The

MAHONING COUNTY MEDICAL SOCIETY BULLETIN

If ever the human race is raised to its highest practicable level intellectually, morally and physically, the science of medicine will perform that service.

RENE DESCARTES

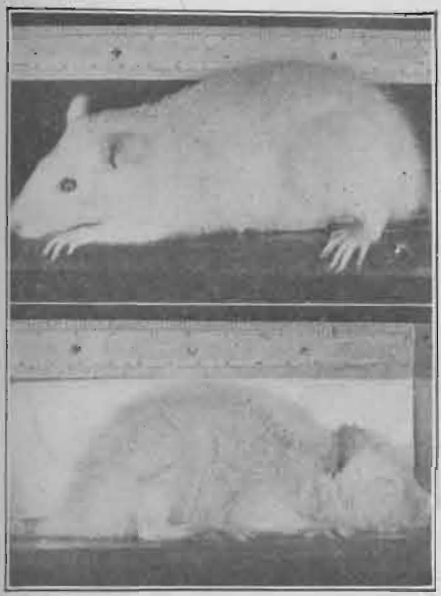
YOUNGSTOWN, OHIO

MAY

NINETEEN THIRTY-ONE

VOLUME ONE NUMBER FIVE

DO YOUR CHILDREN DRINK MILK FROM A HEALTHY, WELL-FED HERD?



The upper picture was taken of one of the rats fed upon the milk from the specially fed cows. The lower rat was fed commercial pasteurized milk.

Ladd, Evarts, and Frank in a feeding experiment conducted in the Boston Dispensary, and using 224 infants, showed that certified milk was superior in nutritive qualities to either Grad A pasteurized, or Grade A pasteurized plus codliver oil or codliver oil and orange juice. They further state that it is possible that the efficiency of the certified milk over the pasteurized was due to the more exact an dscientific feeding of the cattle.

Lewis studied two groups of infants. Group I of 122 babies was fed on certified milk. Group II of 112 babies was fed on commercial pasteurized milk.

Weight
Babies 1-3 months old:
Group I gained 1 lb. and 13 oz.
Group II gained 8 oz.
Babies 3-6 months old:
Group I gained 3 lbs. and 15 oz.
Group II gained 2 lbs. and 14 oz.
Babies 6-9 months old:
Group I gained 5 lbs. and 8 oz.
Group II gained 3 lbs. and 14 oz.

Rickets — There was less rickets in the certified milk group and when it did occur it was of milder type.

These albine rats were used in experiments conducted at Ohio State University by Drs. Scott and Erf to determine the relative value of Natural and Pasteurized Milk. Their findings were similar to those related above.

Do you drink milk at Raver's Buffet, Y. M. C. A. Dining Room, of Youngstown Club?

It is produced from our healthy well-fed herd.
Have you tasted that marvelous ice cream in Burt's Arbor Garden? It's made with cream from

INDIAN CREEK FARM

Baby Milk a Specialty
Also Jersey Milk and Cream

Youngstown Phone 22344 Florence L. Heberding, *Owner*

MAY MEETING

The Distinguished Pediatrician, Clinician and Teacher

DR. JOSEPH BRENNEMAN

of the Children's Memorial Hospital of Chicago

Subject: "THE ACUTE ABDOMEN IN CHILDHOOD"

Tuesday, May Nineteenth—8:15 P.M.

YOUNGSTOWN CLUB

Those who have had the good fortune to hear Dr. Brenneman know that there is a real treat in store when he talks on this subject. His style is natural, his reasoning sound and his conclusions convincing. His remarks on congenital pyloric stenosis and intussusception are particularly good. This lecture will be of absorbing interest to every internist, surgeon, pediatrician and general practioner.

Please notice the dinner announcement on Page 25

Excerpts From the April Program

Congenital Heart Disease

O. S. WILSON, M. D., *Canton, Ohio*

Congenital lesions may be grouped as causing or not causing cyanosis. In the non-cyanotic group, with no shunt of circulation from right to left sides we place dextracardia, anomalous cordae, supernumerary or absent cuspid valves, pericardial defects, such as absent pericardium and coapatation or narrowing of the aorta. Primary congenital hypertrophy and congenital stenosis of mitral, aortic or pulmonic valves

Of the non-cyanotic types with a shunt, we have patent ductus arteriosis, localized defect of auricles and interauricular septum and localized interventricular septal defect.

In the cyanotic group we have a venous arterial shunt in the circulation, with two auricles and one ventricle, or a patent foramen ovale with a pulmonic or tricuspid stenosis we have moderate cyanosis. With a combination of defects such as in the Tetralogy of Fallot, or pulmonic atresia, with ventricular septal defect and patent ductus arteriosus, a moderate cyanosis is present. Extreme cyanosis occurs with a (1) cor bilocularis (or one ventricle and one auricle) with transposition of the aorta (2) complete transposition of the trunks with patent ductus arteriosus or (3) pulmonic atresia and patent ductus arteriosus.

The occurrence in the same heart of a defect at the base of the ventricular septum, pulmonary stenosis dextraposition of the aorta and hypertrophy of the right auricle and ventricle is the commonest of all combinations in congenital heart disease.

Fallot, at Marsailles, in 1888, reported three cases of this combination of congenital defects and it has since retained the name in literature as The Tetralogy of Fallot. He states that in about 75% of all the adult cases of cyanosis due to congenital heart disease this tetralogy will be found. A comprehensvie summary of all the cases confirmed by autopsy has been included in Dr. Abbott's recent monograph. She finds that persons with this condition have a relatively short span of life, mostly dying before adult life is reached, usually in first or early in second decade. The maximum of age in her series was 36 years. Dr. White recently reported a case 58 years old. Four others are listed over 23 years of age, and the average age was 10.8 years.

The diagnosis clinically of interventricular septal defects and associated anomolies, altho often helped by electrocardiogram and X-ray, is based upon the history and physical examination. A pure septal defect, or Roger's disease, may pass thru life with no symptoms whatsoever, and may show cyanosis only as a terminal finding. In these cases a prolonged and constant systolic murmur is usually best heard at the third and fourth left inter-spaces, near the sternum and transmitted with diminishing intensity in all directions; it is usually heard in the back but not in the vessals of the neck. The hardness and intensity varies inversely with the size of the defect. In about one third of the cases a purring systolic thrill is present. When this condition is complicated with a dextraposition of the aorta there is practically always cyanosis of moderate degree, and there may or may not be clubbing of the fingers. In case of a large septal defect with dextraposition the thrill may be absent and the murmur slight due to the fact that blood passes easily into the aorta. If, in addition, there is a complicating pulmonary stenosis the cyanosis is apt to be more intense, the murmur more pronounced and a thrill localized over second and third left inter spaces or diffuse over the whole precordium, is frequently present. With pulmonic stenosis the pulmonary second sound in usually weak or absent, but in a few is distinctly louder. A prolonged harsh, rasping or blowing systolic murmur heard over the whole precordium but chiefly at the base, with its point of maximal intensity to the left of, or over the upper part of the sternum and in the second and third terspace, is present in a great majority of cases. It is transmitted upward along the clavicle, along the course of the pulmonary artery and over the sternum, but it is faint or inaudible at the apex and to the right of the sternum.

The prognosis in congenital heart disease depends largely on the effects of the lesion on the circulation, that is upon the amount of cardiac strain or the degree of oxygen unsaturation induced by the defect and upon the compensatory powers. For this reason symptoms will frequently prove a better guide to the immediate future than the physical signs. A septal defect may give a marked murmur and thrill yet lead to no hampering of the heart's action and to little interference with oxygenation until some

(Concluded on Page 19)

President's Corner

Although there has been but little said about it in print, I presume that the physician has been as greatly disturbed financially by the present depression as have those in any other calling. Remembering that even in prosperous times the percentage of collections does not nearly approximate what is enjoyed in other lines, it is not hard to see what happens to a physician's income during a business lethargy.

Many persons, whom we have rightly considered as being wealthy, have literally lost everything. They had been heavy investors in the stock market, in some cases being heavily margined, and everything was swept away within a few terrible days. And, if they have any securities left, these must not be liquidated until times are better. But in this class there is no cash for the physicians, and they must wait.

