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OF THE

## Indiana state medical association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

## ISSUED MONTHLY

UNDER DIRECTION OF THE COUNCIL

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## ORIGINAL ARTICLES

TIIE DOCTOR.

IIS RELATIO NND DUTY TO TIE STATE.
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The word doctor means a teacher. A doctor of medicine means a teacher of medicine: a docfor of divinity, a teacher of divinity; and a doctor of law, a teacher of law. The writer is inclined to a broader construction or definition, for he believes that a doctor of medicine is not only a teacher of medicine, but is, or shouk be, a teacher and a leader in the broadest sense. The public looks upon the doctor as a storehouse of general information, which he generally is if he reaches and maintains that pinnacle of true merit and confidence that the public is inclined to give him. It is unfortunately true that a few members of our great profession have established in their own minds a lower ideal as their standard, which, of eourse, detracts from their real worth and reflects discredit upon the higher ambitions and ideals of the profession. No truth is more generally accepted than the fact that doctors have been teachers and architects of public opinjon from the earliest history of medicine. A reverence for the true, the beautiful and the real has characterized physicians in all times. For a long time progressive medicine was handicapped by failure of students of science to emancipate themselves from the prejudices and superstitions of the times. In this connection I might quote a paragraph from an article by King in The Nineteenth Century for 1893: "The difficulties under which medical scienee labors may be estimated from the fact that dissection was forbidden by
the clergy of the Middle Ages on the grounds that it was impious to mutilate a form made in the image of God. We do not find this pious objection interfering with such mutilation when affected by means of the rack and wheel and sueh other clerical, rather than medical, instruments."

Higher medical education, with its cver increasing requirements for entering upon the study of medicine, is exactly the right thought and the right spirit, and should be encouraged and maintained by the nembers of the profession who are willing to stand by the principle of higher ideals. The writer would advocate the cnactment of a law requiring all doctors to stand state board examinations once in crery five years. This would serve as an incentive to doctors to establish and continue a well directed course of study and to further establish their rights and claims to the position of teacher. It would also serve to impress doctors with the importance of taking advantage of the postgraduate coursc, as planned by the American Medical Association, which deserves the commendation of every member of the profession. Such a law would result in the general uplifting of the scientific standard of the profession by causing those members who are capable and willing to reach the higher standard, and by eliminating those who are unwilling or incapable of maintaining a progressive position.

Such exacting regulations might be questioned. except for the fact that ours is the one profession whose duty it is to deal not only with human confidences but with human life itself. I speak of the profession of medicine advisedly, because ours is truly the only profession. The law and the ministry are not professions in the strict sense of the word, as is readily understood. They practically have no standard of legalized reçuirc-
ments, either for entering upon their study or for maintaining a higher standard after once admitted.

Another thing indicative of the firmer establishment of the prineiple of higher medieal edueation and higher ideals is the establishment by many of the state medieal associations of official journals, and it gives the writer pleasure to be at the ehristening of the first issue of The JourNal of tie Indiañi State Medical AssociaTION and to bid those upon whose shoulders the most of the burden must of neeessity rest for its sueeess a hearty Godspeed in their mission of a general scientifie uplifting.

The writer is an adroeate of the idea that the doctor shonld take a most serious view of the business or finaneial side of the practice of medieine. While it is true that our profession is founded upon altruistie prineiples, it is also true that ultra-altruism is not sufficient to meet the exacting demands made upon doetors by the members of the rarious commereial interests who have been sehooled in the modern rigid ideas of commereial prineiples. The doetor's suecess or failure depends upon his ability to establish and maintain a respectful supremaey, and in order to do this he must not only merit the confidenee of the people in a professional way, but he must so eonduet the business side of his profession as to give him recognition in the commereial eireles. No man of our profession of ten years' experienee would, I think, were he about to begin life over again, adopt medieine and surgery as his life work, were he actuated simply by the desire to aequire wealth. People when in sickness and distress fly instinetively to the medieal man for comfort, protection and relief, and as promptly forget all about the neeessity for remuneration when the danger is past and a condition of health restored. In this eonnection the following quotation seems apropos:

God and the doctor we alike adore
When sickness threatens us, but not before;
The danger past, both are alike requited,
God is forgotten and the doctor slighted.
Again, the doctor owes a certain duty to his state, and in order that he may be able to measure up to the standard of requirement he must of neeessity combine three prineiples, as his duties are threefold, being seientifie, commereial and politieal.

The members of the legal fraternity have assumed a position of legislative guidanee, and they have assigned themselves the function of eomplete direction of the affairs of state in this respeet. By reason of this assumption and their eoneerted effort they have, and do now, eontrol
the making of our laws, and in every other way have piloted the ship of state. There is no good reason why this should be, either from the standard of intellectuality or equity, and the doctor owes it not alone to himself, but as a publie duty and one of the fundamental duties to which he should school limself, to not only take a position, but a leading one in the eommereial and politieal economy of his state. The great underlying principle of our social and political preferment is public health, and who of all members of soeiety is so competent to eounsel wise laws, regulating and maintaining these prineiples, as the doctor? This should not be looked upon from a selfish standpoint with a view of personal or individual opportunity, but should be aeeepted by the medieal profession as a great principle of duty, and there is no reason why with the present splendid organization in the State of Indiana the physieians of the state should not rise to the full measure of their duty.

## SOME OF THE ADVANTAGES AND POSSIBLE ERRORS OF THE RADIO- <br> GRAPH IN RENAL, URETERAL, AND BLADDER SURGERY.

Williair N. Wisiiard, A.M., M.D. indIANAPOLIS.

The following eases are reported as illustrating some of the advantages and some of the possibilities of error in radiography as a means of diagnosis. Fortunately the errors do not properly relate to the reliability of $x$-ray photography so much as they do to a proper construction of the evidence presented. The cases require no speeial comment and are presented beeause of their interest. The radiograplis were made at my request by Dr. A. M. Cole of this eity, and I ain indebted to his eourtesy for the prints from which the illustrations are made.

Case 1.-J. Me., aged 10 , with the following history: The patient had suffered from bladder irritation and periodical attacks of severe bladder pain from the time he was 18 months old. At this time he was found in the yard, sereaming with pain, whieh lasted for a day or two, whieh gradually subsided to come on again periodieally as stated above. When he was brought to my office on Aug. 10, 1907, he was erying continually from the pain and eonstant desire to urinate. He had not slept for four or five nights. After obtaining the history no attempt at sounding was made, but he was plaeed as soon as possible
under the influenee of ehloroform and a skiagraph taken. While still under the influenee of the anesthetie a bloek tin sound was introdueed into the bladder and revealed what seemed to be a rather large, rough stone. Suprapubie eystotomy was done for removal of the stone the following day, and the stone removed in fragments, as it crushed under the force of the stone forceps. After removal a steel pin was found form-


Fig. 1.-Stone in the bladder with needle as nucleus. Removed through suprapubic opening.
ing the nucleus. His reeovery was uneventful. except for a tendency to marked phosphaturia, whieh eaused a deposit on the drainage tube and also about the wound, requiring the use of hydroehlorie aeid internally and a weak irrigation of hydroehlorie aeid in sterile water. This ehild was possibly the vietim of a meddlesome nurse in infaney. He had been suffering almost eontinuously sinee he was 18 months old.

Case 2.-Mr. J. S. of Shelbyville, Ind., had been suffering for two or three years with eonsiderable bladder irritation, and on the day of his examination he said that for several weeks preeeding he had had an almost ineessant desire to urinate. In brief, he eomplained of all the usual and eharaeteristie symptoms of stone in the bladder, and, on introdueing the seareher, stone was easily felt. The bladder was irrigated, and under loeal anesthesia an air-dilating eystoseope was introdueed and a number of small stones were observed that looked as though they could be easily removed through a small perineal opening. To aroid error as to possible existence
of other and larger stones, a radiograph was obtained, and in the foregoing illustration the stones are shown in about their normal size. Thirteen were eounted in the photograph and through the air-dilating eystoseope, and the number verified by removal through a small median perineal opening which was made under loeal anesthesia.

Case 3.-Mr. II., aged 62. I was ealled to see him on Dec. 19, 1906, by Dr. J. O. Wehrman of Indianapolis. The patient was suffering with an acute retention of urine, and repeated efforts at eatheterization had been unsuccessful. I suceeeded iu emptying the bladder by the use of one of my flat-elbowed eatheters, whieh is a modifieation of the ordinary Mereier, in that it is flattened so that its lateral diameter is greatest, and its flexibility thereby increased. Almost a quart of bloody urine was withdrawn, and it eontained a eonsiderable amount of phosphatie sand. For two or three weeks the systematie use of the catheter was accompanied by the passage of eon-


Fig. 2. Cluster of small stones in the male bladder. Hemoved through perineal incision under local anesthesia.
siderable soft disintegrated stone. The total amount of sand obtained in this way was approximately a dessertspoonful. At the end of three weeks the patient had a violent attaek of ureteral eolie, followed by the passage of a fragment of hard stone about the size of a grain of wheat. This pieee of stone showed a distinet line of fraeture and seemed to have been broken
off of another piece. More or less renal and ureteral irritation existed, particularly on the right side. In the attack of ureteral colic above referred to, pain had been most marked near the lower end of the right ureter. The natural inference was, in view of the quantity of soft stone and the small piece of hard stone that had passed. that probably there was more stone either within


Fig. 3.- "a" shows shadow of wire in ureter : "b" shows shadows suggesting ureteral stones before the above radiograph with wire in ureteral catheter showed true location of wreter.
the kidney or the ureter. A radiograph was made of each kidney and of the bladder, and particular effort made to show the lower end of the ureters. The first picture of the right kidney showed a distinct shadow near the upper end of the ureter which was thought to be an accumulation of soft stone and which was absent in another picture taken some two or three weeks later. The radiograph of the lower end of the ureters and bladder showed what seemed to bee two or three small stones in the lower end of each ureter. I, therefore, introduced a cy:toseope and passed a catheter up the ureter on each side and found both ureters perfectly permeable. Hoping to facilitate the escape of any particles of sand or stone, I also injected sterile water into the pelves of the kidneys and, gradually withdrawing the catheter, I also tried distending the ureters by injecting sterile water. The only result was to provoke some ureteral colic. I then reinserted the eatheter on the right side and injected the pelvio of the kidney with sterile sweet
oil, and also injected the sterile oil into the ureter as the eatheter was being withdrawn. The left ureter was then eatheterized and the oil injected into the kidney and ureter on that side. It was hoped that the flushing of the kidners and ureters in this way would facilitate the escape of any stone, but in this I was disappointed. It a subsequent sitting a few days later the same process was repeated with negative results. The radiograph having diselosed two or three small shadows parallel with the long diameter of, and apparently not far from the lower end of both the right and left ureter, the natural inference was that there might be intra-ureteral stones not felt by the catheter and possibly partially enersted. To determine this fact and to disclose the exact relation of the ureters to the shadows of supposed stone, a catheter was passed up the right ureter containing a small steel wire, and while the eatheter and wire were in position another radiograph was taken. It will be observed by reference to the radiograph (Fig. 3) that the sladows "h" are quite a little distance from the ureter, which is indicated by the shadnw on the wire marked "a." The circular picture shown by the radiograph was a little confusing anatomically until the ureter was definitely


Fig. 4.-The arrow point shows shadow of supposed soft stone. This shadow was absent in a radiograph taken two weeks later. In the interval considerable soft stone was passed.
shown by the subsequent picture with the catheter containing the wire. Whether these coufusing shadows, that secmed in the first place ureteral stones, are points of beginning ossification of the pelvic ligaments or calcareous degeneration of small glands or phleboliths would remain for the present a matter of speculation, but it was clinically a matter of great interest to have the question of possible surgical procedure eliminated by the information obtained by the radiograph. Figure 4 shows a radiograph taken in
the same case as Figure 3, except that it is intended to illustrate the conditions higher up. The arrow point in the upper part of Figure 4 indicates a small shadow shown in one of the carlier examinations and which a later radiograph failed to show. In the two weeks' interval between these pictures a large quantity of solt stone had passed, and the inference was that the shadow indicated in Figure 4 was an accumulation of soft stone which had been passed before the later radiograph was made. The shadow indicated by the arrow point in No. 4 is not shown in the latter picture.

## ANATOMIC'DL BASIS FOR REFLEX MOUEMENTS.

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The room becomes too hot, we close the dampers. The bell rings, we go to dimner. Our whole lives are spent in activitics the nature of which is


Nigure 1.


Fignre 2.

Figs. 1 ant 2.-s. g.. spinal ganglion; a, ascending and d, descending process of axone coming in from s. g. ; c. col laterals: m, motor cells of anterior horn: pr posterior horn ; n, neurone completing rettex arc (after (ieluchlen)
determined ly an inflow of sensations. Some of these activitics are clearly conscious and voluntary, as those mentioned above. Other sensations give rise to activities of which we may be unconscious, as, for instance. the flow of the secretions. Of still other acts we may be conscious, though they are involuntary or performed cren against our will, as winking or coughing. siuch involuntary acts, whether conscious or unionscious, resulting from conversion of a sensory into a motor impulse, are called reflex.

The reflex act is one of the simplest of nervons actions. Two neurons are necessary, the one, sensory, which transmits its impulse to the other, which is motor.
The anatomical conditions rendering reflex movements possible are indicated in the diagram (Fig. 1). In this figure the axones (cellulifugal processes of the neurone) are seen to arise from the spinal ganglion and enter the spinal cord, where they immediately branch to send some processes upward and others downward. These ascending and descending processes give off collaterals which are described by some authors as


Fig. 3.-Diagram to illustrate the mechanism of a spinal reflex and its inhibition from above (after Mettler).
passing over directly to become associated with the dendrites of the motor cells lying in the anterior gray horn. According to other authors. the reflex are is completed by the interposition of another neurone between the collaterals of the axomes of the posterior horn and the dendrites of the motor cefls of the anterior horn. This possible condition is illustrated in the diagram (Fig. 2). Which condition is the true one is a matter of immaterial dispute. Probably both are correct. But that there is this connection between the posterior homs bringing in sensory impulses. and the anterior horns in which lie
cells whose axones run outward carrying motor impulses, has been demonstrated by many investigators. The effect of this union of the sensory and motor roots is very like that of the shunt in an electric eircuit.

A shunt, a conductor of relatively low resistance connecting two points on an electric circuit, establishies a shortened circuit through which a portion of the current will pass.

The anatomical connection between the posterior and anterior horns operates in the same way, i. e., a part of the sensory impulse is shunted, short circuited, across to the anterior horn and out over the motor nerve so quickly that the resulting motion is said to be reflected or reflex.


## Muscul.arbor.

Fig. 4.-Cerebral or superior reflex arc (after Morat).
Morat considers that all areas of gray matter wherever found, including the cerebral cortex, are capable of anatomically reflecting impulses. It would follow, then, that we may have superposed refiex arcs, that the one we have been considering is the inferior arc, and that the superior lies in the cerebral cortex. Indeed we have the closed circuit here as in the inferior arc, as illustrated in Figure 4. ${ }^{1}$

At the time of birth all movements are reflex and impulses play chiefly over the lower arc. The functions at this period of life are called vegetative, i. e., they are likened to the process of veg-

[^0]etable growth, as digestion, circulation, secretion and excretion, which are particularly concerned with the growth, waste and repair of the organism; and are opposed to certain higher animal functions, such as locomotion and cerebration.

As the cliild derelops, a checking, retarding or inhribiting influence is added to the activities of the reflex arc. Children even at eight months of age may be so trained, may have their reflex inhibitory impulses so developed, that they may soil no more napkins. Just what the anatomical basis for these inhibitory impulses may be is not known with certainty, but a possible explanation of it is shown in Figure 3. Whether the inhibitory impulse is carried over the pyramidal tracts or by a separate group of fibers, is not known, but that impulses originating in the brain cortex may act on the cells of the anterior gray horn of the spinal cord, clecking such reflex functions as defecation and micturition, etc., is a matter of common observation. We are all fa-

miliar with the device of pressing on the upper lip to inhibit the act of sneezing, and the voluntary inhibition of the knee-jerk. In fact, so great is the possibility of an inhibitory impulse interfering with the knee reflex that devices to strengthen the reflex are resorted to. These, in all probability, merely interrupt an inhibitory impulse.
In Figures 1 and 2 the simplest anatomical condition essential to a reflex is illustrated. It is easy to understand how the impulse from a finger on a hot stove is carried up the sensory nerve and reflected through the low cervical cord to the motor roots of the brachial plexus and thus to the muscles of the arm. Such reflex acts necessitate a comparatively short passage through the cord. On the other hand, many reflexes are accomplished by the intervention of a connecting neuron of considerable length, as in the case of the reflex maintenance of equilibrium.

Let us study, for a few moments, the reflex paths by which equilibrium is maintained. In Figure 5, modified from Lenhossek, it will be noted that in the anterior and lateral ground bundles are a number of tracts from which cell processes pass over to cells of the anterior horn. Among these is the vestibulo-spinal tract, the fibers of which arise in Deiters' nucleus in the floor of the fourth ventricle and pass downward to end in arborizations about the cells of the anterior horns of the spinal cord, as shown in the illustration. Over this reflex path messages are streaming from the vestibular nerve and cerebellum to the motor roots of the cord conveying information of the position of the body and enabling the individual to maintain his equilibrium.

Next to the antcro-median fissure (Fig. 5) will be noted the tecto-spinal tract, sometimes called the sulcomarginal bundle. This tract cxtends from the superior colliculi of the corpora quadrigemina down the spinal cord to end about the anterior horn cells. Inasmuch as the superior colliculi of the corpora quadrigenina is one of the terminal nuclear masses for the optic nerve, this tecto-spinal tract is evidently the shunt in a visual reflex arc. It is probable that it is due to the impulses conducted over this tract that a man suffering from tabes dorsalis is able to stand and walk if not blindfolded.

There are many reflex arcs, however, the anatomical basis of which is only conjectural. Take. for instance, the reficx act known as coughing. The sensory nerves involved are the laryngeal branches of the vagus, impulses over which reach the brain high up in the medulla. In the series of expiratory blasts constituting coughing the abdominal muscles chicfly are used. Thesc muscles are innervated by the anterior primary divisions of the sixth to the twelfth thoracic nerves. Now, in response to the irritation in the throat, the abdominal muscles contract and the glottis closes. This closing of the glottis is as truly a reflex as the contraction of the abdominal muscles. If we are determined not to cough we may find the abdominal muscles giving a series of three or four strong contractions which, in spite of us, we may not be able to control or check immediately. If, however, we make no effort to check the coughing we note that the contraction of the glottis is released, permitting a blast of air to pass through it under pressure of the contracted abdomen. Now, in some way there must be a connection between the vagus and the lower thoracic nerves. What this connection is we do not know, but it is probably effected by the long
association tracts lying in the antero-lateral ground bundle.

In like manner we might discuss the act of vomiting, sncezing, winking, swallowing, respiration, sudation, secretion and excretion and many others, all of which are reflex. After studying movement after movement we are surprised to find how many of our acts are reflex. Even the impulses which reach the cerebral cortex are in many cases reflected through the superior are appcaring more or less modified in some act. The reflex through the superior are may reverse the act of the reflex through the inferior arc. This is probably due to the fact that in the time necessary for the passage of an impulse through a reflex center, which is always relatively considerable, certain modifications of it take place, memories and possibly scnsations over different afferent paths are brought to bear on it so that the motor impulse which is liberated is in a sense a judgment elaborated from the original sensory impulsc.

The introduction of this psychic factor in the superior reflexes enables us to make a distinction between thesc activities and the so-called pure reflexes, but it should be understood that so far as the nervous mechanism is concerned, conscious reactions do not differ from pure reflexes. Though we voluntarily close the dampcr, our voluntary movement is under the control of a stream of sensations arriving from the muscles themselves and modifying the action of the motor neurone through which the movement is effccted. All such movements as walking, dancing, skating, bicycle riding, automobile driving, singing, writing, etc., though at first voluntary and conscious, become involuntary and unconscious in proportion to the skill acquired in them. In learning all such movements the first thing is to establish proper reflexes and skill in performing them will be in proportion to thoroughness with which our reflexes are established.

## SPINA BIFIDA.*

$$
\begin{aligned}
& \text { Miles F. Porter, M.D. } \\
& \text { Surgeon to Hope Hospital, Professor of Surgery in the } \\
& \text { School of Medicine of Purdue University. } \\
& \text { FORT WAYNE, IND. }
\end{aligned}
$$

By the term spina bifida is meant a congenital deformity consisting of a defect in union of the lamina of one or more vertebræ, accompanied or not by malformation of the cord or its membrancs, or both. The defect is usually a posterior median one, but it may be anterior or

[^1]lateral. De Forrest Willard reports a case in which there was both ant anterior and posterion protusion, and has collected four other cases of anterior spina bifida, in two of which the diagnowis of ovarian cyst was made. Accompanying the defects noted there is usually a superabmedance of cerebrospinal fluid. Spina bifida oceurs once in one thousand births, aceording to Wernitz.: The etiology is unknown. To say that it is due to the failure of the skin and medulla to separate ${ }^{3}$ is but another way of saying that it is due to an arrest of development. A hasty glanee at the embryology and anatomy of the parts con-

rig. - Syringo-nyelocele (after Sutton).
cerned will help to a more perfect understanding of the subject.
"The spinal cord and a large part of the brain are formed by the dorsal coalesence of the medullary folds." ${ }^{\prime}$ This fusion commences in the thoracie region and extends in both directions. This explains why spina bifida is relatively common in the cervical and lumbosacral regions and rare in the dorsal region. For a short time after the medullary folds have coalesced, the embryonic cord and superficial epiblast (skin) remain fused. (iradually these layers are separated by a growth of connective tissue between them, part of which councetive tissue later becomes the spinal column.

Up to the third month of fetal life the spiual cord and spinal canal are of equal length, but, as the bones grow much faster than the cord, the latter recedes until at birth it extends only to

[^2]the second or third hmbar vertebra. In spina bifida, howerer, the fusion of the superficial layer of the epiblast and the embryonic cord may continue, thus preventing the recostance of the cord and causing it to extend to a lower level than normal. Sutton reports a case of sactal meningocele in which the cord extended to the tip of the sacrum. The fact that the neural canal and the enteric canal are, at a very carly date. continuous, explains the frequent coexistence of spina bifida and imperforate pharys, or imperforate rectum and other similar defeets of the alimentary canal.

