broadcasting station.

To the Retiring President, Dr. C. A. Weiss, in appreciation of the very excellent work he performed for our Society, during these most trying times.

To Dr. P. T. Talbot, Secretary-Treasurer, for the able and efficient manner in which he has conducted the affairs of his office, and for his painstaking and untiring efforts in increasing the membership of our Society.

To Mrs. Mary C. Kagy, Assistant Secretary-Treasurer, and Miss Shirley Osborne of the Louisiana State Medical Society, for their faithful performance of their duties, and the courteous manner in which they complied with all requests for information and assistance.

To Dr. J. J. Ayo, Chairman of the House of Delegates, for the expeditious and impartial rulings that greatly facilitated the sessions of the House of Delegates.

We further resolve that a copy of these resolutions be inscribed upon the minutes of this Body, and further that a copy of same be sent to the press, and a copy be sent to each individual or organization so mentioned in these resolutions.

Upon motion duly made and carried, recommendations were made to the Council for Honorary Membership in the Louisiana State Medical Society as follows: Dr. Rudolph Matas, New Orleans; Dr. Dean Lewis, Baltimore, Maryland; Dr. W. G. Owen, White Castle; and Dr. Charles Chas-saignac, New Orleans. These were afterwards accepted.

The House of Delegates considered it a great privilege to listen to the fine address made by Dr. Dean Lewis of Baltimore, President of the American Medical Association, on Monday afternoon.

On Wednesday afternoon, Dr. L. J. Kosminsky, President of the Arkansas Medical Society, addressed the House of Delegates with words of encouragement and admonition to cooperate and work together for the strengthening of the medical profession in our State and Southland.

We were very grateful to have Dr. J. F. Williams, Texarkana, Arkansas, as Fraternal Delegate of the State of Arkansas, and Dr. Stephen B. Tucker, Nacogdoches, Texas, as Fraternal Delegate of the State of Texas, who after being properly introduced to the House of Delegates made a few remarks which were very timely.

The President, in cooperation with the Secretary-Treasurer, was requested to appoint Fraternal Delegates to the various Medical Meetings in the Southern States as in the past.

The following officers and committees, after being duly nominated, were elected:

President-Elect—Dr. C. P. Gray, Sr., Monroe.

First Vice-President—Dr. Marcy J. Lyons, New Orleans.

Second Vice-President—Dr. J. M. Gorton, Shreveport.

Third Vice-President—Dr. Rhett McMahon, Baton Rouge.

Secretary-Treasurer—Dr. P. T. Talbot, New Orleans.

Councilors:

First District—Dr. H. E. Bernadas, New Orleans.

Second District—Dr. Daniel N. Silverman, New Orleans.

Fourth District—Dr. M. D. Hargrove, Shreveport.

Fifth District—Dr. J. E. Vaughan, Monroe.

Committee on Scientific Work—Dr. P. T. Talbot, Chairman, New Orleans; Dr. A. E. Fossier, New Orleans; Dr. A. A. Herold, Shreveport.

Committee on Public Policy and Legislation—Dr. Glenn J. Smith, Chairman, Jackson; Dr. C. Grenes Cole, Dr. F. M. Johns, Dr. Chaille Jamison, President, and Dr. P. T. Talbot, Secretary-Treasurer; all of New Orleans.

Committee on Medical Defense—Dr. Val H. Fuchs, New Orleans, for a term of three years.

Committee on Hospitals—Dr. Chas. Chassignac, Chairman, New Orleans; Dr. J. L. Scales, Shreveport; Dr. O. P. Daly, Lafayette; Dr. J. E. Walsworth, Monroe; Dr. A. J. Comeaux, Youngsville.

Committee on Health and Public Instruction—Dr. W. H. Seemann, Chairman, New Orleans; Dr. F. R. Gomila, New Orleans; Dr. G. M. G. Stafford, Alexandria; Dr. J. Q. Graves, Monroe; Dr. J. K. Griffith, Slidell.

Committee on Journal—Dr. H. W. Kostmayer, New Orleans, and Dr. S. M. Blackshear, New Orleans, each for terms of three years.

Dr. W. H. Seeman, New Orleans, was elected as delegate for two years to the American Medical Association, and Dr. A. A. Herold, Shreveport, was elected alternate for the same term.

New Orleans was selected as the next place of meeting.

Dr. Charles M. Horton, Franklin, was elected Chairman of the House of Delegates, and Dr. King Rand of Alexandria Vice-Chairman of the House of Delegates.

P. T. TALBOT, M. D.,
Secretary-Treasurer.

REPORT OF COMMITTEE ON MEDICAL DEFENSE

To the Officers and Members,
House of Delegates, 1934,
Louisiana State Medical Society.
Gentlemen:

During the months since the last meeting of

the House of Delegates, your Committee on Medical Defense has been asked to lend their assistance in five cases. After investigating the data submitted in each of these cases, the Acting Chairman of the Committee referred these data in each case to each of the other members of the Committee, and on securing approval submitted the case in each instance to Mr. St. Clair Adams, attorney for the State Society. In the last case submitted, the data were received only a few days before the date set for trial, so that nothing could be done except to offer our support to the counsel for the defendant.

Had all the members of the Medical Defense Committee resided in the same community, this last condition would not have arisen. It is, therefore, the opinion of the undersigned that all the members of the Medical Defense Committee should reside in the same community, preferably New Orleans, since the attorney for the State Society is located there.

Attached hereto and forming a part of this report, you will find a financial statement of the Medical Defense Fund. The total amount now held is \$7,945.00. From this it would appear that something less than four years, at fifty cents per capita, will be required to raise the fund to the \$10,000 originally set as the goal.

Permit me to add to this report that it is a pleasure to deal with the Honorable St. Clair Adams, counselor for the Medical Defense Committee, and that his services appear invaluable in this connection.

Since this report was prepared, there has been received in the office from the Honorable St. Clair Adams, a resume of the decision of the Supreme Court of the State of Louisiana in the case of Edward J. Oakes v. Dr. This resume from Mr. Adams is filed herewith as a part of the report of the Committee on Medical Defense. I believe that this decision is important enough to have same read before the House of Delegates at this time, and that the suggestion of Mr. Adams to have it published in the Journal should be carried out.

Respectfully submitted,

H. W. Kostmayer, M. D., Chairman,
Committee on Medical Defense.
No. 32,178

SUPREME COURT OF LOUISIANA

Edward J. Oakes

versus

A physician

Monday, March 26, 1934.

APPEAL FROM THE CIVIL DISTRICT COURT,
PARISH OF ORLEANS:
HUGH C. CAGE, JUDGE.

Rogers, J.

Plaintiff appeals from a judgement entered on the verdict of a jury dismissing his suit in damages

for an alleged libel uttered and published by the defendant.

Plaintiff alleges that he filed suit against the H. Weil Baking Company and Carl Goldenberg for the recovery of damages for certain physical injuries inflicted upon him by Goldenberg. That the defendants in that suit requested plaintiff to submit himself to a medical examination by Dr. the defendant in this suit, and that plaintiff in compliance with their request, submitted to such examination. That on the completion of the examination, the present defendant addressed and delivered a letter to the attorneys for the H. Weil Baking Company and Carl Goldenberg a copy of which letter he attaches to his petition as part.

Plaintiff avers that the last sentence in the letter reading as follows, viz.: "I consider the patient's mental state decidedly abnormal for a man of twenty-five; he is mentally undeveloped, in my opinion," was written and published without just cause or provocation, and that the statement was false, scandalous, malicious and untrue, and that defendant knew it was untrue. That the statement was made for the purpose of reflecting upon the credibility of plaintiff, to humiliate him, to bring him into ridicule before his neighbors, friends and acquaintances, and to discredit him as a witness in his suit against the H. Weil Baking Company and Carl Goldenberg. That he is a stationary engineer by vocation and training, and has always enjoyed the esteem of the people of New Orleans and of his former employers, and that the statement in question deprived him of the esteem, confidence and respect of his friends, employers and the general public.

Plaintiff alleges that the statement of which he complains had no connection with the purpose for which he submitted himself for examination, and was, therefore, entirely uncalled for.

Plaintiff also alleges that on the trial of his suit against the baking company and its co-defendant, the letter was introduced and read in evidence by the present defendant. Then follows an allegation that plaintiff is entitled to \$5,000 damages for the injury to his good name, fame and reputation and for his mortification and humiliation; and also a request for a trial by jury, which request was granted.

The defense is that the letter or report was a privileged communication, both in respect to its delivery to the attorneys representing the baking company and its co-defendant, and in respect to its introduction in evidence and its reading in court; that the words and expressions used in the report were not designed or intended to injure plaintiff or to humiliate him, or to hold him up to public ridicule, but were written only in obedience to defendant's conception of his duty and in

the performance of the same; that the contents of the report were pertinent and germane to the issue; that the report was written and delivered to the attorneys in good faith, without malice, express or implied, and that defendant had probable cause to believe the statements it contained were true. And defendant avers that he does not believe the letter or any of its expressions had the effect of damaging plaintiff, and defendant expressly disclaims any ill will towards plaintiff or any purpose to injure him in the slightest degree.

The defendant, a genito-urinary specialist, is a reputable physician and highly esteemed by members of his profession. He testified that he examined plaintiff upon the request of a member of one of the leading law firms of the city of New Orleans. At the time, this law firm was representing the H. Weil Baking Company and Carl Goldenberg in the damage suit brought against them by the plaintiff.

Defendant testified the statement in his report of which plaintiff complains, viz.: "I consider the patient's mental state decidedly abnormal for a man of 25; he is mentally undeveloped, and in my opinion," was made in explanation of his other conclusions as set forth in his report. It appears that plaintiff was kicked on the rear part by Carl Goldenberg, the blow causing the injuries for which he brought suit for damages against the baking company and Goldenberg, its president and general manager. Plaintiff complained that as the result of the kick he received from Goldenberg three or four different conditions developed, i. e., hydrocele, a rectal fistula and impotency. Defendant explained that his examination of plaintiff, on which his report was predicated, was both objective and subjective. The report on its face shows this. Plaintiff's claims and conclusions as to his alleged injuries were apparently unsatisfactory to defendant, and the words of which plaintiff complains were clearly written in explanation, as defendant states, of his inability to "understand his (plaintiff's) conclusions." The explanation was obviously made in good faith for the purpose of showing why the subjective examination of plaintiff was unsatisfactory and why defendant reached the conclusion there was little or no basis for plaintiff's claim of extensive injury.

The record affirmatively shows that no quarrel or dispute arose between the parties during the course of plaintiff's examination by defendant, and that defendant had no ill will nor cause for ill will towards plaintiff. And the record is wholly barren of any testimony or circumstance from which it can be inferred that defendant's report of plaintiff's physical condition was inspired by malice or prejudice.

Privileged communications are either absolutely privileged or qualifiedly privileged. Qualified

privilege exists in a larger number of cases than does absolute privilege.

Newell in his work on Slander and Libel (3rd Ed.) p. 475, states the rule in reference to qualified privilege as follows, viz.:

"A Communication made in good faith, upon any subject matter in which the party has an interest, or in reference to which he has a duty, either legal, moral or social, if made to a person having a corresponding interest or duty is qualifidely privileged."

The rule stated has been approved and adopted in this state in the following cases: Buisson v. Huard, 106 La. 768, 31 So. 293, 56 L. R. A. 296; Richardson v. Cooke, 129 La. 365, 56 So. 318; Bayliss v. Grand Lodge of Louisiana, 131 La. 579, 59 So. 996; McGee v. Collins, 156 La. 291, 100 So. 430.

Within this rule defendant had a qualified privilege to make the statement of which plaintiff complains. He had an interest in the subject matter about which he was writing. He had been employed to ascertain plaintiff's physical condition and to communicate the result of his findings to his employers. He had become possessed of information affecting their rights, and it was clearly his duty to give them that information. From which it follows, that in making his report to his employers defendant committed no actionable wrong, unless he acted maliciously, which the record shows was not the case.

Plaintiff also charged that the alleged libel was published when defendant testified in plaintiff's suit against the baking company and its co-defendant. It appears that on the trial of that case, defendant testified he wrote the letter containing the statement of which plaintiff complains.

The testimony complained of was given by defendant when a witness in a judicial proceeding, in response to a question of counsel. The testimony was presumptively privileged and before this presumption can be overcome, the plaintiff must show affirmatively that it was not pertinent and material to the issue. This plaintiff has not done.

The rule that immunity from a civil action attaches to a witness in a judicial proceeding has been recognized by the jurisprudence of this state. See Wamack v. Kemp, 6 Mart. (N. S.): 477; La-ville v. Bigneaud, 15 A. 605; Terry v. Fellows, 21 A. 375; Burke v. Ryan, 36 A. 951.

In Terry v. Fellows it was said:

"The administration of justice requires the testimony of witnesses to be unrestrained by liability to vexatious litigation. The words they utter are protected by the occasion, and cannot be the foundation of an action for slander."

This statement of the law was substantially repeated in Burke v. Ryan, where the court held that the administration of justice requires the

testimony of witnesses be unrestrained by liability to litigation on account of their statements in that capacity. Their declarations are protected by the occasion, and cannot serve as the foundation for a civil suit when they are pertinent and material.

Plaintiff refers to several decisions of this court as holding that the statements in a judicial proceeding are not privileged unless founded upon probable cause. But the decisions cited involved the right of litigants to claim a privilege for statements contained in their pleadings. The distinction between the immunity granted to witnesses and the immunity granted to litigants is pointed out in Lescale v. Schwartz, 116 La. 293, 40 So. 708, one of the cases cited, where referring to Burke v. Ryan, supra, the court said that case involved the privilege of a witness, an entirely different matter from the privilege of a litigant. "Obvious considerations," said the court, "lead to the protection of a witness, especially a nonvolunteer witness, that have no application in the case of a mere litigant prosecuting, or defending, his private right."

For the reasons assigned, the judgment appealed from is affirmed.

St. Paul, J., Absent.

REPORT OF COMMITTEE ON TECHNICIANS

SUMMARY OF FINDINGS REGARDING THE LEGAL AND MORAL RIGHTS OF PHYSICIANS AND MEDICAL INSTITUTIONS TO EMPLOY NON-MEDICAL TECHNICAL ASSISTANCE

The following was accepted by Louisiana State Medical Society House of Delegates of 1933, and reaffirmed in 1934.

1. The use of non-medical individuals in the practice of medicine is increasing in private practice, clinic practice, hospital service, public and private laboratories and various and sundry health agencies to an extent that is encroaching seriously upon the legal and moral rights of graduate medical practitioners. There is now an oversupply of physicians and medical colleges are being called upon by medical organizations to limit the classes. The use of technicians by well established physicians and institutions for laboratory work, well recognized medical and surgical procedures and the administration of anesthesia has already progressed to the point where it is practically impossible for a thoroughly competent young or recently graduated physician to use any of these means to either gain a competence, or utilize his accomplishments to serve as an introduction into practice at the most critical period in his professional existence.