There is another group who were not interested in the market, but who were living up to every cent of their incomes and had put aside not a nickel. Many of these have had sharp salary reductions or, through reorganizations, have found themselves without a businesss connection. Here again, the doctor must wait indefinitely for his money.

The third class consists of "four-flushers" and dead-beats, who never had any idea of paying a just obligation, especially a doctor's bill, and, if they are not carefully investigated (for long experience has made them clever actors in this, their favorite role), will use as their argument that they "lost everything in the market," while the truth is that they never owned a share of stock. Many of these people have the funds to pay, and this *they must be made to do*.

The fourth group is represented by thrifty souls who lived well but who were insistent upon saving carefully. These are the citizens who now are able to rather comfortably carry on and are willing and able to pay their way. Incidentally it is from this group that our most grateful and appreciative clients come, and whom it is a pleasure to serve.

There is no reason for the reduction of fees for medical service — the present minimum fees being ridiculously small in comparison to the responsibility attendant upon the proper care and treatment of medical and surgical problems. But certainly this is not the time to increase our recompense. It occurs to me that, until America becomes more prosperous, we should continue as we have always done,— that is, to extend credit to persons who are *deserving of credit*, and to expect that we shall have to be a bit more patient with them until they are again earning normally; and to encourage such people to not postpone medical attention simply because of not having ready cash. These are accounts which we can profitably "carry" until better times. But, hard times or no hard times, new accounts should be investigated very carefully, and the professional dead-beat who comes clamoring for urgent attention should be referred to the physician who is employed to care for indigents.

We will continue to give of our time and ministrations to those honest unfortunates who need and who would pay for it if they could, and we will rejoice in being able to help them.

And these dull and long days will not be without profit to us if we spend part of our time in perusing our ledgers and files and setting them all in proper, up-to-date order, and if we give the rest of our spare moments to continuing the careful study of our scientific journals and volumes.

A. W. THOMAS, M. D.

The Mahoning County Medical Society

BULLETIN

Published Monthly at Youngstown, Ohio, by the Editorial Committee

JAMES L. FISHER, M. D.....Editor
MORRIS DEITCHMAN, M. D.....Asst. Editor
COLIN M. REED, M. D.....Asst. Editor
WM. M. SKIPP, M. D.....Advertising Mgr.
B. W. SCHAFFNER, M. D.....Asst. Editor
ARMIN ELSAESSER, M. D...Consult'g Editor

Publishing Office.....228 North Phelps Street
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● Following the meeting of the Ohio State Medical Association this week, and the convention of the A. M. A. in June, comes what is for many of us the really BIG event — the Annual Post Graduate Day, at the Hotel Ohio, on June eighteenth.

Due to the worthy efforts of the Post Graduate Day Committee and the Program Committee, an extremely worthwhile program has been arranged, to be presented by the following group from the Johns Hopkins University Medical School in Baltimore:

Dr. Emil Novak . . . . . Gynecology
Dr. Walter E. Dandy . . . . . Neuro-Surgery
Dr. Wm. F. Reinhoff, Jr. . . . . Surgery
Dr. Louis V. Hamman . . . . . Medicine
Dr. Thomas B. Futcher . . . . . Medicine

The program in detail will be printed in the June number of the Bulletin. This special number will be mailed to the profession in nearby cities inviting them to be our guests on this gala occasion.

● Your attention is called to the article on "Foundations and Their Trend," which appears on page eight. This timely address caused much comment in the press and brought forth indignant retorts from some richly endowed organizations in New York. Medical sentiment should be united and firmly opposed to the activities of any organization which attempts to distribute widespread medical charity without making any effort to determine those who are eligible.

● In this issue the Bulletin inaugurates a new service consisting of abstracts of the scientific articles presented before the Society at the preceding meeting. The Committee will be interested to hear your opinion on the value of this department.

Secretary's Report

The following is a list of changes recommended by the Constitution Committee in order to make the constitution conform to the model constitution as recommended by the State Society:

Sections of Chapters VI and VII, however, are of local interest only.

The committee, composed of Dr. Smeltzer and Dr. Bachman, went over this problem in December and again in April and discussed with Council the advisability of the following amendments and respectfully submit them to the members for their approval.

CHAPTER I

Section 2. "Any legally qualified reputable physician who has been engaged in active practice for at least one year in Mahoning County, Ohio; any graduate in medicine and resident for at least one year in Mahoning County; or any retired physician in Mahoning County, all of whom must be citizens of the United States, or have indicated their intention to become citizens of the United States by having filed First Naturalization Papers."

Section 5. Any physician, not a citizen of the United States, but otherwise eligible to membership, may be received as an Associate member of the Society. The dues shall be $10 a year. Internes in hospitals in Mahoning County may be received as Associate Members, but no dues shall be required of them.

CHAPTER III

Section 1. (To be changed to read as follows) "The dues for the different classes of membership shall be respectively as follows: Active $15.00 per year, Non-Resident $2.00 per year, and Honorary, none.

Section 2. (To be changed to read as follows) "The dues of all members shall be due and payable in advance before the first of December preceding the calendar year for which such dues are collected. Note: Deliquency of dues after January first, forfeits the right of the individual to Medical Defense furnished by the State Medical Society, during the period of delinquency."

Section 4. (To be changed to read as follows) "A member suspended for nonpayment of dues, shall be restored to membership on the payment of all indebtedness, provided such payment is made within one year of delinquency. Members who have been more than one year in arrears, shall be dropped from the membership roll and can be reinstated only through regular application as is required of new members. A member shall be deemed delinquent and in arrears in all his relationships as a member from and during the period extending from January 1 of the current year, until his dues and assessments have been paid.

CHAPTER VI

Bulletin Committee

Section 6. "It shall be the duty of the Bulletin Committee to arrange for the publication of such a bulletin as is deemed appropriate for this society. The chairman shall appoint one member as business manager who shall keep record of the business of the bulletin, (income and disbursements) and pay all moneys received to the Treasurer who shall in turn pay all the bills upon approval of Council.

CHAPTER VII

Section 2. (To be changed to read as follows) "Special meetings shall be called at any time by the President at the direction of the Council or upon the written request of five active members of the Society At such meetings, any program of literary exercises may be offered, but such business only shall be transacted as has been specified on the call of the meeting."

At the meeting on April 21, 1931, the following men were voted into the Society: Dr. Van Buren D. Viets, 41 New York Avenue; Dr. James D. Mariner, 3812 Loveland Road, Youngstown, Ohio.

We welcome them into membership and hope they will take an active part in the Society and attend all the meetings.

At the May meeting the following names will be presented for election to membership: Dr. John Norman McCann, 2724 Mahoning Avenue; Dr. Thomas A. Lander, 279 East Federal Street.

In order to complete the official list of the Medical Society in this county we are anxious that all members fill in the following questionnaire and return to the Secretary, J. P. Harvey, 101 Lincoln Avenue, Youngstown, Ohio.

Name..... *Age*.....

Medical School.....

Year of affiliation with the Mahoning County Medical Society.....

Foundations and Their Trend‡

By Samuel J. Kopetzky, M. D.

The struggle of the individual against engulfment by the mass is almost as old as the story of mankind. From the earliest days of man's association with his fellows in social, political and economic union we have seen the individual struggling to perpetuate his individuality, to think independently and, within the limits of social order, to act freely and without the interference or coercion of external forces. On the other side have been those who seek to standardize society, to organize a strong central authority and reduce the individual to the impotent role of a marionette.

Standardization Hurting Medicine

Up to the present time medicine had escaped the subjugation of the individual to the herd to a remarkable extent. In the course of the present century, however, a perceptible drift has set in away from individualism in medicine The standardization of medical education, an eminently desirable and necessary step in itself,. has proven the forerunner of an attempt to standardize medical practice, an eminently undesirable and unnecessary sequel. Whereas a doctor and a patient were formerly the two essentials in the treatment of disease, today vast, impersonal organizations have been built up which stand between patient and doctor and destroy the personal contact and knowledge that are essential to successful healing.

Increasing Control of Medicine by Foundations

The most important factor in the gradual suppression of individualism in medical practice is the increasing control which the large philanthropic foundations exercise over healing.