That developmental defeets are often multiple we know; hence we are not surprised to learn that spina bifida is frequently complicated by club-foot, hare-lip, ete.
larieties and Pathology.--The defect may involve but a single lamina or be coextensive with the spinal column (eachischisis-totalis). The rarieties of spina bifida are determined by the stage at which derelopment is arrested in the embryo, and this is determined by the anatomy of the parts.


Fig. 3.-Meningocele with syringo-myelocele (after Sut(on).

There is much confusion in the nomenclature and description of the varieties of spina bifida. Perhaps the most satisfactory classification is that given by Sutton in his work on "Tumors. Immoent and Malignant." It is his classification that I shall use in this paper:

1. Myelocele.
2. Syringo-myelocele.
3. Meningo-myelocele.
4. Meningocele.
5. Masked spina bifida (spina bifida occulta).
6. In myclocele the medullary folds fail to unite, and in the lumbar portion the central


Fig. 1.- (After Shattuck, from Sutton, colored for the author by Mr. R. IV. Grafton). Open lumbar myelocele. Illustrating article by Dr. Miles F. Porter.
caual opens on a shallow depression whose margins are continuous with the skin and whose floor is formed mainly of very vaseular nerve tissue, briglit red in eolor. In some cases this depression is covered by a translucent membrane. This latter rariety might properly be termed closed or covered myelocele to distinguish it from the open rariety, whieh is also known as the open myek-meningocele of r . Reeklinghansen.

Figure 1 (after shattoek from Sutton) shows the lumbar region of a fetus with a spina bifida of the rariety open myelocele. Children with this deformity are usually stillborn, and. if born alive, live but a few days, beeause of the ennfinual draining away of the cerebrospinal fluid in the open cases and early rupture with a like result in the closed cases.
$\therefore$ Syringo-myelocele.-In this condition the mectullary folds have united, but failed to separate from the epiblast (skin). The eentral canal is dilated, and carcful disseetion shows the nerve trunks running around the eonvexity of the cyst to make their exit at the intervertebral foramina. This variety of spina bifida is very rave and practically impossible to diagnose during life. Figure 2 (after Sutton) shows a syringomyeloecle in transverse section. Meningocele in (ombination with syringo-myelocele is not so rare. Figure 3 (after Sutton) shows a sagittal section of a ease of this kind.
3. Meningo-myelocele.-In this variety of spina bifida the cord fails to separate from the surface epiblast, but is closed and becomes compressed against the posterior wall of the eyst, while the nerve cords streteh aeross the cyst to gain the intervertebral foramina. Figure 4 (after sutton) is a diagram of a transverse section of this variety of spina bifida. This is regarded by some writers as the most frequent form of spina bifida.
4. Meningocele.-This is said by Sutton and others to be an infrequent form of spina bifida and consists of a protusion of the membranes through a defeet in the eolumn. That sueh a protrusion may make its way from a canal without bone defeet is believed by some writers. Certain it is that the sae of a meningocele often emerges through a very narrow orifice, and in some cases the communieation between the eyst and the dural space may be entirely cut off. Virchow ${ }^{4}$ reported a ease of this kind which oceurred in Central Africa and was removed under the impression that it was a fatty tumor.

My own limited experience, covering three cases operated on, would lead me to believe that meningoeele is one of the more common forms
of spina bificla. Two of the three cases were of this rariety, one cervieal and one lumbo-saeral, and one was a closed myelocele. Muscatello ${ }^{2}$ also regards meningocele as the commonest form of spina bifida.
5. Spina Bifida Occulta.-In this eondition the cord and membranes are normal, but the arches of one or more vertebræ are defeetive. There is no hernia of either the cord or membranes. An unusual growth of hair in the loins is not uneommon in all forms of spina bifida, but is particularly likely to be present in the oceult variety. The association of perforating ulcer of the foot is so common with this form of spina bifida that one should always look for the deformity when cases of perforating uleer prescut themselves. K'rönlein. Recklinghausen and Kirmisson ${ }^{5}$ report cases of perforating uleer of the foot oecurring in patients with spina bifida neculta.

Symptoms.-Many, perhaps the majority, of cases of spina bifida present no symptoms other than the deformity, in other cases a varying degree of paralysis, sensory or motor, or both, is present, dependent on the location and charaeter of the defect. As above noted, other deformities are frequently associated, cspecially hydrocephalus. club-foot, hare-lip, cleft palate and imperforate anus. The bony cleft can not usually be felt owing to the size or tension of the tumor, or to the amount of fatty tissue, but may in some cases, especially in older pationts, be shown by the $x$-ray. Cleeration of the skin eovering the tumor is so frequent as to be of diagnostie importance.

Diagnosis.-The diagnosis of spina bifida in its broad sense is easy, but the diagnosis of the variety is usually difficult and often impossible until the tumor is opened. The congenital origin and the loeation of the tumor filled with fluid, with the change in tension on blowing. coughing, erying. etc.. are suffieient for the diagnosis of spina bifida. In this conncetion it should not be forgotten that the eommunieation between the sac and the eord may become oblitcrated, as in Tirehow's ease noted above. in which ease there would be no inerease in tension on eoughing, sneezing, etc. Here also it may be noted that there is no relative proportion between the size of the cleft and the tumor. That is to say, that in a given case the eleft may be large and the tumor small and vice versa. The differential diagnosis between the different forms is quite as important as it is diffieult. Peduneulation usually means meningocele, no matter

[^3]what the location. The pedicle may, however, appear broad and, indced, slightly marked from without, while on operation and separation of the sac from the skin and subcutaneous tissue the pedicle is found to be quite narrow. This was the condition presented in my third case. Most sacral tumors are meningoceles. Extensive paralyses and trophic disturbances indicate the presence of nerre tissue in the sac. Shadows seen by transillumination indicate the presence in the sac of nerve tissue, but the coverings of the sac may be so thick that they can not be seen though present. Shadows may also be cast by septa in sacs. Prompt bulging of the fontanels following pressure on the tumor indicate some form of myelocele. A dimple in the sac has the

l"ig. 4.-Diagram of transverse section of meningomyelocele (after Sutton).
same significance. Is indicated in an earlier part of the paper an exact diagnosis prior to an operation will be impossible in many cases.

Prognosis.-Generally speaking the prognosis is extremely unfavorable. Thirty of thirty-two cases obscrved in the St. Petersburg Foundlings' Home ended in death at the end of the first few months of life. Spontancous cure is not unknown, but it is so very rare that it may be left out of the reckoning. Three cases of spontaneous recovery are reported in abstract in the Annals of Surgery, vol. xii, p. 448. Complicating deformities, such as imperforate anus or pharynx, often add to the gravity of the prognosis. Out of 649 deaths from spina bifida in England in 1882, 612 died within the first year. ${ }^{2}$

Rupture of the sac with sudden evacuation of the fluid from the ventricles of the brain may prove quickly fatal. Urinary sepsis from paralysis of the bladder, infection of the meninges, and hydrocephalus are relatively common among the causes of death.

Treatment.-My chief object in presenting this paper is to assist in dispelling the all too prevalent opinion that children with spina bifida are doomed and that treatment is futile. The prevalence of this opinion is costing many lives yearly which intelligent surgery might save.

Treves, writing twenty-three years ago, ${ }^{\text {b }}$ speaking of the operative treatment of spina bifida, says: "The operations are, as far as surgical science at present goes, restricted to cases that present in a marked degree the elements necessary for spontaneous cure and to cases where the cure has so far advanced that the opening in the bones has become closed and the tumor gives trouble only by its bulk. If the sac contains cord elements the result will prove fatal."

As late as 1892 A. T. Cabot of Boston said ${ }^{7}$ that the facts existing at that time justified the statement that the conclusion arrived at by the committee of the Clinical Society of London, to the effect that injection into the sac offered the best prospect of cure, was that held by most surgeons at that time. Mayo Robson reports ${ }^{8}$ three cases treated by injection of Morton's fluid, two of which died of rapidly developed hydrocephalus within three months of the injection and the third died of shock. Keen, writing in 1895, says:" "In the very large majority of cascs practically no treatment other than a palliative one can be adopted."

Woolsey, in Keen's Surgery just published, says: "No operation should be done when these tumors have a thick covering of sound skin and are not enlarging rapidly." He advises the open operation in preference to injection or the use of the ligature, and says: "At present open operation is almost exclusively used."

The above quotations show that the treatment of spina bifida by injection and by the ligature has been relegated to oblivion, a fate which these uncertain and unsurgical measures deserved long before it was meted out to them. They also show but little faitl in the open operation. On the other hand, the study of the literature shows that the trend is toward earlier and more frequent resort to open surgical operation. Mayo-

[^4]Robson, Zcnenko, and others have reported eases of myclo-meningocele which recovered after operation, thus proving beyond question that Treves was in error when he said that operation would prove fatal in all eases in which the sae contains "cord elements."

Confining my search to the Annals of Surgery, I have found there reported thirty-nine eases of spina bifida operated by the open method. Of these, twenty-six cases were cured and thirteen


Fig. 5. Photograph of author's third case before opelation.
died. To these may be added my eases, three in number, two of which recovered and one died. This gives in all forty-two cases operated, with $662 / 3$ per cent. of recoveries. Deducting three deaths whieh were in no way due to the operation, we have a mortality of $264 / 21$ per cent.

Barring the rarc eases in which spontaneous cure occurs, operation offers these patients their only hope of cure, and in those eases in which spontaneous cure is possible the operation entails less risk than the carrying of the deformity does.

Dangers of the Operation.-These are shock, sepsis and loss of cerebrospinal fluid.

Slock is to be feared only in those cases which are of such a nature as to threaten immediately the child's life if left to themsclves. Henee to refuse to operate for fear of death from shock is to sentence them to certain death rather than give them their only chance of recovery by the performance of an operation which may at the most shorten their lives by a few days or weeks.

The danger of sepsis is praetieally within the surgeon's control, and it is less likely to occur without operation than with it. By clamping the neck of the sac or corking the opening into the spinal canal with the finger or a sponge dangerous loss of eerebrospinal fluid can be prerented.

Contraindications to Operation.-Rachischisis totalis is inoperable and myelocele is generally so considered, but I firmly believe that future experience will prove that operation may save many cases of this otherwise speedily fatal deformity, although from the nature of the conditions the mortality will always be high.

Hydrocephalus is said to contraindieate operation. It should be stated here, however. that early operation may prevent hydroeephalus, and


Fig. 6.-Photograph showing cicatrix after operation in author's third case.
I venture the prediction, therefore, that it will eure some cases if done early. Given a patient with spina bifida, born without hydrocephalus, and developing this diseasc later, I would advise operation. Personally I would not refuse to operate a patient with spina bifida born with hydroecphalus, for in so doing one would stand to lose nothing that is worth keeping, and might be rewarded by the recovery of the patient. It goes without saying that no operation should be
done for the cure of a spina bifida in the presence of an imperforate pharyma or rectum.

Contrary to the opinion of some surgeons, paralysis is an indication for, rather than against operation. Lebrun ${ }^{2}$ and others have reported cases in which the paralysis was improved or eured by operation. lmprovement or eure of paralytic symptoms may be expected to follow operation in those cases in which these symptoms are due to pressure. bint, of course, no such result (an be obtained if the paralysis be due to a fetal defect. Whem the tumor is so small and so situated as to give rise to no inconvenience and has a firm, well-nourished covering, operation is unnecessary.


Fig. 7.-Semi-schematic drawing representing sagittal section of tumor remored from case 3. The posterior cyst is bilocular, while the alterior crst is minocular and communicates with the sumal canal. No commundeation between the posterior and anterior eysts.

Time of Operalion.- (iven a tumor with thiek. well-nomrished coverings. not increasing in si\%e and aceompanied hy no stmptoms. operation had better be defereot mentil the child is 6 monthe old or a feall old. But cases which are operated to improve stmptoms or save life ean not be operated too carly.

Techemir.-Infiltration anesthesia may be better in some cases hut in the majority ether is the anesthetic of choice scopolamin. morphin and eocain for the production of anesthesia are. in my jutgment, unwarranted. Asepsis. avoidance of loss of eerebrospinal fluid, a woidance of injury to com elements and awoidaume of shock
are of prime importance. Hemorrhage is not likely to be profuse but unusual precantions should be taken to guard against the loss of blood because of the extreme smsceptibility of young habes. such as most of these patients are. to hemorrhage. Asepsis of the operating field may be secured in any of the well-known ways, but it should not be forgotten that a child's skin is tender and that too vigorous efforts in this direction may do more harm than good. Uleerated areas shoukd be cleansed with special care. corered during the operation, and exeised if feasibe. The skin covering the tmmor is redundant so that excision of a portion of it is necessary : hence the excision of the ulcer-bearing area is feasible in all cases except in those in which it is too great in extent and those in which it inwolves skin inseparable from the eord elements. Separation of the sac from the skin should be done before the sae is opened. Clamping the sae when this is possible is the best means of prerenting the loss of cerebrospinal fluid. With care this may be done without danger, even though the sae contains cord elements. Having the patient lie with the head low and the hips clevated is a wise precaution against serious loss of cerebrospinal fluid. It should be remembered that nerve elements, when present in the sae, usually occupy in the main a midline position in or against the posterior wall. 'Therefore, it is best to incise the skin laterally, open the sac in a clear spot on the side and, after the escape of the fluid, to examine carefully to determine Whether any nere tissue of importance is present, and, if so, its location. Lumbar and saeral suina bifida usually contain no nerves of great importance: hence in most of these cases the sace may be exeised. In case the sac contains important nerve struetures they should be separated from the sac if this ean be done without harm. and, if not, that part of the sae adherent to the nerve structures should be returned to the spinal canal. In myeloceles of the covered variety and in large sringo-myeloceles the transparent dorsal part of the sae may be excised without injury to important nerve tissue. If the canda is cont. the ends should be accurately sutured. If the sate is amputated in toto the safest way of closure is the ligature: if a part only is removed. it should be closed by suture. Whether ligature or suture is used, the material should be absorbable and the closure should be water tight.

Many methods have been suggested to restore the bony ranal. but a firm eorering to present a return of the hernia ean be made of flaps made from the eonnertive tissue, museles and skin:
hence osteoplastic operations are unnccessary and inwarranted. It is better, perhaps, that the suture lines be so arranged as not to directly overlie each other, but it is doubtful if this precaution is of serious importance. Buricd absorbable sutures are always to be used for the closure of the sace and the coaptation of the musele and comncetive tissue flaps. Such a suture is preferable for the closure of the skin, but, owing to the irregularity of the wound. it will in some instances be wiser to use a through-and-through suture, in which casc there can be no objection to the use of horse hair, although catgut (iodized) is, in my opinion, quite as safe, and by using it one has not to subject the child to the pain and fright necessitated by removal of stitches. Drainage is to be avoided. In adequate dry dressing, not too bunglesome, slould be applied and lett undisturbed for a week unless necessity requires its remoral within that time. In lumbar and sacral cases in young patients the dressings must be protected from the discharges from the bowels and bladder by the use of rubber dam, protective or adhesive plaster, coupled with vigilance on the part of the nurse. 'To secure further safety along this line, no diaper is pinned, as usual, about the child, but instead the child is laid on a pad or folded diaper, and these are removed as soon as they are soiled.

A report of three cases of spina bifida operated by me are appended. I regret that the records of the first two cases are as incomplete as they are.

Case 1.-Child, 6 weeks old. Healthy and well formed, except for a tumor the size of a Tangerine orange in the mid-cervieal region. 'Tumor elastic and fluctuating, coverings thick, slight increase in tension when child cried. The tumor was circumscribed by an oval incision extending down to the sac. This being found clear the neck of the sac was transfixed. tied and cxcised. The skin flaps were closed with buried sutures. At the end of the week the wound was healed and the child went home, apparently cured. This babe was operated at the St. Joseph Hospital about five years ago and was heard from a few months later, when it was in perfect health.

Case 2.-Referred by Dr. Carl Schilling. Small child, 48 hours old. second child of healthy parents. Family history good, so far as attending physician knew, but no special inquiry was made. In the sacral region was an elongated, flattened tumor containing fluid, about two inches wide and three inches long, covered
with a semi-transparent membrane. There was marked increase in tension when child cried. Immediate operation was advised and accepted by the parents. The child was taken to the Lutheran Hospital for the operation, after which it was taken home, where it was carcd for by Dr. schilling, to whom I am indebted for the postoperative history of the case. Ether anestliesia. Through an opening in the side of the thin sac a finger was throst into the opening in the canal, dffectually preventing loss of cerebrospinal fluid. The transparent cover of the tumor was excised. The skin was undermined sufficiently to allow of approximation of the edges by sliding. Flaps were made of either side of the floor of the depression, the free margin of each flap corresponding to the outer rim of the depression. the linge boing near the center. These flaps were turned toward the center and their margins stitched, thus closing the spinal canal, then the skin flaps were slid over and stitched. The child recovered from the operation without severe shock, but died seventy-two hours later in conrulsions, due to rapidly developing hydrocephalus.

Cise 3.-R. F. Female, aged imontlis. IVas brought to me by Dr. Wilking of Roanoke, Ind.: to whom I am indebted for the very complete history of the case.

Family history-Father, who is 38 years of age, had a tainting spell, followed by extcusor paralysis of the third toe, five years ago. Three years ago (190t) had a similar attaek, followed by complete extensor paralysis of the foot and anesthesia of the leg and foot, which condition is still present. He was unable to walk until lic was 4 years old, because of "spinal trouble." specific infection denied.

The mother of the ehild lost one aunt from consumption. A brother of her parental grandlather had several children who had rickets and were feeble minded. She has been liaving tuberrnlosis since January. Has three children, aged 11,8 and 4 years respectively, in good health. Had a miscarriage at the seventh month of an hermaphrodite which had a timor in the back, but which tumor was said by grandmother not to be in the midline. The attendant at this labor says there was an "enormous amount of amniotie fluid, possibly six or eight gallons." One child died when $i$ months old with a lumbo-sacral spina bifida which had been leaking for two months.

The patient was born with a lumbo-sacral tumor three by four inches in diameter. A few werks later a slight paralysis of the anal sphine-
ter was noticen, wso a slight tendency to talipes equinus. On cxamination I found a well-nourished, bright child with a lumbo-sacral tumor measuring fire by seren inehes in diameter. The tumor was covered by healthy skin, was elastic, fluctuated and expanded when the child cried. There was slight paralysis of the anal sphincter. No other defects. A diagnosis of spina bifida of the variety meningoecle was made and operation advised. After due preparation the operation was done at Hope Hospital.

Technic.-The tumor was circumscribed with an incision down to the sac, whieln was separated from the surrounding tissues down to the defect in the spinc. Which was found to be about two inches long and one-half inch wide. The neck of the sac was carefully clamped, the sac opened and examined. No important nerve strueture being found, the sac with its skin covering was excised. the sac closed by catgut sutures, the stump dropped and covered with flaps taken from the soft structures on either side of the spinal defect, and orer those the skin was sutured. A dry dressing was applied, the lower portion being protected from discharges from the bowel and bladder by adhesive plaster. There was no leakage of cerebrospinal fiuid. The wound was dressed first one week after the operation and found healed, save for one or two small areas on the surface where the coaptation was not perfeet. liecovery was uneventful, save for a mild attack of bronchopneumonia, which eommenced on the first lay and lasted until the sixth day. The child left the hospital 40 days after the operation and remains in perfect healtl. There is still some anal paresis. Figures 5 and 6 are made from photographs of the child before and after operation. Figure $\hat{i}$ is a drawing representing a sagittal section of the tumor removed. There are two distinct cysts, the posterior is bilocular, the two locules connecting by a narrow opening, while the anterior communicated with the spinal canal.

THE WORK OF THE INDIANA STATE
BOARD OF HEALTH.

## J. N. Hurty, M.D.

Secretary of the Indiana State Board of Health. INDIANAPOLIS.
Before discussing the work of the State Board of Health it is well for us to consider the morbidity and mortality in Indiana for the year.

During the twelve months ending Nov. 30, $190 \%$, there was less sickness and death than in the corresponding preceding period.

Smallpor.- Wias reported present somewhere every month in the year. The deaths numbered 9 , and for preceding period 6. The number of cases reported is only a partial gauge of the prevalence of smallpox, because usually only the absolutely certain ones are reported. The liundreds of mild cases, diagnosed as "eruption caused by buckwheat cakes," as "blood impurity," as "Cuban itcli," etc., escape being reported. Nso the thousands of cases which are diagnosed as grip or not diagnosed at all. Seven years of smallpox in Indiana has demonstrated, as elsewhere, that quarantine and isolation are useless for the purpose of preventing the spread of the malady. The mild unrecognized cases spread the infection, and quarantine is never applied to them. The remark made by Prof. Jolin Fisk, "It takes a thousand years to raise the human family a single notch," is fully sustained by the slowness with which the people take hold of vaccination. Here is a prophylaxis, tried, well proven, harmless, and yet a so-called practical people will not generally adopt it.

Diphtheria.-The deaths from diphtheria numbered 353 , as against 402 in the preeeding rear, a decrease of 49 , or 12.1 per cent. Compared with 1900, the first ycar of the collection of accurate mortality records, when the diphtheria deaths numbered 845 , the decrease is 343 , or 46 'er cent. Compared with the arerage mortality for the last eight years (463) a decrease of $23 . \%$ per cent. appears. Despite the marked deerease in mortality, there is no evidence to show a decrease in morbidity. If the sickness rate of diphtheria has not decreased, then it seems rery probable that sanitation has not been a factor in the causing of the decrease in deatlo rate, and, therefore, we conclude that the nore general use of antitoxin (the applieation of eure) has brought about the improvement. Doubtless the use of antitoxin as a prophylactic has to some degree deereased diphtheria morbidity, but the effect must be very small, for diligent inquiry does not warrant the conclusion that immunizing is practiced to any appreciable extent. It grows plainer every year that diphtheria infeetion is generally spread by carriers who have not the slightest idea they are infected. In an epidemie in Plainfield, one hundred and twenty cultures were taken from unsuspeeted persons, and forty-four were positive. Cultures show that diphtheria prevails in adults more extensively than has been supposed.

Scarlet Fever.-The reeord 97 deaths from scarlet fever, against 101 in the preceding twelve montlis. The mortality from this malady is decreasing, for the average annual number of
deaths for the last eight years is 142 . By this comparison the decrease is 31.6 per cent. This decrease is $\% .9$ per cent. more than the diphtheria decrease, and, in the absence of an antitoxin, must be attributed to more careful and successful treatment and perhaps to an extension of toleration, for there are no facts to suggest less prevalence. Epidemics of mild scarlet fever are not rare and, as with diphtheria, the infection is spread mostly by mild unrecognized cases.