2. The legal rights to employ technical assistance in the practice of medicine, or any part of it, as the law has been specifically interpreted by

the Attorney General of the State of Louisiana, is under "direct" and "competent" supervision by a legally qualified practitioner. Responsibility for the act of any medical technician cannot be assumed except when the service performed by the technician is directly and competently supervised. The right to practice medicine, or to offer medical services to the public, in the State of Louisiana is not given to institutions, hospitals, clinics, Board of Health or medical colleges. Non-medical technical assistance in the form of laboratory work or anesthetic services is distinctly illegal, excepting the directly supervised administration of an anesthetic by a graduate nurse.

A physician, utilizing technical services secured in such institutions, should be fully appraised of the fact that the full consequences of such acts as are performed by the technician fall squarely upon his responsibility. We believe that physicians utilizing the services of nurse anesthetists, in hospitals particularly, are generally not cognizant of this fact, nor do we believe that the hospital administrations are either.

3. The provisions of the "Medical Defense Fund" of the Louisiana State Medical Society cannot be extended to cover acts of medical technicians in the employ of physicians which may result in damage suits. It is obvious that a physician cannot directly or competently supervise a great number of technicians doing laboratory work that automatically determines, with its performance, a diagnosis.

ST. TAMMANY PARISH MEDICAL SOCIETY

The Society met May 11, in regular stated meeting in the Southern Hotel, Covington, La., and as there was "Business of Importance" sufficient to take up all the time available, the program was restricted to the consideration of the subject named.

The meeting was well attended there being only three members absent. The Medical Bulletin submitted by the Director of Relief for St. Tammany Parish was brought to the attention of the Society and most freely discussed. The Society being fully informed as to the efforts made last year by the Louisiana State Society to arrive at some satisfactory solution of this Fee Schedule, the major part of this Medical Bulletin, and being aware of the stand taken by the State Society in the matter, as a Society, unanimously, refused to approve or consider this Schedule of Fees and the Secretary was instructed to so inform the Director of Relief of the Parish. Last year the Society indorsed the stand taken by our State Society officers in reference to this matter.

Dr. Roy Carl Young of Shreveport was admitted as a member, having transferred from the Shreveport Medical Society.

The meeting adjourned to meet in Slidell, June 8, 1934.

Dr. F. F. Young, President.

Dr. H. D. Bulloch, Secretary.

SECOND DISTRICT MEDICAL SOCIETY

The Second District Medical Society held its regular monthly meeting at the home of Dr. Louis T. Donaldson at Hahnville, La., on Thursday, May 17. A most interesting paper on the subject of "Epilepsy" was read by Dr. Edmund McC. Connelly of New Orleans. Other guests of the Society included Drs. William D. Phillip, Roy B. Harrison, Dan Silverman, D. R. Womack, Lucien H. Landry of New Orleans and Dr. Aye of Raceland, La. The following regular members of the Society were present: Drs. Joseph Kepfler, N. K. Edrington, P. T. Landry, L. T. Donaldson, Earl Clayton, E. P. Feucht, William Guillot, S. Parker, A. P. Donaldson, Lionel Waguespack and R. S. Campbell. A most delicious supper was served by Mrs. Donaldson. The next meeting will be held on June 21 at the home of Dr. William Guillot at LaPlace, La.

N. K. Edrington, M. D.

MEETING OF THE LAFOURCHE VALLEY MEDICAL SOCIETY

The quarterly meeting of the Lafourche Valley Medical Society was held at the K. of C. home in Thibodaux on April 19, at which time election of officers was held and the following were elected: Dr. W. J. Duval of Houma, President; Dr. Leo J. Kerne of Thibodaux, Vice-President; Dr. Guy R. Jones of Lockport, Secretary and Treasurer.

A very instructive scientific program was rendered, the meeting terminating at the Park Inn where a delicious luncheon was served.

Guy R. Jones, M. D.,

Secretary and Treasurer.

NEWS ITEMS

Prof. Sidney K. Simon of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana was absent from the city during the first part of May, during which time he attended the meeting of the American Gastro-Enterological Association held at Atlantic City, N. J., and a meeting of the Society for Advancement of Gastro-Enterology held at New York City.

Prof. O. W. Bethea of the faculty of the Graduate School of Medicine of The Tulane University of Louisiana made three addresses at the meeting of the Kansas State Medical Society held at Wichita, Kansas, May 9th, 10th and 11th.

C. C. C. POSITIONS OPEN FOR PHYSICIANS

Qualified physicians are needed to meet the

needs of the medical service of the C. C. C. A young physician who wishes to have a temporary or carry-over position with a liberal salary for some months would do well to consider these positions. The pay and allowance amount to about \$250.00 per month, living accommodations furnished at each camp; transportation is supplied. A period of active duty is for six months, but may be extended for a longer period.

Further information regarding appointment in the medical reserve corps or duty with the C. C. C. may be obtained by applying direct to the surgeon of the corps area in which the applicant is a resident.

SAMUEL D. GROSS PRIZE

The Trustees of the Samuel D. Gross Prize announce that they are prepared to receive until January 1, 1935 manuscripts submitted for this \$1,500 five yearly prize. Details may be obtained by communicating with Dr. John H. Gibbon, 19 S. 22nd St., Philadelphia.

MEDICAL STUDY TRIP TO HUNGARY

A series of postgraduate lectures and demonstrations in English will be given in the principal Hungarian University clinics during the summer. A party is being arranged which will leave from New York, August 18 to take in these clinics. To those interested information may be obtained from Dr. Richard Kovacs, Secretary, 1100 Park Avenue, New York.

THE BULLETIN OF THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER

The above mentioned Bulletin is a very useful instrument for dissemination of information about cancer. It contains a number of short practical articles written by distinguished authorities in the field of cancer therapy and cancer research. It offers, at a subscription price of only \$1.00 per year, an easy and practical way for the physician to keep abreast of cancer control progress. A complimentary copy of the Bulletin will gladly be sent to any physician requesting it from the American Society for the Control of Cancer, 1250 Sixth Avenue, New York City.

ANNOUNCEMENT

The Gynecean Hospital Institute of Gynecologic Research of the University of Pennsylvania, is conducting an intensive study of families into which congenitally malformed individuals have been born.

Special interest centers in families in which malformations have appeared in two or more chil-

dren. Physicians who have knowledge of any such families are urged to communicate with:

Dr. Douglas P. Hurphy,
Gynecean Hospital Institute,
University of Pennsylvania,
Philadelphia, Pa.

INFECTIOUS DISEASES OF LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. For the week ending April 21, it was found that there was still being reported a large number of measles cases, being 349 listed this week. Other diseases in double figures include 112 cases of syphilis, 67 of gonorrhoea, 26 of chickenpox, 24 of scarlet fever, 20 each of typhoid fever and pneumonia, 18 each of whooping cough and diphtheria, 17 of pulmonary tuberculosis, 16 of malaria, 14 of cancer, and 12 of hookworm. Twelve cases of typhoid fever were reported from Orleans Parish, 8 of which were imported. Orleans Parish also reported 6 cases of smallpox and 15 cases of scarlet fever. Caddo listed two cases of tularemia. The measles epidemic was diminishing to a certain extent as shown by the report for the week ending April 28, there being 302 cases reported. There were also reported 52 cases of syphilis, 24 of pneumonia, 21 of malaria, 18 of pulmonary tuberculosis, 17 of gonorrhoea, 16 each of typhoid fever, diphtheria, and chickenpox, 15 of scarlet fever, 14 of whooping cough. Four cases of smallpox were reported from Orleans Parish. For the week ending May 5, measles had fallen to 96 cases, pulmonary tuberculosis had increased to 46, and cancer to 26. There were also listed 30 cases of pneumonia, 24 of malaria, 22 of diphtheria, 16 of typhoid fever, 15 each of syphilis and gonorrhoea, 13 of chickenpox, 11 of scarlet fever. Three cases of undulant fever were reported from Orleans Parish, and 2 of tularemia from Lafourche and Morehouse. Jefferson Davis Parish reported 5 cases of typhoid fever. For the week ending May 12, there was a slight increase in the number of measles cases, 216 appearing in the published report. Other diseases reported in double figures include 60 cases of malaria, 46 of syphilis, 42 of pneumonia, 40 of pulmonary tuberculosis, 35 of cancer, 32 of gonorrhoea, 27 of scarlet fever, 24 of diphtheria, 20 of influenza, 17 of whooping cough, and 14 each of typhoid fever and chickenpox. Catahoula reporting 3 cases of typhoid fever led other parishes. Lafourche Parish reported 3 cases of smallpox, Orleans Parish 1, and Washington 2.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, reports that during the week ending April 14, there were 136 deaths in New Orleans, divided 85

white and 51 colored, with a rate for the group as a whole of 14.7, for the white population 13, and for the colored 19.1. The infant mortality rate for this week was 95. There was some increase in the number of deaths reported for the week ending April 21, there being 155 deaths with a death rate of 16.8, of which 103 occurred in the white population, giving them a death rate of 15.7, and in the colored 52 with a rate of 19.4. The infant mortality rate was 140 and for the first time in a very long while the white rate 146 was higher than the negro rate 130. The total number of deaths had fallen in the week ending April 28 to 133, giving a rate of 14.4 for the group as a whole, 13.1 for the white race, as a result of 86 deaths, and 17.6 for the colored who had 47 deaths. The infant mortality rate was 108, and the negro rate 147. For the week ending May 5, there were listed 145 deaths, 78 in the white and 67 in the colored population, giving a rate for the respective groups of 15.7, 11.9, and 25. The infant mortality rate was 95.

APPROACHING MEETINGS

The American Society for the Study of Goiter will meet in Cleveland, June 7-9, the Wade Park Manor Hotel being the headquarters. A very complete program has been arranged for this meeting.

The American Society for the Study and Control of Rheumatic Diseases will hold their annual meeting June 11, in the Ball Room of the Hotel Cleveland, Cleveland, Ohio, from 9:00 to 1:00.

Eleven interesting papers on the subject of arthritis make up the program.

The twentieth annual tournament of the American Medical Golfing Association will be held at the Mayfield Country Club, Cleveland Monday, June 11. Some fifty prizes are offered for the eight events. Those members of the American Medical Association who are interested in playing golf at the meeting of the American Medical Association should write to Dr. William Burns, 4421 Woodward Avenue, Detroit, for an application blank.

The American Proctologic Society will hold its thirty-fifth annual meeting June 11-12, Cleveland, with headquarters at the Hotel Cleveland. A very interesting scientific program, together with clinics and social entertainment, has been provided for this meeting.

The Seventh Annual Graduate Fortnight of the New York Academy of Medicine will be devoted to the consideration of Gastrointestinal Diseases. This meeting will be held October 22 to November 2. A complete program and registration blank

may be secured by addressing Dr. F. P. Reynolds, New York Academy of Medicine, 2 East 103rd Street, New York City.

A RESOLUTION

Motion by Dr. Mayer, seconded by Dr. Lefleur.

Whereas, the members of the Saint Landry Parish Medical Society have learned with profound regret, of the recent demise of Dr. C. Farrar Patton and Dr. Carrol Allen, two of the most distinguished physicians of the State, each eminent in his respective field of activity;

Resolved, that the condolences of this body be extended to their bereaved families:

That a copy of this resolution be spread on the minutes:

Copies sent to their families:

A copy sent to the official organ of the State Medical Society.

Adopted unanimously, the body rising.

WOMAN'S AUXILIARY NEWS

The Woman's Auxiliary to the Louisiana State Medical Society in convention in Shreveport, elected the following officers: President, Mrs. Thomas H. Watkins, Lake Charles; President-Elect, Mrs. Hermann E. Gessner, New Orleans; First Vice-President, Mrs. Joseph E. Hears, Shreveport; Second Vice-President, Mrs. J. E. Walsworth, Monroe; Third Vice-President, Mrs. Francis E. LeJeune, New Orleans; Fourth Vice-President, Mrs. R. S. Kramer, Jennings; Treasurer, Mrs. Ben Goldsmith, Lake Charles; Recording Secretary, Mrs. John L. Scales, Shreveport; Parliamentarian, Mrs. A. L. Levin, New Orleans.

Having had the most inauspicious beginning a malicious Fate ever dealt the auxiliary, Mrs. Musser, nevertheless, closed her administration in a blaze of glory, with a record of service and accomplishment of which the state is deeply proud. You recall that she went into office during those bankless, thankless days of Spring, 1933, without even a state convention to bid her "godspeed." She simply received the gavel by registered mail on the fateful day, tersely informing her, as in a game of tag, "you're it." So she was. And the Louisiana Auxiliary "points with pride" to the mark she made and recalls with affection her blithe smile, her marvelous tact, and her understanding heart. She invited the State on two projects, the periodic health examination for members and the Fund for Indigent Physicians and their dependents in Louisiana. She edited a year book for the auxiliary, practically a necessity, but a great deal of work, and the publication affords the members much necessary information. At the president's suggestion, the state auxiliary of Louisiana set aside a definite sum of money to be available to the president for traveling expenses in going about auxiliary business. Now, it seems

to me, the enterprising auxiliaries will at once set about getting their share of that money back by inviting the president to visit them the first thing next fall. Mrs. Musser's Annual Message will be given in full below.

The death of Dr. Spencer A. Collom, of Texarkana, touches the hearts of Auxiliary members in Louisiana most poignantly. It was Mrs. Collom who affected our organization and we have always regarded her as the Mother of the Louisiana Auxiliary. Her sorrow is our sorrow.

The annual report of Mrs. John H. Musser, President of the Woman's Auxiliary to the Louisiana State Medical Society, which was read at the convention in Shreveport, follows:

REPORT 1933-1934

The term I have served as President of the Woman's Auxiliary to the Louisiana State Medical Society has seemed to me as a dream, pleasant yet filled with those apprehensions which disturb us even through the soundest sleep, ideas of how we should perfect this or that pet project, but as dawn comes on us the reveries turn out to be futile and we plod on as best we can.

I am proud of the work Louisiana has accomplished this year and from the reports of the various officers and heads of committees you have heard how it was managed. All honor is theirs.

This is the time I wish to thank all of them for remaining on from Mrs. Lucas's administration to mine, knowing, though, that I shall never be able to make them realize how much I appreciated their kindness because on assuming office I felt very much like the old woman in Mother Goose who had to pinch herself "to see if this be I." This willing support did much toward steadying the ship of state.

A suggestion I would like to call to your attention is the advisability of having a President serve two years. My history reads—first two months spent learning how to pronounce Ouachita and Calcasieu, vacation, fall, letters with a few ideas, then the last few weeks a sudden realization of

what it was all about—then the curtain falls on my last message.

To make the way perhaps easier for my successor, may I make these further recommendations? First, more co-operation in publicity with the state chairman. Promptly after each Parish meeting have it written up and sent on to her giving data taken chiefly from the reports of the standing committees, so by these means the other parishes will realize just what is being done throughout the state. Second, some definite amount be set aside to assist President and other officers in the payment of their expenses to visit the different auxiliaries because we need this coming together and discussion of the other fellow's handling of our mutual problems. To me, this is very essential, for broader co-operation is bound to follow. Thirdly, that the past president of a parish auxiliary automatically become a member of the board for the following year, thereby being able to give the new officers the benefit of her advice and experience. This is done in the state organization and I believe in two parishes. Another that the President-elect be a member of the Executive Board.