Their influence begins in the medical colleges, extends to the public health service and continues in costly and unproductive experimentation with the conditions of medical practice. It is this phase of the problem that I shall discuss this evening.

Inefficiency of Foundation Health Policies

In examining the aims of the different foundations, one is immediately struck by the breadth and vagueness of their avowed purposes. The goal of one is "the well-being of mankind," of another "to improve the physical, mental and moral conditions" of the race. While this flexible purpose is of marked advantage in keeping the vast funds of the organization available for whatever need arises and prevents the "freezing" of trusts, it has its weakness.

The well-being of mankind being inextricably interwoven with good health, it is natural that most of the philanthropic foundations having the former general purpose should center a large part of their activity in the health field. Undeniably, the physician is the central figure of any enduring health program, yet the organizations representing the medical profession are rarely utilized in their logical advisory capacity. Instead of figuring as the central figure in the health scheme promulgated by the foundations, the doctor is subordinated to administrative considerations. His attitude toward healing is ignored; his interests disregarded.

Rappleye, Dean of the College of Physicians and Surgeons and Director of Study of the Commission on Medical Education, has said, and he has been supported by many others in his stand, that any plan, whether developed from within the profession or imposed upon it from without, that lessens the responsibility of the trained physician in the care and treatment of patients or denies him the rewards of individual effort and superior ability will in the long run be detrimental to the public welfare. Many well intentioned foundations are guilty of both these faults. In their interest in administration, statistics and social research, they place the physician at the outskirts of a highly centralized organization. Lammenais aptly describes the consequences of such a situation when he states that "centralization results in apoplexy at the center and anemia at the extremities."

Foundations Interfere With Practice of Medicine

On the second charge, that of interfering with the rewards of practice, the guilt of the foundations is often no less real for being unintentional. In their social experiments they subsidize agencies that come in direct competition with the practicing physician; for few, if any, have any effective methods for determining those who are eligible to free care or take pains to reject the ineligible.

In justification of such practices, the argument is sometimes heard that the lay foundations are obligated to undertake the various preventive services because physicians are unable to handle that type of work. On this score, it need only be said that the foundations themselves play a large part in the control of medical education; and the doctors who are turned out represent to a considerable extent their idea of what a

doctor should be; for, as Laski states in his article on foundations and universities, even though the foundations make no deliberate effort to exercise any control over the colleges, the very fact that a fund is within reach "permeates everything and alters everything. The college develops along the lines the foundation approves." In any case, in the last analysis, it is a physician who performs the actual service and there is no reason to believe that a medical man working under lay direction is any better fitted to discharge his duties than a doctor whose individual practice has developed his judgment, initiative and resourcefulness.

At the present time the medical profession is by no means convinced, and it is not alone in its doubts, that super-organization produces the best in medical care.

Pay Clinics' Unfair Competition

A more direct form of competition on the part of the foundations is the sponsorship of groups and pay clinics to treat what is vaguely defined as the white collar class.

As a matter of fact, no self-supporting venture into group practice in New York City has demonstrated its ability to lessen the costs of medical care. No group practice has ever been able to prove that it gives a better grade of service than its patrons could receive in private practice at a comparable cost.

A subsidized group, on the other hand, is in direct and unjust competition with the private practitioner No doctor who must depend on his professional earnings for a livelihood, and who must defray his office, personal and civic expenses from those earnings, can compete with an organization that is partly underwritten by the wealth of a foundation and that advertises to the public, at a cut rate, the service on which his economic existence hangs.

Not all foundations, it is true, are guilty of this ill considered indifference to the economic stability of medical practice. It is an avowed policy of the Commonwealth Fund not to interfere with private practice but to emphasize educational service and professional training. The Carnegie and Rockefeller Foundations do an inestimable service to the medical profession as well as the public by their contributions to medical education and scientific research

Physician Essential in Public Health Work

The one constant essential in public health work is the physician; and it cannot be stressed too strongly that he cannot function properly if he is subjected to economic injury. The contribution of the doctor to the community in free medical care has been quoted by Dr. Heyd to be three hundred and sixty-five millions of dollars a year. The physician cannot make this enormous gift to the needy and discharge his personal obligations if his economic stability is undermined by mistaken conceptions of philanthropy on the part of well-meaning but misguided lay groups.

Alleged Ulterior Interests of Physicians

Upon occasions when argument has grown heated, advocates of the bureaucratic system sponsored by some of the foundations have considered that they were scoring an unanswerable point when they asserted that the doctor was unable to judge their methods fairly because of his financial interest in the situation. Obviously the same criticism can be applied to their impartiality. If the doctor is indeed vitally concerned with the preservation of his right to earn his livelihood by the practice of medicine, it is no less true that an increasingly large number of social workers, statisticians, field workers and directors derive their living from the activities of the foundations. Surely there is no reason to credit them with a more inherent fairness or altruism than a profession whose annual gift to society, in free service, totals more than the entire donations of all the medical and quasi-medical foundations during the last twenty years.

Physicians' Charges Minor Part of Medical Costs

As a matter of fact, it has repeatedly been demonstrated, and all of the observations of the Committee on the Cost of Medical Care to date tend to prove, that the physicians' charges are by no means the major portion of the economic burden imposed by illness. The average middle class worker is able to meet the expenses arising from an illness requiring home or ambulatory treatment. It is when hospitalization and extensive nursing are required that sickness imposes an unbearable burden on the middle class. The disease in this case suggests its own remedy. If hospital costs were reduced, unnecessary laboratory tests abolished and adequate nursing made available at a price within his means, the middle class patient would no longer face economic as well as personal disaster with the advent of illness. Under the present system, with hospital and nursing charges fixed, the physician is the only one who tempers his fee to the individual case.

Foundations Could Lower Hospital Costs

Would not the foundations make a vastly practical contribution to medical care if they exerted their considerable influence to reduce unnecessary overhead and employed their resources to lessen the costs of hos-

pitalization to the middle class? There are a number of ways in which this could be done. Funds could be established in Grade "A" institutions to assume part of the hospital, nursing and laboratory charges to patients within specified income groups; or increased contributions to the hospital as a whole could be employed to reduce fees to the entire public. Whatever the method decided on, here is a field in which the foundations could render direct and effective assistance to the middle class when its need is urgent.

Physicians Willing to Cooperate With Foundations

The dissatisfaction of the profession with certain aspects of the present policies of the foundations is not to be construed as a lack of appreciation of the great good which many of these organizations do and the even greater potentialities for good which all of them possess. Surely it is possible for two groups, both supremely interested in as complex a problem as the public health, to develop cooperative methods whereby both can work fruitfully in the common field, for their own and the public good. If the profession is truly and intelligently interested in public health education and preventive medicine, as it should be, there is no reason why it cannot give active and productive support to many of the projects of the foundations. If the latter, on the other hand, are primarily concerned with the public health, rather than with the development of influential and efficient administrative machinery, they will recognize that the doctor is the one indispensable feature of any health program under present conditions and that no permanent benefit can be derived from any system which stifles his individual development or destroys his economic security. Once these fundamental principles are accepted, it should not be difficult to establish a harmonious working relationship between the two groups.

Proposed Cooperation Between Foundaions and Physicians

Let us consider some of the practical methods of bringing about such a rapport. It is clear that much of the friction which has arisen heretofore has grown out of the vagueness of the foundations' expressed aims. Confronted with the task of expending huge sums of money for the "good of mankind," the executives must first determine what the good of mankind is; and it is here that one of the chief weaknesses of the present system lies. Obviously health is one of life's most necessary and desirable gifts; and so millions of dollars have been allocated to its purchase. Unfortunately, there is no one market for health. One phase of it depends on curing existing illness, another on disease prevention. Ill health may grow out of economic wrongs or spring from faulty hygiene and lack of sanitation. The exploration of any of these fields has infinite posibilities for good. It may also be replete with error. One of the grave flaws in current foundation policy, as we see it, has been that these groups have lacked proper guidance in the determination of their precise aims. With the exception of those like the Rockefeller and Carnegie Foundations, that confine themselves to education and research in their medical departments, they have wasted enormous sums of money in the attempt to determine what what to do with their money. In their ventures ino the field of health they have spent millions of dollars on demonstrtaion, statistics, reports and publicity without the achievement of a single notable result that can conclusively be laid to their activities.