Typhoid Fever.-The typhoid deaths numbered 858, as against 913 for the preceding period. This is a decrease of 55 , or 6 per cent. The average annual deaths for eight years is 1,100 , and by this comparison the decrease is 242, or 22 per cent. As typhoid fever is like sin, a disgrace to any community, the state is to be especially congratulated on account of the decline in deaths, but, as with diphtheria and scarlet fever, there is probably no decrease in prevalence. Mild cases in large numbers are undoubtedly common, and not even suspected. On account of the existence of so many blind carriers of typhoid infection, the prevalence of the malady will certainly remain undiminished until all human servage, of all human beings, is sanitarily disposed of, all of the time.

Diarrheal Diseases.-The mortality from diarrheal diseases in children under 5 years of age and their prevalence is a fair gauge of the sanitary condition of a state. There were 1,823 deaths from these causes in 1906, and in 1907 there were $1,6 \% 9$, a decrease of 144 , or 7.9 per cent. Comparison with the annual average, 1,, 740 , deaths for the last eight years, shows for the last year a decrease of 65 , or 3.5 per cent. Inquiry indicates a slight decrease in prevalence of diarrheal diseases.

Pneumonia.-The pneumonia death figures are 3,392 for 1906 and 3,483 for 1907, an increase of $96_{x}$ or 2.5 per cent. The average of deaths annually for the last eight years is 3,419 , and, compared with this figure, the last year shows an increase of 69 , or 3 per cent. The increase in deaths from this disease in Chicago and other large cities is much greater than for this state. Over one-fifth of all pneumonia deatlis, i46 in a total of 3,419 , are of infants under 1 year of age. The age period of 5 to 30 is comparatively low in pneumonia deaths, the number almost doubling for the 30 to 60 period and almost doubling again for the 60 to 100 period.

Tuberculosis leads as a cause of death, 4,29\% deaths oceurring from it in 190\%. This is a decrease from 4,456 in the preceding year of 159 , or 3.5 per cent. The female tuberculosis deaths
always execed the male deaths in Indiana, which is contrary to the conditions in large cities. The following table shows the terrible havoe wrought in 1906 in Indiana. A like table can not be compiled at this time for $190 \%$, the data not being at hand:

| Total consumption deaths | 4,456 |
| :---: | :---: |
| Males | 1,675 |
| Females | 2,771 |
| Nothers, age 18 to 40, prime of life | 917 |
| Fathers, age 18 to to, prime of life | 2.5 |
| Orphans under 12 years | 2.353 |
| Homes invaded | 3.233 |
| Cost to the people, not less than | 00,000 | 3,404 in 4,456 , or $i 6$ per cent.. are in the age period 15 to 55 years. This is the working period. The question is always pertinent, How much longer will those who control our political affairs refuse to take cognizance of the awful preventable loss to the people from tubereulosis? Murders, suicides and accidental deaths show a decrease, as appears in the following tables:


|  | 1907. | 1906. |
| :---: | :---: | :---: |
| Murders | 93 | 112 |
| Suicides | 321 | 343 |
| Accidents | 1,668 | 1,797 |

WORK OF THE STATE BOARD OF HEALTH.
The frrst step in sanitary work is the collection, tabulation and analysis of the vital statistics. This is done each month, and the sanitary lesson deduced and immediately practically applied. The statistics show what diseases exist and where, and this makes it possible to put forth intelligent efforts against them. Better and better cooperation of the people is given each ycar, and when it is finally generally secured the preventable diseases will be greatly reduced.
The State Board prints and distributes annually 10,000 cireulars on the prevention and sanitary management of the following diseases: tuberculosis, diphtheria, scarlet fever, typhoid fever, diarrheal diseases, measles and the sexual plagues. These circulars are used to teach from in many schools, and frequently the managers of farmers' institutes apply for them for distribution among farmers. The direct applications from the people for these health circulars number several thousand annually. Of the 20,000 and more letters received each year, over 5,000 are from the common people asking for sanitary instruction and advice. The outgoing mail of the board averages over 200 pieces daily, and the individual calls to consult on sanitary subjects average six per day. The secretary, as executive officer of the board, directs all departments, analyzes the statistics, attends to all but the routine correspondence, and makes personal
risits and sanitary inspections in all parts of the state. In the past year he made 66 such risits and inspections, and also gave twentr-three publie lectures to rarious socicties on publie health sulojects.

> LABORATORY OF HIGABNE.

In the Hygiene laboratory the board does withont fee all kinds of bacteriological and pathological work in the interests of the health of the people. In the year just passed 5.420 pathological specimens were examined and reported upon. Sputum. blood. diphtheria cultures. cancers. tumore. urine. feces. pathological finids, etc., are some of the smbstanees which are microseopically examined. This work is to give early aid in diagnosis of disease and thus to make cure more likely and also to aid in disease prevention. The carly and ecrtain diagnosis of typhoid fever, diplitheria, tuberculosis and other diseases is obrionsly of the greatest importance to the state as well as to the infected individnal and his immediate neighborhood. 'The sooner the character of a disease is determined the sooner vpoper methods of conre and prevention come.

The Hygiene Laboratory has been called "The life saving station," for its work is truly the saving of life.

## PLRE FOODS AND DREGS.

The enforement of the pure food and drug law falls mpon the state Board of Health. There are five chemists, five inspertors, two stenographass and one janitor employed in the chemical laboratory and in inspertion work. In the past year t,0es analuses were made. The inspection of foods and drugs and sanitary inspection of slanghter houses buteher shops. groceries. drug stores. dairies. milk depots. ete., numbered 3,061. The pereentage of adulterations of foods, wheh was 12.3 in 1906 , fell to 16.3 in 1902 . This improvement is attributed to inspections and prosecutions by the State Board on account of adulterations. Wide publicity concerning the results of the boardls anti-adulteration work has been given by the publie press and this las been a great help in suppressing adulteration. The milk inspection and analysis in 1906 showed 20.1 per cent. of all milk samples collected to be low standard. In 190 this per cent. fell to $9 . \therefore$ 'There were 2,0; 6 drug samples analyzed dmoing the year and the pereentage of adulteration was 62.5. In 1906 the total number examined was 1.55!), with 62.5 per eent. adulterated. It appears therefore from these figures that adulterafion of drugs has not diereased bint. instead, has
increased. We think this is due to the fact that. fiedding to precedent and advice, bery few sults have been filed against druggists, proserutions. except in Hagrant instances, being snspended and warnings given. It seems that warnings are not sufficient and the hoard will promptly proseconte in the future, and we feel certain the report will show a deerease in drug adulteration next pear. The grocer may excuse the sale of adnlterated goods on the plea that customers demand cheap foods, hut the druggist has no such excuse, for certainly no person wants cheap drogs. It is fortunate for the people that the state as well as the foderal law eompels the printing on the label of every package containing alcolol, morphin. opium, cocain, heroin, chloroform, chloral hydrate and acetanilid a statement of the quantity of such ingredients present, will make clear to the purchaser what he is buying and will tend to smppress the manufacture and sale of a large number of worthless preparations.

## THE NEW LAMS CONCERNING PUBLIC HEALTH.

The Sixty-fifth General Assembly passed five important laws concerning the public health. They were the registration law, the free antitoxin law. the pure food law, the sterilization of degenerates law and the state tubermbsis hospital law.

The registration law eovers the first and most important step in public health work. It recquires that all hirtlis. deaths. contagious diseases and marriages slall lie reported upon blank forms furnished by the State Board of Health, and that the same shall he promptly recorded in local record books and afterward forwarded and preserved in fireproof vaults in the state capitol building.

It is impossible to emphasize too emphatically the importance of correct vital statistics. Birth and deatlo certificates are in daily demand in the courts to prove date and cause of death, place of lurial, age sex, color, etc. They are also constantly needed to prove date and place of birth. parentage, legitimacr, ete., to establish right to property inheritance, right to pension and right to insurance. Mothers are partieularly interested in secing to it that the birth of their infants are properly and correctly reported and recorded. It is the mexpected that happens, and those who least expect lave to prore legitimacr. date and place of birtl are frequently the very ones who find it neressary to do it. Tmportant as rital statistics are for the individual, they are of still greater importance in puhlic health work. Sta-
tisties of death and contagious diseases tell the health anthorities the whereabouts of the enemy and make intelligent combat possible.

The free antitoxin law compels counties, cities and towns to supply diphtheria antitoxin free to the poor. The plrysieian fills out a blank furnished by the State Board of Health telling how much antitoxin he needs, giving the name, age and sex and address of the patient and testifying to the belief that the patients are too poor to pay for the remedy. This properly-filled-out blank is a valid claim upon the county, city or town, as may be, and is eurrent with any dealer in antitoxin. This law went into effect April 10, 1907, and since that date over 200 poor children have had the benefit of this marvelous remedy.

The pure food and drug law has been fully discussed, but a little history of the same will interest everyone. The first pure food law was presented by the State Board of Healtlı in 189 a and was promptly rejected by the legislature. It was again presented in 1899 and passed, but no money and no lahoratory were provided for its enforeement and it was a dead letter. Money and power for enforcement were asked from the legislature of 1901 and 1903, hut the bill was promptly kicked out. The legislature of 190.5 provided for the enforeement in a feeble way and the State Board did the best it could with the weak law. In 190i there was an overwhelming demand from the people. and the Assembly of that year passed an exeellent pure food amil drug law and voted $\$ 15,000$ for its enforcement.

The report for 1907 when printed will fully record the work done, and the people will then know if they want it continued.

The passage of the sterilization of degenerates law by the Assembly of $190 \%$ places Indiane in the lead of all states and all counties in the practical applieation of the seientific and only practical method of eliminating degenerates. The method is to legally sterilize confirmed eriminals. idiots, rapists and imbeeiles. We have heretofore preserveck and by eare have increased the duration of life of these degenerates and permitted them to procreate. To continue such a course means that finally the unfit will predominate and our race and nation be destroyed. The simple. harmless, painless, dangerless operation of vasectomy accomplishes sterilization without mutilation and without humiliation. The sterilized degenerate is improved in health and disposition, and in the experience at the Indiana Reformatory at Jeffersonville over 2.50 out of 300 have voluntarily submitted.

## WHAT THE AMERICAN MEDICAL ASSOCIATION STANDS FOR.

The objects of the American Medieal Association and its activities are stated by G. H. Simmons, in an address before the Kentucky State Medical Association. October 15-17 (.Iournal Ameriean Medieal Association. November 23). Two of its objcets, however, are more specially treated, viz: Nedical education and medical legislation. He gives a history of what has been done in the past, showing how from the first, advancement in medical education and medical requirements has been a prominent object of the organization, and how the apparently fruitless early efforts are in great part at least to be credited with the comparatively great results of recent years. At present the preliminary educational requirements are among the most important matters under consideration and the adrertised statements of medical colleges are no longer accepted implicitly, but careful inspection is made by the Council on Merical Education, with the result that it has on record full data as to the equipment as well as the alleged requirements of the various institutions. Edueational statistics are also collected regarding other parts of the world. complete lists of graduates and licentiates in this country are kept. and there is mutnal co-operation between the comesil and the state examining boards in this matter. Directly related to the educational work is that of medical legislation. and there has been established by the association a central bureat to work in co-operation with state committees to secure proper medical laws throughout the country. Medical legislation is not for physicians only, but for the public, and what is best for all concerned whonld be carefnlly considered.

The rarious points which must be considered are being taken up by the Committee on Medical Legislation through this harean, and the result will be, it is hoped, a syatem that will he equitable and fair, based on just principles and which shall powess some of the features of permaneney. The American Aedical Directory and the reasons for its production are also discusect, and the important work of the Council on lharmacy and chemistry is duly notied. Dr. Simmons appeals to the Kentucky state Medieal Aswociation to co-operate by refusing to use proprietary remcdies that have not been passed on by the Council. Other subjects noted are the reommendation that a board of public instruction on medical subjects be instituted. Dr. MeCormacks work, the postgraduate work in the county societies, and the establishment of a postgraduate course as a part of the organization work, and, finally, the value of organization in the medical profession under one common head with the facilities it affords of advancement in all the lines above noticed. The association. Dr. Simmons says, stands for higher standards in medicine, miform and just medical laws, honesty and integrity on the part of all connected with the profession and those who supply physicians with medicinal agents, for scientific, national and local sanitation, and, in short, for honesty and fairness in everything that relates to the health and physical welfare of the people. And, especially it stands for the individual doctor, to help him not only to become a better physician, but to protect and promote his social, scientific, moral and material interests, so that he can give better service to those who depend on him, and become a scientific and moral leader in every community.

# THE JOURNAL <br> OF THE INDIANA STATE MEDICAL ASSOCIATION 

Devoted to the Interests of the Medical Profession of Indiana
Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

## JANUARY 15, 1908.

## EDITORIALS

## THE JOURNAL OF THE [NDIANA STATE MEDICAL ASSOCIATION.

For two or three ycars the question of establishing a journal for the Indiana State Medical Association, to take the place of the bound "Transactions," has been more or less diseussed by our members. At the 1906 meeting the House of Delcgates referred the matter to the Council for consideration, but it was not until the meeting of $190 \%$ that the Council, in carrying out the instructions of the House of Delegates, appointed a committee to determine the feasibility of establishing a journal and the wishes of the various county societics of the state as to carrying out the project.

The committee reported that with the money annually spent directly and indirectly in getting out the bound "Transactions" and making the usual Association announcements, added to the income which could probably be seeured from adrertising, it would be possible to publish a cred.itable monthly journal, and that sixty-one county socicties (a large majority) had voted in favor of the establishment of a journal. Accordingly the Council, at a regular meeting held at Indianapolis on Oct. 15, 190\%, voted to begin the publication of a monthly journal with the first of the rear. and decided upon such policies and arrangements as seemed warranted in order to successfully carry out the project. This first number of The Journal of the Indiana State Medical Association is the result of that action and is offered as an evidence of what the members of the Association may expect from those upon whose shoulders falls the editorial and managerial work.

It will be our aim to publish as large and as good a journal as the Association's finances and our capabilities will permit. It is our purpose to give the members a journal which will serve all the purposes of any general medical periodical and in addition be the official organ of the Asso-
ciation. To this end we sliall have, in addition to all announcements of the Association and a report of the annual meeting, departments deroted to original articles, editorials, news notes and comments, society proceedings, abstracts from current medical litcrature, and book reviews. We shall try to keep onr members informed concerning medical affairs in the state, including the work of the Board of Health, the Board of Medical Registration and Examination, and such legislation as is of interest to the medical profession of Indiana.

The advertising pages will at all times be free from nostrum advertisements, as the advertisement of no medical preparation will be aecepted unless the preparation is a U. S. P. or N. F. preparation or has been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and any firm or individual will be refused adrertising space if we can satisfy ourselves that such firm or individual is making a practice of defrauding patrons in any way. In other words, we shall adopt the policy that it is better for us to publish a journal without any advertising whatsoever than to publish a journal containing advertising for the publication of which we would feel that we owed our nembers an apology.

An endeavor will be made by the editors to make Tire Journal a truly representative organ of the medical profession of Indiana, and to that end the encouragement and support of every doctor in the state is solicited. As the chief function of The Journal is to further the interests of the Indiana State Medical Association, no little effort will be put forth to aid the medical organization movement, which, in essence means the building up of the county medical societies. The aim of the editors will be to make The Journal a valuable assistant to the officers of county societies in increasing membership and interest in their respective organizations.

The editorial policy will be to recognize and approve the things which make for a better medical profession, and to disapprove and censure those things which lower the moral, professional or scientific standard of medieal practice.

Indiana has long held an enviable record for progressiveness in medicine, and the establishment of a journal to represent the interests of the entire profession of the state is but another step in the line of progress. To make The JourNis all that it should be in order to earn the support and eneouragement of a progressive profession is the aim and hope of the editors.

## THE COUNTY MEDICAL SOCIETY.

Under the present plan of organization of the American Medical Association, the largest and most representative organization of medical men in the world, the county society is made the fundamental unit upon which the structure is built. And of perhaps even greater importance is the relation which the county soeiety bears to the state association. Hence the obvious necessity of making this primary faetor a powerful instrument whose every stroke shall make for the good, not only of its individual members, but also of those bodies of which it has the privilege of serving as the foundation stone. How this ean be best accomplished is one of the vital questions the solution of which is now being attempted by some of the ablest and most progressive men of our profession.

It has beeome a well established fact that the busiest practitioner is, generally speaking, the most faithful and enthusiastic attendant upon his eounty society meetings. Though his time is worth far more than that of the mediocre man, yet it is freely and gladly given for the upbuilding of his local society; to him it is a privilege to bclong to such a body. Though yet in a somewhat embryonic state, the reports from those who hare already instituted it would indicate that the plan of a postgraduate system of study as a program to be followed in the county society, pursuant to the suggestion of the Committee on Organization of the American Medical Association, is one of the excellent ways of increasing the usefulness of the soeiety.

That a capable secretary is highly essential to the success of the county society is also self-evident; such a one as would enter heartily into all records and details of the work done, would keep in close toueh with the members, and furnish a report of the proccedings of his society for publication. On the other hand, no one factor can contribute so much to the life of a state journal as the county society and its secretary. Indeed, so firmly do we believe that the success of this journal depends primarily upon the support of cach and every eounty society within our state that our initial appeal is to the eounty secretary to furnish us all the information available concerning the affairs of his particular medical society. Not only records of society proceedings and papers read, but also all local news of interest, matter relating to medical legislation, higher medical education, organization, suppression of quackery and the nostrum evil, sanitation, vital
statistics, as well as personal news; all these are of the lighest importance in promoting interest in the state organization and hence the organ of that body. We earnestly solicit the aid of every county secretary within our state in making The . Tourval of the Indiana State Medical Association the best of its kind in the country, an organ that shall be representative of the high rank that Indiana has earned in matters educational.

## A WORD TO OUR MEMBERS ABOUT THE JOURNAL'S ADVERTISERS.

The success of any periodical depends essentially upon its quality, for without quality it cannot secure subscribers and readers, and without subscribers and readers it cannot secure patronage from those firms who look for returns from the readers who see the advertising. The Jourval has been established for the purpose of giving the members of the Indiana State Medical Association an organ which they can call their own and in which every member may feel a sense of personal interest, but, unlike many medical journals, particularly of the privately owned charaeter, its policy will be to furnish not only quality in its reading pages but quality in the adrertising pages as well.

In carrying out this latter policy the rule has been adopted that the advertisment of no medical preparation will be accepted for publication in The Jourall unless it is a U. S. P. or N. F. preparation or has been approved by the Council on Pharmacy and Chemistry of the American Medical Association. and no advertisement of objectionable character of any kind whatsoever is to appear in The Journal. The adherence to this policy has already resulter in the refusal of over $\$ 2,000$ worth of advertising, but we propose to keep the advertising pages clean and above criticism even if we have to publish a journal without any advertising whatever.
But we have been successful in securing a modest amount of advertising patronage, and the fact that the contracts accepted comply with our rigid requirements is sufficient to gire every one of our advertisers an endorsemeut. We therefore respectfully ask our members to favor The Journal's advertisers whencver possible. Remember that every dollar received from advertising enables us to publish a larger and better journal, and it is to your interest to support those firms who advertise in your journal for the reason that all our advertisers are worthy of patron-
age and they shonld be shown preference beeause they are aiding us, with the money paid for adrertising, in publishing a larger and better journal than otherwise would be possible.

If you are about to purchase or preseribe any pharmaceutical specialty, instrument, appliance or office equipment, see if it is advertised in 'Tire Jourail. If it is not advertised in The Jourcill find ont why it is not. Let those yon are dealing with know that we have a medical journal which is owned, published and controlled by the medical profession of Indiana and that Thes Jouraill will give vahe received for every dollar spent in advertising, for the advertiser will be appealing to the owners of Tife Jourana who are going to patronize those who patronize them.

If every member will do this for Tide JourNAL, in which he should feel a sense of ownership and interest, we can succeed in obtaining an adrertising income which will enable us to greatly increase the size and improve the character of The Jocrini and at the same time put ollrselves in touch with a class of reputable firms who are deserving of patronage and can be of service to us and we to them.

We have helped many firms catering to physicians to make fortunes, and we have seldom asked if our patronage and endorsement were rightly hestowed. Privately owned medical journals have prostituted their pages to the interests of dishonest adertisers for the profit to be obtained, and the rank and file of the profession. with nothing to guide them, have been the rictims of the rankest deception. But with the establishment of medical journals which are owned, published and eontrolled by the medical profession and not by private interests it will be less possible for medical men to he victimized, for the reason that standards will be established and there will be no exeuse for medical men not knowing what and what not to use and whom and whom not to patronize.

The: Jocrais will refuse support in its advertising pages or clsewhere to those things which are known to be had, either directly or indirectly, or to those things which are not known to be good. It will not sit in judgment upon those things which if good are not advertised in Thf Jourasal, but it will, under any and all circumstances, maintain that as a journal owned by the medical profession of the state and conducted on right principles it should have the earnest support of every one of its owners, and that support should be carried to the advertising pages.

## SCIENTIFIC EDITORIALS

## ADVANCEN OF SURGERY IN $190 \%$.

With honorable pride we contemplate at the begimning of another year the accumulating wealth of surgical science and art. Surgery adrances incstimably within the cycle of a year. The apocalypse which opened the aseptic era was only the beginning of an interminable suecession of useful and fascinating innovations.

The year $190 \%$ will not be marked in history as one which has given epoch-making revelations, but rather as one in whieh there have been gleaned many helpful contributory bits, the sum of which is worthy to stand in comparison with the record of any year of the decades of marrelous progress since Lister wrought. With hundreds of worthy coutributions recorded for the year, it seems an invidious task to select a few, if only for the purpose of illustration. It is clear that even the briefest recital of the important erents would fill a volume.

From Europe one of the most interesting reports is that of a successful jejuno-esophagogastrostomy for impermeable stricture of the gullet. This operation of Roux of Lausanne, the making of a new esophagus of a displaced segment of jejunum, carrying arterial supply through the arching branches of the vasa intestini tenuis, the trunks of these ressels being ligated before separation of the segment of jejumum by division of the mesentery below the ligatures. stands as one of the fine achicvements of Swiss surgery. Roux suceessfully implanted the segment of jejunum presternally and subeutaneously. The ease was one of tramatic stricture of the esophagus in a boy. Later, in a case of cancerous stricture of the esophagus, Verhoogen, of Brussels, successfully repeated Roux's operation, the patient dying shortly after of carcinoma cachexia. A third operation was reported from Antwerp. The performance of Roux has more than a theatrical interest. It opens the way into a great, new field. Two hours away from Lansanne. Roux's great compatriot. Kocher, has added during the year evidence of the superiority of the surgical treatment of exophthalmic goiter, presenting a record of cure in 73 per cent. of primary cases, of 92 per cent. of cures in combinations of exophthalmos with ordinary goiter, and 100 per cent. of cures in struma vasculosa. In all, 83 per cent. were improved by operation and only 3.5 per eent. died.