The Woman's Auxiliary of Louisiana has stood up well during the depression and has lost but a few members. Attempts have been made all this year to have Webster re-organize, but as yet nothing definite has been decided. To our new member, Jefferson Davis, is given a hearty welcome.

The two state-wide projects, that of giving aid and assistance to the State Committee on the Indigent Physicians Fund and the periodic health examination will, I trust, go on and gain in volume yearly. It is pioneer work and the first state-wide work attempted. This could be worked up to be of great practical value, for what is more important than caring for our own? Equally vital is the fact our health must be guarded.

With these suggestions I end this report, with many thanks for your trust in me and assurances that my pleasure in the work has been greatly augmented by the pleasant association I have had with the officers of the state auxiliary.

Marguerite H. Musser.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

OUR PRESIDENT .



E. C. Parker, M. D.
Gulfport, Mississippi

President, Mississippi State Medical Association

Dr. Edward Clifton Parker was born in Shelby County, Alabama, April 2, 1874, being the third and last child of W. G. and Lottie Hill Parker. He was reared on a farm and received his high school education at Columbiana, Alabama. Dr. Parker received the degree of A. B. from Howard College at Birmingham, Alabama, in 1896 and his medical degree from Tulane University in 1899.

He began practice at Shelby, Alabama, where he was physician for the Shelby Iron Company for two years and then studied surgery for two years under Dr. L. L. Hill at Hill's Infirmary, Montgomery, Alabama. He moved to Gulfport November, 1903 where he has practiced continuously since with the exception of the year 1914, spent in study in Europe and 22 months with the A. E. F. in France and Germany.

Dr. Parker is a member of the Harrison-Stone-Hancock Counties Medical Society, the Mississippi State Medical Association, the Southern Medical Association, the American Medical Association and a fellow of the American College of Surgeons. He was elected a member of the Board of Governors of the American College of Surgeons at the Clinical Congress in Chicago in 1933. He is consulting surgeon at the United States Veterans' Hospital, Gulfport and for the Louisville and Nashville Railroad.

In 1899, Dr. Parker married Miss Ida Lee Howell of New Orleans, Louisiana. They had one daughter who died when she was three years old, Mrs. Parker having died nine days after the little girl was born.

In 1927 he married Miss Letitia Rousseau of Quebec, Canada, and of this union there is one son, Edward Clifton Parker, Jr.

YOUR OFFICERS FOR 1934-1935

President—E. C. Parker, Gulfport.

Vice-Presidents—A. B. Harvey, Tylertown; Gilruth Darrington, Yazoo City; R. C. Smith, Drew.

Historian—Leon S. Lippincott, Vicksburg.

Editor—Leon S. Lippincott, Vicksburg.

Associate Editors—J. S. Ullman, Natchez; D. W. Jones, Jackson.

Speaker of the House—J. P. Wall, Jackson.

Treasurer—E. L. Wilkins, Clarksdale.

Secretary—T. M. Dye, Clarksdale.

Council—First District, J. W. Lucas, Moorhead; Second District, L. L. Minor, Route 4, Memphis, Tenn.; Third District, R. B. Caldwell, Baldwyn; Fourth District, T. J. Brown, Grenada; Fifth District, W. H. Watson, Pellahatchie; Sixth District, H. Lowry Rush, Meridian; Seventh District, Joe E. Green, Laurel; Eighth District, W. H. Frizell, Brookhaven; Ninth District, D. J. Williams, Gulfport.

Committee on Public Policy and Legislation—F. J. Underwood, Jackson, Henry Boswell, Sanatorium; W. H. Anderson, Booneville.

Committee on Publication (ex-officio)—Leon S. Lippincott, Editor, Vicksburg; J. S. Ullman, associate editor, Natchez; D. W. Jones, associate editor, Jackson.

Committee on Constitution and By-Laws—J. Rice Williams, Houston; J. S. Ullman, Natchez; W. H. Frizell, Brookhaven.

Committee on Budget and Finance—W. L. Little, Wesson; D. C. Montgomery, Greenville; John B. Howell, Canton.

Delegates to the American Medical Association—J. M. Acker, Jr., Aberdeen; J. W. D. Dicks, Natchez.

Fraternal Delegates—Alabama, G. S. Bryan, Amory; Arkansas, P. G. Gamble, Greenville; Louisiana, R. J. Field, Centreville; Tennessee, Ira B. Searle, Holly Springs.

The next meeting will be held at Biloxi.

TRIBUTE

At the recent meeting of the Association beautiful tribute was paid to the long and faithful service of a member lost during the year.

Dr. J. S. Ullman offered a resolution to the effect that as a token of respect to the memory of one of the deceased members of the Association, who had always been most loyal and devoted, the annual oration shall be known as the **Ewing Fox Howard Memorial Lecture**. This resolution was unanimously adopted.

The following from the report of the acting historian was also adopted:

Dr. D. W. Jones had suggested that as a tribute to long years of service in the Association, the history to be closed with the death of Dr. Howard and the history to that date be dedicated to him, a new history to begin with the same date. After consideration with the president and other members of the Association, this was decided upon tentatively. As a suitable dedication it was suggested that brief tributes from a number of friends of Dr. Howard should be included together with his picture as a frontispiece. Certain members of the Association have been asked to furnish such tributes in their own handwriting if they saw fit, spontaneous and with no set form. No one has been urged and only one request was made. We now have such tributes from J. M. Acker, Jr.; W. H. Anderson, G. S. Bryan, W. W. Crawford, John D. W. Dicks, T. M. Dye, C. W. Emerson, L. C. Feemster, Lucien Sydney Gaudet, H. H. Haralson, W. N. Jenkins, J. W. Lipscomb, W. L. Little, J. W. Lucas, L. L. Minor, E. C. O' Cain, Charles W. Patterson, T. E. Ross, P. W. Rowland, H. Lowry Rush, F. Michael Smith, W. K. Stowers, J. S. Ullman, Felix J. Underwood, J. P. Wall, and E. LeRoy Wilkins. Obviously it was not possible to reach everyone who might wish to contribute his token of friendship and respect. There are probably others who would like to do this. If so, it is not too late. They can be included.

COMMITTEE ON PUBLIC POLICY
AND LEGISLATION

The Committee on Public Policy and Legislation made a commendable report of activities during the past year. The committee opened its report with the following comment:

"There was an unusually large amount of legislation before the 1934 session of the Mississippi Legislature in which the medical profession and the State Board of Health were interested. The legislation was dealt with in such a way as the members of your Committee on Public Policy and Legislation deemed wise and for the best interest of all concerned.

"The physicians of Mississippi were pleased to learn that it was possible to have incorporated in the sales tax bill the proviso that physicians are exempt from payment of sales tax on gross incomes.

"Acts enabling non-graduates in medicine to come before the State Board of Health for examination were introduced for five persons. To license physicians this way is to lower medical standards in Mississippi and this will jeopardize our reciprocal relations with other medical examining boards. Two of the five bills passed."

The legislation enacted:

SB 141—To appropriate \$13,213.88 to cover deficit in appropriation by previous legislature for support South Mississippi Charity Hospital, Laurel.

SB 233—To empower the State Board of Health to grant J. W. Johnson examination.

SB 258—An act to secure the benefits of the National Industrial Recovery Act and authorizing municipalities of the State of Mississippi to undertake projects, to purchase or construct waterworks system, water supply system, sewer system, sanitary disposal equipment and appliances, light plants or light system or gas system, garbage, rubbish, or sewage disposal plants and systems, incinerators, storage facilities, docks, wharves, terminal facilities, cotton compress, airports, hospitals, and warehouses and in furtherance thereof, to purchase or construct necessary parts of such system either within or without the limits of said municipality, and authorize municipalites now or hereafter ownng and operating such system, to improve, enlarge, extend, or repair the same; to authorize municipalites to jointly own or operate the same, to issue revenue bonds ,mortgage bonds, or other certificates of indebtedness payable solely from revenues derived from such system or systems; to regulate the issuance, sale, and retirement of such bonds, and/or such other matters in connection therewith. To regulate the use of the revenues of such system or systems when such bonds are issued and outstanding to provide for the operation of such improvements and collection of such revenues; and for other purposes

SB 289—Authorizing State Board of Health to give L. L. Jones an examination for medical permit.

HB 3—To create a State Board of Administration to govern all charity and insane hospitals, eleemosynary schools and Ellisville colony, and abolish present boards governing each.

HB 84—Appropriate \$2597.21 to cover a deficit of the last biennium in the South Mississippi Charity Hospital, Laurel.

HB 95—An act making it unlawful to have in possession or to sell, barter, give away, or keep for sale, the drug Cannabis Indica, or any mixture or compound thereof, except by a regularly licensed druggist or apothecary; regulating the sale of same by said druggist or apothecary; providing a penalty for the violation of this act; and repealing section 1050 of the Mississippi Code of 1930.

HB 155—An act providing rights, duties and powers to the State Board of Pharmacy to regulate the practice of pharmacy and enforce pharmacy and drug laws of this State, to amend sections 5825, 5826, 5829, 5832, 5834, and 5839, of the Mississippi Code of 1930, and Section 5833, Chapter 277, of the Laws of 1932.

HB 279—Appropriate \$124 to the Vicksburg Infirmary for hospital service to national guard during flood 1927.

HB 366—An act making an appropriation for the support and maintenance of the Mississippi State Charity Hospital, the Matty Hersee Hospital, the Natchez Charity Hospital, the South Mississippi Charity Hospital and the Vicksburg Charity Hospital for the years 1934 and 1935.

Section 1. Be It Enacted by the Legislature of the State of Mississippi, That the following sums of money be and the same are hereby appropriated out of any money in the state treasury, not otherwise appropriated, for the support and maintenance of the Mississippi State Charity Hospital, the Matty Hersee Hospital, the Natchez Charity Hospital, the South Mississippi Charity Hospital and the Vicksburg Charity Hospital for the years 1934 and 1935:

Mississippi State Charity Hospital, \$50,000.00.

Matty Hersee Hospital, \$50,000.00.

Natchez Charity Hospital, \$45,000.00.

South Mississippi Charity Hospital, \$50,000.00.

Vicksburg Charity Hospital, \$45,000.00.

Section 2. That the money herein appropriated shall be paid to the State Treasurer out of any money in the state treasury upon warrants issued by the State Auditor of Public Accounts and the State Auditor shall issue his warrants upon requisition signed by the proper person, officer, or officers, in the manner prescribed by law; and that the funds herein appropriated shall be disbursed under authority and by and with the approval of the board of trustees of each of said institutions.

Section 3. The salary of the superintendent for each of the hereinbefore named hospitals shall be fixed by the Board of Trustees, and in no instance shall said salary exceed the sum of \$4,000.00 for any one year.

Section 4. That this Act shall take effect and be in force from and after its passage.

HB 553—An act to authorize the Board of Supervisors of Harrison County, in their discretion, to levy a tax not to exceed one-half of one mill on the taxable property in said county to provide funds for charitable hospital purposes.

HB 698—An act to provide for the posting in places of employment of laws regulating labor and hours of labor.

HB 925—An act to appropriate to private and municipally owned hospitals located in the State

of Mississippi for their use in supporting charity wards in their respective institutions. A total of PVBE.EJ.J. for the biennial period was appropriated.

The report closed with the following statement from the committee:

“The appropriation for the State Board of Health was set at \$325,000.00. This is \$65,000.00 more than the last biennial appropriation but is still \$65,000.00 less than the State Board of Health appropriation for \$1930-1931.

“When all members of the medical profession of the State realize the importance of actively interesting themselves in medical and public health matters as the teachers and agricultural forces do, then, and not until then, will desirable and necessary legislation and financial support be forthcoming.

“Each member of the Committee is profoundly grateful to those members of organized medicine in the State who responded to every call of the Committee. May we, as a united, harmonious and militant organization, acting unselfishly in behalf of the medical needs of the people of the State and not overlooking our own legitimate rights, become stronger with each passing year by advocating a just cause and by presenting a solid invincible front always.”

The report was signed by Henry Boswell, Chairman; W. H. Anderson; and Felix J. Underwood.

GRADUATE COURSES FOR MISSISSIPPI PHYSICIANS PROPOSED

As a result of resolutions presented by Dr. Felix J. Underwood, Jackson, and unanimously passed by the House of Delegates of the Mississippi State Medical Association at its recent meeting in Natchez, it is hoped and believed that some excellent graduate courses will soon be made available to the physicians of Mississippi without loss of time from practice. The resolutions follow:

Whereas, there are many physicians in the State of Mississippi who need to take post-graduate courses but who are unable to go away for graduate study for sufficient time at their own expense including loss of income from practice; and

Whereas, constantly there are advances in medicine and improvements in methods of diagnosis and treatment, thereby making greater the need for graduate study; and

Whereas, it is the desire and duty of the Mississippi State Medical Association to foster, promote, and contribute financially to a medical education program thereby bringing to the physicians of Mississippi annual courses in general medicine, obstetrics and medical gynecology, including the very best instruction possible on prenatal and postnatal care, looking to an early reduction of the maternal mortality rate, physical diagnosis, pediatrics,

urology, minor surgery, and other branches of medicine; and

Whereas, the Commonwealth Fund of New York by its award of fellowships to physicians for graduate study and undergraduate scholarships to students for four years medical study has given concrete expression of its interest in medical education in Mississippi (yet by its present plan only a comparatively small number of the 1450 practicing physicians of this State can avail themselves of such a splendid opportunity); and

Whereas, the Mississippi State Board of Health with whom the Commonwealth Fund has a co-operative program in public health and medical education, has encouraged this Association in planning a program of medical education by allotting to such a program \$1,000 and by securing the active interest of the officials of the Tulane Medical School and obtaining a pledge from Tulane University for \$500; and

Whereas, by charging a small annual registration fee, it will be possible to raise a minimum of \$1,000 from the physicians who will register, attend, and directly benefit by the program, and

Whereas, the medical education extension course contemplated (modeled somewhat after the one now being carried out in the State of Virginia) will cost at least \$15,000 for one year;

Therefore be it Resolved:

1. That the Commonwealth Fund be earnestly requested to allot \$11,000 as a grant for the first year to assist in financing this needed program;

2. That if the Commonwealth Fund agrees to cooperate financially, the Mississippi State Medical Association appropriate from funds in the treasury of the Association, not otherwise appropriated, the sum of \$1,500 for the first year of this program, thereby making available \$4,000 locally;

3. That the Joint Committee in charge of arrangements for the medical education extension course be composed of the following:

President and Secretary of the State Medical Association, President and Secretary of the State Board of Health, Deans of both the Undergraduates and Graduate Schools of Medicine, Tulane University of Louisiana, Miss Barbara Quin, Assistant Director of the Commonwealth Fund, or a representative of the Fund named by Miss Quin.