The mere expenditure of money, on no matter how lavish a scale, will not accomplish anything useful unless a significant purpose is fixed on and a practical plan of operation evolved. What more logical group is there in the sphere of health to aid in the selection of such a purpose, in the development of such a plan, than the medical profession? Continuous, intimate contact with sickness has taught it much of the needs of public health. If it has seen too many panaceas and too many administrative theories have their brief day of glory for it to accept any untried remedy, whether social or medical, on faith, it has also known how to make effective use of new things once their worth has been proven. Its organizations, like the Medical Society of the County of New York or the New York Academy of Medicine in New York City represent the totality of authentic medical experience. Would not the foundations interested in public health do well to establish a permanent contact with such organizations, to solicit their aid in the discriminating selection of objectives and obtain their advice on the relative value of the large number of health projects which are annually conceived and which require expert and critical appraisal to determine their true measure of worth? If such an advisory relationship were established, it would instantly minimize the possibility of friction between the foundations and the medical profession. To the former it would vouchsafe an added freedom from error in judgment. To the latter it would spell protection against one source of economic wrong. There is one agency which has successfully worked out

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Head Injuries

Read before the Youngstown Medical Arts Club March 25, 1931

DEAN NESBIT, M. D.

Injuries to the head may involve the external soft parts, the bones, or the intracranial contents, or a combination of any two, or all of these in the same patient. Before discussing the results and treatment of these injuries I wish to review in part the anatomy and physiology of the cranial contents, and especially since encephalography has aided much in the study of the living anatomy and physiology of this part of the body.

The skull is a bony vault, an expanded continuation of the vertebral column, containing the brain, its membraneous coverings, blood vessels, nerves, etc.

The brain is covered by three membranes — the dura, arachnoid and pia. The dura, or outer membrane, is composed of two layers in close apposition, except in certain areas where they separate to form sinuses for the passage of venous blood. The outer, or endosteal layer, is the internal periosteum of the cranium, and is continuous with the periosteum on the outer surface of the bones, through the foramina at the base of the skull, and is also continuous with the periosteum lining the vertebral canal. This layer contains blood vessels which supply nutrition to the bones. The inner, or meningeal layer, by reduplication, sends in processes which project inward forming divisions of the cavity, and giving support to the cranial contents. These are four in number — the falx cerebri, tentorium cerebelli, falx cerebelli and the diaphragma sellae

The falx cerebri, sickle like in shape, is a strong arched process which separates the two hemispheres of the cerebrum, narrow in front where it is attached to the ethmoid bone, and broad behind where it is a continuation of the upper layer of the tentorium. Its upper margin is convex, and is attached to the inner surface of the skull in the midline, and contains the superior longitudinal sinus; its lower margin is concave and free, allowing an opening for communication between the right and left half of the skull. This lower border includes the inferior longitudinal sinus.

The tentorium is the process which intervenes between the upper surface of the cerebellum and the occipital lobes of the cerebrum. It is attached posteriorly and at the sides to the inner surface of the occipital bone where it encircles the lateral sinuses. Anteriorly it is attached to the superior margin of the petros portion of the temporal bone on each side where it encircles the superior petrosal sinus. At the apex of this bone it is continued forward to be attached to the posterior clenoid process. The internal, or free border of the tentorium, at each side crosses the external border to be attached to the anterior clenoid process. This semi-circular border, with the dorsum sellae in front, forms a large oval opening called the incisura, and transmits the brain stock. This is an important area because of the narrowing of the subarachnoid space, and the possibility of obstruction to the free flow of the cerebro-spinal fluid. In the midline of the tentorium, from the internal to the external border, is the junction with the falx cerebri, and the location of the straight sinus through which the blood passes from the inferior longitudinal sinus to the right or left lateral sinus and the torcula, near the internal occipital protuberance.

I shall only mention the falx cerebelli which is a small triangular process which separates the two lateral lobes of the cerebellum, and the diaphragma sellae, a small circular fold which forms a roof for the sellae turcica, and presents only a small opening for the passage of the infundibulum.

Upon the outer surface of the dura, and projecting into the sinuses may be seen numerous, small, whitish bodies called the Pacchionian bodies. The principal collection of these bodies is at the vertex. They are enlarged normal villi of the arachnoid which project through very small openings in the layer of the dura, and push the outer layer ahead, sometimes forming depressions in the skull itself. In structure they are composed of a core of spongy tissue which is continuous with the trabecular tissue of the subarachnoid space, covered over by a membrane which is a continuation of the arachnoid membrane, and this in turn is covered by dura. According to Weed, the purpose of these bodies is to bring about the elimination of the cerebro-spinal fluid from the subarachnoid space into the blood in the sinuses. According to the same authority some spinal fluid escapes along the nerve roots, but the Pacchionian bodies take care of most of this work.

The arachnoid is a more delicate membrane lying between the pia and dura. From the dura it is separated by a narrow space called the subdural space which contains a small amount of lymph like fluid, and is

continuous with the lymph spaces of the cranial nerves. The subdural space does not communicate with the subarachnoid space. This is important as subdural hemorrhage will not show in the cerebro-spinal fluid unless the arachnoid has been torn.

The arachnoid on the upper portion of the brain is thin and transparent, and the vessels of the pia can be plainly seen through it. With the dura open one may overlook this membrane and think that the vessels of the pia lie directly beneath the dura. The arachnoid passes over the convolutions of the brain but dips down into the Sylvian and intercerebral fissures. It is also prolonged as a sheath upon the cranial nerves. At the base of the brain it is denser and near the midline quite opaque, and extends across between the temporal lobes so as to leave a considerable space at the base of the brain.

The space between the arachnoid and pia is called the subarachnoid space. These two membrances are loosely joined by connective tissues covered with endothelium which makes not a true space but many spaces. This so called space filled everywhere with fliud, is small on the surface of the cerebrum but at the base of the brain there is less connective tissue, and a greater distance between the two membrances permitting the formation of large cavities or cisterns.

The largest one of these cisterns, the cisterna magna, is the continuation upward of the posterior part of the subarachnoid space of the spinal cord, and is formed by the arachnoid passing across the back and under portions of the medulla and cerebellum. It connects with the fourth ventricle by three foramina — the foramen of Magendie in the midline, and on each side by an opening called the foramen of Luschka. It is continuous around and above the medulla with the pontile cistern which in turn is a continuation upward of the anterior subarachnoid space of the cord. Thus, the medulla, the most vital and delicate part of the brain is surrounded and protected by a cushion of fluid.

The pontile cistern is continuous upward and forward through the incisura with the interpeduncular cistern, and this continues forward around the infundibulum and optic chiasm as the cisterna chiasmatis. From the interpeduncular cistern there is a pathway only quite recently described and named by the Committee on Encephalography, the cisterna intercommunicans, and connects with the cistern around the vein of Galen. Fro mthe cisterna chiasmatis the pathways lead along the Sylvian fissure on each side, and between the frontal lobes in the midline, and over the cortex along channels following the sulci of the convolutions of the brain.

The pia is an extremely vascular membrane and derives its blood from the internal carotid and vertebral arteries. It surrounds the brain fitting like a glove adapting itself to every fold and fissure, and extends into the interior forming the velum interpositum and the choroid plexus of the ventricles. This invagination to form the velum interpositum and choroid plexus is produced in the development of the brain by the great over growth of the secondary forebrain, and its over lapping on the smaller primary forebrain.

The spinal fluid is generally believed to be secreted by the choroid plexus in the ventricles. Freemont-Smith has shown that it is dialyzed from the blood plasma, and is similar in its protein content to other tissue fluids such as edema and ascites. He points out its similarity in this respect to glomerular urine. The amount produced daily is variously estimated at from thirty to fifty c. c. but in many recorded cases has been produced in much larger amounts. The cerebro-spinal fluid passes from the lateral ventricles through the foramina of Monroe to the third ventricle, from here through the aqueduct of Sylvius to the fourth ventricle and escapes into the Cisterna Magna through the foramen of Magendie, and the two lateral foramina of Luschka. From here it spreads to every part of the subarachnoid space, down the cord, around the medulla into the pontile cistern, up around the midbrain filling all the cisterns and spaces to be finally absorbed mainly above the level of the tentorium. Thus, if some form of obstruction should prevent the free flow of the fluid from the lower to the upper part of the brain, hydrocephalus producing pressure symptoms and brain atrophy may result even if the aqueduct and foramina are open.