In England, Arbuthot Lane has shown that resection of the entire colon for chronie consti-
pation is a procedure deserving serious eonsid(ration. for in more than forty operations there were no fatalities and the majority were quite cured. None were made worse. Owing to the pronounced enteroptosis constant in such eases, the technie is simple and the exceution of the operation mueh easier than one might carelessly imagine. The open treatment of fractures advocated by Lane has found supporters everywhere. and the fatuity of leaving unopened any fracture in which there is the slightest doubt as to precise coaptation has beeome a fact.

In Great Britain the subject of aceurate dosage in anesthesia has received musual attention in 190~, with the result that the Vernon-Hareourt regulating inhaler, or a similar regulating deviee, is to be found in almost every climie, the Skimer mask and drop bottle lraring been practically abandoned.

In spinal anesthesia Mr. Barker, of the Unirersity ('ollege Hospital, London, has found it casily possible to anesthetize one side of the body at a time or raise or lower the mper limit of anesthesia by simply olserving the important rôle played by gravity upon the distribution of the foreign anesthetic finid in the spinal canal. He used storain, oceasionally combined with adrenalin (or suprarenin, the synthetic analogue of the extract of the supraremal gland). By elanging the patient's position, i. c., lifting or lowering the trunk, placing the patient upon one side or the other, or bowing the back, he ean determine with considerable precision the area of anesthetization. Mr. Parker illnstrates this by using three glass tubes with curves corresponding to the curves of the spinal canal, fashioned after Braune's plate of a frozen mesial section of a female eadaver, and filled with a solution of the same specifie gravity as the spinal fluid. Barker's stovaine solution (storaine 10 per eent., glucose s per cent., adpra dest. 8.5 per cent., sp. gr. 1,0300), colored riolet with methyl, is slowly introdueed at a point corresponding with the usual point selected for spinal puncture, and a photograph taken two minutes later shows that the heary solutions have gravitated downward (the pelvis being elevated three inches) to about a level with the fifth or sixtlo dorsal vertebrex. while Bier's solution (storain 4 per cent., Na('l 11 per cent.. epirenin borate, 0.01 per cent. sp. gr. 1,0058), whieh is lighter than the spinal Hluid. remains near the point of injection. It is needless to say that Barker's ohserration is of considerable elinieal importanee.

Auschuetz, of Breslau, has shown that one ean, in a very simple manner, attain good results in
the resection of even large portions of liver tissine and decries that complicated methods and unusual appliances are deemed necessary in resection of the liver. He says the important duestion is the ligation of the branches of the portal rein and of the artery. That this is possible is proven by the experiments of Kousnietzofl and P'enski.

- "In resections one ean simplify the ligation of these vessels in two ways: (1) By making a clean, smooth ineision through the liver tissuc. The bleeding vessels on this smooth surface ean lon grasped with clamps and ligated. If one separates the liver tissue bluntly then the ressels, alter the extreme stretehing, tear and retract; they can then be grasped only with difficulty and uncertainty. In case of shooth ineision, however, they (ann casily - be found. The liver wound should, if possible, be made in the form of a wedge and closed by means of sutures. (2) The recond method of procedure eonsists in the application of ligatures en masse as suggested by Konsmietzotif and Penski. One does not need, howerer, a particular guiding suture or special instrmments as Kousnietzoff's needle. but can get along just as well with the Dechamps needle."

In America Van Buren Knott has deseribed a liver suture which will permit the coaptation of a wound of the liver. at the same time controlling hemorthage without the necessity of packing, and will also permit the radical extirpation of liver tumors. Parallel with the wound in the liver or with the area to be excised, and about one-half incle from its edge upon either side, he inserts deeply through the liver substance, by means of a large, romml, blunt needle, a strand of No. 3 catgut. These needles are modifications of Kousnietzoff's blunt liver needles. The strands enter the liver tissue about one ineh beyond the edge of the wound, run deeply through the liver substance and cmerge the same distanee from the ${ }^{0}$ pposite end of the wound. The ends of the eatgut strands are fastened by drawing them up sungly and tring to either end of both strands a small ordinary skein of catgut, which, presenting a brod surface against the liver tissue, prevents the indralwing of the suture ends. Transerse interrupted sutures of No. 3 eatgut are then introdueed by means of a small, blunt meedle in -ucli a manmer that they engage upon either side of the wound the buried long strand of catgut. These may be tied as rapidly as introduced and, exerting their traction upon the buried long suture, may be tied snugly, ensuring hemostatis and coaptation without the danger of their eutting out.

When it is desired to remove a portion of the liver tissue carrying with it a tumor, this may be done by excising between the buried long sutures a wedge-shaped ellipse of liver substance and introducing the transverse sutures as above described (November Annals of Surgery).

Stamm, of Ohio, has made a useful contribution to liver surgery in the form of a liver suture supported by bone plates taken from the thin blade of the scapula, the bone plates replacing the folded bundles of catgut used by Knott to keep gut sutures from cutting through.

Thomas S. Cullen, following the example of Keen and Tiffany in America, Terrier and Auvray in France, Langenbuch in Germany and Mayo-Robson in England, has repeatedly made successful hepatectomies, using a needle which, instead of being wedge-shaped on cross section like that of Kousnietzoff, is almost flat, making a smaller hole in the liver substance. However, like Knott, who also modified the Kousnietzoff needle, he disclaims any credit for introducing the real principle of the needle, which will push the ressels to one side instead of piercing them, and, like Mikulicz, he says the Kousnietzoff needle is the Columbus egg of liver surgery.

In Europe Freyer's suprapubic prostatectomy has attained a great popularity. It is a brilliant procedure and doubtless the safest and best in some varieties of prostatic hypertrophy, yet the report of St. Peter's Hospital for the year shows that of fifty-eight operations nine were fatal. Frever often completes the suprapubic extirpation within a minute, a performance sure to appeal to those surgeons who like being timed with a split-second watch. Fistula almost never follows the method for the reason that the resieorectal fascia is not traversed.

Rovsing, of Copenhagen, said of Freyer's method at the German Congress of Surgery in April: "Technically, this operation is so wonderfully easy and rapid of performance that I readily understand and share the enthusiasm of the gentlemen who have resorted to it, but the operation is just as dangerous as it is beautiful and seductive. Of four cases of prostatectomy operated by me according to the Freyer method, one died on the second day of cardiac asthenia; a second developed, on the fourteenth day postoperationem, after the external wound was practically healed, profuse hemorrhage after the prostatectomy wound, and death was only averted through a firm tamponade after the method of Mikulicz. In two eases there developed narrow strictures which demanded the constant use of
bougies, and in one case the urinary retention was in no way influenced.

A useful contribution of the year is represented by Wederhake's silver-rubber-silk suture material. In the Copenhagen clinics nitrate of silver catgut has been used for years, but it was during the year just closed that Witzel and Wederhake described the method of impregnating silk with a mixture of metallic silver and rubber. It has been clearly shown that silk or linen bearing colloidin or rubber is relatively impenetrable so far as bacteria are concerned, for it does not absorb lymph. As to the value of silver as a bactericide, there will be no dispute. We predict a considerable vogue for this suture. Plain, black linen, too, with or without celloidin, is likely to become more generally used in America than it has been since the old days of iron-dyed linen and silk. The Mayos brought home from the Stiles clinic in Edinburgh a supply of black linen. Several years ago Halsted, of Baltimore, began to use black linen, believing that it is more readily seen against the tissues than the white Pagenstecher linen or Von Brun's hemp.

The year $190 \%$ witnessed the adoption of towel clips to pin heavy sterile towels precisely round the edges of operative wounds. The longhandled towel clips of Moymihan are superior, the length and shape being such that they hang quite out of the operator's way. The most careful operators everywhere have begun to cover in this manner superficial tumors or large areas of skin to be sacrificed, as in the case of amputation of the breast, with a gauze towel shaped about the edge of the area to be removed so that all skin is covered over during the operation; that is to say, in amputation of the breast, for example, the towels are pinned with the clips all round the breast hanging away from the skin ineisions, and all the skin included between the skin incisions is separately eovered by gauze sewn fast around the edge of the island or held by the clips.

The year has seen the establishment of opsonin departments in laboratories attached to surgical clinics everywhere and raccine therapy has taken as important place in the treatment of many surgical conditions, as tuberculosis of the bladder and kidney, lupus, tuberculosis of bone, in bacillus coli infections of the kidney, in common surgical infections with the streptococcus, gonococcus, staphylococcus, ete. The phagocytic power may unquestionably be increased in this way. Through the study of opsonic indices diagnosis has gained much. The work begun by Sir A. E. Wright, of St. Mary's Hospital, London, has heen perhaps the most engrossing of the year.

The hopes which were entertained as to the value of trypsin in the treatinent of carcinoma have not been realized. However, it has appeared that the trypsin treatment at least helps to prolong life and keeps nodules under control, bearing about the same relation to the treatment of carcinoma that the use of the mixed toxins of erysipelas and the bacillus prodigiosus does to the treatment of sarcoma.

In the Insbrook Clinic Suter has used the balsam of Peru in the treatment of 562 cases of open accidental wounds and has investigated the action of balsam of Peru in such wounds scientifically for the first time. He states that the agent mechanically incloses bacteria, and has, in addition, decided bactericidal power giving off bactericidal substances to the tissues, and that it possesses great chemotactie power. The kidneys were not irritated by its use. The results of local treatment of wounds were excellent.

In the Middlesex Hospital, London, Kellock notes good results from the use of sulphur in tuberculous sinuses and cavities, and remarks the superiority of this agent over iodoform under similar conditions.

Sir Arthur Fripp's method of bandaging the limb after operations upon the knee joint has found a welcome in this country. Briffly, the method consists of fixing the limb not rigidly but with a very thick, soft dressing so that while the limb is held in slight flexion it is not held rigidly in this position, a certain small range of motion being permitted by the dressing. It is claimed that its adoption has decreased perceptibly the percentage of cases in whieh loss of function is observed after knce-joint operations.

The value of the application of Bier's bandages with the consequent artifieial hyperemia in the treatment of tuberculosis of bones and joints having been established, Hertzler, of Kansas City, and others have turned their attention to the study of the influence of hyperemia in the treatment of tubereulosis of the peritoneum, suggesting the use of a flanged tube to be left in the wound after celiotomy for tuberculous peritonitis, with a view of permitting continuous entrance of air, the presence of the air producing hyperemia. Hertzler remarks that hyperemia has been found of use in tuberculosis elsewhere, and by analogy we may be warranted in assuming that the same faetor is active in the treatment of tulereulosis in the peritoneum. With these two facts in mind, it seems quite possible that this is the factor underlying improvement by opening the abdomen in some forms of peritoneal tuberculosis. "This assumption finds a clinieal sup-
port in the fact that it is only the type with exudation that is so bencfited. This is easily explained on this theory, for manifestly in the hyperplastic types the vessels cannot dilate to any considerable extent, therefore the operation can be of no use."

Among many interesting reports of surgery of the vascular system Monroe, of Boston, has advoeated surgical interference in cases of the congenitally open ductus arteriosus, declaring that its ligation must be followed by eonstant and permanent restoration of the function of the lungs and arteries and that it can be reached by a short surgical route.

At the meeting of the British Medical Association Bland-Sutton advocated the removal of all infected gall bladders, broadly speaking, upon the hypothesis that bile is purely excrementitious and that the gall bladder, like the vermiform appendix, is practically useless.

To the observant it is clear that America is keeping abreast of the most progressive nations of the earth in the advancement of surgery. To the traveler abroad there comes nowadays the definite impression that American surgery is in the ran. In clinics cverywhere abroad the names of our teachers yhom we love to honor at home are lieard upon every hand. We are proul of the recent developments of surgery, and we are especially proud of America's fine part. It has been a good year for home pride.

Josfeph Rilus Eastanan, Indianapolis.

## TIIE PROGRESS OF CLINICAL MEDICLNE DCRING THE YEAR NLNETEEN HUNDRED AND SEVEN.

No epoelh-making discoveries have signalized the history of medicine during the year whieh has just elosed. It would be a great mistake, however, to assume that but little progress has been made. On the contrary, great activity has prevailed along various lines of elinical researeh, with a corresponding advanec. To even indicate more than a few of the advances thus made would exceed the limits of this bricf editorial review.

One of the most striking evidenees of progress in the general field of clinical medicine is the phenomenon of the specialty of internal medicine which the last year, along with those which immediately preceded it, lias helped to create. Its reeognition is practically complete, as indicated by the utterance of Professor Osler in the introductory chapter to the first volume of Modern Medirine. He says: "The profession should
learn to recognize the worker in internal medicine as a man who has to derote so much time to his studies that it is impossible for him to take general practice, and in a way he is a specialist. in the broad sense of the term. like the surgeon." The depth and breadth and complexity of the problems which confront the clinician to-day can searcely be better emphasized than by this phenomenon viewed in its proper light and significance.

Instearl of merely cataloguing without adequate comment what has been done during the last year or so. I have deeided to select a few subjects representative of the year's work and discuss them somewhat more at length. believing that by this means a better view of progress (an be given and more actual information conseved.

Among the fields of research already referred to may be mentioned the elinical relations of the internal secretions, and especially those of the thyroid gland and adrenal bodies. The patholwey of Graves' disease may be considered as established at least to the extent of considering a hypersecretion of the tly roid gland as an essential and possibly sufficient factor in its causation. The assumption of a perverted secretion appears to be entirely uncalled for, as the physiologieal effect of the normal seeretion experimentally or therapeutically given corresponds an closely to the sydrome of the disease as to leave but little doubt concerning its efficiency: While hypertroplyy of the gland exists in nearly all the eases, and according to some observers is always present though sometimes unrectognizable. the essential thing is not the hypertrophe but the hyperseretion. It seems perfectly reasonable to suppose. as clinical observation indicates. that this lypersecretion may exist withont any demonstrable increase in the size of the gland. although the olservations of Macallum on sixty cases seem to prove that histological changes are constantly present. These changes are identical with those which are characteristic of experimental compensatory hypertrophy and consist of strands of fibrous tissue rumning like sears through the gland. while the alveoli become irregular, the colloid being diminished or absent, and the epithelium becomes converted from the low cubical to the columnar type. The pressing question is what causes these anatomical changes. and we are at present without any definite information along this line, although it may be fairly assumed to be some sort of a toxic process. The therapeutie indications derived from these data are fairly well defined. We can not reach the
ultimate callses for the very good reasons that we do not know what they are, and, besides. they have become fully operative and produce their results before the patients present themselves for observation. Wie can, therefore only deal fundamentally with the clinical fact of hyperthymidism.

There are two ways of approaching this problem: first. by diminishing the secretion of the gland; and, second, be neutralizing and rendering imnocuous the excess of secretion after it has found its way into the circulation. The first method constitutes the surgical treatment either he intra-glandular injection with a view to dcstroving the seereting structure of the gland or by ablation of more or less of the gland structures. The first of these methods has proven unsatisfactory, while excision, if we may judge from the enormous experience of Foeher, Halsted and others, offers the most available hope of permanent cure.

The medical treatinent slould undoubtedly be given a trial first and should include. along with rest. proper hygiene and gencral symptomatie control and the injection of sera or other therapeutic preparations derived from the blood of thyroidectomized animals. If these measures property carried out, preferably under a hospital régime, do not lead to progressive improvement. then, in the writer's opinion, thyroidectomy should be advised, possibly preceded by ligation of one or more of the thyroid arteries, and it should be done early, before myocardial or other decenerative changes occur. With these measures at our command the percentage of hopeless cases of Graves' disease should grow smaller and smaller in the future.

Our experienee with Addison's disease justifies the belief that one-sixth of the cases can be cured by the timely and persistent use of suprarenal extract, while a considerably larger proportion, perhaps 2.5 per cent. more, can be substantially benefited. It does not appear that surgery can help us here, because in so far as the adrenals are involved it is the loss of secretion, as it is of the thyroid in myxedema, which lies at the bottom of the syndrome.

Another, and possibly the most important. field of active clinieal researeh during the past year is that of vaceine therapy, ineluding its control by the opsonic index. The technical difficulties still encountered in studying the opsonie index are very nearly prohibitive of its widespread use at this time. The errors of individual observations are admittedly so great that several indiecs should be taken before allowing it to
serve as the unsupported basis of an important practical conelusion. This, however, las no bearing upon the value of vaccine therapy. Its widest application appears to be in the field of ehronic or subacute infections such as that of tuberculosis. While professional opinion in regard to many aspects of the question must be regarded as still in a formative stage, the fundamental facts are beyond contention. The central truth, which lias been fully established, that the injection of dead bacteria or the products of bacterial growth, in proper dosage, strengthens the defenses of the body, at least against those particular micro-organisms, and possibly others as well, is supported by an accumulation of facts which should be regarded as entirely conclusive. Clinical observations in support of this view are not limited to the period of technical work by the so-called opsonic methods, but extend back over a period of years, ineluding Pasteur's immortal pioneer work on rabies and the empirical use of the old tubereulin in the treatment of tubereulosis. These methods, as well as others, were in use by many clinicians, the writer included, long before opsonins had been christened or opsonie methods given a place in clinical medicine. In the opinion of many their cffieiency as an important adjunct in the treatment of tuberculosis, the scientific reasons for which were made dearer by Wright's work, was beyond reasonable doubt. While the devitalized tuberele bacilli have formed the basis of the opsonie work. Ross, a co-worker with Wright, defines a bacterial raccine as "bacteria or their products." so that the use of the old tubereulin comes strictly within the scope of the term. There scems to be exeellent biological reasons, supported as they are by clinical expericnce. that both the old and new tuberculin should be regarded as valuable agents in the treatment of tuberculosis, the former perlaps stimulating the production of antibodies, the latter that of opsonins. On the whole, while we are still feeling for solid ground, it is difficult to a aoid the conriction that we are near the eulmination of the greatest therapeutic triumph of the ages, thanks to the labor of Koch, Pasteur, Metchnikoff, Wright and others. As Ross has recently pointed out, the liazards of incompetent and ill-judged orer-cxploitation of these methods necds to be guarded against. Conservatism and caution are imperative until their precise limitations are better defined, but it seems eertain that they will oceupy a conspieuous place in the therapeutie field of the future.

In a general way one might say that the adrancement during the last year has been largely
along biochemical lines. The illustrations already given belong strictly within this domain: and while they may be unusually farorable examples, it is not too mueh to say that there has been a general advance, although perhaps less conspicuous in many other departments of elinical research.

George IV. McCisket. Fort Wayne.

## EDITORIAL NOTES

It will be our aim to have The Jourval in the hands of members on the morning of the 1.5th of each month.

Tire postal officials do not permit us to send Tite Jourvil regularly to any but bona fide subscribers. Therefore, before you write us coneerning failure to receive The Journal it would be advisable for you to make sure that you have paid your State Association dues, which include a subseription to The Jocrval.

Trie annual session of the Indiana State Medical Association will be held at French Lick, June 18 and 19. Our May number will have a preliminary announcement and program of the session, and our Junc number, which will be in the hands of our members by June 10 , will be a special French Lick number, giving full information concerning the session.

Witir the passing of the bound "Transactions," as little appreciated as they were on account of form and manner of publication, we desire to pay tribute to Dr. A. IV. Brayton, who conscientiously and ably edited them for so many years. His labor was essentially one of love, for he was never adequately paid for his services, and he fulfilled the duty creditably alike to himself and the Association and in such a manner as would be expected from one of his recognized literary and scientific attainments.
$W_{e}$ are starting out with clean advertising pages. To do so it has been neeessary to refuse orer two thousand dollars' worth of such advertising as is regularly accepted by some of the most prominent medical journals in the country. But we believe that ever right-thinking physi(ian in Indiana will approve our course, as we also believe that very soon every prominent medical journal in the country will have to refuse objectionable advertising or go out of business,
because all right-thinking doctors will refuse to support or read any journal which publishes nostrum or other objectionable advertisements.

Ir the advertising pages of this number will be found a county medical society directory, containing the name of cvery organized county medical society in the State, the name and address of its secretary, and the time and place of holding regular meetings. Every county sccretary has received a request for information concerning his particular Society for publication in this directory. As will be seen, many secretaries have failed to furnish the requested information, and in consequence many blank spaces appcar in the directory. We hope that the directory in our next number will be complete, and to that end we urge the county secretarics to furnish all missing information, as well as to call our attention to any changes whieh should be madc.

The first number of The Jourval of the Indiana State Medical Association, published at Fort Wayne, Ind., will come from the press early in January, 190s. It will be edited by Dr. Albert E. Bulson, Jr., assisted by Dr. Ben P. Weaver. It will be a monthly periodical, published and controlled by the members of the Indiant State Medical Association. In starting his work Dr. Bulson will have the great advantage of experienee. for he has been the bright and entertaining editor of the Fort Wayne Medical Journal-Magazine for a number of years. We congratulate the Indiana State Association upon having secured his services. A good, practical man, too! The ghad hand, Mr. Editor !-Journal of the South Carolina Medical Association.

Thanks, Brother Editor; we hope that we may merit the compliment.
"Uscle" Joe ChNoon is gloating over the fact that he was re-elected speaker of the House in the face of opposition from the labor organizations. If he secures the presidential nomination perhaps he will regret that he has unnecessarily antagonized the labor organizations. as he may also regret the insults he has offered the medical profession. The members of the Legislative Committee of the American Medical Association who ealled on him last year, all his peers in culture and refinement, will not soon forget the discourteous reception at his hands, his uncouth manners, and the sneering way in which he referred to the medical profession in general, and it is not likely that medical men as a class will
be found shouting his praises or sacrificing their self-respect by voting to further his ambitions. It is time for medical men to look beyond party politics when exercising the right of suffrage, and, if they do, Cannon and his ilk will receive the rebuke they justly descrve, for the medical profession can be a power in politics.