4. That the secretary of the State Board of Health be requested to prepare and transmit immediately to the Fund a proposed budget, with these resolutions, and write a formal appeal for the favorable consideration of these resolutions from the Mississippi State Medical Association, and that the Commonwealth Fund be asked to give prompt notice of what action is taken at the June, 1934 meeting of the Governing Board of the Fund

in order that the program may be gotten under way not later than July 1, 1934, if the action is favorable.

5. That copies of these resolutions be sent also to the deans of the Undergraduate and Graduate Medical Schools of Tulane University; and that the resolutions be spread upon the minutes of this Association.

6. That the thanks of this Association be extended to the Commonwealth Fund for the valuable assistance it has for the past several years given in the field of medical education and public health in Mississippi.

AN ECHO

One of the most prominent members of our State Medical Association, whose interest in the welfare of the Association is unquestioned, writes: "There is too much of a tendency for a good time, social activities, and sight seeing, at our meetings; and too little interest in the scientific sessions."

This writer was especially struck with the small attendance upon the section meetings at Natchez. At one time, when a very interesting and scholarly paper was being read, there were not over a score of doctors in the auditorium,—and they were mostly in the rear of the room!

It is discouraging to an essayist to feel that a paper upon which he has spent hours of study and research, will be received with so little interest and by such a small audience.

Of course we should have some features of entertainment, but it is a crying shame that our essayists should be treated with such discourtesy. If the State Medical meetings are to be scientific sessions, let us devote more of our time and attention to the reading of the papers.

Jackson,

D. W. Jones.

May 12, 1934.

MISSISSIPPI STATE HOSPITAL ASSOCIATION

The fifth annual meeting of the Mississippi State Hospital Association was held on the forenoon of May 7, at the Eola Hotel, Natchez, with the largest attendance in its history. The membership committee reported 51 institutional active members; seven personal active members; one personal associate member; and one honorary member.

The secretary's report showed that for the year 1933, 32 member hospitals with 1,366 beds had an average daily number of patients of 408, an average of 13 patients per hospital, and a bed occupancy of 29.9 per cent. For 1932, 25 member hospitals had a bed occupancy of 29.0 per cent. In 38 hospitals, 51.6 per cent of all patients paid in full, 20 per cent paid in part, 10 per cent of patients

admitted as pay patients paid nothing, and 18.4 per cent were admitted as charity patients. Twenty-two hospitals lost \$10,988.53 from care of patients injured in automobile accidents. Eight other hospitals showed an average loss from care of such patients of 52 per cent.

On recommendation of the committee, minimum standards for institutional membership in the Association were adopted.

The report of the Committee on Nurses and Nursing showed that of 24 member hospitals conducting schools of nursing, the average daily number of patients was 15; that 29 hospitals had a total of 330 student nurses, the smallest number being three, the largest number 34, the average 11. It was recommended by the committee that the payment of monthly stipends to student nurses be discontinued and the amounts now so paid be used in carrying out the curriculum as proposed by the State Board of Nurses Examiners.

Dr. W. H. Anderson, Booneville, chairman of the Committee on Publication, in presenting the report of the committee, generously offered two pages of the "Mississippi Doctor" to the Association.

A resolution was adopted requesting the incoming Board of Directors to make a comprehensive study of group hospitalization and urging members of the Association to give due consideration to the findings of the Board before adopting any definite plan.

Officers for the year of 1934-1935 were elected as follows: President, V. B. Philpot, Houston; president-elect, H. A. Gamble, Greenville; secretary-treasurer, Leon S. Lippincott, Vicksburg; board of directors, V. B. Philpot, H. A. Gamble, Leon S. Lippincott, J. Gould Gardner, Columbia; R. J. Field, Centreville.

Dr. R. J. Field, Centreville, presided.

Joint Session

In the afternoon, a joint session of the Hospital Associations of Louisiana, Mississippi and Tennessee was held with Dr. R. J. Field presiding. Alabama was also represented by the president and vice-president of the Alabama Association, Drs. Roscoe C. Stewart, Sylacauga and C. N. Caraway, Birmingham. The program included a round table discussion on group hospitalization under the leadership of Dr. B. C. MacLean, New Orleans, president of the Louisiana Hospital Association; a discussion of state aid to voluntary hospitals by Dr. V. B. Philpot, Houston, president-elect of the Mississippi State Hospital Association; and a discussion of hospital publicity by B. P. Moffat, Memphis, secretary of the Tennessee Hospital Association.

An invitation was extended by the Louisiana

Hospital Association to hold a similar joint session in New Orleans next year.

Joint Banquet

In the evening a banquet of the Associations was given on the Roof Garden of the Eola Hotel with Dr. Louis J. Bristow, New Orleans, vice-president of the Louisiana Hospital Association, toastmaster. The speakers were Dr. Bert W. Caldwell, Chicago, executive secretary of the American Hospital Association; Dr. C. Rufus Rorem, Chicago, associate director of Medical Services, Julius Rosenwald Fund, and consultant on Group Hospitalization, American Hospital Association; and Paul H. Fesler, Chicago, past president, American Hospital Association.

The registration for the sessions was 135.

AN APPRECIATION

The Committee on the Homochitto Valley Medical Society on Arrangements deserves much commendation for the able and thoughtful manner in which preparations were made for the sessions of the Mississippi State Medical Association, the Womans Auxiliary and the Mississippi State Hospital Association and for many features of entertainment for the pleasure of the visitors. It is not a small task to make every one happy at such a time and the work of the committee left nothing to be desired.

STILL AN ACTIVE MEMBER

"I have your card requesting that I attend the Mississippi State Hospital Association and I am sorry to advise that on account of my health I will not be able to attend.

"You may also advise that I will not be able to attend the Mississippi State Medical Association, and will be glad for you to also notify them to this effect. I trust that you all may have a successful meeting and an all round good time. I am now in my 88th year and extend my best wishes to all of you."

Summit,

Dr. H. K. Butler.

April 26, 1934.

COUNTY EDITOR APPOINTMENTS

Appointments of County Editors are announced as follows:

Montgomery County—E. W. Holmes, Winona.

Webster County—E. F. Arnold, Bellefontaine.

Sunflower County—H. B. Cottrell, Indianola.

Choctaw County—Clyde Ruff, R. F. D., Tomnolen.

CENTRAL MEDICAL SOCIETY

The Central Medical Society started off the May meeting with a delightful "Dutch Supper" served in the Convention Hall at the Robert E. Lee Hotel to 59 members and guests.

The scientific program was given by three of the staff doctors at the Mississippi State Tuberculosis Sanatorium. The first paper was presented by Dr. I. P. Burdine, Jr., entitled "Indications for Surgery in Pulmonary Tuberculosis." Dr. Burdine's paper was discussed by Drs. J. F. Armstrong, A. E. Gordin, J. W. Barksdale, with Burdine closing. Dr. E. D. Kemp read a very interesting paper on "Childhood Type Tuberculosis." Discussion was by Dr. N. C. Womack. The last feature of the program was a roentgen ray demonstration by Dr. W. J. C. Weimers. Dr. Weimers showed quite a few chest plates, taken at various intervals during patients' illnesses and explained them. Drs. Adkins and Henderson spoke briefly on the roentgen ray demonstration and stressed the fact that roentgen rays should not be relied upon entirely as a diagnosis in tuberculosis.

The members of the Society seem to be taking more interest in the meetings as is being shown by the attendance and the lively discussions at the meetings. Our June meeting will be in Clinton where we will be the guest of Dr. L. B. Neal at his country home just outside of Clinton.

Jackson
May 9, 1934.

L. W. Long,
Secretary.

DELTA MEDICAL SOCIETY,
(CLEVELAND) APRIL 11, 1934

The Society was called to order at 2:00 P. M. by the President Dr. R. C. Smith, at the Broom Memorial Auditorium of the Delta State Teachers College. The invocation was said by Dr. I. D. Eavinson, pastor of the Baptist Church of Cleveland. An address of welcome was given by Mr. Joe P. McCain of Cleveland, and the response by Dr. A. G. Payne of Greenville. In order to allow our guest-essayist to depart on an early train, the scientific program was next taken up.

A paper "Prophylactic External Version" was given by Dr. John Lucas of Greenville and was discussed by Dr. C. W. Patterson of Rosedale.

A paper "Migraine" was read by Dr. I. B. Bright of Greenwood. It was discussed by Dr. C. P. Thompson, Dr. T. B. Holloman, and the discussion was closed by Dr. Bright.

Next was a talk by our guest-essayist, Dr. Ray M. Balyeat of Oklahoma City, Oklahoma, who gave an illustrated lecture on "Allergic Diseases: Diagnosis and Treatment," which was very greatly enjoyed and proved most interesting and instructive being illustrated by lantern slides.

A paper "The Bite of the Lactodectus Mactans (T-Dot Spider)" was given by Dr. T. J. Barkley of Isola and was discussed by Dr. Scudder of Mayersville, a guest from the (Issaquena)-Sharkey-Warren Counties Medical Society.

A paper "Report on Syphilitic Project Conducted at Scott, Mississippi" was given by Dr. I. I. Pogue of Scott.

A paper "The Effect, On the Human Body, of Changes in Barometric Pressure" was given by Dr. N. B. Cottrell of Indianola.

Immediately following the scientific program the business session was gone into. The President, Dr. Smith, acknowledged the presence of numerous guests and welcomed them. Among those present were: President-Elect of the State Association, Dr. E. C. Parker of Gulfport; Dr. Felix J. Underwood of Jackson, of the State Health Department; Dr. T. N. Dye, Secretary of the State Association and active in the Clarksdale and Six-Counties Medical Society, together with many members of the Clarksdale and Six-Counties Medical Society, including the President, Dr. L. N. Brevard of Dundee; several doctors from Memphis; and guests from several other counties adjacent to the territory of the Delta Society.

The minutes of the previous meeting held at Belzoni, October 11, 1933, were read by the secretary and stood approved as read. The treasurer's report was read and approved.

On a motion of Dr. Field of Shaw, duly seconded, the Society unanimously passed resolutions of respect on the death of a former member, Dr. T. D. Allen, and the president was asked to appoint a committee to draw up suitable resolutions in this regard.

The secretary then read a report of a special committee that had been appointed by the president to work with a committee from the Clarksdale and Six-Counties Medical Society in the matter of the consolidation of the two societies. A brief summary and outline of the work of that joint committee was given by the secretary and by the other member of the committee from the Delta Society, Dr. E. R. Nobles of Rosedale, and it was moved and seconded that the action recommended by the committee be approved by the Society, to-wit:

"That the Delta Medical Society join with the Clarksdale and Six Counties Medical Society to form a new Society in accordance with the resolutions passed by the Clarksdale and Six-Counties Medical Society."

This motion was freely discussed and it was voted unanimously that the Delta Medical Society unite with the Clarksdale and Six-Counties Medical Society to form a new Delta organization. At this juncture, the members of the Clarksdale and Six-Counties Medical Society present at our meeting were requested to join in the discussion from this point on, since it had to do with the new organization of which the members of the Clarks-

dale and Six-Counties Medical Society were to form a very great part.

The Constitution and By-Laws were read by sections by the secretary and were adopted as read with the exception that Section 4, Chapter 2, of the By-Laws was changed so that the last sentence of that Section, "The Secretary-Treasurer shall receive a yearly compensation of \$50.00," was stricken out.

Officers for the new Society were then elected with the following results:

President—Dr. R. C. Smith, Drew

President-Elect—Dr. L. H. Brevard, Dundee

Vice-President—Dr. J. D. Simmons, Gunnison, Bolivar; Dr. A. M. Gill, Sidon, Leflore; Dr. J. W. Jackson, Belzoni, Humphreys, Dr. B. H. Higdon, Sunflower, Sunflower; Dr. D. C. Montgomery, Greenville, Washington; Dr. I. P. Carr, Clarksdale, Coahoma; Dr. H. G. Johnson, Tunica, Tunica; Dr. E. A. McVey Lambert, Quitman; Dr. J. A. Harris, Webb, Tallahatchie.

Secretary-Treasurer—Dr. F. M. Acree, Greenville.

The question of financing the new organization was then taken up and the following resolutions were offered by Dr. V. B. Harrison of the Clarksdale and Six Counties Medical Society and were unanimously passed:

Whereas: The Delta Medical Society and the Clarksdale and Six-Counties Medical Society have a substantial treasury balance, and

Whereas: After the consummation of the proposed merger the separate treasuries will become joint, and

Whereas: On recommendation of the Mississippi State Medical Association each component county in the two Societies has organized a county medical society for administrative purposes, and

Whereas: The newly organized county medical society may want to hold scientific programs but is handicapped by the absence of an adequate treasury

Therefore: Be it resolved that (1) The two separate Societies set aside from their respective treasuries a like amount to be known as the treasury of the new Delta Medical Society.

(2) That the remainder of the respective treasury balance of the two Societies be divided equally among the new component counties on a ratio per membership in the present Societies.

(3) That the amount to be paid into the new Delta Medical Society be one dollar and a half (\$1.50) per paid membership in the respective two Societies.

V. B. Harrison, Secretary,

Clarksdale and Six-Counties Medical Society.

The meeting then adjourned to the American

Legion Hut, to attend a delightful banquet presided over by Dr. E. R. McLean, the High-Sheriff.

F. M. Acree,

Secretary-Treasurer.

Delta Medical Society.

HOMOCHITTO VALLEY MEDICAL SOCIETY

The second regular quarterly meeting of the Homochitto Valley Medical Society was held in Natchez, April 12, with 19 members present.

After an enjoyable dinner, at White's Private Dining Room upstairs, the meeting was called to order by President W. H. H. Lewis, presiding.

After roll call and reading of the minutes of the previous meeting, the remainder of the time was spent in discussing and perfecting the plans for the state meeting in May.

Dr. Lucien S. Gaudet, chairman of the arrangement committee, was called upon, and went into details about what had been done and the work of all the committees that had part in the programme of arrangement.

There being no further business, the meeting was adjourned.

W. K. Stowers,
Secretary.

Natchez,

May 3, 1934.

SOUTH MISSISSIPPI MEDICAL SOCIETY

The South Mississippi Medical Society will hold its regular quarterly meeting in Hattiesburg on the afternoon of June 14. The new officers elected at the December meeting will be installed at this time. The program is being arranged by Drs. Thompson, Terrell and Daly of Columbia.

J. P. Culpepper, Jr.,

Secretary.

Hattiesburg,

May 4, 1934.

ADAMS COUNTY

Dr. and Mrs. Philip Beekman recently left to visit relatives in Kansas City.

Dr. Francis Dixon is now fully recovered from an appendix operation, and has again taken up his practice.

Mrs. W. K. Stowers has recently left for Canada, on account of the death of her father, Mr. Bishop. We all extend our sympathy to her and to Dr. Stowers in their loss.

Mrs. C. E. Mullins of Bude, wife of our genial Dr. Mullins, is reported on the sick list. May she soon be well again as she means much to the local ladies auxiliary.

Natchez,
May 3, 1934.

Lucien S. Gaudet,
County Editor.

CHICKASAW COUNTY

Drs. V. B. Philpot and J. R. Williams, Houston, and Drs. W. C. Walker and J. M. Hood, Houlika, attended the Pontotoc Medical Society meeting Tuesday.