This free flowing of the cerebro-spinal fluid in the cranium and out into the spinal canal is very important physiologically, as well as diagnostically. We know that such common acts as crying, coughing, straining, etc., cause the fluid to flow out of the cranium into the spinal canal, and this same process occurs in cerebral congestion, edema, hemorrhage, abscess, and in tumors of the brain if there is no blocking. Thus, anything that produces increased intracranial pressure, with a few exceptions, will produce increased intra-spinal pressure, and by measuring the pressure, and examining the contents of the cerebro-spinal fluid taken from the spinal canal we can

learn to differentiate the causes of the changes in the pressure and contents of the cerebro-spinal fluid.

I shall spend no time on injuries to the soft parts, and only enough on fractures to say that the compound and depressed fractures should be properly taken care of, and that other fractures can be ignored except for the damage done to the organs that lie within, or to those that pass through the openings in the cranium.

The damage to the intracranial contents consists of concussion, edema, lacerations and hemorrhage with the ensuing complications of infection and further edema.

Concussion is the immediate loss of cerebral function following a blow on the head in which the patient passes instantly into a state of profound shock, and although recovery may be spontaneous and speedy, the final outcome depends upon the presence or absence of other injuries. Formerly this was explained by the theory of molecular commotion, but this theory has been discarded as only a meaningless explanation to cover a condition which was not understood. It is now generally agreed that cerebral anemia is the cause of this condition, and Boyd states that since the skull is not entirely rigid, and possesses a remarkable degree of elasticity, a blow on the head will produce a compression of the brain emptying all of the blood vessels thus producing a profound degre of anemia. Along with this is another important phenomenon, i. e., the reaction produced upon the sympathetic nervous system which permits the great vessels to dilate, and the blood because of gravity, flows rapidly from the brain to these dialated vessels, thus aiding in the production of the anemia. But whatever the cause may be it is a sign for one to observe the patient very carefully for other more lasting lesions.

Edema which appears rapidly, and at first is of an inflammatory character like that which follows any other trauma interfers with the circulation and absorption of the cerebro-spinal fluid because of the increased presssure it produces within the skull. This interference further increases the intracranial pressure, and in turn interfers with the circulation of bood and more edema follows. This is a vicious circle and anything that increases the pressure adds to the edema, and can only be relieved by treatment directed to the continued relief of pressure. Edema is the most common immediate lesion and also the most common and serious complication of other pathological conditions following held injury. The purpose of the effort to lessen edema, and to prevent continued intracranial pressure, is to reduce the posttraumatic disabilities which have been so frequently seen. In this connection I shall quote Temple Fay as follows, "The cerebral atrophy noted in an extensive series of encephalagrams on posttraumatic cases is directly due to the prolonged period of intracranial pressure following head injuries."

Lacerations may involve any part of the intracranial contents and beside the damage that may be done to cranial nerves, the most serious results are those produced by tearing of blood vessels and the subsequent hemorrhage.

Hemorrhage is a very important condition within the skull not because of the loss of blood but because of the irritation produced by the red cells and because of the effects of the added pressure, both locally in special areas of the brain thus producing focul signs, and also generally when it adds to the edema and interfers with the nutrition of the brain tissue, thereby aiding in the production of brain atrophy. Multiple hemorrhage into the brain tissues which is always accompanied by edema, and when unruptured into the ventricles and surorunded by the intact pia, is one of the most serious conditions. I do not know how to treat such cases; it seems that all die.

Complications that accompany head injuries are usually more serious than the original lesions, and the two most important ones are infection and edema. Infection more often follows compound fractures, and since time will not permit a discussion covering the whole field, I shall pass over this phase of the subject by saying that it is a serious complication, and when local infection develops most difficult to diagnose. As I have said, edema is the most common complication as well as the most common original lesion. It is present to some degree in practically all head injuries, and produces many of our later mental disabilities, and is responsible for most of our mortality.

The operative treatment can be passed over by saying that there are two conditions requiring operative procedure. First, a compound, comminuted, depressed fracture; and second, an extra or subdural hemorrhage with progressive focal signs. I might add that some few depressed fractures that are not compounded might call for an operation.

The extent of the injury to the visible parts of the head or to the bone is a poor indication of the extent of injury to the intracranial contents, or of the seriousness of the case. All head injuries should be

treated with respect. Some serious cases will give nothing but a history of an injury, others a history of an injury with a minor contusion or abrasion of the scalp or face. If there has been a period of unconsciousness, even if only for a short time, the patient should be kept under close observation. If the condition is more serious the first thing to determine is the presence or absence of shock. The three things to look for are rapid pulse, low pulse pressure and sub-normal temperature, and if these are present treat the shock. As long as shock persists one need not worry about the intracranial pressure. In passing over the treatment of shock I want to emphasize only two things — the use of both external and internal heat, and also the use of intravenous glucose solution. I have been unable to locate anyone of authority who has been able to prove any benefit from the use of drugs.

A careful physical examination should follow looking for injuries to other parts of the body as well as the head. Observe the mental attitude of the patient; irritability is often seen, and in children the desire to bite is almost pathognomonic of increased intracranial pressure. The condition of the eyes should be noted, the muscle actions, the size and reaction of the pupils. The fundi of the eyes can be examined at this time or later. Note the presence or absence of facial weaknesses, or other muscle group paralysis, and the condition of the reflexes. A lumbar puncture should be done and an accurate pressure reading taken. This cannot be properly measured if the patient is struggling or is bent forward. He must be quiet with the body straight and lying on the side. The use of a 19 or 20 gauge needle with a very short point is preferable because it is large enough for the free flow of fluid, it is firm enough to handle, and having a short or round point it will not tend to deviate to the side. A long sharp point even after it is in the canal is dangerous especially if the patient moves or struggles. I have seen perfectly clear fluid coming through a long pointed needle suddenly become bloody following a moderate amount of movement on the part of the patient, due I am satisfied to injury to the anterior plexus of veins.

The presence or absence of blood must be determined. If blood is present in the cerebro-spinal fluid it should be drained off as well as possible, and drainage repeated until the fluid is clear. It has been shown that red blood cells produce a reaction in the subarachnoid tissue, and tend to block the normal pathways and filters for elimination of the cerebro spinal fluid. This means that if the blood is not removed the elimination will be interferred with, and if the intake and output of fluids is not properly controlled, the increase in the quantity of cerebro-spinal fluid present within the skull, will produce an abnormal pressure upon the delicate intracranial contents. As long as blood is present an effort should be made to keep the fluid intake high enough to facilitate the reaccumulation of cerebro-spinal fluid, so that the blood may be more easily drained off. Lumbar drainage will need to be done as often as indicated by the slowing of the pulse rate, the increased pulse pressure, respiratory changes and eye ground findings. Normal cerebro-spinal fluid circulation and elimination is usually present in about a week to ten days.

If clear fluid is obtained and a carefully taken pressure is found to be high, the problem is one of fluid management, with or without spinal drainage. Any tim symptoms require it drainage may be resorted to. Control of the fluid intake with the careful use of glucose and magnesium sulphate has been found to be quite adequate in many cases. Since the volume of cerebro-spinal fluid is largely dependent upon the amount of fluid dialyzed from the blood, which in turn is dependent upon the fluid stored in the body, and upon the fluid intake, the amount of fluid taken by mouth must be under control, as well as the amount of fluid stored in the body. The excess of cerebro-spinal fluid can be removed from the subarachnoid space by spinal drainage, but it is unwise to keep repeating this procedure to relieve the intracranial pressure except in case of hemorrhage only to have the fluid rapidly replaced because of excessive intake. One must relieve the intracranial pressure when necessary by spinal drainage but should go further and try to prevent its excessive formation.