A number of our county medical societies have adopted the postgraduate course of study and without exception the reports show that the plan is meeting with success. In some of the societies the work is being carried on with unusual cnthusiasm and interest and with an accompanying increase in membership and attendance. To those soeietics that have not as yet considered the postgraduate course of study we recommend a careful investigation of the work as done by the societies that have adoptcd it. Some alteration in the plan. to meet local conditions, may be necessary in certain instances, but in the main the program as arranged by the A. M. A. Committee on Postgraduate Study is worthy of adoption. Full partieulars may be secured by addressing Dr. .John H. Blackburn, Bowling Green, Ky.

Tue physicians of the Ninth Indiana Councilor District lave dcalt a severe blow to the nostrum houses, and many well-known medical journals, when they pledged themselves to use no medical preparations which are not contained in the official United States Pharmacopeia or National Formulary or in the list of New and Nonofficial Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association, and to refusc to receive or subscribe for any medical or religious journal which advertises fraudulent or worthless nostrums and proprietary medicines after Jan. 1, 1908.

This is an exhibition of the right kind of spirit, and we hope that the physicians of every other councilor district in the State will make a similar pledge and abide by it.

The Stewart-Hord Sanatorium, of Slelbyville. Ind., is sending lettcrs to physicians soliciting whisky, morphin and drug habit cases on a commission basis. The doctor reccives twenty-five Iollars (\$25.00) for referring the case and the patient pays one hundred and twenty-five dollars (\$125.00) for "the cure." This is ealled a "liberal offer to physicians," but no physician who desires to maintain his self-respect will have anything to do with such an offer. If the StewartHord Sanatorium is deserving of reeognition and patronage from medical men. it ean secure it
without resorting to the deceptive practice of paying a commission to obtain the business, for every conscientious physician will refer his patients where he honestly believes they are to receive appropriate attention, and he will collect his fees from the patient for any advice rendered. But if anything is needed to condemn the Stew-art-Hord Sanatorium as unworthy of recngnition and patronage by intelligent and ethical physicians, it is only necessary to read some of the breezy correspondence which has emanated from the proprietors in answer to numerous inquiries as to their methods and standing.

Some of the county medical society secretaries to whom we sent a request for the early payment of dues (including subscription to The JourNAL) for the purpose of meeting the expenses connected with the establishment of The JourNAL, have inquired as to the disposition of the dues paid in $190 \%$ and if the transactions for 190\% would be issued. To these inquiries we wish to make the following answer: The dues for $190 \%$ were used in paying the bills incurred in $190 \%$, including the publication of the $190 \%$ transactions which will probably be in the hands of members by the time this journal is published. The 1908 dues will be used in paying bills incurred in 1908, including the subscriptions to The Journal, Heretofore it has been customary to pay dues just before or at the time of the annual meeting, and there was little reason for paying the dues sooner, as but few bills were contracted prior to the date of the annual meeting. But with the establishment of The Jourval the expenses begin even before the publication of the first number and continue throughout the year, and in consequence the dues are required to pay the subscriptions, which, in turn, are used to meet The Journal expenses. The members are paying no more than usual, but are simply asked to pay the dues with the beginning of 1908 instead of three or four months later, and in return are to receive Tue Journal for the entire year.

IT inas been said, and perhaps truthfully, that any secretary can either make or break the organization he is elected to serve. We do know that the life of the county medical society depends, in a very large measure, on the work of a capable, energetic and faithful secretary. How necessary it is, then, to select for the office a man who is fitted for the work, and not one who is given the position out of respect for his gray hairs, his mental attainments, his political pull, his ability
to be "a good fellow"," or the friendship which all medical men have for him.

The selection of a capable secretary is a business proposition and as a business proposition it should be considered. There is scant honor in the position, but much hard work if full justice is done to the office. Not all men possess the necessary qualifications, but every society possesses at least one such man, and he should and usually is willing to accept the office for the good of the medical profession of his community. Self-sacrifice is necessary, but nothing good in this world was ever accomplished without self-sacrifice, and we will all contribute to the fund of self-sacrifice if each does his part in helping to make the county society what it is intended to be and what it ought to be-an organization for the scientific, ethical and social betterment of its members.

We particularly urge the members of county societies to select secretaries with caution. If any society has a good secretary, then that secretary should be continued in office; if the secretary is a poor one, then he should be replaced by a better one, and if any society has a poor secretary and it is impossible to get a good one, then it is time to inrite some capable and energetic young man to locate in the county not only to become secretary of the county medical society, but to awaken a little interest in a medical community that is fast approaching the last stages of decay.

Tue doctors of Indiana are now receiving letters from various candidates for state offices and their friends soliciting support. Before any doctor pledges his support to any candidate for a state office it would be well to definitely determine where that candidate stands on questions of interest to the medical profession. We have had unfortunate and sometimes humiliating experiences with governors and members of the Assembly which should stand as a lesson to us, and when we pledge support at the caucus or at the polls let it be with a full knowledge that our candidate is not only in sympathy with, but will rote for, those measures which are championed by the medical profession as a whole.

We need better and more far-reaching laws pertaining to public health, sanitation, food inspection, medical registration and examination, medical education, rital statistics, the care of the dependent, and many other things of equal importance, in which the physician takes a personal interest. and the public should be interested be(anse receiving the greatest benefit. Men aspiring to state office should be given to understand that they must champion and vote for these bene-
fits if the rote and infinence of the dortor is to be secured．It is not cmongh io pledge smpport becanse the candidate belongs to any particular political party．

In this connection we desire to eall attention to the motion passed at the last meeting of the Coumcil to the effect that＂any Indiana candidate for county，state or national olfice slabll be inter－ viewed br the councilor of the district in which such candidate resides，or some one deputized by the councilor，and information obtained as to the probable attitude of such candidate on questions vital to the best interests of the medical profes－ sion，and that the riews given by the candidate be made known to the Comeil for publication in Tue Joursal or such other publicity as may be deemed advisable or expedient．＂

IT is asserted by certain newspapers of the state that Dan（i．Reid，multi－millionaire，rail－ road man，steel magnate and newspaper owner， will supplant Albert ．I．Beveridge in the United States senate three years hence it certain plans set on foot monthe ago，in a quict way，can be carried ont．James E．Watson，one of the candi－ dates for governor．is said to be one of the lead－ ing figures in the drama that has been seriously plamed．as he and lieid are very close friends． and it is even reported that Reid is finaneing Watson＇s campaign．

What a pity it is that positions in the United States Senate as well as in the national House of liepresentatives can not be dirorced from the spoils system．Here we have an example of a man aspiring to the position of I＇nited States senator（a habit with many millionaires）with lont little to commend him other than his millions and his supposed willinguess to let loose some of his hard－earued（？）money among a lot of polit－ ical leeches who no doubt would greedily enlist their srmpathies and aid in his cause．Senator Beveridge is one of the nation＇s great men to－ day，and he is a man whose sigual ability as an orator and a statesman has been eoupled with an unusual amount of that eommon honesty and a sense of duty so lacking in many of the men se－ lected to represent the people at the nation＇s eap－ ital．He has been a justly prominent factor in the Senate，and his distinguished services have been a credit to the nation and to his own state of Indiana．Of such men we should be proud， and until the short－sighted，spoils－grabbing poli－ ticians in the Republican party of Indiana ean produce his equal in mental caliber．integrity and general fitness for the high position he now occupies，it is the height of folly to entertain for
a moment the thought of retiring him to private life．Medieal men owe a debt of gratitude to smator Beveridge for his support of so many measures advocated by the medieal profession， hat ther owe allegiance to any man，be he Repub）－ liean or Democrat，who so ably and so conscien－ tionsly represents the people of this great state．

The Jolrvil of the Lndfica State Medi－ cal Assochition．It sounds well，but what does it mean？It means that the Indiana State Medi－ cal Association has taken a step that is in keep－ ing with the reputation which the medical pro－ fession of Indiana has established for progress and all that goes to make suceess for medical men．For many years the Association published at great expense the bound＂Transactions，＂which eame from press six to nine months after each annual meeting，and contained simply the pro－ ceedings of the annual meeting and a list of combty and state society members and officers． The book was considered of so little value by a large proportion of our members that hundreds of rolumes usually remained uncalled for in the offices of county secretaries，and those volumes that did find their way into the hands of mem－ hers uswally found a resting place on a library shelf，where they remained unopened and often times without the wrapper being removed．

Other state societies have had the same experi－ ence．and，appreciating the advantage of doing away with＂Transactions．＂have established jour－ nals in their place，and always with the greatest satisfaction and benefit．We are，therefore，keep－ ing up with the progress of other state societies in establishing a journal as an offieial organ of our state medical association．and we are doing this without adding to the expense of the association， for the Comeil has specifically provided that the expense to the association of publishing Tiee Jourxal shall not exceed the expense previously incurred in printing the＂Transactions．＂

We propose to publish a journal which shall perform all the functions which any progressive and good medieal joumal should perform，and at the same time be the official organ for the Indiana State Medical Association for the pub－ lication of the transactions of the association and its affiliated societies．Tife Journal will be dis－ tinetively a periodical for Indiana physicians， and it will be our aim to make it so interesting and so good that every doctor in the state will want it，and raise a commotion if he docs not get it．In the pursuit of this policy we hope to greatly assist the efforts of councilors and county society officers in securing new members as well as
stimulating interest in socicty work. Onr members will be kept informed on questions pertaining to the work of the Board of Medical Examination and Registration, the Board of Health, and all legislation concerning the interests of the medieal profession. Personals and medical news notes of general interest will occasionally appear, as also abstracts from current medical literature. Original artieles from Indiana men will appear when the department devoted to such contributions is not fully occupied by the papers read before our annual mecting and approved for pullication. Soeiety proceedings and announcements, including reports from county and district soeieties, will be given promincuce. And, all in all, we hope to give the members a journal that will be appreciated and considered the best thing for which the Indiana State Merlical Association is responsible.

## DEATHS

## Deaths of Indiana Medical Men.

Dr. Cumbles Cimp, of C'amden, died in California the last of Norember. He was the oldest practicing physician in Carroll Countr. being over 70 years of age.

Dr. Himhtor Wolfe died at his home in Washington, on November 9, at the age of 88 years. Dr. Wolfe practiced medicine for fully fifty years and was one of the leading physicians in his part of the state mitil fourteen rears ago, when he retired.

Dr. Rater Gray died at liis home in Portersville. November 20, at the age of 26 years. Dr. Gray was a graduate of the Louisville Medical College, and after leaving that institution first located at Alford later going to Petersburg, and still later to Porterssille, where he practiced for the last two rears of his life. He leaves a wife and two children.

Dr. Thomas Burnett Willanis died at his home in Angola, Aug. 16, 1907, at the age of 68 rears, 10 months and 28 days. Dr. Williams was born at Paltimore, MId., Sept. 6, 1838 . He graduated from the ('leveland Medical College in 1863 and was physician in the U. S. Marine Hospital at Cleveland, Olio, in 1864. He located at Angola late in 1864 and praetieed there until his death. He was a member of his county and state assoeiations and the American Medical Assoeiation. At the time of his death he was health officer for the city of Angola and president of the Stuben County Medical Soeiety.

Dr. Hebbaid M. Samtif, physician, writer. educator and venerable president of the Board of Trustees of Vincennes University. died at his houe in Vincenner, Dec. 23, 190i, aged 87 years. Dr. Smith suffered a fall on the 4 th of Decemher, fracturing his hip, and the foreed quietude and old age brought on a revival of some of his: old ailments and finally pneumonia set in. causing his death.

Dr. Smith's early life was one of hardship, and his carly medieal education was largely aequired at odd hours during a period when he was teacling school in Kentucky. After a partial eourse of instruction at the Transylrania Medical College in 1843 he commened the practice of medicine at New Liberty, Ky:, where he remained about six months, then moving to Warsaw, Ky.. where he practiced medicine until 18tr. In that year he began a regular conrse of instruction at the Starling Merlical College, Columbus, Ohio, and he received his medical degree two years: later. Followiug his graduation he located at Vincemnes. where he practieed continuously mutil the time of his death.

One of the early experienees of Dr. Sinith was his recognition of cholera at Vineennes in 1849, which eaused alarm and excitement among the people, protest from fellow physicians and more or less emmity. Dr. Smith bravely held to his opinion that the town was stricken with cholera. and the physicians and people were finally fored to believe that his opinion was correct.

In 18.58 Ir. Smith purchased the Vincennes Gazette and immediately commenced to champion the cause of Alralan Lincoln in his memorable canrass against Douglass, the Gazette being one of the first papers to put forward the name of Lincoln for President. Inmediately on Mr. Lincoln's clection and installation as President, in 1860. Dr. smith was appointed postmaster at Vincemes and held the position until 1869.

Having always been actively interested in edueational affairs, he was elected in $18: 6$ a member of the board of trustees of the Vincennes University, and in 189 r beeame the president of that board. In $18+9$ he became a member of the Knox County Medieal societr, and he became a member of the Indiana State Medieal Association on its organization in 18:6. He was also a menber of the American Medical Association, the first meeting of whieh he attended at Cincinnati in 1852. He was a charter member of the TriState Medieal Association, which originally embraced Indiana, Illinois and Kentueky: and which, outgrowing its territory, assumed the name of the Mississippi Yalley Medical Association.

He becane a Master Mason in 1045，and at the time of his deatli was the oldest member of the V＇incennes lodge．He was a nember of the Western Writers＇Association，having joined on its organization，and even contribnted poems at its annual meetings．Benjamin F．Parker’s late issue of＂Indiana Pocts＂contains several selec－ tions from Dr．Smith＇s poems．In his younger days his poems were published in Peterson＇s La－ dies＇Magazine，The Philadelphia Saturday Courier，the old Louisville Journal，the Cincin－ nati Art Journal and other prominent journals and papers of that time．A collection of poems， entitled＂At Midnight and Other Poems，＂were published in book form by Carlin \＆Hollenbeck in 1898．His last contribution to the bookmakers was＂Historical Sketches of Old Vincennes．＂His contributions to medical literature have also been published from time to time．

He was a diligent student，an apt scholar，a clear thinker and a logical reasoner．He always had the courage of his convictions，and no power or influence was ever strong enough to cause lim to deviate for a moment from what he regarded as the high path of rectitude．He beliered it to be his patriotic duty to take an intcrest in the affairs of his city，his State and nation on all matters of public interest．His more than fifty years＇record as a practicing physician was ideal from the standpoint of both the profession and the laity．No taint of any professional miscon－ duct was ever attached to him，and he altray： had the unbounded respect of his fellow practi－ tioners and the love and gratitude of his patients． He left an impress for good on the community in which he lived that will remain for many years．

## The Death of Nicholas Senn．

Dr．Nicholas Sexis，former profesint of sur－ gery in Rush Medical Collcge，and one of the world＇s most distinguished surgeons，died at his lome in Chicago，January 2 ，as a result of heart disease，with which he had suffered for ten weeks． ITe was a physician of international reputation． and the results of his studies in surgery and path－ ology have become a part of the incdical history of the agc．A man of culture，refincment and thorough erlucation．Dr．Semn was peculiarly fitted for the honored position he lreld in his prolestion．and his success as a surgeon placed lim among the great medical men of the day： During his actire career he found time to conf－ uribute to surgical literature a large number of valuable works．As a teacher his success was eridencerl years ago，when he first entered that
ficld of the profession，hy the popularity with which his lectures were received by incdical stu－ dents．

Dr．Selln was born in switzerland in loft． When i years of age lie cane to this country with his parents．The family settled at Fond du Lae， Wis．，the same year．The boy was sent to the public schools and finally entered the office of a country doctor．where he took up the study of medicine．For several years Dr．Senn practiced at one of the smaller towns in northern Wiscon－


Nichotas sexix，1844－190s．
sin．finally moring to Milwankee．Where he soon made a reputation as a surgeon of more than or－ dinary ability：and eventually became recognized as one of the great surgeons and writers of the country：About fifteen years ago he remored to Chicago．where he was already interested as pro－ lessor of surgery in lush Medical College．Since that time his reputation as a surgeon and writer has broakenerl until there is no country where he was not well and favorably known．

## PERSONALS

Dr．E．O．Buress has located at Portersville．
Dr．H．C．Kxispr，of IVncemes has located in Huntingburg．

In. W. If. Bocias, formerly of Illinois, has located at Salem.

Dr. G. W. Andfrans has begun the practice of medicine at Cossuth.

Dr. IV. P. Alexinder las removed from Cam. den to the new town of Gary.

DR. Wm. F. Rust, of Holland, is at St. Louis, Mo., doing postgraduate work.

Dr. E. S. Baker and family, of Lafayette, are spending the winter in California.

Dr. IV. S. Campbeld has been reappointed health oflicer for Tippecanoc County.

Dr. Illison Maxivell, of Indianapolis, left the latter part of November for Europe.

Dr. L. C. CliNe, of Indianapolis, recently started on a pleasure trip aromed the world.

Dr. R. B. E.srr, of Dunkirk, left December 1i for an extended tour through the west.

Dr. P. R. Urmston, Valparaiso, and Louise M. 'Tillotson, Bay City, were married Oct. 29, 190\%.
1)r. Eari Van Reed, of Lafayette, formerly interne at St. Elizabeth's Ilospital, has located in Lafayette.
1)n. E: P. Elsley, of New Albany, is in Philadelphiad and other eastern citics taking postgraduate work.

1f. A. B. Krapp, of Washington, is spending the months of January, February and March in California.

Dr. C. E. Caylor has opened a hospital for the public at Pennrille. It has accommodations for eight patients.

Dr. And Mrs. Frank IV. Foxworthy, of Indianapolis. have returned from a four months' sojourn in Europe.

Dr. Nohit D. Berry, of Muncie, on Dec. 16, 190i, sustained a Colles fracture of the right wrist, due to a fall on an extended hand.

Dr. Edward Gordan, coronor of Lake County, announces as his deputies for 1908 Drs. E. M. Shanklin, IV. F. IIouk and II. L. Iddings.

Dri. Ricilari B. Wefiemfle, ol Lafayette. started, on October 15 , for a trip around the world. He expects to be gone about ten months.

Dr. W. C. Cauble, secretary of the Washington County Medical Society, has been elected secretary of the Wrashington County Board of Health.

Dr, ILarvey Mitchell, retired. Delaware County's oldest physician, fell at his home Dec. 21, 190\%, sustaining a fracture of the neck of the left femur.

Dr. Cirus IT. Campbell and wife, of Hammond, have gone to California to spend the winter, with the hope that the doctor will regain his failing health.
1)r. Geo. R. Green, of Muncic, sustained a Colles fracture of the right wrist, due to accidental release of crank while cranking an automobile on Nov. 9, 190\%.

Dr. Joseph Rulus Eastman, of Indianapolis. who las: been in Europe for more than a year. has returned and resumed his work in the Indiana Medical College.

Fr. Georgi Flifdebick Shrady, the founder of the Medical Record (New York City). an eminent surgeon, died at his home in New York (ity Nov. 9, 190\%.

Dr, W. W. Wood, formerly a practicing physician at Angola, has abandoned the practice of medicine and taken a position as traveling sales. man in the New England States.

Dr. E. E. Eiffert, a graduate of the Indiana Medical College, class of $190 \%$ and Dr. A. F. Gutzsell, a graduate of the Fentucky School of Medicine, class of 1903. have located at Jasper.

Dr. George W. McCaskex, of Fort Wayne. delivered the address on medicine at the sixtythird meeting of the Northwestern Ohio Medical Association, held at Toledo, Ohio. December 11.

Dr. J. D. Hillis, liealth officer for the city of Lafayette, lias been systematically enforcing the new pure food law, with the result that Lafayette is showing a marked reduction in the amount of illness in the city.

Dr. Johe IV. Suuss, of Indianapolis, has been appointed secretary of the Marion County Board
of Health at al salary of $\$ 1.200$ per ammon, succeeding Dr. ('arl Mrcialuey, who, in turn, becomes deputy coroner.

Mrs. Lhlfin stoltz, wife of Dr. Charles Stoltz, of couth Bend, died on Deeember \%. Mrs. Stoltz was prominent in social and educational affairs in south Bend and. like her husband. emjoved the friemdship and esteen of a very large circle.

Dis. Win. Shamframd H. R. MeKinstry have completed thoir terms of service as internes at the City IOspital and located in the city of Indianapolis for practier, the former at 316 North Meridian street and the latter at the corner of Thintieth and Hlinois streets.

Dr. KeNNeTH Jefrhes, for several years physician to the Eastern Insane Hospital, has resigned his position and gone to New York for a few months of clinical work, after which he will practice in Indianapolis with his father. Dr. W. E. Deffries. $81 f$ Tirginia arenue.
1)r. Thomas J. Behsley and Miss Nellie Loomses, of Indianapolis, were united in marriage at Indianapolis, Der. 11, 190\%. Dr. Beasley is a reecnt graduate of the Indiana Medical College and now has charge of the Rockwood Sanitarium for' Thbereulosis near lonville.

Dr. (ivy P. Levertic, of Lafayette, coroner of Tippecanoe Comety, with his bride, Ieft on a wedding trip to Europe Jume 15. Deputy Coroner II. M. Reser, of Lafayette, followed the example of the eoroner by marrying on October 16. Dr. Reser and bride took a wedding trip, which inchuded risits to numerous Lastern cities.

## NEWS, NOTES AND COMMENTS

T'HE physicians of New Mlbany and Jeflersonville lave faken up the postgraduate eourse of sturly.

Tue physicians of North Vernon have deeided to charge double fees for all sick calls attended within the city limits between the hours of 9 p . m. and 6 a . m .

Tue Fort Wayne Medical Society has taken official action concerning the hiding of eases of contagious and infertious diseases, and has determined to support the Board of Health in efforts to suppress the practice of eovering up commmicable diseases for any cause whatsoever.

Ture Lomisville Medical College and the Mospital College of Medicine, both located at Louisville, ky.. have combined under the name of the Louisville and Hospital Medical College, continuing as the medical department of ('entral ['niversity.

T'uE: secertary of the Green Comnty Medieal society reports the following removals: Dr. W. II. Cole, from Switz City to Ehora; Dr. R. T. ('ook, from Solsberry to Bowling (ireen: Dr. V. s. Shanklin, from V'icksburg to Terre Maute; I)r. .J. I'. Pickel, from Midland to Indian Territory.

The Northern Tri-State Medical Association meets at Toledo, Ohio. on Janmary 14. Dr. Albert E. Bulson, Jr., of Fort Wayne, is president of the association, and Dr. Wm. F. Shumaker, of Butler, is secretary. Indiana plysicians represented on the Toledo program are as follows: A. ('. Voder, Goshen; M. Stamm, Fremont; M. F. Porter, Fort Wayne; H. F. Mitchell, South Bend; Ki. Ki. Wheclock, Fort Wayne.