Dr. F. L. McGahey, Calhoun City, has returned from New Orleans where he has been taking post graduate work. He will resume his practice at Calhoun City.

Drs. V. B. Philpot and J. R. Williams, Houston, are attending the meeting of the State Hospital Association at Natchez this week.

Dr. Douglas D. Baugh, Houston, has just returned from Memphis where he has been studying x-ray work.

W. C. Walker,
County Editor.

Houlika,
May 7, 1934.

CLAIBORNE COUNTY

Mrs. G. W. Acker, wife of Dr. G. W. Acker, Port Gibson, has been ill for several weeks and at present is in a Vicksburg hospital.

Dr. and Mrs. J. V. May were called to Brookhaven recently by the illness and death of Mrs. Mays' father, Mr. Boren.

Dr. W. N. Jenkins, Port Gibson, attended the meeting and convocation of the American College of Physicians in Chicago.

Claiborne County, like Egypt, is visited by plagues, measles, whooping cough, chicken pox and conjunctivitis or in the common vernacular pink eye.

The negro children of the Port Gibson schools have been given toxoid by the part time county health officer, Dr. Jenkins.

W. N. Jenkins,
County Editor.

Port Gibson,
May 3, 1934.

COPIAH COUNTY

Dr. E. H. DeBerry of Hazelhurst has returned from a three weeks' vacation, spending part of this time in Memphis doing special work.

W. L. Little,
County Editor.

Wesson,
May 2, 1934.

DESOTO COUNTY

When this is read the annual meeting of the Mississippi State Medical Association at Natchez will be history.

We are anticipating a delightful meeting in the

fine old city of Natchez. We will remember with pleasure a former meeting of the association there in 1908, one of the first meetings of the association that we ever attended.

Our report, as secretary of our local society and as councilor of the Second District is much better than for the past several years.

We stand ready to give President Parker our help to the advancement of the Mississippi State Medical Association; former president Dicks wrought well.

L. L. Minor,
County Editor.

Memphis,
R.F.D. No. 4
May 6, 1934.

FORREST COUNTY

We mourn the death of Dr. Lawrence B. Hudson who was accidentally shot recently while hunting in Alabama. He had been inactive for a few months due to ill health, but was making a courageous and successful fight for recovery at the time of the tragedy. With the passing of Dr. Hudson organized medicine suffers the loss of one of her most loyal members. He was one of the outstanding surgeons of this section and had attained many honors. He was a Fellow of the American College of Surgeons, a recent past-president of the South Mississippi Medical Society, and a member of the State, Southern, and American Medical Associations.

Dr. H. Carrol McLeod has been appointed district surgeon of the Illinois Central Railroad.

Most of the Hattiesburg doctors attended the state meeting in Natchez. Among those going were Drs. S. E. Bethea, B. D. Blackwelder, C. C. Buchanan, W. W. Crawford, R. H. Clark, J. P. Culpepper, C. C. Hightower, H. L. McKinnon, H. C. McLeod, T. E. Ross, Sr., T. E. Ross, Jr., R. E. Schwartz, and P. E. Smith.

R. H. Clark,
County Editor.

Hattiesburg,
May 12, 1934.

FRANKLIN COUNTY

The many friends of Mrs. Robert Massengill are glad to know that she has fully recovered from a recent operation for appendicitis. Dr. Massengill is the physician in charge of C. C. C. Camps, Nos. 1 and 2, with headquarters in Bude.

After several hectic weeks of a wide-spread epidemic of measles, the doctors of this county are now resting on their laurels and enjoying a much needed rest.

Mr. and Mrs. Sherrod Towns and Mr. Willis

Ducrest of Baton Rouge, recently spent the week-end with the former's parents at Quentin.

This correspondent is greatly grieved over the death a few days ago of his old friend, Dr. Carroll W. Allen of New Orleans. In our humble opinion, no man was his superior as a conscientious diagnostician and skilled surgeon.

S. R. Towns,
County Editor.

Quentin,
May 7, 1934.

GRENADA COUNTY

Just a few lines to let you know that we are living and enjoying some of life's blessings—health and poverty. The "poor" we have with us always.

The Winona District Medical Society met at Durant on April 10 with about 35 doctors in attendance. After a bountiful luncheon at Hotel Durant a good program was enjoyed. President James of Ackerman gave us a fine paper and Dr. Duncan of Memphis, the guest speaker, entertained us with the "Medical Aspects of the Prostate," Case reports were made by Drs. R. C. Elmore, E. C. O'Cain, F. B. Brumby, M. E. Arrington, and J. T. Googe.

On this occasion we missed an old and loyal friend in the absence of Dr. J. O. Ringold. He was a product of Grenada County and your scribe gave him his first instruction in his medical studies. A good man has gone from us. Peace to his memory.

Our local ranks have been augmented by the location of Dr. Sam B. Caruthers in our city. He is associated with a son of Dr. S. S. Caruthers of Duck Hill, More anon.

T. J. Brown,
County Editor.

Grenada,
May 4, 1934.

HINDS COUNTY

Dr. T. E. Wilson and Dr. G. W. F. Rembert, Jackson, attended the annual meeting of the American College of Physicians in Chicago, April 16 to 21.

Of interest to the general profession was the recent marriage of Dr. Harvey Garrison, Jr. and Miss Merideth Owens. The wedding took place April 25, and this popular couple will make their home in Jackson.

Dr. John K. Bullock and Miss Mary Lewis Mayer were married April 28. Dr. Bullock practices pediatrics here in Jackson and these happy newly-weds will be at home here.

The Mississippi State Pediatrics Association will

hold its annual meeting in Natchez, May 7 at the Eola Hotel. There will be a dinner after which there will be the address of the president, Dr. Noel Womack, Jackson, dealing with "The Aims and Purposes of the State Pediatric Society." Following the presidential address there will be presented papers as follows: Dr. E. C. Mitchell, Memphis, on "The Work of the American Pediatric Association in Region Two" and Dr. Robert Strong, Professor of Pediatrics at Tulane University, "Empyema in Children". There will be a round table discussion of the two papers.

The staff of the Baptist Hospital held its regular meeting April 17 with a good dinner being served followed by the election of officers and general business. Dr. H. C. Sheffield was elected president and Dr. T. E. Wilson, secretary. Dr. Van Alstine and Dr. Long are retiring officers.

The staff of the Jackson Infirmary held its regular meeting the evening of April 24. After the usual good dinner the program consisted of a presentation by Dr. A. G. Wilde, "Summary of Refractive Conditions and Causes of Blindness in Mississippi". Dr. Womack gave a splendid paper on "Cerebral Infections in Children."

Dr. T. E. Wilson presented a paper to the society at McComb, May 3 dealing with "The Prevention of Heart Disease." Dr. Walton Shannon, exodontist of Jackson, accompanied Dr. Wilson to McComb.

Wm. F. Hand,
County Editor.

Jackson,
May 4, 1934.

HOLMES COUNTY

Dr. W. O. Mabry, Goodman, who had a severe attack of coronary thrombosis several weeks since, is improving.

National Hospital Day will be observed by the Holmes County Community Hospital on Saturday, May 12, by keeping the hospital open for inspection by the public all day, and by the following program at 2:00 P. M.:

Invocation.

Address of Welcome—A. P. Yarborough, Pickens.
Unveiling of Portrait of the late Dr. L. S. Rogers.

Address—Dr. R. C. Elmore, Durant.

What a Hospital Means to Rural Communities—
Dr. P. B. Brumby, Lexington.

Music by the Bob Stephenson Orchestra.

Dr. and Mrs. W. B. Hyde, Durant, are spending a two weeks' vacation in Hot Springs.

R. C. Elmore,
County Editor.

Durant,
May 5, 1934.

LEFLORE COUNTY

Dr. J. W. Lipscomb, Jr., Columbus, spent April 13 and 14 in Greenwood, and April 15 at Glendora, with his uncle, Mr. M. P. Sturdivant.

Dr. and Mrs. J. A. Crawford visited Memphis April 16.

Dr. T. H. Blake of Campbell Clinic, Memphis, visited here April 16.

Dr. J. R. Johnson, Laurel and Jackson, was in Greenwood on April 17. He has decided to locate in Jackson.

Dr. and Mrs. L. A. Barnett spent April 22 in Memphis.

Dr. George Baskerville visited his sister in Alexandria, La. the week end of April 28 and 29.

Dr. J. A. Milne and Miss Jessie Ruff of the Commonwealth Field Unit spent several days in Leflore county with the health department, making their annual appraisal.

We are sorry to report the death of our oldest physician, Dr. T. R. Henderson, 79, retired from active practice since 1904, but in active business as president of the Bank of Commerce since its organization. Dr. Henderson died suddenly at 6 A. M., April 28, with coronary occlusion. He was buried from the First Baptist Church at 3 P. M., Sunday, interment at Odd Fellows Cemetery. He came to Greenwood from Aberdeen in 1860, and grew up with the town. His life was a blessing to the entire community. He was loved by all who knew him, and his death has cast a gloom over the entire city.

W. B. Dickins,
County Editor.

Greenwood,
May 1, 1934.

MONROE COUNTY

Altho they made us shiver, a bit, the April showers have brought, in their wake, the flowers of May time that bless and cheer us so much. How welcome they are. Birds are singing as tho they were full of joy and hope. Why should we not be happy too? Life, health and friends are still ours. Even the capacity to share the sorrows of others should, in a sense, make us glad. Again when we remember that within the week we shall have the privilege of attending another session of our state medical association where we can mingle with those whom we have learned to love so well, a great joy floods our souls. I can not understand how any one of us can deliberately deny himself of this annual feast. The tug and lure of old Natchez has been drawing me for many weeks. When these lines shall appear in the Journal I hope that pleasant thoughts and memories of the meeting will be yours and mine.

Just two weeks ago I had the pleasure of attend-

ing the meeting of the Alabama State Medical Association in Birmingham. I went over there as the guest of Dr. R. B. Caldwell, who was the fraternal delegate from our association. It was a great trip and treat. Tho no body of doctors can compare, fully, with our membership, I saw a splendid group of men who are deeply interested in the same problems that claim and hold our attention. If any schism or friction exists in their body, I failed to discover it. Among many interesting features of the session was one that was an innovation. This was a luncheon given by Dr. Seale Harris to his friends. This luncheon was at the Tutwiler hotel—the headquarters of the convention. Fifty covers were spread and not a single invitation was not accepted. At least every seat was filled by an appreciative guest. I felt highly honored that Dr. Caldwell and I should have been pressed to attend. Of course, we did so. At the beginning of the banquet (for such it was) Dr. Harris announced that “no politics or speeches” would be indulged since the purpose of the gathering was that “friendship and fraternal feeling should run rife” for the hour. It was, indeed, a happy occasion.

The Monroe County Medical Society held its monthly meeting last night at Aberdeen. A good attendance was had. The next meeting of this society will be held in Amdry, since we alternate between these two towns. Each one of these meetings seems to draw us closer together as we realize that the problems that confront us can only be solved by united effort.

There has been but little sickness in our own ranks or in the families of our members. Dr. C. E. Boyd, who has spent several months in post-graduate study at Tulane, has returned home much to the pleasure of his large clientele. He has been sadly missed while away from his work. He was a little off balance, physically, when he came back. But I am convinced it was, largely due to close study and change of environment. He seems to be back to “normalancy” again.

During the early months of this year there was a large amount of sickness with us. Our people had to undergo an epidemic of influenza and this was followed, or attended, with measles, rubeola, mumps, whooping cough and scarlet fever. The schools were badly demoralized. It seems that we have passed thru these trying experiences with a not very high mortality. But for the fact that a rather large percentage of malaria “carry overs” seems to be evident, health is good again. Let us hope the entire state will be exempt from an undue amount of sickness for the remaining months of the present year.

When I write again, I hope to chronicle the most splendid meeting in the history of our state asso-

ciation. Our noble president, Dr. Dicks, has labored hard and well that this should be so. Of course, old Tom Dye has been in harness so long that like an old and honest work ox, nobody ever thinks to give him praise or thanks no matter how well he may discharge the duties of his office. But here is a hand to Drs. Dicks, Dye and Lippincott.

G. S. Bryan,
County Editor.

Amory,
May 2, 1934.

PEARL RIVER COUNTY

With the perfume of millions of Satsuma orange blossoms permeating the atmosphere now, one drives along the highways with pleasant thoughts until, abruptly, his mind returns to that ever present question, "How am I to collect that account?" It seems now that we will have an abundant crop of Satsumas this year. That will give a number of people work for awhile during harvest time. That is in keeping with our greatest need, namely, to get people back to work.

We leave tomorrow for the meeting of the State Medical Association. It is always a pleasure, and is profitable, for us to meet friends at such times and to get any new information that others have secured either through experience or research. It is to be regretted that so many of our general practitioners are too busy to attend medical meetings. It seems that it would be better for them and their patients if they would forego some of their services for which they receive no remuneration and attend the medical meetings occasionally at least. It gives a fellow a different attitude toward life when he can get away for a day or two for some association with his friends and fellow workers and exchange views and experiences.

Dr. W. W. Hickman is now located at Picayune. We wish for him a pleasant and profitable work in this county.

The Pearl River County Hospital is again open following a period of suspension during which some necessary repairs were made through a C. W. A. project.

We hope and expect our State Medical Association will have the best meeting ever. Let us all join in and make it so. On to Natchez.

G. E. Godman,
County Editor.

Poplarville,
May 7, 1934.

PONTOTOC COUNTY

Pontotoc County Medical Society met in Pontotoc, May 1, with a good attendance. We had sev-

eral visitors from adjoining counties present which added greatly to the program.

The many friends of Dr. J. W. Gillespie, Sherman, will regret to hear of the serious illness of his son, Hancock, but we are glad to report that he is gradually improving.

We have sixteen active physicians in Pontotoc county and two retired. All active physicians belong to our county society.

Quite a number of our doctors are planning to attend the State Medical Association Meeting at Natchez next week. From the program just received a few days ago it bids fair to be a fine meeting.

R. P. Donaldson,
County Editor.

Pontotoc,
May 3, 1934.

SUNFLOWER COUNTY

Sunflower County was well represented at the last semi-annual meeting of the Delta Medical Society held Wednesday, April 11, at the Delta State Teachers College, Cleveland. At this meeting plans were presented and adopted for the consolidation of the Clarksdale and Six Counties Medical Society and the Delta Medical Society. The new organization will be known as the Delta Medical Society and will have a potential membership of over 250 physicians. Dr. R. C. Smith, Drew, Sunflower County, was elected president of the new Delta Society.

Dr. J. W. Lucas, Moorhead, Councilor for this District, was present at the Delta Society meeting to hear his son, Dr. John Lucas, read a splendid paper before the scientific assembly.

Dr. U. S. Wasson was elected as a delegate to the State Medical Meeting in Natchez.

Many of the doctors of this county have had to assume the role of patient during the past month and this ordeal was indeed trying on some of them. No doubt they will have a more fraternal feeling for their patients who have just been robbed of some offending organ or who are being subjected to large doses of unsavory medicines.

During the latter part of April the doctors of Sunflower County met in Moorhead for a round-table discussion of matters of vital importance to physicians of this county. Other meetings of this type were planned for the future.