This can be done in three ways — by giving magnesium sulphate by mouth or bowel, by hypertonic glucose solution by vein, and by curtailing the liquid intake. By giving magnesium sulphate the blood volume can be lowered so that the circulatory system must go to the tissue spaces to replenish its supply of fluid. This will temporarily prevent the further production of cerebro-spinal fluid, and will also withdraw fluid from the subarachnoid space; but the fluid intake must be restricted to about 20 ounces daily if lasting results are to be obtained. Of course, this is not good treatment in the presence of shock.

Fifty per cent glucose solution given into the vein produces a temperary hyper-

tonic state of the blood, and draws fluid from the tissue spaces of the body, and also effects the production and elimination of cerebro-spinal fluid. Glucose solution can be used in shock as it increases the blood volume, delays cerebral edema, and also furnishes sugar for metabolic requirements. Glucose acts directly upon the tissue spaces in its dehydrating action, whereas magnesium sulphate withdraws fluid from the vascular system which secondarily turns to the tissue spaces to replenish its lost fluid. A combined use of these two agents has been found very valuable. The 50% glucose solution in the vein will draw fluid into the circulatory system, and will hold it there temporarily when it will again find its way back into the tissues. But if at the height of the glucose reaction (about one hour after being given) magnesium sulphate is given by mouth or bowel this fluid will be entirely eliminated and a more permanent result obtained. It is thus possible to effectually dehydrate a patient if the intake is properly limited.

I like to watch the pulse rate, the pulse pressure, the eye grounds and when necessary the spinal fluid pressure in all head injuries. If the blood volume has been reduced by magnesium sulphate, and the pulse rate goes up to 120 or over, then the volume can be increased by intravenous glucose, and the pulse rate will come down as vascular volume is increased. If one can keep the pulse rate around 100 to 110, one may be quite certain that the intracranial pressure is not high enough to do much damage. If it is impossible to keep the pulse up to 100 to 110 in a definite intracranial injury, the eye will show some pressure changes and a lumbar drainage will be advisable. There is no way to determine a definite procedure for all patients but each one will need close watching, and the treatment determined from time to time as indicated.

So far I have said nothing about the use of the X-ray because it is of little aid in the treatment of these cases, and while X-ray films should be made as a matter of record of all serious head injuries, it is not advisable, I am satisfied, until the patient is co-operative, and at the convenience of all concerned.

In conclusion I shall emphasize the following facts:

First: That each case must be carefully and continuously studied.

Second: That shock must be recognized and treated.

Third: That sub-dural hemorrhage does not show in the cerebro-spinal fluid unless the arachnoid has been torn.

Fourth: That there are two indications for operation.

Fifth: That the presence of red blood cells in the subarachnoid space soon causes an irritation of the subarachnoid tissues and tends to produce adhesions and blocking of the normal fluid pathways.

Sixth: That lumbar drainage should be repeated regularly until the fluid is free from blood.

Seventh: That edema is the most constant lesion.

Eighth: That increased intracranial pressure early produces brain atrophy.

Ninth: And that the fluid pressure should be kept under dangerous limits by lumbar drainage and by body fluid control. This last can be done by limiting the intake, and by judicious use of glucose solution by vein, and by magnesium sulphate solution by mouth or bowel.

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Gray's Anatomy

Foundations

(Continued from Page 10)

such an arrangement on a small scale. The rapport between the East Harlem Health Center and the East Harlem Physicians' Association might serve as a model to larger groups.

The principal other criticism which is directed at the foundations is less tangible but of equal importance. I have already spoken at length of the deadening effects of outside dictation and standardization on any social group. The foundations must learn that their function is to provide means for the advancement of thought, not to control thought. They should encourage research but not state what the nature of that research shall be. In the field of public health they should carry out projects conceived in conjunction with public health officers and the medical profession. They should provide facilities for the improved practice of medicine but they must not dictate what the conditions of medical practice shall be. They should remember that organization is not an end in itself but a tool to enable the individual to function at the maximum efficiency and to the fullest development of his native powers.

John Stuart Mill concluded his essay, "On Liberty," with the following admonition to the State:

"A government cannot have too much of the kind of activity which does not impede, but aids and stimulates, individual exertion and development. The mischief begins when, instead of calling forth the activity and powers of individuals and bodies, it substitutes its own activities for theirs; when, instead of informing, advising, and, upon occasion, denouncing, it makes them work in fetters, or bids them stand aside and does their work instead of them. The worth of a State, in the long run, is the worth of the individuals composing it: and a State which postpones the interests of their mental expansion and elevation, to a little more of administrative skill, or that semblance of it which practice gives, in the details of business; a State which dwarfs its men, in order that they may be more docile instruments in its hands even for beneficial purposes will find that with small men no great thing can really be accomplished; and that the perfection of machinery to which it has sacrificed everything will in the end avail it nothing, for want of the vital power which, in order that the machine might work more smoothly, it has preferred to banish."

I can call to mind no more pertinent admonition to organized philanthropy.

‡This is an abstract of the address delivered before the Medical Society of the County of New York, Monday, February 23, 1931. Reprinted from The New York Medical Week.

Contemporary Review

Survey of Physicians' Incomes

The one most significant figure produced by the Surey is the average net income of physicians throughout the United States — $5,059.

Medical Economics' First Survey of the Physician's Income, made two years ago, showed the aevrage net income for physicians over the United States to be $5,806. Two years have brought an average shrinkage of $747 in the physician's yearly income.

The physician's capital investment in educational expense, and non-productive years while being educated, is $28,000, upon which he owes a yearly interest of $1,400. Subtracted from $5,059, that leaves an average *true* net income of $3,659. This is not enough to enable a physician to support a family in moderate comfort, not to mention saving for retirement. Medicine pays no pensions.

A concerted effort to increase the medical profession's general earning power should have been undertaken before now. Here are three ways to do it:

1. Better efficiency in credit and collections can increase the average physician's gross income 20%, at little or no extra expense. $1,656 added to a net income of $5,059 gives a new net of $6,715.

2. Physicians do $365,000,000 worth of charity work a year. We will agree that at least 20% of this amount represents abuse of charity — which, divided equally, represents an annual increase of $561 per individual physician — raising the net to $7,276.

3. The Julius Rosenwald Fund computes the annual quackery bill of the nation as $355,000,000. Assume that a million-dollar cooperative advertising campaign by organized medicine, educating the public effectively against quackery, would reduce this waste 25%, and turn that much revenue into legitimate channels.

The result allows each practicing physician a yearly increase of $683, less $10 — his share of the advertising campaign costs.

The resulting net income is $7,949 — not a potentiality for the future, but a figure possible to attain within three to five years.

Not a high mark to shoot at, but an improvement!

Averages mean little unless they point the way to improvement.

— Medical Economics

Decreasing Number of Delinquent Accounts

Here are some valuable tips for doctors and their secretaries:

1. In taking the patient's name, be sure that the surname is correctly spelled and printed out.

2. Always ask for the full first name as well as the middle initials of the patient.

3. Record the occupation of the patient, or of the patient's husband or parent, as well as the concern where employed.

4. Record carefully the residence address, and if a business address is available, record both.

5. Take extreme precautions with persons who give a rooming place, or office building as their address. In all such cases find out the permanent home address.

6. Take extreme precautions with patients who have no telephone at their residence address. Possession of a telephone is a good indication of the patient's ability or willingness to pay his or her bills.

7. Get detailed information on all persons who give an out-of-town address. If possible, get cash payments in such cases.

8. Always get the name of a near relative. This information is valuable in "follow-up" cases.

9. Always ask any new or unknown patient who referred him to the doctor, and record that person's name and address on the ledger card.

Obviously, it requires tact on the part of the secretary to get such information without antagonizing the patient.