The: Indianapolis City Council, on Dec. 11, 190\%. voted to allow the Board of Health $\$ 51,000$ for the completion of improvements in the City Hospital. The attempts of the board to enforee the ordinance against the crowding of people in insufficient quarters (as many as 18 Hungarians being found sleeping in one small room) have been frustrated by the decision of Judge Whallon, who declared the ordinance invalid.
'The Delaware County Hospital Commission has recently purchased, through the bencficence of Mr. James Labayteaux, of Delaware Comnty, the old Me.Culloli home in Muncie, to be conrerted into the Delaware County Hospital. The site is eentrally located and one of the most desirable in the city for the purpose, and was secured by the commission for a consideration of $\$ 18,000$. The building will, in the near future. be thoroughly renovated and equipped by the commission, and will be maintained by the county under the statute providing for the maintenance of county hospitals.

I CASE of poisoning from antikamnia is reported by Dr. II. N. Rowell in the California citate Journal of Medicine. In experienced nurse, suffering from an ulcerated tooth, on the adrice of her dentist had taken antikamnia. She harl taken ten grains. When examined by Dr.

Rowell she was found in a state of collapse, and a half'-hour's work with various restoratives was required to bring about consciousness. The patient had no idiosyncrasy; as she had taken coal tar derivatives in the past, but under the direetion of her plysieian. The package from which the tablets were taken was marked "Sample Package," and, she alleges, was left at her door.

Tur physicians of Bellefontaine, Ohio, have taken action regarding evening office hours, thu: limiting, in all except emergeney cases, the numher of hours of a physician's working day. An agrcement, signed by practically every physician in the town, has been published in the loeal papers, whereby the physicians agree to close their offices at 6 o'elock each evening except Saturday. Patients are recquested not to make demands on the physicians during the evening lours except in cases of emergeney. By closing their active work, so far as possible, at 6 p . m., the physicians of Bellefontaine hope to have the evening for study and reading, thus increasing their ability and the value of their services to their patients.

The new Methodist Hospital at Indianapolis. although still incomplete, held open house New Year's day. I turkey dinner was furnished from 12 to 2 by the ladies of Hall Place M. E. Church. and a gencral reception from 2 to 6 by the ladies of the Methodist churches of the city. Over 6,000 persons visited the hospital during the day. and the sum of $\$ 3,600$ was contributed toward the fimishing of the structure. Miss Marilla Williams, of Jeffersonville, a trained nurse and not a physician, was chosen superintendent of the hospital at the meeting of the board. She received her training at the Deaconess Training school of Chicago and has had charge of the Jeffersonville Hospital for the past eight years. Among the applicants or candidates mentioned for this position there were sixty physiciams, The directors hope to have the hospital ready for ocenpancy in about three months.

Gombinor Hincy issued three Christmas pardons to red-handed murderers. Every year several men, who have been given life sentences for crimes that merited such punishment, are thus turned loose, their release vitiating to an extent in the publie mind the force of the life sentence. This is one of the potent reasons why the people oppose the abolition of the death penalty. They do not fance the idea of sending to prison for life some infamous beast who richly deserves hanging, only to see him paroled a few years later by
some sentimental governor with it mistaken "('lhistmas spirit" gnawing at his "innards." So long as the pardoning power is so freely employed, the good people of Indiana will insist on keeping a good supply of hemp rope up at Michigan City for certain distinguished citizens who manifest a reckless disregard for human life.Fort Wayne Vews, December 26.

Tife Americin Medical Assochation announces that the first number of the Aichices of Internal Medicine, a journal devoted to the publication of articles relating to internal medicine which are too technical or too elaborate for a journal of general circulation, will come from press some time this month. The Archices will not conflict with other publieations now in existcmec but will be, as it were, a connecting link between technical journals, and representing special work so far as it relates to the internist and medical joumals in general, for which such matter would be too technical, too theoretical or too experimental in character. The editorial board is made up of the following well-known mens: Joseph L. Miller, Chicago; David L. Edsall. Philadelphia; Richard C. Cabot, Bostow; Theodore C. Janeway, New York City; George Dock, Inn Arhor; II. S. Thayer, Baltimore. The subseription price will be $\$ 4.00$ a year. but as an introductory price a reduction of $\$ 1.00$ will be made to members and sulsecribers to The Journal of the A. X. . 1.

Is tires suit of the Memplis Keeley Institute rs. the Leslie E. Keeley Company, the fraudulent character of the "Keeley Cure" has been fully exposed. In the trial it developed that the Keeley ('ompany built up and maintained its bnsiness by fraudulent representations, and the higher court maintained that there was abundant eridence to prove that the Keeley business obtained its start and reached its eminence by gross misrepresentations. and that a company thus preying on the public should not be protected in its frauds by the court. The eridence showed, as every plysician knows, that there is no such salt as the "double chloride of gold," and, furthermore, that there is no gold in any form whatsoever in any of the so-called Keeley gold cure remedies. It one time Kepley's reputation as a public benefactor was heralded far and wide by pulpit and press, but the evidence now shows, what many intelligent physicians always thought was the case, that Leeley was a swindler of the worst type and the "gold cure" a rank humbug foisted on a gullible public for profit.
'The ('ommittce of the A. M. A. on "Tegislalive Measures to I'revent Ophthalmia Neonatorum" recommend the following form of law as a basis for legislative action, to be modified to suit the needs and legal situations in each state, and pliysicians are urged to cooperatc, both indiridually and collectively, with the committee to sceure its enactiment:
IN ICT to Prevent Inflammation of the Eyes of the Newborn Babe, or So-Called Ophthalmia Neonatorum.
section 1. The department of health of this state is hereby rested with power and authority to publish and distribute such information and instruction, to furnish such remedies, and to make such rules, regulations and ordinances as it may deem expedient to prevent the development of inflammation of the eyes of the newborn babe. or so-ealled ophthalmia neonatorum, in publie hospitals or institutions in which midwifery is practiced cither wholly or in part, and in connection with the practice of legally lieensed midwives.
Section 2. Said department is authorized to enforee its rules, regulations and ordinanees at the expense of the state.

Section 3. Any person violating any rule, regulation or ordinance of said department of liealth regarding the prevention of ophth:almia neonatorum shall be guilty of a misdemeanor: This act shall take effect immediately.

In Collicr's Weckly a strong tribute is paid to the progressiveness of the Massachusetts Board of Health. An act which took effect on Sept. 1, 1906, provides that "it shall be unlawful for any person (including physicians) to sell or to expose or offer for sale or to give or exchange any patent or proprictary medicine or article containing cocain or any of its salts or alpha- or betacucain. or any synthetic substitute of the aforesaid." Previous to the enactinent of this law every Massachusetts dmggist sold proprietary preparations containing cocain in some form. Since then the board has prohibited the sale of the following preparations: Crown Catarrh Powder, Dr. Agnew's Catarrh Powder, Dr. Cole's Catarrh Cure, I. C. R. Instant Catarrh Relief, Pretzinger"s Catarrh Balm, Allenbury's Throat Pastiles No. 9, Tucker's Specific for Asthma, Hay Fever and all diseases of the respiratory organs.

Finding that many cocain preparations advertised for sale belong to the list of non-proprietary preparations sold without preseription, the board issued an order to the effect that druggists may no longer scll, except on prescription, the following: Compressed Pills, Throat, Mentholated, John Wyeth \& Bro., Inc.; Compressed Pill, Naulsea, John Wyeth \& Bro., Inc.; Anti-Vomiting Tablets, Mulford; Tablets, Anti-Vomiting, No. 2. Mulford; Compressed Tablets, Creosote Compomit, No. 2, C. Kilgore. New York.

Later the board advertised as unsalable at retail the following: Standard Catarrh Powder, Reeves' Coca and Toln Cough Drops, Reeres' Drug and Chemical Company, Cambridgc, Mass.; Coca Wine, Ropes Drug Company, Salem; Coca Wine, W. B. Markell's Drug Stores; Coca Wine, Lewis, the Manufacturing Chemist, Boston; Peruvian Wine of Coca, E. F. Mattison, Providence, R. 1.; Wine of Coca, Davies, Rose \& Co., Boston; Metcalf's Coca Wine, Theodore Metcalf Company, Boston; Dr. Earl's Coca Wine, the New York and Boston Drug Co., Boston; Epstein's Wine of Coca, Epstein's Cut Price Drug Store, Boston.
This work is in the right direction and is commended to the attention of various state boards of liealth, Indiana included.

The Ilfinois Stite Medicil Society has recently entered into an agreement with the American Medical Association by which systematic cooperative organization work will be taken up in Illinois. The plan is as follows: The Membership Department of the American Medical Association has selected the best and most competent men from among its representatives for organization work. These men have had much experience along this line and are thoronghly familiar with all the details of organization work. The work is taken up by counties and councilor districts. Before an organizer is sent into a district, correct proof of the names of the pliysicians of cach county, indicating the members and non-members of the county medical so(icty, is sent to the county secretary, who is asked to revise it and return it to the general office of the American Medical Association. This is done for two reasons: first, that the membership list for that county may be complete and up to date: sccond, to enable the secretary to designate on the proof those plysicians in the county who are not members of their county society, but who are cligible and who would be acceptable to the county society. From this returned proof a list of eligible and desirable non-members is made up, which list is given to the organizer when he starts into the district. At the same time he is given a letter of introduction to the councilor: on whom he calls before taking up the work in the district and with whom he carefully discusses the work in that particular district. The councilor gives hin such advice and instructions as he tlinkss best and also gives him a letter of introduction to each county secretary in the district. The organizer then takes up each county in turn, calling first on the countr secretary and
presenting his credentials. The organizer and the county secretary then go over the list of nonmembers of the county in detail, the secretary giving the organizer such advice in the way of suggestions regarding local conditions, individuals, etc., as he may think advisable. The organizer then calls personally on each desirable nonmember in the county, presenting the cause of medical organization and endeavoring to secure the application of the physician for the county society. Applications are taken on a triplicate blank, one copy of which is turned in to the county secretary, the second is sent to the state secretary, and the third to the general secretary of the A. M. A. The organizer, at the time of taking the application, collects one year's dues for the county society, which, of course, includes the state per capita assessment. As soon as the county is completed the organizer reports to the seeretary of the county society as to the results obtained. When an entire district is completed a report is made to the eouncilor of the distriet. In this way it is anticipated that within the next few months every physician in Illinois who is a non-member of his county society can be personally intervicwed, and wherever possible indueed to become a member of his comnty and state organizations.

The advantages of this kind of organization are many, and it is hoped that some such plan ean be adopted here in Indiana where there is room for extended organization work. The Council will probably make an effort to secure the eooperation of organizers of the A. M. A., and if suitable arrangements can be perfected the officers of eounty societies will be requested to give all possible aid and assistance to the organizers sent into this state.

## SOCIETY PROCEEDINGS

## THE COUNCIL.

A meeting of the Council was held at the Claypool Hotel, Indianapolis, on October 15. The meeting was ealled to order by Clairman Wishard, with the following Councilors present: Walter J. Leach, Third Distriet, New Albany; W. H. Stemm, Fourth District, North Vernon; Joseph H. Weinstein, Fifth Distriet, Terre Haute; D. W. Sterenson, Sixth Distriet, Richmond; W. N. Wishard, chairman, Seventh Distriet, Indianapolis; George Rowland, Ninth Distriet, Corington; E. G. Blinks, Tenth Distriet, Michigan City; Charles H. MeCully, Eleventh District, Logansport; Albert E. Bulson, Jr., Secretary, Twelfth District, Fort Wayne; C. A. Daugherty, Thirteenth District, South Bend. The Secretary presented the proxies and instructions from Councilors W. R. Davidson, First District, Evansville; G. W. H. Kemper, Eighth Dis-
trict, Muncie, and George Knapp, Second Distriet, Vincennes.
The chairman stated that the business of the meeting was to consider the question of the establishment of a medieal journal to take the place of the bound "Transactions," and that in compliance with instruetions from the House of Delegates the Council had, at a. former mecting, appointed the secretary of the Council a committee of one to collect all necessary facts concerning the feasibility of publishing a medieal journal to take the place of the bound Transactions, and the wishes of the members of the Association concerning the subject.
The secretary reported that he had sent circular letters to all the county societies in the state asking that a rote be taken on the proposition to establish a journal for the Indiana State Medical Association, and that up to date sixty-three societies had roted for the establishment of a journal and eight had roted to retain the "Transactions," thus indieating that a large majority of the societies were favorable to the establisliment of a journal. He also reported that in aecordance with instructions from the Council he had carried on an extensive correspondence, eoncerning state society journals, with officers of rarious state societies and medical editors interested in state society publications. Much of this correspondence was then read, showing that without exception the state organizations that have established official jommals are not only thorouglily satisfied with the results accomplished, but are unwilling to abandon the plan. The secretary then presented considerable tahnlated information with reference to the cost of publication of various journals, rates charged for advertising, subscriptions, salaries paid, policies pursued. etc. He also stated that he had seeured some preliminary bids on the publieation of such a journal as he thought the Indiana State Medieal Association ought to publish. and that he had definitely determined the fact that a ereditable journal could be published without ruming the Association into debt or raising the dues.
Following a rather extended and general discussion on the subject, Dr. Stevenson mover that the Council establish a journal for the Indiana State Medical Association to take the place of the bound "Transactions," and that the first number of the journal be published on or ahout Jan. 1, 1908. The motion was seconded by Dr. Rowland, and on vote was umanimously carried.

Dr. Sterenson moved that Dr. Bulson of Fort Wayne be elected as editor of The Jourvar for one year and to continue thereafter as editor until his suceessor is clected. The motion was seconded by Dr. Dangherty, and on rote carried unanimously.

Dr. Bulson moved that the name of the journal be The Jourval of the Indina State Medical Association, that it be made a journal of general interest to the medical profession of Indiana, and that it be published under direction of the Council. The motion was sceonded by Dr. McCully, and on vote unanimously carried.

Sauple enpies of several state journals were presented for inspection, and after a free discussion of the subject it was decided, on motion by Dr. MeCully, seeonded hy Dr. Leaeh, that the new journal be made to correspond in a general way with the size and appearanee of the official organ of the Kentueky State Medical Association. Motion carried.

Dr. Bulson stated that as the "Transactions" and the various printing bills for the Association for each

Sear had cost approximately 7 io cents for each member． he thonght that such an amount from earh member should be roted as an ammal subscription to Tree Journal，and witl the amount raised in this way from subseriptions，added to the amount that could poswibly be seenre．from advertising，he wonld be willing to undertake the publication of a jomrnal of 48 pages，of the size of the Kentuckiy Medical Journal， each issue to eontain 3.000 popies．

Dr．McCully then moved，seconded ly Dr．Stevenson， that in cents from the 1908 dues of every member of the Indiana State Medieal Association be set aside as a subseription to The Jorranal for one year．or from Jan．1．1908，to Jan．1．1909；that such sum be plaeed to the credit of The Jotrral immediately on collee－ tion of the dnes；and that the members of eounty med－ ical societies be asked to par their 1908 dues by Jan－ uary I on aecount of the estahlishment of a journal and the neeessary expenses inemrred．Motion earried．

Motion by Dr．Dangherty，and seeonded by Dr．Row－ land．that the expenses pertaining to the publieation of Tife Jocraxal，ineluding the salary of the editor． le limited to the income derived from the subserip－ tions and adrertising．Carried．

Dr．Bulson then stated that owing to the demand on his time for regular professional work，he would not he able to look after all the details eonnected with the proper editing and publishing of the new jommal．consequently he would like to have an assist－ ant to share some of the responsibility．Dr．Rowland then moved．seconded hy Dr．Stemm，that Dr．Bulson be authorized to select and appoint an assistant ed－ itor．and to employ such office help as required．but that all salaries and other expenses eonnected with tne publication of The Jocreal be paid from journal funds．Carried．

Moved hy Dr．Stevemson，and seconded by Dr．Row－ land．that the adsertisement of no medicinal prepara－ tion be aceepted for publication in The Jorrval un－ lese it is a C．S．P．or N．F．preparation．or has been approved by the Council on Pharmacy and Chemistry of the Ameriean Medieal Asomiation．Carried．

Dr．Butson salid that he had the advertising rate earde of varions journals，including nearly all of the state enciety jourmals．and lie suggested that the rates for Tue Jocraval be made to compare favorably with the rate of other state society journals of similar size and circulation．

Moved hy Dr．Blinks and seconded lye Dr．Me．Cully． that the alvertising rates be made to conform to the rates charged he other state journals and that the rates as established be umiform to any and all adver tisers．Carried．

Moyed by Dr．Weinstein，and seconded by Dr． Stemm．that TuE Jotrval print no free advertising readere and have no advertising incert among the regular reading pages．Carried．

Moved lyy Dr．Dangherty，and seconded by Dr． Stemm．that all original articles for publication in The Jotrail，thall hase the apmoval of the publiea－ tion committee of the Comeil．Carried．
Moved by Dr．Mulson，and seconded by Dr．Wein－ stein．that the secretary of the Asoociation shall promptly turn ower to the treasurer all state society dues．and that the treasures shatl likewise promptly turn over to the editor of Tue Jotrival all suberepip－ tions to The Jotrxile so that the funds muy be a vaitable for the parment of pmblication expenses． Carried．

Moved by Dr．Stewensom，and seconded by Dr． Dangherty，that the editor he given full authority to adopt any measures and pursue any policer not already provided for byetion of the Council．that in his judg－ ment seems indieated as necessary or appropriate in the best interests of Tife Jocrsal of the Indiana State Mencal，Associatios，and that the Council extend eneouragement and support in all his efforts to build up the journal interests．Carried．

Moved by Dr．Stevensom，and seconded hy Dr．Row－ land．that any candidate for county，state or national offiee shall he interviewed by the eouneilor of the dis－ trict in which sueh eandidate resides，or some one deputized by the comeilor，to inquire as to the prob－ able attitude of the candidate on questions vital to the best interest of the medical profession．and that sueh views be made known to the Council for such publieity as may be deemed advisable or expedient．Carried．

Adjourned．
Albert E．Bifloon．Jr．，Sfe．

## ALLEN COUNTY． <br> fort Wayce memical Nociety．

（Meeting of Dec．3，1907．）
The Society met in regular session in the assembly room of the courthouse．with Vice－President English in the chair and 36 members and a number of guests present．The minutes of the last meeting were read and approved．

Epidemiology of Typhoid Fever was the title of a paper read by Dr．II．O．Bruggeman．He said that typhoid fever is an infeetious and eontagions disease． and that the immediate role of polluted water in the spread of the disease has overshadowed all other sources of infeetion．Typhoid ferer is a general infee－ tion．a true septicemia．and hence the beilli may he expreted by the way of the urine．feees and spntum． The bacilli in the feces come in a large part from the bile．The sputmm may be loaded with bacilli and esperially is this true if pulmonary complifations ex－ ist．The theory that intestinal worms play an im－ portant part in inoenlating typhoid is probably fal－ lacious．Three or four per eent．of the patients who have trphoid continue to exerete the bacilli for long periods of time after recovery．These bacillus par－ riess are important factors in the spread of the disense． and several epidemice have heen traped to such a source．Certain persons who have never had the clin－ ical somptoms of the disease may discharge typhoid bacilli for long periods of time．These individuals are another important source of the spread of typhoid，is are aloo atypical rases leading to errors in diagnosis． Much study has lieen given the question of viability and retention of vimbency of the hacillus trphosus nut． side the body．Contradictory results have been ob－ tained，but in general it may be said that direct sum－ light rapidy destroys the hacillus，whereas the baeil－ lus．when dried and kept in the dark，lives for many days and is unaffected hy freezing and thawing．The lacillus is viable in water from few to many days．de－ pendine on the amount of organie material present and the ab－cuce of sunlight and other adverse eonditions． The orgenisms may live in the soil for a number of months．and have been known to survive for twenty－ three days on the external parts of an ordinary house fly．Every case of typhoid fever is due to the pres－ ence of excreta on t．ee fool．fingers or other places where excreta sloould not he found．Contaminated
fingers are a menare both to their owners and the pul)lie. Infected bedding and clothing are a source of outlreak in military commands and among laundresses. Rummage sales are another source of infection. and it is now generally recognized that flies may earry the infecting organism directly from the feces to the food. Dust is another possible medinm of transfer, and Hurty attributes epidemics to the blowing about of dust rontaining excreta derived from the toilet rooms of railroad trains. Polluted water is the principal sonrce, not only when used for drinking purposes, but also when used on tooth bruslies, as a nasal douche. in the manufacture of soft drinks and even in bathing. Nilk probably plays the next most important rôle in the epidemiology of typhoid. Milk may be infected by the contaminated fingers of typhoid murses. flies and the use of polluted water to wash the milk containers. Jilk epidemics affect principally women and children. Oysters and fresh regetables may also be disseminators of typhoid. The disease is brought about through the medium of food, fingers and flies. Filth is therefore the fundamental condition for the spread of typhoid, and cleanliness the universal panarea for its eradication. One thing is especially clear. and that is that typhoid fever is a eontagions disease.

Dr. Van Buskirk opened the disussion by saying that every case of typhoid fever has its origin in another ease, and hence the excreta from every typhoid case should be destroyed. The chronie baeili earriers are a prolifie sonree of the disease. From a boullon eulture of bacillus trphosis poured on the ground in the fall. living organisms have been recovered in the spritg from the sirface of the ground and also at a depth of eighteen inches. This shows how easily the ground water may be contaminated and from that the drinking suppliss. Contaminated water and typhoid feces are the most usual direct someres of infection. The urine may contain the bavilli for veats.

Dr. Van Buskirk moved that the paper be referred to the State Aedical Assoriation. Motion seronded and earried.

Dr. Buchman said that he knew of an instanee in which two members of a family were infeeted by contaminated water used for dish washing. Every permon who ingests typhoid bareilli will not take the disease. as the derelopment of the disease depends on the general state of the system. Intestinal antisepties in the treatment of the divease are nueless becanse trphoid ferer is a systemide disease.

Dr. MeOscar said that he helieven that the bacilli exereted dming an attack of typhoid are more virulent than those excreted after the attack. It was formerly thought that tape wom infection was the one damger in using vegetables fertilized with luman feers. but it is now known that vegetables earry typhoid.