The many friends of Dr. W. P. McDavid were grieved to know of his death following a short illness. Dr. McDavid was well liked by those with whom he came in contact and his skill and ability as superintendent of the Parchman Hospital as well as his pleasing personality will be greatly missed by his associates.

H. B. Cottrell,
County Editor.

May 12, 1934.
Indianola,

WARREN COUNTY

The laborers in laying the cross-ties and rails in the construction of the old Georgia Pacific Railroad, from Atlanta via Birmingham to Greenville, Mississippi had a catchy little ditty they would sing as they worked, which ran in this way, "Walked all the way from Birmingham, if that ain't walking, I'll be d—n." Dr. William Pierre Robert looks "awful tired." He recently made a round trip to Birmingham.

The many friends of the late and lamented Dr. E. F. Howard will be pleased to learn that his widow, Mrs. Howard, is making a satisfactory convalescence from an appendectomy following an acute attack of appendicitis.

Dr. J. S. Kellum, Assistant Medical Officer with the U. S. Engineers, who is now located in the city of Vicksburg, called on us a few days ago. His duties extend over supervision and sanitation in construction camps along the levees of the Mississippi, chlorination of drinking water for such camps and boats used in the government's activities, etc. Dr. Kellum is successor to the late and very much beloved Dr. J. E. Quidor.

Dr. Edley Jones, in his rotations or gyroscopic activities as a Rotarian, attended the convention of the 17th District of Rotary held at Alexandria, Louisiana.

Dr. F. A. Thomas, of St. Joseph, Louisiana, recently brought one of his patients to our city for medical consultation and treatment.

The *unusual* experiments being conducted by Dr. Tom Sparks are marvelous and awe inspiring. Tommie acknowledged that it has been definitely proven that one certain way to "keep from getting old" is to drive the car at ninety miles an hour and beat all trains to the railroad crossing. But he is working on another decidedly advantageous and perhaps more effectual way. His first experiment was on the day Vicksburg celebrated or dedicated the airport. He hired a plane and took the pilot's place and zoomed around over the city of Vicksburg for two hours, sometimes high, sometimes low, dropping on the door step of his special friends a sack of self-rising flour (leaven bread) to let them know the "angel of daring" had "passed over."

The Warren County Health Department was honored and complimented by several visitors during the month. Dr. H. C. Ricks, Director of County Health Work, State Board of Health, Mr. H. A. Kroeze, Director of Sanitary Engineering, State Board of Health, and Dr. C. C. Dauer, Associate in the Department of Preventive Medicine, Tulane University, New Orleans, Louisiana. Dr. Dauer is making a first hand study of work being done in various health departments as an aid to him in his professional duties as teacher in preventive medicine.

And must our blood be spilled upon the grave

of the "immortal" Prentiss? Or shall we call for another Bulwinkle committee of investigation? Dr. Cook found the North Pole, Dr. William A. Wirt found the communist among the "brain trusters" and Dr. G. S. Bryan has found the fountain of Youth and now poses as a stripling courier leading "Father Time" and his hour glass to their eternal exit. No, my dear doctor, we glory in *your* "eternal youth." In the original article we said our "venerable scribe" and venerable *more* often refers to those we venerate or look upon with high regard, honor and deference, but if this explanation will not suffice, if my blood must be spilled, remember, "There is a touch of winter in my beard, a sign the Gods will guard me from impudence."

Just back from the State Medical Meeting at Natchez. It was a great meeting, most instructive and entertaining papers were read. The attendance was most creditable and the people of Natchez most cordial. We believe without any statistics, that more doctors were accompanied by their wives than on any previous occasion where we were present. The following from Vicksburg as best we can gather were in attendance: Dr. J. A. K. Birchett, Jr., Dr. Guy C. Jarratt, Dr. W. P. Robert, Dr. Leon S. Lippincott, Dr. A. Street, Dr. W. H. Parsons, Dr. B. B. Martin, Dr. H. H. Johnston, Dr. Edley H. Jones, Dr. Sydney W. Johnston, Dr. F. M. Smith.

Dr. H. T. Ims,
County Editor.

Vicksburg,
May 10, 1934.

WASHINGTON COUNTY

The following Washington County doctors attended the Delta Medical Meeting in Cleveland, April 11: Dr. R. C. Finlay, Glen Allen, Drs. T. C. Oliver and J. S. Sanders, Leland; Drs. A. G. Payne, O. H. Beck, E. W. Eubanks, F. M. Acree, T. B. Lewis, C. P. Thompson, J. Shackleford, L. C. Davis, H. A. Gamble, J. A. Beals, J. C. Pegues, R. E. Wilson, J. F. Lucas, E. T. White and J. G. Archer, Greenville.

The many friends of Dr. and Mrs. E. B. Lewis formerly of Leland are rejoicing over their arrival in America, after seven years' medical missionary work in Congo, Africa. They had with them their daughter, Miss Jane Lewis, and son, Billy, age four, who was born in Africa and enjoying his first trip to America. Dr. Lewis stated that their plans were to return in January to Africa, and to make it their future home.

Mrs. Jimmie Franklin and small daughter of Jackson were guests of her parents, Dr. and Mrs. T. B. Lewis, Greenville, in April.

Dr. and Mrs. S. L. Lane, Hollandale, were called to Weir on account of the death of Dr. Lane's aunt, Mrs. Eddleman of that place. Mrs. Lane did not

return with Dr. Lane but remained in Greenwood as the guest of Mrs. Tom Bush. Mrs. Eddleman, death will be regretted by the Hollandale friends of her daughter Miss Virgie Eddleman, who formerly was a member of the faculty of the Hollandale High School.

Miss Dorothy Thompson, a student at "Ole Miss," enjoyed a short visit with her parents, Dr. and Mrs. C. P. Thompson of Greenville.

Dr. W. P. Shackleford after four months' stay at Tulane University in New Orleans has returned to Hollandale.

Miss Ethel Payne of Jackson has been a frequent visitor to her parents, Dr. and Mrs. A. G. Payne, Greenville, this past month.

Miss Dorothy Thompson, daughter of Dr. and Mrs. C. P. Thompson, Greenville, was the guest soloist at the "Ole Miss" Glee Club concert in Greenville. Miss Thompson has an unusually beautiful soprano voice, and thrilled her audience so that she was compelled to give encore after encore. It is a delight to her many friends to know that she was in a special concert at "Ole Miss" where she is specializing in music. Miss Thompson's mother was her guest for the concert.

Dr. Sam Hooke of Noblesville, Ind., was called to Greenville on account of the sudden illness of his wife who was operated upon at the King's Daughters' Hospital, Greenville. Mrs. Hooke was visiting her sister, Mrs. Laudig, of Skene, when she was taken ill. Dr. and Mrs. Hooke's many friends will be delighted to know that she is getting along nicely.

Miss Mildred Duke, daughter of Mrs. W. T. Duke, and the late Dr. Duke of Glen Allen, was operated upon at the King's Daughters' Hospital, Greenville. It is good to know that she is making a rapid recovery.

Miss Rhea Blake and little daughter, Berkeley, who have been visiting her parents, Dr. and Mrs. T. B. Lewis, Greenville, returned to their home in Bluefield, West Virginia.

Dr. Paul Gamble, Greenville, made a quick trip to Nashville, Tenn., to bring home his small son and daughter, Paul and Mary, who have been visiting their grandmother for several weeks.

The many friends of Dr. and Mrs. J. F. Lucas, Greenville, are delighted to hear of the recovery of their little son John from an operation for appendicitis.

The following doctors were visitors in Greenville during April: C. R. Smith, Drew; F. M. Tyndall, Sunflower; I. I. Pogue, Scott; G. J. Mancil, Indianola; S. D. Newell, Inverness; R. S. Roby, Bourbon; R. N. Crockett, Winterville; B. H. Higdon, Sunflower; E. R. McLean, Cleveland; J. W. Lucas, Moorhead; J. S. Sanders, Leland; R. A. Haggard, Arcola; G. W. Owen, Shelby; T. C. Oliver, Leland; S. L. Lane, Hollandale; J. A. Clark, Rute-

ville; J. A. Alexander, Indianola; Jackson, Belzoni; and Semmes, Memphis.

Dr. J. G. Archer, Greenville, attended the meeting of the American College of Physicians in Chicago, April 16 to 20.

John G. Archer,
County Editor.

Greenville,
May 7, 1934.

WINSTON COUNTY

Times among the doctors of this section are awfully dull, quite a bit of illness but money for doctor bills is slow coming.

Some of our physicians are having great times fishing with great catches reported.

Dr. L. T. Parks, C. A. Kirk, and T. F. Kilpatrick were on our streets this week.

We have but little to report at this writing but that we may have as many counties report as possible, I am sending this in, however, a little late since I have been unusually busy.

We were anxious to be at Natchez at the Medical Association but as I understand we had had no representation there.

M. L. Montgomery,
County Editor.

Louisville,
May 10, 1934.

MISSISSIPPI STATE BOARD OF HEALTH

Dr. C. C. Dauer of the Department of Preventive Medicine, Tulane Graduate Medical School, was a visitor to the offices of the Mississippi State Board of Health of April 1-3. Dr. Dauer plans a return trip later to observe some of the field activities.

On May 1, at Ellisville, a celebration was held on the occasion of the opening of the cottages for tuberculous patients. The use of these cottages by those in Jones County who need them will be a step forward in the control of tuberculosis in that county. The building of the cottages was a CWA project. A cottage is now being constructed for a nurse who in cooperation with the patient's physician will look after these patients in the cottages. The value of this way of caring for tuberculous patients has been proved. There is not room at the Sanatorium for all cases who wish admittance, and this is a solution of the problem of caring for those who cannot be admitted. To put the patient in the cottage at least removes the constant source of infection in the home.

On request, Miss Gladys Eyrich, supervisor of mouth hygiene activities in Mississippi, made an inspection of the school children's teeth at Shuqualak, with especial reference to mottled enamel. While the records have not been completely studied, they show that about one-third have the marking to a greater or less degree. An analysis of the water shows fluorine 2.8 per million. An

outstanding fact about the teeth of the children at Shuqualak is that except for the mottling, the teeth are wonderfully constructed, with little caries. Only one child out of 170 examined had badly decayed first permanent molars.

The State CWA Dental Hygiene project, using four white and two colored dental hygienists, began on March 5 and is expected to run for several weeks longer.

So far, the white hygienists have worked in Yazoo, Holmes, Union, Simpson, Bolivar, Leflore and Monroe counties. The colored hygienists have worked in Washington, Hinds, Coahoma, and Warren counties. The health officer in Warren County reports that the colored hygienist did good work in his county during Negro Health Week. Her work included completion of inspections, a tooth-brush drill by 16 pupils at the Y. M. C. A. before 300, demonstrations with models, and examinations of seniors on Saturday morning with a dentist assisting.

Eight schools in Mississippi are now 100 per cent in dental corrections. Since the beginning of this school year, dental inspections have been made in 71 counties, 90,821 mouths have been inspected, and 32,260 of these persons now have dental certificates showing that all dental defects have been corrected. This is 35.5 per cent of the total examined.

On March 30, the Jackson Dental Society entertained Dr. G. C. Cady, dental surgeon with the U. S. Public Health Service.

Dr. Cady was in Jackson visiting the mouth hygiene division of the State Board of Health in the interest of the survey being made by the American Dental Association and the U. S. Public Health Service of mouth hygiene activities.

On April 16-18, the Mississippi State Dental Association held a very successful meeting in Jackson. The program and attendance were excellent.

Miss Mary D. Osborne, R. N., Associate Director of the Child Hygiene Division, State Board of Health, attended the biennial conference in Washington on April 27 and 28, inclusive, of the American Nurses' Association, the National League of Nursing Education, and the National Organization for Public Health Nurses. Miss Ora E. Phillips, R. N., Supervising Nurse, State Board of Health, also attended. This national conference had an attendance of almost eight thousand registered nurses. Eighteen nurses from Mississippi attended representing the following counties: Copiah, Claiborne, Forrest, Hinds, Lauderdale, Leflore, Pike, and Washington.

As a part of the Commonwealth Fund's cooperative program with the Mississippi State Board of Health, they have awarded for graduate study in public health nursing five scholarships to Mississippi public health nurses. These nurses given scholarships are: Miss Loraine Scheurman, Pike

County, to Teachers' College, Columbia, New York; Mrs. Estelle M. Dinkins, Yazoo County, to Vanderbilt University, Nashville, Tenn.; Miss Mary Louise Hartfield, Lauderdale County, to Vanderbilt University, Nashville, Tenn.; Miss Anne McGovern, Union County, to Vanderbilt University, Nashville, Tenn.; Mrs. Ella M. Sayle, Coahoma County, to Vanderbilt University, Nashville, Tenn. The scholarships are for a four-months' period beginning in September.

Felix J. Underwood,
Executive Officer.

Jackson,
May 7, 1934.

DR. J. O. RINGOLD

Dr. James Oscar Ringold, for 33 years a practitioner of medicine in Carroll and Montgomery Counties, died at his home in Winona, March 31st, 1934, after an illness lasting several months, cerebral arterio-sclerosis.

He was born in Grenada County in 1873. He was educated in the public schools of Winona. His academic degree was from the University of the South, Sewanee, Tenn., and his M. D. Degree from the old Memphis Medical College, now the University of Tennessee.

His medical career was begun in Vaiden, Carroll county, in 1900. For 19 years he ministered to the sick of that town and community during which time he served for a number of years as county health officer and as local surgeon for the Illinois Central Railroad. He moved to Winona in 1919 and made his home here until his death. He served several years as county health officer, and enjoyed a wide and varied practice. He was a member of the medical staff of the Winona Infirmary. He was particularly known and loved for his unselfish ministrations to the poor people.

He was married to Miss Alva Dorris of Winona in 1900, their union being blessed with five children, of whom four survive him, namely, Dr. Oscar Ringold of Cleveland, Edwin Ringold of Winona, Rupert Ringold, a student at Mississippi College, and Bertis Ringold, a student in Winona High School.

He was actively identified with the First Baptist Church of Winona, which he served for many years as a deacon. He was also a loyal member of the Winona Lodge, No. 48, Free and Accepted Masons.

He was a loyal member of the Winona District Medical Society of which he was a past president.

Funeral services were held in the Baptist Church, Winona, Monday morning, April 2, the spacious church being filled to overflowing with friends who gathered to pay their last tribute of respect and love. Following the benediction at the grave a choir composed of two score negroes, most of them at one time or another the beneficiaries of Dr. Ringold's ministering hands, gath-

ered around the grave and sang 'Swing Low, Sweet Chariot' as their last tribute to their deceased friend.

E. W. Holmes.

Winona,
May 2, 1934.

DR. W. W. HOLLADAY

The program of the approaching convention of the Mississippi State Medical Association has come to my father's desk.

It is with a sad heart that I inform you of the death of my father, Dr. W. W. Holladay, on January 12, 1934, from heart trouble, aged 77 years.

For 50 years he had practiced medicine here where he first located. He was recognized as one of the leading physicians of this section of the country and the influence of his life will reach far.