— Bulletin of the Wayne County Medical Society, Detroit, Michigan

State Meeting

Welcome To Ohio Medics

The Academy of Medicine of Toledo and Lucas County welcomes its fellow Ohioans to Toledo for the Eighty-Fifth Annual Meeting of the Ohio State Medical Association. It is indeed a signal honor for us to again play the role of host to such an august body of medical confreres. And with this thought we throw wide the doors of our city to extend the right hand of fellowship and cordial hospitality. And ours is an open house for the week of May 10th. No formal ceremony, no presentation of the City Key. Just walk right in and "be at home." Our services are cheerfully yours to command. May your short stay with us be profitable and enjoyable. When your visit is ended and you leave our city gates, may you carry home pleasant memories of old friendships strengthened and new ones made. And may we as a body feel that our serious deliberation and scientific study shall have been our annual collective contribution to the advancement of scientific, progressive medicine in this, our Buckeye State.

Eleventh Annual Golf Tournament

In Toledo we feel that the best is none too good for our fellow Ohio physicians. So, through the efforts of Dr. H. L. Wenner and his Golf Committee, arrangements are all set to stage the annual 1931 golf tournament on Monday, May 11th, at Inverness Country Club, the championship course where Sarazen, Farrell, Bobby Jones and other international golf celebrities will battle for honors in the National Open Championship in July. Bring your golf clubs along and try your skill on some of the tough holes that test the mettle of these champions. You'll be sure to meet old friends out on the fairway and at the club house. In the evening the banquet table will be a gastronomical delight and the program includes special entertainment in addition to the distribution of prizes. Come out to Inverness for a jolly good time. And remember, Dr. Wenner and his Toledo gang are out for another Championship this year.

Clinic Program

The Clinic Committee of the Toledo Academy of Medicine has arranged a splendid clinical program for Monday, May 11th. Non-golfers among the early arrivals can spend a most profitable day. The various Toledo hospitals have prepared interesting programs for the morning hours. The afternoon program will be given at the Toledo Academy of Medicine Auditorium, Monroe at 15th Street, and all the hospitals will jointly participate in the presentation. The program schedule will be available at Registration Headquarters, Hotel Secor, and at the hospitals. If interested, don't miss this excellent clinic program — come to Toledo on Monday.

Annual Banquet and Dance

The social event deluxe! The annual banquet and dance, sponsored by the Toledo Academy of Medicine, will be given on Tuesday, May 12th, at 6:30 P. M., in conjunction with the Second General Session of the Convention, at which the addresses of the President, Dr. C. W. Waggoner of Toledo, and Presiednt-Elect Dr. D. C. Houser of Urbana, will be given. Dr. E. J. McCormick and his local Entertainment Committee, augmented by a special committee of ladies, headed by Mrs. Chas. Fisher, have left nothing undone to make this a most successful party. The scene will be laid in the Commodore Perry Hotel Ball Room. Fred Seymour and his full orchestra, one of the outstanding musical organizations in the country, has been engaged to furnish delightful chamber music during the dinner hour and his irresistible melody of rhythm for dancing. The Toledo doctors and their wives will be out in full force to help entertain. Bring the ladies and enjoy this delightful, informal social evening. The hotel chef has promised a dinner menu to please the most discriminating taste; we'll guarantee that the last lingering notes of the music by Fred Seymour and his gang will only find you hankering for more. Be sure to get your tickets, $2.50 per plate, before 2:00 o'clock Tuesday afternoon at Registration Headquarters. Don't miss this party — join the happy throng at play.

— *The Toledo Academy of Medicine, Bulletin*

The Cleveland Health Education Foundation

The Academy of Medicine of Cleveland has made a gift to the community by establishing a Health Education Foundation with $10,000 of Academy funds as a nucleus. This amount will be increased by a quiet campaign amongst medical men, laymen, and institutions.

The entire control will be vested in the Board of Directors of the Academy and the tentative purposes will be:

1. To apply scientific research to present Health Education methods and material to test their worth and effectiveness.

2. To provide public health lectures, carry on publicity in the interest of health through paid space in publications, through radio broadcasting, through group or individual instruction, and through other means as conditions may warrant.

3. To acquaint the public with all the advantages the community offers in the way of caring for the sick and the prevention of disease.

4. To seek to increase observance of the laws, ordinances and statutes affecting public health.

5. To urge the adoption and enforcement of legislation in the interests of health.

6. To advise the public against exploitation.

The Academy believes that leadership in the field of preventive medicine and health education is the duty and privilege of the medical profession and proposes to assume it.

The establishment of the Health Education Foundation is an act of tremendous significance. It establishes the Academy as a strong community force. The Foundation is, so far as we know, the first attempt to place Health Education on an endowment basis.

—*Bulletin of the Academy of Medicine of Cleveland*

Pittsburgh Pediatric Society

Dr. Julius H. Hess, Professor of Pediatrics of the University of Illinois Medical School, will give an address on "Premature Infants as a Present Day Problem" in the auditorium of the Pittsburgh Academy of Medicine, 322 North Craig Street, on Monday, May 11, 1931, at 8:15 P. M. Dr. Hess comes on invitation of the Pittsburgh Pediatric Society. An informal dinner will be given at the University Club the same evening at 6:30. The price of the dinner is $2.50 per plate, and reservations may be made with the secretary, Dr. T. O. Elterich, Highland Building, not later than May 9. A cordial invitation is extended to the medical profession.

Figure This Out!

"When will the common sense of Ohio rise in its might, throw the antis and the cultists into discard—and vaccinate?" asks the *Ohio Health News*, official publication of the State Department of Health, as a conclusion to an article giving the statistics on smallpox in Ohio for the past 10 years. The statistics cited by the *Health News* are as follows:

Years	No. Cases	Years	No. Cases
1920	7209	1925	4018
1921	7286	1926	2133
1922	2422	1927	1558
1923	2415	1928	1236
1924	5597	1929	3223
		1930	5116

April Meeting

(Continued from Page 4)

additional factor such as obstruction in the pulmonary circulation supervenes producing a transient or terminal cyanosis Persistent cyanosis, a continued low temperature, a high red cell count (above 5,500,000) and a dilation of the heart all point to a grave disturbance of the circulation and rapidly lead to a fatal termination.

The treatment of these cases rests mostly with prophylaxis. They should be dressed warmly, sheltered from inclement weather, restrained from exposure to contagious diseases and prevented from over exertion. Medication is indicated only with positive evidence of an impending break in compensation. When this is present a daily ration of digitalis should be prescribed.

Report of the Legislative Committee

House Bill 585 and Senate Bill 292 to create a separate licensing board for chiropractors and extend the privileges of chiropractors was indefinitely postponed by the merical committee of both houses.

Senate Bill 58, a Christian Science proposal to exempt the "practice of religious tenets" from the laws governing the practice of medicine, was killed by the Senate Health Committee.

House Bill 4 and Senate Bill 207, the osteopathic bill, was so amended by the House Health Committee that the Osteopaths themselves withdrew their support and it did not come to vote.