Dr. Greenawalt said that he believed that the gall bladder was the source of the bacilli in the "bacilli carriers" in the chronic dissemintors of the disease. He thinks that patients shoukd not he discharged until an exmmation shows the wrine and feces chear of typloid lacilli, and that all rases of typhoid fever -honld be quarantined.

Dr. Havice said that mild canes of trphond are dangerous for the reason that such patients do not consider themselves sick enough to go to bed. and oftentimes not sick enongh to consult il doctor. He believes that the Board of Health hould see that grocerymen th not leave food ont on the silewalk in gather dust and germs.
1)r. Nierman satid wat the only sure prevention of typhoid is to boil all water and cook all food before ingestion.

Dr. Squires said that he believes that there is a great ditlerence in the vimlency of the bacillus typlosis, as the sererity of epidemics varies greatly. Infertion from a virulent case produces a severe attack, and conversely.

Dr. Porter saill that the nuclei of many gallstones are typhoid bacilli. He knows of one case of typhoid arising from ristern water used only in hathing and dish washing. Investigation showed a leaking sewer one foot from the cistern. He said that typhoid may ocrur without fever and abdominal symptoms.

Dr. Drayer said that many cases of trphoid originate from patisnts having the disease, but not reeognized asuch. Sporadie cases may be explained on the ground that the germs remain latent in the system until the body resistance hecomes low.

Dr. Van Sweringen said that the U'nited Sitates Army ('ommission demonstrated the important rote of the fly in the prometion of typhoid. It is impossible to get a body of men together withont having typhoid. He further said that he had obtained the Widal reaction in two eases of tuberoulosis and that neither patient lad erer had typhoid.

Dr. Rhamy said that he had seen the Widal reaction orror in thberenlosis. He further said that it is the mild and unreeognized cases of typhond fever which are the ones that do the damage. Bacilli which are not virulent may become virulent when they find a suitable -ubject. The germs in the chronic disseminator probably come from the gall bladder.

Dr. Broggeman in cloaing said that oyster are ushally infected in their beds. Mild cases of typhoid are the principal eause of epidemics. One German vilkage epidemic was traeed to a woman who had had the disease 42 yeare before.

Dr. Bulson moved that the secretary invite the wot ermment milk expert to deliver a publie lecture under the atupisers of the Fort Wayne Medial Society. Seconded and rarried.

Dr. l'orter introduced the following resolntion:
Resolical. That the time for paring the anmual as-ess ment for the indigent fund be changed to correspond with the time for the payment of the annual dnes.

Action pontponed until second reading.
The ammalal election of officers resulted as follow-: President. II. D. Calvin: vice-president, C. R. Dancer: secretary, J. (. Wallace: treasurer, W. P. Whery : censor to till racancy. H. A. Duemling, delegate to the Sitate I-morintion. H. O. Bruggeman: alternatedelegate. I. H. McEFoy.

Dr. Porter mowed that the meeting of December at be di-pensed with and the program for that evening be taken up later. Seconded and earried.

Aljourmed.
Charles (i. Beall. Sece pion tom.

## (Meeting of Dec. 10, 1907.)

society colled to order at the Fort Wiayne Lutheran Hospital (clinic night) by preadent. Mcreoy, with 32 members and several guests present. Minuten of previons meeting read and approved.
Pyelitis Accompanied by Severe Bronchitis,-Case report hy Dr. Dnemling. Patient. man, aged 22 , was scen in consultation with Dr. (iny Smith. l'atient was fonnd romplaining of pain in the dent antl the back
(lumbar region) and of a severe cough accompanied by iree expectoration of mucus; 24 hours before had had two chills, one following the other. No previous history of any importance. On examination pulse 104 , temperature 103 , respiration 36 . Percussion note same over all areas of the chest; thought to be not as resonant as normal. By auscultation coarse râles in the bronchi, and finer ones in the smaller bronchioles. Percuscion in the right hypochondriac region caused the patient to call attention to the pain in the back occa-ioned by the transmission of the force exerted by the percusaion. Found pronouneed tenderness orer the right kidnes. At this point the patient gave a history of having had gonorrhea 15 months before. Examination of the urine showed a specific gravity of 1,033 , highly acid, no albumen or sugar, no phosphates but an abundance of urates. Pus eells found by microscopic examination. On the following ayy the urine showed a larger quantity of pus cells, some staphylococci and a few gonococci. Patient expectorating freely. Three days later the temperature and respiration became practically normal and patient in a fair way for recovery. Dr. Duemling said that the intercsting feature of the case was that it seemed to be an ascending infection.

Rupture of the Liver.-Reported by Dr. Duemling. Patient age 0 years, was thrown from a wagon. Not known whether the wagon passed over him or not. Patient found by Dr. Duemling in deep shock, two ribs fractured. Removed to the losspital. On arrival the patient complained of screre pain in the abdomen, was vomiting, restless and very pale. Abdomen distended and tympanitic. An exploratory incision was made and great quantitics of blood came into the field. While clearing away the clot= pieces of peculiar substance, thought to be fecal matter coming from a ruptured bowel, were discovered, and these, on closer inspection, were found to be pieces of detached liver. Patient died about 24 hours after the injury. The peculiar thing about the ease is that the man could live so long with such an extensive rupture of the liver and so little symptoms. In connection with chis case Dr. Ducinling reported another very similar case of ruptured liver in a soung man, with death 6 houra after the injury.

Appendicitis with Resection of the Bowel.-Dr. Duemling reported a case in which numerous attacks of appendicitis had resulted in adhesions and a tumor mass as large as the fist necessitating a resection of two or three inches of the ilcum in order to secure satisfactory results from operation.

In this connection Dr. Van Sweringen also presented a specimen of resection of the bowel made necessary from trouble with the appendix. The patient was operated at the end of the first week of an attack of appendicitis. Free pus and a gangrenous appendix were found. Appendix removed anc drain inserted. Considerable sweuling around the bowel and eecum. Removed the drain at the end of a week. Patient worked during the summer and in the fall attended school for several weeks when he again began to have trouble in the right side. On examination it was found that ne had a larger tumor than when he had his appendicitis. The bowel was opened and a tangled mass of bowel and inflammatory material discovered. The bowel was resected and an end-to-end anastomosis made. Recovery uneventful.

Removal of the Thyroid.-Dr. Duemling presented a thyroid tumor which grew as a retro-sternal goiter and was all but hidden behind the sternum. It seciued very small until it was uncovered. The most prominent sympton produced by the goiter was interference with respiration. When the tumor was removed it left a very large eavits which had to be drained. Recovery was meventful despite the fact that she also had suppurating tuberculous glands of the neck on the left side, which were also removed at the same time.

Dr Deumling then presented a number of fibroids, several of which had been removed from pregnant women. He suggested that the fibroids grow faster if the patient becomes pregnant.

In the discussion Dr. Porter said that there are several reasons for operating a case of fibromyomata with pregnancy present. Dr. Reed's idea is correct unless miscarriage is liable and then it is not because we have the miscarriage, but on account of the septicemia. Another reason for operating these cases is to save the child, for on removing the tumor and allowing the pregnancy to go on to term the child's chances are better. He said that he had done this in cases fully five months along.

Dr. Porter said that he was not sure that fibroids grow faster on account of pregnancy. The growth of the pregnant uterus pushes the tumor up into the belly and it seems as though the tumor is really growing rapidly.

With reference to the resection case report by Dr. Duemling. Dr. Porter said that he thought it would be advisable to make a microscopical examination of the specimen, as it was not unlikely that the growth might be malignant.

With reference to rupture of the liver, Dr. Porter said that fewer lises would be lost if we could get the profession to realize that so-called "shock" in nineteen out of twentr cases is not shock at all but hemorrhage. If the symptoms do not get rapidly better the thing to do is to open the belly and stop. the hemorrhage,

Dr. Rhamy said that in making microscopic examinations for gonococei in the urine-it is absolutely nccessary to use 'rrams' stain to differentiate the gonococci from other organisms which look like gonococci.

Dr. B. Van Sweringen exuibited specimens of ovarian cysts prepared by a method which shows the size of the cyst much better than the usual method. He rubs the inside of the crst with boric acid and stuffs the crst with cotton. He then rubs the outside with boric and salicylic acid and hangs the cyst up to dry.

Dr. Beall sald, concerning the case of hemorrhage from ruptured liver, that it is remarkable that so large a rent should occur without any external mark of violence if the liver was normal. In this case the liver substance seemed to be diseased, as slown by the vellowish pieces taken out by Dr. Duemling, and this diseased condition probably accounts for the extent of the injury.

Dr. English reported a case of rupture of the lung by contre-coup. The patient was struck with a board over the left side ribs to the left of the stomach. There was very little external evidence of injurs, but a great deal of shock. There was no evidence of perforation or injury to the abdominal contents or evidence of hemorrhage. Patient died within twenty-four hours, and on postmortem the tissues over the cartilages of the ribs on the left side were found edematous, and on opening the rheit. the right lung was found codlapsed,
the left one appearing normal. On lifting the right lung, found a tear in the upper and onter posterior half one and one-half inches deep. There was a peritonitis in the upper left portion of the abdomen, but absolutely no hemorrhage.

Motion was made and carried that all clinieal cases reported be in writing as far as possible.

Following adjournment the members partook of luncheon served by the hospital management.

Adjourned.
J. C. Wallace, Sec.

## (Meeting of Dec. 17, 1907.)

Meeting called to order by President MeExoy with 35 members and a large number of guests present by special invitation. Reading of minutes of previous meeting postponed.

Clean Milk was the title of a stereopticon lecture by Dr. George N. Whitaker, a government dairy inspector. He spoke of the danger in using impure milk and ealled attention to the fact that milk is frequently a earrier of disease. Tuberculosis may be transmitted to the human being from milk taken from a cow suffering from tuberculosis. It is therefore nceesary that all cows suffering from tuberculosis should be exchuded from herds. The tuberculin test for tuberculosis in cows is effieient and laws and ordinances shoukd be passed requiring the frequent examination of herds for tuberculosis and other diseases, and when tuberenlosis is foumd in a herd the dairyman should be legally required to remove the diseased eattle from his heril. Milk may be eontaminated outside of the cow. and in frequently the carrier of diphtheria. typhoid and scarlet fever. Epidemics of these diseases have frequently been traced to milk. Ordinnces should be passed regulating the handling of milk and milk utensils, and there should be absolute cleanliness of water used in washing the pans and paiks used to hold the milk. By means of the stereoptien Dr. Whitaker exhibited slides showing dirt in the bottom of bottles containing milk. He also showed numerous pictures of barns where milk eows are kept and pointed out the errors in sanitary arrangements. He also exhibited slides showing barns and milk houses which could be considered entirely sanitary. Attention was called to the various methods and means of keeping dirt from getting into the milk. and he advised that milk be served in bottles and that the bottles be filled under sanitary methods and eonditions. All utensils used about milk should be thoroughly boiled. In a city of sufficient size there should be a eity milk plant and this should be run under as aseptie conditions as possible. Tables were shown illustrating the increased mortality of bottle fed infants over those fed by the breast. This mortality could be redueed if the milk supplied to infants was of proper quality and free from contamination.

In the diseussion Mr. Ellison, a leading dairyman, said that while the milkman is blamed for many shortcomings in the handling of milk, the consumer is also frequently at fault. as very many families give milk but little care after it has been delivered.

Dr. Buchman exlibited a bottle of milk with a great quantity of dirt in the bottom and said that the milk had been served by one milkman but put in a bottle furnisled by another milkman. The milk may have been all right but the bottle may not have been clean.

Dr. Schrader said that in a number of eases his patients had expressed themselves in favor of having
milk served in their own containers because the bottles in which their milk had been served were either unelean or there was dirt in the bottles.

Dr. McEvoy said that he has certain knowledge that much of the milk served in bottles is bottled in the street, and of course under such conditions it was impossilble to have cither the milk or the bottles elean.

Dr. Buchman said that under the new milk ordinance there will be no milk bottled anywhere but in a proper milk house.

Dr Tan Buskirk said that he has been advising consumers to visit the source of the milk supply so as to form a fair sort of opinion as to the conditions under which the milk is furnished.

Mr. Ellison suggested that publicity of opinion regarding dairymen who do insanitary work would $g_{0}$ a long way toward improving the sanitary condition of the milk supply of the city.

Dr. Whitaker suggested that the score card system be kept on file in the office of the board of health and the results published in the newspapers. Under this srstem the dairy inspector reports as to the results found on frequent examination of the rarious dairies and their product. and the publication of the facts enables the publie to know just what dairymen are most rigidly following the requirements of the milk ordinance. This system also has the advantage of pointing out to the dairyman his faults and giving the honest dairyman an opportunity to improve.

Dr. A. S. von Mansfelde, of Ashland, Neb., was then intiodured and gave a short talk eoncerning the work of the commission appointed to investigate the cause of rellow fever. He requested that the Fort Wayne Medical snciety pass resolutions endorsing the movement to put bills through Congress for pensions for Mrs. Mabel H. Lazear and Mrs. Jennie Carroll, widows of two doctors who were on the yellow fever commis. sion, and who in the interest of science allowed themsclves to be bitten by mosquitoes infected with rellow ferer. losing their lives in eonsequence.

Motion to amend Section 3. Chapter 5, of the by-laws to read that the time for paying the annual assessment for the indigent fund be changed to correspond with the time of payment of the annual dues was then roted on and carried.

Adjourned.
T. C. Wallace, Sec.

## BARTHOLOMEW COUNTY.

The Bartholomew County Medical Society met in regular session Tuesday, December 10, and elected the following officers for the ensuing year: President. Dr. John Little Morris: vice president, Dr. T. W. Ben ham; sceretary and treasurer, Dr. George T. McCoy: delegate. Dr. R. E. Holder: member of the board of censors, Dr. F. B. Morton. Dr. W. S. Blue was elected a member of the society and the application for membership of Dr. C. W. Potter was received and referred to the board of eensors.

Geo. T. McCoy, Sec.

## CLARK COUNTY.

At a recent meeting of the Clark County Medical Society the following officers were elected to serve for the ensuing year: President, Dr. O. P. Graham, Jeffersonville; viee-president, Dr. F. N. Flynn, Jeffersonville; secretary and treasurer. Dr. Austin Funk, Jeffersonville. The society formerly met every month but has reeently adopted the postgraduate eourse of study
and now hodd werkly meeting．So far the postgrad－ late fomse has proved very succesoful and the meet－ ing－have been well attended．

Idjournet．

## destin Five，Nec．

## CLINTON COUNTY．

The Clinton Comety Medical Society met December万，at－s p．m．．and elected the following oflicers for the emang year：I＇readent．Dr．（ienge W．Brown fice－ president，Dr．M．F．Mecerte：secretary and treasurer． Dr．Charles Chittick．Dr．M．F．Bonlden contribnted a paper entitled．＂lnsanity Compared witn Borderland and Epiexdic State．＂Dr．N1．F．Alecarty also read a paper on the sulject of＂The Treatment of luemmonia．＂ Chames Cuittick．ser．

## DAVIESS COUNTY．

At the mecting of the Dariess Comuty Medical So－ （iety on December i，the following officers were elected： President，Dr．C．II．Venne：vice－president．Dr．Henry Ciers：seretary and trequmer．Dr．T．F．Spink：censor， Dr．Vance May：delegate，Dr．Henry Jlem：altemate， Dr．B．B．Smoot．

T．F．Smine，Sec．

## DE «ALB COUNTY．

It a recent meeting of the De Kall）（ounty Medieal Society the following officers were elected：President， 1r．M．E．Klinger，（farrett：first vice－president．Dr．T． （x．Matheny，Anhmon；second vice－president，Dr．W．F． Shmaker，Butler；secretary and treasurer，Dr．Chas． S．Stewart，Auhm：（emsors，Dr．J．B．Caseheer，Dr． J．（＂．Baxter，1）r．WI．W．Swarts．

## DELAWARE COUNTY．

The Delawne Comuty Medieal siofety held its an－ mal menting Friday，Decomber（i．at which time the following oflicers were elected for the ensuing year： President，D）r．（＇．（x．Poland：rice－president，Dr．A． 11．Good：secretary．Dr．II．S．Bowles：eensor，Dr．W． IV．Wadsworth．Officers holding over：Censors，Dr． P．C．Barnard and Dr．F．E．llill ；delegate．Dr．I．N． Trent．

H．S．Bowles，Sed．

## FAYETTE COUNTY．

The Fayette comuty Medical Fociety met in regular arssion Tuesday，Dectumber 10，for the election of officers．The following oflicers were elected：President， 1）r．L．D．Jillman：vicepresident．Dr．J．Il．Clarke； secretary and treasurer，Dr．V．D．Ladwick：eensor， Dr．F．J．Spilman．The society has decided to adopt the full four reare postgraduate course of study as ontlined by the educational committee of the American Medical i－modiation，and has raised a fund to pur－ chase new hook for use in commertion with this work．

V．D．Ludwiek，Sef．

## FULTON COUNTY．

The ammal December election of offirer for the Ful－ tom Comoty Madical Society resmited as follows：Presi－ dent，Dr．F．C．Dielman．Finlton；vice－prosident，Dr．A． Johmson，Akron：secretary and treasirer，1）r．M．O． King，Rochester：delegate．Dr．（．L．Slonaker；board of censors．Dre．II．S．Shafler，C．E．Gould and A． Jolm：on．

M．O．King，Sice．

## HUNTINGTON COUNTY．

 nese session December 10，and reected the following officers：President，Dr．F．B．Morgan；vicepmesident． Dr．F\％W．Poinicr ；sectetary and treaburer，Dr．Man－ ice II．Krebs：hard of celloors．Dr．lat E．Perry，Dr． Olive O．Nelson and Dr．Kirin Wright．

Mathice II．Krmebs．A＇．

## JAY COUNTY．

The ．Tay Comaty Medieal Society held its ammol medting at Portland，Derember 20．and elected the following ofters for the ensuing year：President．Dr． C．（ ${ }^{( }$．Mills，Red Key：viefopresident．Dr．Grant Chaney．Portland：sectetary and treasurer．Dr．M．T． Jay．Portland．The ammal banquet followed the bu－i－ ness meeting and this was attended by the member－ and their wises．Dr．M．T．Jay acted as tonstmaster and there were responses by Drs．Cr．W．Shepherd of Red Key，E．C．Garber of Damkirk．Grant Chaney of Portland，Job Fitzpatrick of Dumkirk，and Mrs．W．D． Schwartz and Miss Nellie McFarland of Portland．

Adjomrned．
Harriet Wiley，Nef．

## JENNINGS COUNTY．

The Jemnings County Medieal Soeiety met in regular monthly session Wednesday，December 11．The follow－ ing officers were elected for the ensuing year：Presi－ dent，Dr．C．C．MeFarlin；vice－president，Dr．W．L． Grossman：secretary and treasurer，Dr．W．H．Stemm： board of censors，Drs．D．R．Samders，W．R．Robertson and W．H．Richardson．The society manimously roted to take up the postgraduate course．

W．11．Stemm，Ane．

## JOHNSON COUNTY．

The ammal meeting of the Johnson County Medical Soeiety was held Deeember 30，and the following offieers elected for the ensuing year：President．Dr． D．S．Phipps．Whiteland：vice－president，Robert Repass． Stones Crossing：seeretary and treasurer，J．M．Wal－ lace，Franklin；censors，Drs．R．D．Willan，Trafalgar： D．W．Sheek，Greenwood：J．H．Lanam．Franklin． The society decided to adopt the postgraduate course and begin the regular program at the first meetine in January．Soeiety also roted to meet on the first． second and third Mondays of each month at $2: 30 \mathrm{p}$ ．m．． and that these meetings be deroted to the postgradnate work，and that the meetings on the fourth Monday of each month be devoted to reports of cases as formerly．

I．M．Wallace，Sef．

## LAKE COUNTY．

At the regular meeting of the Lake County Medical Soectety held November 17．the committee on the Mcomack meeting reported aplendid success．The suggestions of Dr．Mrecomack as to the post－graduate course of study were disensed and farorably ron－ sidered．Committes were appointed from each town in the eounty to arrange weekly meetiugs for the doctors of their respeetive commmities．One meetin！ eaeh month for all the doctors of the comity is to he devoted to a rexume of the work done by the sult－ committees at weekly meetings．
＂infant recding＂was the title of a paper loy 1 br Eleanor Scoll，which was ilhstrated by charts and tables for the wee of the buty practitioner．It was
shown that cow's milk in various dilutions is the safest and best artificial infant's food where healthy human breast milk is not obtainable.

Dr. Oberlin, who opened the discussion, coincided with the essayist and added a suggestion that barley water be used as a diluent.
Dr. Reiss, formerly deputy milk inspector for the city of Chicago, pointed out the diffieultics encountered in securng pure milk and said that unless milk can de seeured under sanitary conditions its use is attended with considerable danger. He reported that in his visits to nearly all the dairies in northern Indiana he found a woeful lack of protection against contamination of the milk supply shipped into the cities.

The annual meeting of the Lake County Medical Soeiety was held on December $\bar{n}$. The election of offieers resulted as follows: President, Dr. W. F. Howat, Hammond; vice-president, Dr. A. J. Laver, Whitler: secretary and treasurer, Dr. W. D. Weis, Hammond: telegate to the state assoeiation, Dr. G. D. Brannon. Crown Point: board of censors, Dr. E. M. Shanklin. A. J. Laner and A. A. Ross: eommittee on legislation, Drs. W. D. Weis, A. G. Schleicher. Thos. Oberlin.
The committee on postgraduate course of study, Dr. Hammond, reported a successful weekly miceting.

At the January meeting of the society a risume of the work of the various weekly meetings will be given. The subjects will be "Study of Malignant and Benign Tumors" led by Drs. lowat and Groman, and "The Study of the Primary Tissues" led by Dr. Weis.
The president's amman address wats delivered by Dr. W. F. Howat. On motion the soriety directed that the address be printed and a copy sent to every physician in the county.

Dr. IV. D. Weis, sec.

## LAPORTE COUNTY.

The LaPorte County Medieal Society held its ammal meeting at the Public Library in Michigan City Friday afternoon. Dec. 13. There was a large representation of the physicians of the county present and a plan of work for the year wats laid out which will ensure meetings full of interest. Dr. F. A. McGrew reported a case of retroperitoneal ryst with operation. Dr. J. J. Kerrigan read a paper on "Arteriosclerosis," which was full of practical suggestions. The rational study of drugs was dwelt upon by Dr. V. V. Baeon. The ammal election of officers resulted as follows: President, Dr. J. Lucius Gray, LaPorte; vice-president, Dr. 13. W'. Hollenbeck. Westrille: secretary, Dr. J. W. Milligan. Michigan City; treasurer, Dr. E. G. Blinks, Míhigan City; censor, Dr. J. N. Ledbetter, Michigan City: delegate, Dr. W. Bowers, Michigan City.
J. W. Milligin, Sece.