He would greatly enjoy mingling with you doctors at the convention because he loved his profession and contacts with other physicians.

Hoping you will have a great convention, I am,
Sincerely,

Mrs. Ina Holladay Curtis.

Porterville,
May 4, 1934.

THE WOMANS AUXILIARY

To the

MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Henry Boswell, Sanatorium.

President-Elect—Mrs. Leon S. Lippincott, Vicksburg.

Secretary—Mrs. Adna G. Wilde, Jackson.

Treasurer—Mrs. C. C. Hightower, Hattiesburg.

Press and Publicity—Mrs. Hugh H. Johnston, Vicksburg.

GENERAL SESSION OF THE ELEVENTH ANNUAL MEETING OF THE WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

FIRST SESSION, MAY 9, 1934

The general business meeting of the Woman's Auxiliary to the Mississippi State Medical Association was called to order in the Eola Hotel, Natchez, Wednesday, May 9, 9 a. m., by the president, Mrs. Frank L. Van Alstine, Jackson. A quorum was present.

The invocation was offered by Dr. George D. Booth, Natchez.

The welcome address was given by Mrs. Edwin Benoist, Natchez, and the response was made by Mrs. C. C. Hightower, Hattiesburg. A brief memorial address was given by Mrs. D. J. Williams, Gulfport, in memory of Mrs. Charles Le Baron.

The first Vice-President, Mrs. W. C. Pool, took the chair and the president read her report. A

rising vote of thanks was unanimously given in appreciation of her work.

The president introduced Dr. Seale Harris, Birmingham, as a welcome visitor to the meeting. He gave a short address.

The report of the president-elect was read by Mrs. Henry Boswell, Sanatorium.

The report of the Program and Relations Committee was read by Mrs. W. C. Pool, Cary, first vice-president.

A vote of thanks was given to Dr. W. C. Pool, Cary, for printing a nice hand book for the state auxiliary.

The press and publicity report was read by Mrs. Leon S. Lippincott, Vicksburg.

The report of the Committee on Hygeia was given by Mrs. C. E. Mullins of Bude.

The treasurer's report was read by Mrs. E. C. Parker, Gulfport, who reported the following:

Balance on hand from last year.....	\$ 87.02
Receipts	115.50
<hr/>	
Total	\$202.52
Disbursements	\$118 79
<hr/>	

Balance, May 9, 1934..... 83.73

The auditor's report was read by the recording secretary and was accepted. A rising vote of thanks was given the treasurer for her services.

The report of the historian was read by Mrs. J. W. D. Dicks, Natchez.

The reports of the following councilors were read.

1st district.....	Mrs. John Meals, Greenville
5th district.....	Mrs. John B. Howell, Canton
7th district.....	Mrs. L. L. Polk, Purvis
8th district.....	Mrs. H. R. Fairfax, Brookhaven

On motion these reports were received and filed.

Dr. J. W. D. Dicks, Natchez, president of the Mississippi State Medical Association, was introduced by Mrs. Van Alstine. Dr. Dicks expressed appreciation of the cooperation given him by the auxiliary. Dr. E. C. Parker, president-elect, was then introduced and he asked for the same support from the organization.

The secretary read a telegram of greetings and regrets from Mrs. Southgate Leigh, president of the Woman's Auxiliary to the Southern Medical Association.

Mrs. Seale Harris, Birmingham, past president of both national and southern auxiliaries was introduced. She gave a very interesting address.

The reports of the delegates to the Southern was given by Mrs. L. L. Polk, Purvis.

SECOND SESSION, MAY 10, 1934, 8:30 A. M.

The second general meeting of the Woman's Auxiliary to the Mississippi State Medical Association was opened in the Eola Hotel, Thursday morning, May 10, 1934.

The president, Mrs. F. L. Van Alstine, presided.

A quorum was present. The invocation was offered by Dr. George D. Booth, Natchez.

It was voted to send a telegram of regret to Mrs. E. F. Howard, Vicksburg, because of her absence, and sympathy because of the loss of her husband; a letter of sympathy to be sent to Mrs. L. E. Hudson, because of the loss of her husband, Dr. Hudson.

The resolutions of the courtesy committee were read by Mrs. Leon S. Lippincott, and approved by a rising vote of thanks.

The report of the nominating committee was made by Mrs. D. J. Williams; nominations from the floor were called for. No further nominations being made and the nominees were elected by acclamation.

The following were declared elected unanimously.

President-elect—Mrs. Leon S. Lippincott, Vicksburg.

1st Vice-President—Mrs. L. S. Gaudet, Natchez.

2nd Vice-President—Mrs. T. J. Barkley, Isola.

3rd Vice-President—Mrs. Hugh Johnston, Vicksburg.

4th Vice-President—Mrs. C. E. Mullins, Bude.

Recording Secretary—Mrs. Adna G. Wilde, Jackson.

Treasurer—Mrs. C. C. Hightower, Hattiesburg.

Historian—Mrs. J. W. D. Dicks, Natchez.

Parliamentarian—Mrs. D. J. Williams, Gulfport.

COUNCILORS:

1st District—Mrs. J. A. Beals, Greenville.

3rd District—Mrs. L. L. McDougal, Booneville.

4th District—Mrs. E. C. O'Cain, Winona.

5th District—Mrs. John Howell, Canton.

6th District—Mrs. O. Simmons, Newton.

7th District—Mrs. L. L. Polk, Purvis.

8th District—Mrs. H. R. Fairfax, Brookhaven.

9th District—Mrs. E. C. Parker, Gulfport.

A rising vote of thanks was extended to Mrs. Frank L. Van Alstine and to the officers for their splendid work of the past year.

An editing committee, Mrs. Van Alstine and Mrs. Garrison, to approve the minutes of the convention, was appointed.

The registration committee reported the registration of 9 state officers, 5 councilors, 60 members, 25 visitors, from organized territory, 6 visitors at large, and 5 out of the state visitors, making a total of 111 registrations.

The new president, Mrs. Henry Boswell, was introduced by the president. Mrs. Boswell expressed appreciation of Mrs. Van Alstine's work, and outlined her program for the coming year.

The meeting was adjourned SINE DIE at 10 A. M.

Mrs. Adna G. Wilde,

Recording Secretary.

Mrs. F. L. Van Alstine,

President.

PRESIDENT'S REPORT

As the Woman's Auxiliary to the Mississippi State Medical Association convenes for its eleventh annual convention, I would like to take stock for just a few minutes of the progress we have made.

Searching through the mass of records and reports and preparing the short history sketches was the first work undertaken; and the slow but sure development of an auxiliary minded organization was noticable in each year's work.

With a beginning of 19 members at the organization in Vicksburg in 1923 it has grown to a membership of 218. But, not alone in membership has the progress been made. There has developed a very definite vision and understanding of work that may be accomplished by the auxiliary; not only by the women but by the doctors as well, as they better understand the aims of the auxiliary.

In addition to the history sketches, collecting the photographs of the past presidents and having them prepared for publication, I have contributed a few articles on the auxiliary work and letters to the auxiliary members, to the New Orleans Medical and Surgical Journal and the Mississippi Doctor.

Each Councilor was given a small map of her district with organized medical societies, and the organized Auxiliaries, if any, with the number of members, and instructions pertaining to her work copied from the Hand Book.

A mimeographed copy of the Constitution was sent each state officer and each auxiliary president.

At the luncheon of the Anti-Tuberculosis Association, I attended as your representative and stated to it our platform of Health Education, that as a state body we were not a money raising body, except for the one purpose at the Preventorium, but leaving such matters wholly to the local auxiliaries as to their activities; but, assuring them of the assistance of all auxiliary units in the Christmas Seal Sale where their services were needed or requested.

When the state presidents of all Woman's Clubs and organizations were called to meet for the purpose of outlining a program of work for women in the C. W. A. I again stated our policy of Health Education, and with the consent of Dr. Lippincott, one of our councilors, placed in the program of Women's Work the employment of Nurses for the teaching of hygiens in the schools and colleges of the state. This met with the approval of the state chairman of Woman's Work and was sent to Washington, and I hope had some influence in obtaining the services of the 85 nurses who have been giving health instructions in the schools.

As to the Preventorium work, I feel that we have laid the foundation for some very successful work in this department.

Mrs. Dan Williams gave Mrs. Pfeiffer a rough

outline of what she thought every one would like to know of the Preventorium and the result of Mrs. Pfeiffer's work was so complete that when a typed copy was sent to Mrs. Underwood as a member of the Preventorium Committee in Jackson, Dr. Underwood promptly confiscated and appropriated it to have it printed by the State Board of Health as he said it was the most complete description of the Preventorium and its work he had ever seen. So several thousand copies are at our disposal, also Dr. Underwood extended to us the franking privileges of mailing them as needed.

These pamphlets were delayed in printing until several auxiliaries thought best to defer the essay contests until next fall and have more time for preparation. A few have held this contest and it has proved a worth while project.

Of the many letters written, I will say I have answered all letters coming to my desk that required an answer, sent all information requested by National and Southern Auxiliary officers, and written all auxiliary presidents general communications as well as any specific correspondence needed.

I would not close my report without expressing my sincere thanks and appreciation of the loyal support and help given me by the officers and members of the auxiliary, both state and auxiliary units.

Our councilors, Dr. Bryan, Dr. Parker, and Dr. Lippincott have at all times given their support and guidance, which with the cooperation of Dr. Dicks, president, and Dr. Dye, Secretary, has made the year's work an harmonous endeavor.

I have greatly enjoyed my visits with the auxiliaries of the Central, Simpson County Unit of Central, Issaquena-Sharkey-Warren, South Mississippi, and the Winona District at which meeting the Holmes county unit was organized.

These contacts have ceased to be with auxiliary members, for I feel they are now with friends, and if I have helped place one more brick securely in the foundation of our auxiliary structure, I shall be well content.

Mrs. Frank L. Van Alstine,
President.

Mabel Seals Mason is the daughter of A. J. Seale and Martha Coleman Seale, and the grand-daughter of Dr. R. H. Coleman.

She was educated in the public schools of Alabama and attended college at Alabama Conference Female College, now the Woman's College at Montgomery, Alabama.

She taught for three years in the public schools of Alabama and on October 12, 1910, was married to Dr. G. D. Mason and moved to Wayne County, Mississippi, where they lived until Dr. Mason reported for service in the Medical Corps of the Army. During his period of service Mrs. Mason



Mrs. Mabel Mason, Lumberton.
President 1931-1932.

lived in Chattanooga and Charlotte, North Carolina in order to be near him.

After the close of the war they moved to Lumberton, where Dr. Mason engaged in the practice of medicine until his death 1931.

Mrs. Mason is active in civic affairs of her community, serving as chairman of the Division of Community Service in the Mississippi Federation of Women's Clubs, and chairman of Music of the First District Federated Clubs.

She served as Treasurer of the Woman's Auxiliary to the Mississippi State Medical Association, 1928-1930, and of the Woman's Auxiliary to the Southern Medical Association 1931-1932, and as the president of the Women's Auxiliary to the Mississippi State Medical Association, 1931-1932.

The Auxiliary greatly appreciated Mrs. Mason's efforts to "carry on" the profession she loves, as she entered her term of office as president only a few weeks after the passing of Dr. Mason.

HISTORY OF THE WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION, 1931-1932

The ninth annual convention of the Woman's Auxiliary to the Mississippi State Medical Association met at the Robert E. Lee Hotel in Jackson,

Tuesday, April 12, 1932, (the date having been advanced because of the A. M. A. Convention meeting in New Orleans in May instead of in June, its usual date), with the president, Mrs. Mabel Mason presiding.

The various auxiliaries reported their activities and interest as being social, and local projects as the need of their services arose.

Dr. W. W. Crawford of Hattiesburg gave an interesting and instructive talk on the necessity and the importance of regular and systematic examinations by the family physician, and the result of study of cancer and its hereditary tendencies as found from the study of mice through some seventy generations.

Dr. F. J. Underwood gave a talk on "New and Old Ideas, or Fallacies Exploded!" This gave note of radical changes in the thinking of the profession as well as the thinking and beliefs of the laity.

The Homochitto Valley Auxiliary was reported and welcomed as the new auxiliary with sixteen members. Mrs. W. C. Pool and Mrs. A. Street assisted in its organization at Natchez.

Mrs. Charles E. Oates, Little Rock, Arkansas, as president of The Woman's Auxiliary to the Southern Medical Association, was guest of honor, and spoke of the educational work to be done by the auxiliary, mentioning especially the Jane Todd Crawford Memorial and the Romance of the Doctors Whom We Honor.

The Woman's Auxiliary to the Central Medical Society entertained the visiting ladies with a luncheon at the University Club, and on Tuesday night a reception was held for members of the Medical Association and visitors in the Roof Garden of the Robert E. Lee Hotel.

On Wednesday afternoon Mrs. W. B. Dobson was hostess at a lovely tea in her home entertaining all doctors' wives as well as members of the auxiliary.

After regretfully accepting the resignation of Mrs. Henry Boswell, president-elect, who was forced to resign because of ill health, the following officers were elected:

President—Mrs. W. C. Pool, Cary.

President-Elect—Mrs. F. L. Van Alstine, Jackson.

First Vice-President—Mrs. J. M. Acker, Jr., Aberdeen.

Second Vice-President—Mrs. Henry Boswell, Sanatorium.

Third Vice-President—Mrs. Leon S. Lippincott, Vicksburg.

Fourth Vice-President—Mrs. Estes Blount, Bassfield.

Recording Secretary—Mrs. A. G. Wilde, Jackson.

Treasurer—Mrs. E. C. Parker, Gulfport.

Parliamentarian—Mrs. D. J. Williams, Gulfport.

Historian—Mrs. M. H. Bell, Vicksburg.

COUNCILORS:

First District—Mrs. H. L. Cockerham, Gunnison.

Second District—Mrs. J. C. Culley, Oxford.

Third District—Mrs. D. E. Stanton, Columbus.

Fourth District—Mrs. W. H. Curry, Eupora.

Fifth District—Mrs. J. A. K. Birchett, Jr., Vicksburg.

Sixth District—Mrs. W. S. Gill, Newton.

Seventh District—Mrs. L. L. Polk, Purvis.

Eighth District—Mrs. L. S. Gaudet, Natchez.

Ninth District—Dr. Emma Gay, Gulfport.

HOLMES COUNTY UNIT OF THE WOMAN'S AUXILIARY TO THE WINONA DISTRICT MEDICAL SOCIETY

Mrs. Frank Van Alstine, President of the State Auxiliary, organized what will be known as the Holmes County Unit of the Woman's Auxiliary to the Winona District Medical Society, in Durant, on April 10, with eight members, and the following officers were elected: President, Mrs. R. C. Elmore; Secretary and Treasurer, Mrs. W. E. Hyde. This auxiliary held its first meeting April 27, at the Hotel Durant, with five members present. The meeting was opened by the president, Mrs. Elmore, who read the constitution, the dues were paid, and Mrs. Elmore was elected delegate to the state meeting at Natchez.

Our next meeting will be held on Hospital Day, at the Community Hospital.