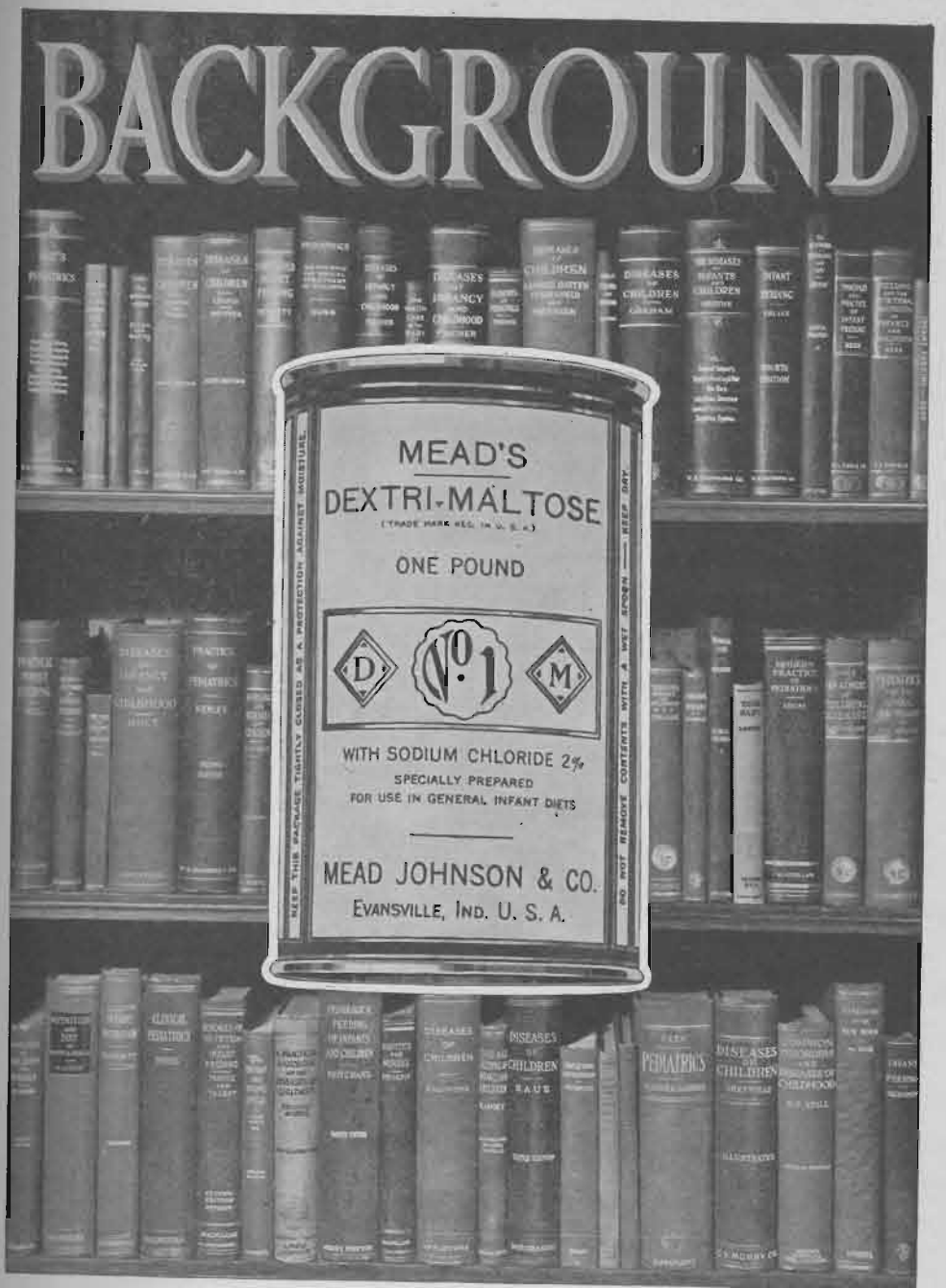
The legislative committee wishes to express its appreciation in behalf of the Mahoning County Medical Society, to Representatives George Lewis, Frank Agnew, George Roberts, Mrs. Della Slagle, and Senator Nils Johnson for their wise and conservative attitude in refusing to pass this vicious legislation.

M. E. HAYES, M. D., *Chairman*

Report of the Publicity Committee

Several things are planned along the lines of publicity. These ideas are submitted for approval: (1) It is the feeling of the committee that a bulletin board of our own should be placed in each hospital staff room. (2) The Vindicator will cooperate with us and publish a weekly column of material relating to health submitted by us. This material may be obtained in the form of articles for radio release or in the form of short news articles abstracted from Hygeia. This will be furnished by the American Medical Association without cost to us. The committee feels that this is a worth while effort and should be put into practice by early fall. (3) No definite action has been taken relative to newspaper advertising concerning the Society. The American Medical Association in its Journal very earnestly condemns such effort and the committee has taken no action in this regard.

Respectfully submitted,
E. C. BAKER, M. D.



THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that has consistently, for three decades, received universal pediatric recognition.

No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Mead's Dextri-Maltose.

Report of Communicable Diseases for April, 1931

Diseases	Youngstown Cases	Youngstown Deaths	Struthers Cases	Campbell Cases	County Cases
Scarlet Fever	91	1	5	3	70
Influenza	—	3	—	2	3
Chickenpox	41	—	18	—	30
Tuberculosis	17	7	1	1	7
Measles	22	—	19	—	7
Pertussis	—	—	—	—	—
Diphtheria	4	—	—	—	6
Syphilis	15	—	—	—	2
Pneumonia	2	20	1	2	12
C. S. Meningitis	2	—	—	—	—
Erysipelas	—	—	—	—	—
Opthalmis Monatorum	—	—	—	—	—
Septic Sore Throat	1	1	—	—	—
Poliomyelitis	—	—	—	—	—
Typhoid	—	—	—	—	2
Smallpox	—	—	—	—	2
Mumps	—	—	—	—	6

Annual Tournament of the American Medical Golfing Association, June 8th

The Philadelphia Committee on Arrangements has decided to hold the Seventeenth Annual Tournament of the American Medical Golfing Association, Monday, June 8th, at the Aronomink Country Club instead of over the Hunting Course as announced in the brochure of the association which was mailed to members, March 11, from the executive office in Detroit. The Aronomink Course is one of the most modern in the district and is in splendid condition. It is amply difficult and reasonably fair, has an attractive club house and, in all respects, is an excellent place for the tournament. The officials at Aronomink and the local committee are doing everything possible to make the tournament a success. The Philadelphia men composing the Local Committee on Arrangements are Drs. John W. Corskey, Chairman; Willis F. Manges, Fred H. Leavitt, Frank J. Kelly, and Damon B. Pfeiffer.

New Light on Rickets

In the Journal of the American Medical Association, April 4th, 1931, page 100, appears an imposing list of scientific papers on vitamin D, the basis for which is Mead's Viosterol in Oil, 250 D.

It is highly significant that almost all of the authorities in this field have accepted the Mead brand as the standard. This is due to the medical profession's unique respect for Mead Johnson & Company and the fact that this particular brand of viosterol enjoys the longest continuous laboratory and clinical experience in America—dating back to 1927.

On page 12 of the J. A. M. A. for April 11th, 1931, under the title "Viosterol is not a substitute for cod liver oil except in rickets," is a very interesting statement of the comparative values of viosterol, cod liver oil and 10 D. cod liver oil which clarifies the respective advantages of each of these antiricketic agents.

DINNER

TUESDAY, MAY 19, 1931

at 6:30 P. M.

at the

Youngstown Club

First National Bank Building

in Honor of

Dr. Joseph Brenneman

—

An opportunity to meet our distinguished visitor and dine in good company. Members and guests are cordially invited. Phone your reservations to Dr. Walter B. Turner, Phone 6-6132.

Is Radio Broadcasting Worth While?

EDITOR'S NOTE — Radio broadcasting was done in Youngstown previously, but was discontinued due to lack of interest and opposition on the part of the Medical Society. Station WKBN is willing to give us time on the air whenever we ask for it. We print herewith some opinions from outside sources.

1. Radio is one of the world's most important means of communication.

2. Dispersion of simple, authoritative medical and health information should be made a sustained effort of organized medicine.

3. The medical and health broadcast should not be a revenue producer to either the broadcasting companies or the profession and should not be allied with commercial interests.

4. Radio health programs should be supported by appropriate newspaper publicity.

5. The best hour for the health broadcast must be determined for each community individually.

6. The optimum length of radio talk for once weekly is ten minutes; for a daily talk, five minutes.

7. Radio schedules should be maintained twelve weeks in advance.

8. Radio programs should be the work of a committee representing the organized medical group.

9. Radio speakers should be selected more for their qualifications of voice, diction, interpretation and dependability.

10. All radio health programs should be rigidly censored and all papers must be edited before presentation.

11. Personal aggrandizement of practicing physicians must be denied.

12. Diagnosis and treatment by radio is impossible and wherever found must be regarded as highly unscientific and unethical.

13. Medical societies should endeavor to keep other programs on the station over which they broadcast free from objectionable medical and health propaganda and advertising.

14. Although the results from radio health programs may be intangible, the effort is warranted if conducted on a dignified, scientific and ethical basis in terms easily understood by the public.

—*American Medical Association Bulletin*

RADIO RITUAL — Do you realize that four times a week — at the beginning and the end of each of our radio talks — the people of Toledo and vicinity are told there is a Toledo Academy of Medicine? In addition, the newspaper announcements of these talks never fail to mention the Academy of Medicine. This helps you collectively and individually in numerous, though perhaps unseen, ways.

— *Bulletin of the Toledo Academy of Medicine*