Mrs. W. B. Hyde, Sec.

Durant,
April 28, 1934.

THE WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The Woman's auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society met in the Monroe room of the Hotel Vicksburg, for the April meeting. The table was artistically decorated for the luncheon by the hostess, Miss Zita O'Leary.

Following the luncheon a short business meeting was presided over by the president, Mrs. H. S. Goodman. The meeting was then turned over to the leader, Mrs. J. A. K. Birchett, who gave a most interesting talk on the life of Lister.

Those present were Mrs. H. S. Goodman, and Mrs. W. C. Pool, Cary; Mrs. I. C. Knox, Mrs. W. H. Parsons, Mrs. Gus Street, Mrs. H. H. Haralson, Mrs. Leon S. Lippincott, Miss Zita O'Leary, Mrs. Preston Herring, Mrs. Guy Jarratt, Mrs. B. B. Martin, Mrs. J. A. K. Birchett, Mrs. Hugh Johnston, Mrs. George Street, Mrs. C. J. Edwards, Mrs. M. H. Bell, and Mrs. Pierre Robert of Vicksburg.

SOCIAL NOTES

The many friends of Mrs. Fannie Howard are pleased to know that she has recovered from a recent illness.

Mrs. A. Street is spending the week-end in New Orleans, having motored down to witness the Southern Golf Tournament.

Mrs. Leon S. Lippincott and young son, Stanley, made a visit to New Orleans.

A number of members of the local auxiliary attended the meeting of the State Medical Association in Natchez. Among those present were Mrs. B. B. Martin, Mrs. Leon S. Lippincott, Mrs. Sydney Johnston, Mrs. Hugh Johnston, Mrs. F. M. Smith, Mrs. W. H. Parsons, Vicksburg, and Mrs. W. C. Pool, Cary.

Mrs. Pierre Robert has had as her guest her mother, Mrs. Robert.

Mrs. Preston Herring and little daughter, Helen, have returned from a three weeks visit in Trenton, Missouri. They were the guests of Mrs. Herring's parents, Dr. and Mrs. J. C. Greenoe.

Mrs. Frances Goodman, daughter of Dr. and Mrs. H. S. Goodman, of Cary, is being extensively entertained before her marriage the latter part of this month.

Mrs. L. J. Clark,
Press and Publicity Chairman.

Vicksburg,
May 12, 1934.

JACKSON SOCIAL NOTES

Dr. and Mrs. J. W. Barksdale have as their guest, their daughter, Mrs. T. A. Turner and her two children of Long Beach, California. Mrs. Turner will be remembered as Charlotte Barksdale.

Mary Lane Womack, daughter of Dr. and Mrs. Noel Womack, and Henrietta Rehfeldt, daughter of Dr. and Mrs. Fred Rehfeldt, are two attractive graduates at the Central High this year.

The marriage of Dr. Harvey F. Garrison, Jr., to Miss Meredith Owen, and of Dr. John Bullock to Miss Mary Louise Mayers have been of much interest to the medical circles this month.

Mrs. Temple Ainsworth,
Press and Publicity Chairman.
Jackson,
May 10, 1934.

HONOR ROLL

COUNTY EDITORS—L. S. Gaudet, W. C. Walker, W. N. Jenkins, W. L. Little, L. L. Minor, R. H. Clark, S. R. Towns, T. J. Brown, Wm. F. Hand, R. C. Elmore, W. B. Dickins, G. S. Bryan, G. E. Godman, R. P. Donaldson, H. B. Cottrell, H. T. Ims, John G. Archer, M. L. Montgomery—18.

SOCIETIES—Central Medical Society, L. W. Long; Delta Medical Society, F. M. Acree; Homochitto Valley Medical Society, W. K. Stowers; South Mississippi Medical Society, J. P. Culpepper, Jr.—4.

WOMAN'S AUXILIARY—Mrs. Adna G. Wilde, Mrs. F. L. Van Alstine, Mrs. W. B. Hyde, Mrs. L. J. Clark, Mrs. Temple Ainsworth, Mrs. Leon S. Lippincott.—6.

HOSPITALS—Houston Hospital, Miss Eva Collins; Natchez Sanatorium, W. K. Stowers; Vicksburg Hospital, W. H. Parsons; Vicksburg Sanatorium, J. A. K. Birchett, Jr.—4.

OTHERS—Mrs. E. C. Parker, Felix J. Underwood, D. W. Jones, H. K. Butler, E. W. Holmes, Mrs. Inda Holladay Curtis.—6.

GRAND TOTAL, 38.

BOOK REVIEWS

The Modern Treatment of Syphilis: By Joseph E. Moore, M. D., Baltimore, Md. Charles C. Thomas, 1933. pp. 535.

This excellent and opportune monograph deals with the study and treatment of syphilis since the enlightening and fruitful period of 1905-1910, during which period Schaudinn demonstrated the *Spirocheta pallida* (1905) as the causative organism, Wassermann worked out the specific serum complement reaction (1906), and Ehrlich introduced salvarsan (1907). Since that time Jacobs and Heidelberger synthesized tryparsamide (1919) and Sazerac and Levaditi introduced bismuth (1921) in the treatment of syphilis. Mercury and iodides had been used empirically for many years.

This outstanding volume is the answer to the needs of every one interested in the practice of

medicine, since syphilis is one of the four "killing diseases" and is so protean in its manifestations. It affords a ready and reliable source of information in methods of handling an individual with syphilis. The statistical data are based on a wealth of clinical material largely from the Syphilis Division of the Medical Clinic of Johns Hopkins Hospital and also from other well controlled and highly organized syphilis clinics (Cooperative Clinical Groups).

The first part of the book is devoted to the biological nature of syphilitic infection with concise and comprehensive discussion as to mode of infection, immunity, resistance and prognosis of cases untreated, incompletely treated and treated properly. Then the various drugs are discussed in a detailed manner as to theories of action, rela-

tive merits, preparation, indications, contraindications and ill effects. The author gives his personal opinion as to the best bismuth products and also states that bismuth has almost completely replaced mercury in the treatment of early as well as late syphilis. The section on arsenical reactions is very thoroughly and splendidly presented.

In the management of early syphilis the author stresses the necessity of patients being thoroughly and frankly informed as to its infectiousness and peculiarities of relapse and latency. The following axiomatic "nevers" as brought out in this section on early syphilis are well worth remembering: (1) Never treat early syphilis on suspicion; (2) never allow interpolated rest periods but use continuous treatment; (3) never discontinue treatment until one year's continuous treatment after blood and spinal fluid Wassermann has become and has remained completely negative; (4) never discharge a syphilitic patient as permanently cured. The complications which may arise during treatment are comprehensively and clearly discussed especially from the standpoint of early manifestations. In such instances concrete suggestions are offered as to subsequent management.

Since the larger part of the course of syphilis runs below the threshold of attention the author emphasizes the importance of routine serologic tests. This clinically quiet but pathologically progressive period, is discussed as latent and benign late syphilis. It is shown that treatment is very necessary in such cases with the idea of clinical arrest but not radical cure. In other words "in early syphilis one may treat the disease and in late syphilis one must treat the patient." Since cardiovascular type of syphilis is one of the most frequent causes of death an entire chapter is devoted to the management of such cases with suggested plans as to treatment in various types.

The sections on visceral and ocular syphilis are very laconically presented with many helpful suggestions which should be conducive to vital tissue salvation.

About one fourth of this monograph is allotted to the subject of neurosyphilis, the percentage incidence of which is succinctly discussed according to amount of previous treatment. It is inferred that inadequate and irregular treatment predispose to neurosyphilis. In no condition is the adage more applicable "an ounce of prevention is worth a pound of cure." Routine spinal fluid survey will disclose very valuable information and at times necessitate change in plan of treatment. The prognosis of the various types is discussed without any treatment and with various forms of treatment.

Neurosyphilis is classified into four groups: (1) More or less purely meningeal; (2) more or less purely vascular; (3) diffuse meningovascular and (4) parenchymatous. Each is discussed separate-

ly from the standpoint of general principles of treatment. However, it is emphasized individualization in treatment is indispensable. A detailed discussion is given to malarial treatment and its exigency in paresis.

(1) Syphilis in marriage, (2) congenital lues and (3) Wassermann fastness are discussed in the author's usual manner of thoroughness and conciseness.

This authoritative monograph presents the general principles of treatment and shows statistically what to expect in all stages and manifestations of syphilis, taking into consideration age of patient, other diseases and complications. At the end of each chapter is an outline of the principles of treatment as well as a bibliography with the more pertinent references.

It is a volume which should prove a very real value to all in the practice of medicine and is very heartily recommended by the reviewer.

H. H. RUSSELL, M. D.

The Story of Child Birth: By Dr. Palmer Findley
Garden City, Doubleday. Doran & Co., Inc.
1933. pp. 376. Price \$3.00.

This book written for the lay reader and more particularly for the child bearing woman is of interest to the physician as well, and one will be well repaid for its careful perusal. The obstetrical methods and superstitions of primitive peoples are described in an interesting and instructive manner, and the course of evolution of maternity practices is outlined from antiquity to the present time. Due attention is given to the midwife, past and present.

Of particular interest to the physician are the chapters headed Birth Control, (including abortion), The Lost Art of Obstetrics, and Martyred Mothers. In the first, the indications for birth control and its advisability under certain conditions are set forth. The fact is stressed that at the present time birth control is practiced most by the class that needs it least. The desirability for larger families among the better class is stressed, together with the advisability of resisting the propagation of the unfit.

In the chapter on Martyred Mothers particular stress is laid on adequate prenatal care. The need for better training of medical students in obstetrics is also emphasized. Attention furthermore, is called to the fact that the United States has a very low rank among the civilized nations of the world in the matter of maternal mortality. The author states that this mortality rate must be more than halved if we are to take equal rank with those countries that are making the best showing. It is an undeniable fact that many of the deaths from toxemia, hemorrhage and infection are preventable, if the patients receive better obstetrical care.

In the discussion of the lost art of obstetrics

the author reminds us that there is at present too much operative midwifery. Not that obstetrical operations are all to be decried indiscriminately, but objection is raised to the ill advised and unnecessary resort to forceps, version or Cesarean section in cases in which normal delivery may be reasonably expected. In other words, a plea is made for more conservatism on the part of the attendant and for more reliance on the forces of nature. Stress is laid on the necessity for proper care during pregnancy as a means of forestalling difficult and dangerous deliveries; this is most appropriate as the book is intended primarily for lay readers.

On the whole, this work should prove especially valuable to lay workers in the social fields. It is not a manual for the expectant mother, but will interest all concerned with the public welfare.

E. L. KING, M. D.

The Study of Anatomy: By S. E. Whitnall, A. M., M. D., B. Ch. (Oxon). Second edition. Baltimore, William Wood & Company, 1933. pp. 93. Price \$1.50.

Doctor Whitnall, as a teacher of anatomy, offers in this little book for the medical student his counsel on "The Nature and Principles of the Subject," "Practical Methods of Study", "Books", "Teachers and Lectures" and "Examinations". There is much sound advice on habits of study which applies as aptly to other subjects, and the inclusion of a brief chapter on "General reading" lends to the work a broader usefulness than its title would indicate. The keynote of the author's treatment of the aims and methods of anatomical study is embodied in his admonition: "First of all, you should realise that as a medical student you are essentially a biologist: a student of Life, with Man as your subject. Therefore bear in mind the fact that, contrary to the usually accepted opinion, human anatomy is a study not of the dead but of the living. You have to utilise the dead as a partial and imperfect means to an end, and that end is to establish the essential foundations upon which the practice of medicine is based."

HAROLD CUMMINS, PH. D.

Nasal Accessory Sinuses. By Frederick M. Law, M. D. New York City. Paul B. Hoeber, Inc. 1933. pp. 215. Price \$10.00.

This book is the latest of a series of Monographic Atlases, edited by James T. Case, M. D., and written by Dr. F. M. Law. It is the very best book written on the roentgenographic aspect of nasal accessory sinuses. The author is as well known

to the oto-laryngologists as he is to the roentgenological profession and is considered by both as an authority of note. For this reason his new monograph immediately becomes of great value, and will serve the oto-laryngologists and roentgenologists as a reliable guide for authoritative information.

The book contains 215 pages of informative matter, and is profusely illustrated, explaining clearly the roentgen anatomy of the head, and also illustrating numerous diseased conditions which are commonly found in the nasal accessory sinuses.

We heartily recommend this book to all who are interested in oto-laryngology and roentgenology as being one of the most reliable books of its kind published.

LEON J. MENVILLE, M. D.

Passional Psychology, By Dr. Jacobus X. ****
Privately re-issued by the American Anthropological Society, New York.

There have been written during the past decade many valuable works on love and sex life, but the present volume does not belong to this group. I can find nothing good to say of "Passional Psychology." One of the outstanding faults of the book is that fully ninety per cent of the content is borrowed from other writers, mostly French; whole chapters are taken from such sources. The author signs himself, "Dr. Jacobus X", preferring to use a nome de plume or remain incognito. In this I think he shows rare good judgment.

C. S. HOLBROOK, M. D.

Clinical Management of Horseshoe Kidney, By Robert Gutierrez, A. B., M. D., F. A. C. S: New York. Paul B. Hoeber, 1934. pp. 143

This is a well executed work completely covering the subject of a curious anomaly.

The history is considered from the standpoint of distinct eras in the development of medical science and contrasts present methods with early days when cadaveric observations and postmortems afforded the only opportunity for study of anatomical curiosities.

The various phases of horseshoe kidney from embryological development to treatment of the anomaly, as a disease, are considered in a simple and attractive manner. The splendid drawings and roentgenograms scattered throughout the pages add to the clearness of the text.

This is a splendid book and is recommended by the reviewer as an important work to have in one's urologic library.

EDGAR BURNS, M. D.

Modern Clinical Psychiatry. By Arthur P. Noyes, M. D., Philadelphia, W. B. Saunders Company, 1933. pp. 485. Price \$4.50.

Modern Clinical Psychiatry, by Arthur P. Noyes, W. B. Saunders & Co., is well written and splendidly arranged. The book is admirably adapted for teaching medical students and an excellent reference especially for general practitioners. Dr. Noyes has brought his book up to date and handled his subject clearly and concisely. It is regrettable, however, that in places his language is so technical, as it will deprive the book of much of its value in so far as medical students are concerned.

EDMUND MCC. CONNELLY, M. D.

PUBLICATIONS RECEIVED

Lea & Febiger, Philadelphia: *Diseases of the Skin*, by Oliver S. Ormsby, M. D.

Paul B. Hoeber, Inc., New York: *Modern Drug Encyclopedia and Therapeutic Guide*, by Jacob Gutman, M. D., Ph. D., F. A. C. P.

Harvard University Press, Cambridge: *The Road to Adolescence*, by Joseph Garland, M. D.

The John Day Company, New York: *I know Just the Thing for That*, by J. F. Montague, M. D.

Collegiate Press, Inc., Ames, Iowa: *Coccidia and Coccidiosis of Domesticated, Game and Laboratory Animals and of Man*, by Elery R. Becker, D. Sc.

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