## LAWRENCE COUNTY.

The Lawrence County Medical Society met in regular session Thursday, December 5. at which time the anmal eleetion of oflicers resulted as follows: President, 1)r. J. D. Jyons, Mitchell, Ind.; vice-president, Dr. E. E. : Xlitchell: Bedford, Ind.: seeretary and treasurer. Dr. Claude Dollens, Aroca, Ind.; censors, Dr. R. B. Short, Belfort, Ind.; Dr. J. A. Givens, Mitehell, and IIr. C. H. Emery, Bedford, Ind.; delegate, Dr. J. T. MeFarlin, Williams, Ind.
Dr. R. B. Short read a paper on "Post partum Hemorrhage," and Dr. C. H. Emery one on "Laryngitis."

Claide Dollens, Nef.

## MARION COUNTY. <br> INHAAAPOLIN MEIDIC.IL NOCIETS <br> (Meeting of Dec. 3, 1907.)

The program consinted of case reports and presentation of specimens.

Mitral Stenosis.- Cave report and patient exhibited by Dr. E. C. Thomas. Patient, male, aged 44. machinist. Aconte articular rhemation at the age of 14 . First seen in Jamary of the present year. Now shows the following complicated group of signs: Tisible throbbing carotids and brachials: visible hease of right ventricle; visible apex beat in sixth intereostal space five inches to the left of the stemum; heaving impulse felt in the third intereostal sace to the left of the stermom: shden, sharp shork at the apex: pulse regular, large and oft; first sombl short, sharp and loud: second somd accented at the apex: presys. tolic murmur londest just before and merging into the first somud. heard hest just to the right of the left nipple. Sphymographie tracing show sharp but not high mp stroke. strong tidal wawe, and well-marked dicrotie wave. Dr. Thomas believed that there was primary mitral incompetence causing the left rentricular hypertrophy, followed by the present condition of the mitral stenosir. There is a posibility of an aortie incompetence, but he does not believe that thin exists.

Opsonic Therapy in Furunculosis.-Dr. T. V. Keene reported having treated seven cases of chronic furmenlosis with injections of sterilized cultures from the lesions themselves. In all cases there hat been matked improvement, and in some cases entire cure.
Adenofibroma of the Nasopharynx.- Dr. IV. F. Cler enger reported the case and exhibited the specimen of an ademofilmoma of the nasopharyn. with musual symptoms.
Intestinal Obstruction.--Dr. T. B. Noble reported three eases of intentinal obstruction with operetion Two eases had had previous attacke of moperated appendicitis within a year. The third ase wo : healthy boy. aged 18 . taken sudkenly ill with severe colicky pains while at work in the eorn field. $1 / 1$ three eases showed the complication of severe colicky pain. abdominal dixtension and obstinate constipation. with a little temperature. In two rases the oberation was delayed for many days becense the attenting plysician did not make a correct diagnosis. and aloo because a slight movement of the bowds after soveral days deceived tore atteuding phrsician into thinking that the obstruction had been relieved. In one come the gut was so gangrenous that it ruptured as coon as it was tonded. In the third rane an intusmsception was found that comld not be reducen, and t..e bowel was resectere.

Stones in the Cystic Duct.-Case report by Dr. J. O. Mchlexander. l'atient, female, aged 33. It the age of 16 had jaundice which persinted for some time. attended with nalusa, romiting. heallowe and cometimation. At 18 she had an attack of hepatic colie which recuried at intervals of two months. It $2+$ she was operated for gallstones, one hundred stones heing removed. but one being left in the cratie duct beean-e it could not be removed. Pationt free from gall bladder smptoms for six years, when there was a recurrence of the symptoms. swelling in the line of the incision. spontaneous opening amb dischage of muchs. and clowure and reopening of the wound a mumber of times. Pationt operated, cholecyotomy being performed. Two stones were fomen in the eystic duct and
the wall of the gall bhadder was found thickened and the organ filled with mucus. The gall bladder was removed and the womud closed without drainage, the patient making a complete recovery.

Umbilical Hernia of Enormous Size.-Case report by Dr. R. O. Me.llexander. Patient, female, aged 52. Úmbilical hernia developed twenty years ago. Has borme five children since the development of the tumor. The hernia h:1s steadily increased in size until it now measures $331 / \mathrm{s}$ inches at the greatest eiremmference, $281 / 4$ inches at the base, and $171 / 2$ inehes from the base to the apex. The mass is edematous and indurated, and has two uleers on the surface which have persisted for five years. The hernia eontains the omentum and bowel is irreducible. Considered inoperable. Basket-like truss used for a snort time, but was not satisfactory. The patient gets about suffieiently to attend to light household duties.

Bronchopneumonia Simulating Appendicitis.-Cace report hy Dr. A. C. Kimberlin. Patient, male, aged 43. was suddenly seized while at work with an intense pain in the lower abdomen. most severe in the right iliae region. Pulse 120 , small and soft, temperature 102 , respiration rapid and shallow, seemingly on account of pain. No history of previous cold or cough. First examination of the lungs was negative. Pain was relieved ly morphin and the bowels moved freely ly castor oil. The next morning the pain was still present. lut intensified by deep pressure over the region designated. During the night a severe pain was fell in the region of the right shoulder. and examination diaclosed an area of dulness in the front of the right chest, extending up as iar as the fourth rib. There were $n$ n ralles. The breath sounds were diminished. but of normal quality. At the end of the second day a few fine, moist rales could be heard over the dull area. By the evening of the fourth day the whole lower lohe of the right ling showed evidence of consolidation. On the fifth day there was extension to the left lower lobe, but it never became as extencively involved as the right lung. Other parts of the lungs were affected during the course of the itlness. which terminated fatally at the end of the third week. The abdominal pain entirely disappeared in ahout four days, and from that time the course of the illness was that of a rather typical ease of bronchopnemmonia. The ne notable exception in this ease, aside from the early abdominal pain. was the entire absence of eough and expectoration. This is the seeond ease of pneumonia he las seen in which abdominal pain was an early and prominent symptom. In the other case a diaguosis of appendicitis was made by the atiending physician, and a surgenn was called in to operate, but fortumately disencered the true nature of the illness.
Enlarged Kidney.-Dr. F. L. Truitt reported the case and exhibited the specimen of an enormously enlarged kidney. The exact nature of the lesion was not known, as he had not yet had time to study seetions of the organ whieh are now being prepared.
Discussion.-Dr. T. B. Nohle said that he was much interested in Dr. Kimberlin's case, as he had frequently encountered the emmbination of pulmonary and abdominal disease. He was called in one case where the man, suffering from lobar preumonia early in convaleseence, developed symptoms of acute appendieitis and was operated. The appendix was found distended with a whitish pus, which gave an almost pure eulture of the pneumofoccis. In riew of this relation he
wonld warn the general practitioner to be very sure that the symptoms in the abromen are not caused by real disease there.
Dr. Wymn said he had seen cases of pneumonia with marked abdominal symptoms, even simulating typhoid.

He said that he was in doubt as to the real lesion in Dr. Thomas' ease. In view of the strong and visible pulation of the carotids and brachials, the character of the sphygmographie tracings, the hypertrophy of the left ventricle and the location of the murmur, he believed there must be some incompetence of the aortie valve.

Adjourned.
R. H. Ritter, Scc.

## (Meeting of Dec. 10, 1907.)

Etiology and Treatment of Hemorrhoids, with Special Reference to Operation by the Ligature Method, Under Local Anesthesia, was the title of a paper by Dr. H. H. Wheeler. He said that the pile tumor is a mised tumor made up of varions proportions of venous dilatation and connective tissue hyperplasia. The first is always primary, but the latter may become so prominent that the tumor becomes almost wholly fibrous tissue. The predisposing causes are sex, habits, necupation. muscular exertion, heredity and anatomic arrangement of hemorrhoid veins. Exeiting causes are constipation with attendant straining, disease of the bladder, protate. wrethra, pelvic organs, heart, kidneys pelvie and ahbominal uterine displacements. obstructive hepatie disease, pregnancy, diarrlea and tight lacing. The piles may be internal or external, and they may he thrombotie, variense, inflammatory or of the connective tissue type. The symptoms include variable pain and diseomfort, not dependent on the number or size of the tumors. Palliative treatment is not now considered ennservative, and is only used when operation is refused or contraindicated. The operative treatment is the most satisfactory to the pafient and the doefor. especially since the introduction of infiltration anesthesia. The greatest objections to the older methods of operation are the necessity of a general anesthetic and the loss of time to the patient. In most memplicated eases inis is unnecessary if they are operable under local anesthesia, whieh gives very little pain and discomfort and a very short interruption from the daily business of the patient. Hemorrhoids ean be safely and radically relieved by operation under loeal anesthesia if the operator is a thorough master of the prineiples and technie of infiltration anesthesia.

Before operation the patient should be thoroughly examined to exelude the possihility of complication, as well as to aceurately loeate the tumors. The bowels should be thoroughly eleaned the day before the operation. If the sphincter musele is found eontracted it may be anesthetized and dilated by injeeting it with a 2 per eent. solution of cocain at the distribution of the lesser sphincteric nerve. One-eighth per eent. solution of cocain is injected into the center of the pile tumor until the tumor turns glassy white. The pain is slight and is relieved as soon as the dissection is begun and the tension is relieved. The mass is grasped with a forcep and is disseeted up until it is attached by a narrow pedicle, which is ligated with silk or linen and the mass eut off. Skin tabs are injected and cut off the same way. The bowels are moved on the second day following the operation and every day thereafter. The author gives a saline before breakfast, and when the
impulse is felt, eight ounces of olite oil are injected. After the movements the parts are cleansed and one ounce of olive oil with one dram of iodoform is injected into the rectum. The anal region is kept clean, and as soon as the ligatures have come away 15 per cent. ichtbyol in castor oil, or 4 per cent. silver nitrate solution is applied to the granulating surface until lealing is complete.
Discussion.-Dr. Goethe Link said that most people that would consent to any kind of an operation preferred a general anesthetic. He believed that the dilatation of tbe spbincter is perhaps the most important part of the operation. This can be done under cocain anestbesia, but it requires considerable needling aud quite a quantity of the drug, botb of which are made more dangerous by the nature of the region. The addition of adrenalin is of advantage, as it contracts the blood vessels and retains the cocain in the tissue into wbicb it is actually injected, and thus lessens the amount necessary and the danger of absorption. The weakest possible solutions of cocain should be used. as the abundant vascular supply makes absorption very easy. While the operation under local anesthecia can be done, it is not yet wholly satisfactory.
Dr. A. B. Grabam said that ligation of piles is one of the oldcst operations on record. The clamp and cautery method was introduced about the middle of the last century. The question as to the superiority of eitber one of these operations has been debated ever since, and the adrocates of either metbod claim exactly the same advantages and merits. Neitber operation is very difficult, and both are satisfactory if done with care. Dr. Graham said that he has tried the plan of remoring hemorrhoids under local anesthesia, following the method of Gant, but bis experience bas been rery unsatisfactory, and he is now most emphatically opposed to it. He believed it is impossible to thoroughly dirulse the sphincter under local anesthesia, and the injection of solutions into the pile mass is very painful. Pain is only present when the piue tumor protrudes into the lumen of the rectum. descends and is grasped by the sphincter. The confining of patients to bed for some time after the operation is the safest plan, as there is always danger of hemorrhage until the ligatures have come away, and even after that bleeding has been known to occur. Allowing tbe patient to be up and attending to his business in a few hours or days is fraught with positive danger. Furthermore, a patient with an ulcerated rectum should be in bed. and every effort made to stimulate rapid healing with a minimum amount of scar tissue. It is a significant fact that when doctors themselves are operated on they always want a general anestbetic.

Dr. G. W. Combs said that the two chief drawbacks to doing this operation under local anesthesia were the interference with doing perfect work because of the constant fear of paining the patient and the difficulty in securing complete dilatation of the spbincter. Tbere are many objections to local anesthesia. Moreorer, it is not safe to let patients up soon after the operation, as it requires a certain length of time for the rectum to return to its normal condition.

Dr. F. R. Charlton called attention to the powerful effect of stretching the spbincter. It is one of the methods used to restore a patient in anesthetic accidents, the profound stupor of opium poisoning, etc. He can not understand how this procedure can be successfully carried out under local anesthesia without producing pain or shock or both.

Dr. G. J. Cook said that the old and still commonly taught idea that an external pile may be an extrayasation of blood is a mistake. A true external pile is always a dilated blood ressel that suddenly becomethrombosed. In nearly every case it is also infectel. He has had an extensive experience with local anestbesia, having done appendectomies, cbolecystotomies and other major operations under it. He has never tried to divulse the sphincter under local anesthesia because the quantity of the drug necessary for anesthesia is dangerous and the muscle can only be thoroughly deadened by extensive needling. He has never tried to remove piles under local anesthesia and is strongly opposed to it. He has seen and heard Gant, and believes that much of Gant's success is due to marrelous manual dexterity. He does not believe that Gant removes the whole tumor mass, and will only be conrinced of the thoroughness of the work when a number of patients have been followed up for four or five years and carefully examined to see that there was been no recurrence of the piles. Except in the rare ca-cs of complete prolapse of the pile tumor, after the sphincter is stretched, the pile must be spized with a forceps and forcibly pulled down. This of itself mould be a painful proceeding. but is absolutely necessary if the whole mass is to be exposed and gotten rid of It is for this reason, if for no other. that he doubts if the operation can be tboroughly done by Gant or anyone else under local anestbesia. 'It is a simple mat. ter to remove simply the upper or superficial part of the pile, but thas is really of very little value. It is the rule, founded on good reason. to confine the patient to bed for some time after an operation under general anesthesia, and he can sec no reason why it is any more proper to allow patients up sooner when local anesthesia has been used. This tiscue does not heal kindly or quickly, and in the upright position the Whole weight of the column of blood in the portal system is thrown on the lacerated area. He belieses in limiting the diet of the patient after the operation and not moving the borrels until the fourth or fiftly day. This promotes rapid healing. The next day after the operation his patients are given an injection of aristol in olive oil, and this is repeated every day until healing is complete. He does not use silver nitrate until the sixth or eighth dar, and only then if the ulcer seems sluggish and needs stimulation.

Dr. T. B. Eastmon said that he was impressed with the extent to which surgenns will go to avoid the use of a general anesthetic. The danger of a general anpsthetic is of course too real to be neglected, hut if more care were taken and more skilled anecthetists engaged the danger would be exceedingly slight. He has tried the rarious injection methods. but has found them all unsatisfactory, and believes the danger absolutely less with skillfully given ether than cocain in filtration.

Dr. Wheeler. in closing. adhered to his contention that niles can he remored and removed thoroughlv and the sphincter divulsed under local anesthesia. although the latter is not always satisfactory. Injection of cocain into the sphincter is not difficult nor necessarily painful. He does not helieve tbat it is necessary to confine patients to hed as long as usual after this operation unless there is some complication. He believes that locking up the bowels for four or fire days favors general infection. and earlier moving with thorough washing of the site of operation is far preferable. Pain after the use of local anesthesia is
no more eonstant or serere than after the nare of a gencral amenthetic. latiouts slould be operated at home or in a hospital, aud only moder exceptional circambtances at the ollice.

- Idjourned.

1i. H. Ritter, Nece.

## (Meeting of Dec. 17, 1907.)

The society was called to order in the clinical amphitheater of the (ity Hospital by the lresident, 1)r. I'filf. The mimutes of the last meeting were approsed without reading. I comumnication was read from Demarcus Brown, the State Librarian, calling attention to the fact that a list of foreign medical journals had been ordered for the State Library and others would be ordered as the fumds permitted. The secretary-treasurer called attention to the request for the parment of dues for 1908 now instead of postponing it until the first of the new year. This request was made beeause of the rsia slishment of a journal by the state Medical Association and the need for funds immediately.

Disseminated Keratitis.-Case report by Dr. J. O. Stillson. This was a child with disseminated keratitis from hereditary syphilis. The iris was prolapsed forward and adherent to the cornea, a condition called lencoma adherens. He discussed the various forms of kratitis and laid special stress on the distinetion betweon inflammatious of the external layer of the cor nea, due usually to acute infections and tramma, and intlammations of the posterior layer due usually to constitutional diseases. He refcred to the treatment of inflammations of the corvea, warning against the unncessary use of silver and other caustics. Cocain should be used cantiously, and only under exceptional ciremmstances given to the patient

Tertiary Syphilis.-Dr. . W. Brayton presented there cases.
('AsEE l.-Paticut, male, aged 40. a bartender and a vory heary driuker. Two years ago he became infected with sybhilis. Gives a clear history of secoudary lesions and las had only indiflerent treatment. Four months ago he begau to hive trouble with his teeth: they became loose aud were extracted by a dentist. This was followed by extensive inflammation and necrosis of the maxilla. six weeks ago the nose became reel aud swollen and a discharge appeared. There has taken place extensive destruction of the nasal bones add flattening of that organ. The interesting feature of this ease is the early appearance and rapid progress of the tertiary lesious.

CAsE: 2.-A Woman, aged 24. Ilintory of enlargemeut of the cervical glands in childhood. Six months ago there appeared a small papule on the ala of the nose. This changed to a blister, became pustular and was soon followed by other similar lesions. Some of them healed $u_{p}$ entiresy, raving scars, but others have remained unhealed for the entire period. The differential diagnosis is between lnpus, acne rosacea and syphilis. The lesion at first examination is a very indefinite oue. but a eareful questioning brings out a history of a primary lesion two rears ago. followed by distinct secondarics, and now at this early date by tertiary lesions.

CAse 3.-WOman, aged 23. Scattered over the entire hody are numerous flat, scaly, squamous syphilides which have bern prosent for about three weeks. This eruption might easily be confnsed with seborrheie ecerema or pantiasis.

Brain Softening from Arteriosclerosis.-Dr. F. B. Wyun gave the following history of the rase frour which the braiu exhibited came. sexeral months ago a woman became suddenly hemiplegir, with no loss of conseiousness. There was complete aphasia, not ammesie, but no paralysis of the muscles of the lips, tongue or pharynx. There was no improvement after several months, the fingers contracting and the joints becoming rigid, A provisional diagnosis of hemorrhage into the internal capsule was made at this time. Two days before ler death she developed tonie courulsions, begiming on the paralyzed side, and beeame uncon--rious. The brain was exhibited by Dr. J. V. Reed, who explained that on opening the dura there was distinct bulging, and a quantity of fluid eseaped. The left hemisplere was depressed and flattened; the pia and arachmoid over this side were thickened and opaque. The membranes at the base were thickened. but there was no evidence of tuberelos. There was softening of the parenchyma, most marked in the lolambic area, and the posterior portion of the frontal lobe on the left side. There was no evidenec of recent or old hemorrhage. The basilar artery was modulat and the Sylvian artery stiff and hard with thickened walls. There was no thrombus found. The canse of the symptoms was evidently ehronic softening from arteriosclerosis.

Acute Meningitis, Cirrhosis of Liver and Other Com-plications.-Case report by Dr. F. B. Wynn. Patient female, aged 46. One sister died of tubcreulosis. Six months ago she began to have slight dyispnea, gencral indefinite pains and malaise. Two months ago the anklos becane edematous, and in a few weeks she became aware of fluid in the abdomen. For the last three weeks of her life she had a persistent diarrhea. She complained of headache. dy<pnea, dizainess and progressive loss of strength. For the last four months there was an elevation of temperature crery day, varying somewhat, never going very high. Au oceasional murmur could be heard orer the heart, but this disappeared shortly before her death. She died of an aeute meungitis. The autopsy revealed an advanced stage of a typieal atrophie cirrhosis of the liver. The diagnosis before death was tubereular peritonitis. The liver was demonstrated by Dr. R. H. Ritter.

Atheromatous Degeneration of Heart.-Dr. E. S. Knox exhibited the lieart of a patient who had died in the lospital in the course of an operation for the removal of a cystie thyroid gland. The patient was 56 years old and gave a history of alcoholism and syphilis. The ether had been discontinued and the wound was being dressed, when he suddenly died. Autopsy rerealed exteusive atheroma of the mitral and aortie values and aorta, with atheromatous nleers in the latter. The left ventricle was hypertrophied and the eoronaries markedly sclerotic in patches. In the left coronary was found an occluding thrombus. There was right hydrothorax with diaphragmatie pleurisy.

Adjourned.
R. H. Ritter, Sec.

## PIKE COUNTY.

At the regular December meeting of the Pike County Medical Society the following officers were elected for the ensuing year: President, Dr. Williain M. IIunter; vice-president, Dr. WV. J. Bethel; secretary and treasurer. Dr. E. S. Imel. Dr. T. Riee read a paper on "Fracture of the Frontal Bone of the Skull," and presented a elinical case history showing eomplete reeovery
following the remoral of sereral spiculen of bone and some brain substance．The paper was discussed by various members．Drs．Coleminn，Hunter，Kime and Abbott reported cases of scalp and skull injuries．

E．S．Imel，Sec．

## PUTNAM COUNTY．

The Putnam County Medical Society met in busines＊ semion December 10，the election of officers resulting as follows：President，Dr．Walter M．Gaughey；vicc－ president，Dr．Chas．Sudranski：secretary，Dr．J．V． Bastin；treasurer．Dr．L．M．Hanma．After much dis－ cuswion it was decided to take up the postgraduate course for 1908．During 1907 the following members were admitted to the society：Drs Zarin，Wright，Cul－ lipher and Moser．

J．V．Bastin，Áce．

## RANDOLPH COUNTY．

It the regular montluy meeting of the Randolph County Mledical Society，Tucsday aftemoon，Deeember 10，the following officers were elected for 1908：Presi－ dent，Dr．W．W．Root，Parker City，Ind．；vice－presi－ dent，Dr．J．E．Nixou，Ridgeville，Ind．；secretary and treasurer，Dr．Chas．L．Botkin，Farmland，Ind．；cen－ sor（three years）Dr．J．II．Maroney，Winchester，Ind． Dr．G．C．Markle．Winchester．read one of the most interesting papers cerer prescuted lefore this socicty， his subjeet being，＂－－drantages of the County Medical Soriety．＂By manimous whe of the society the paper was referred to The Jourial of the Indiana State Memcal Assoclation for publieation．

Chas．L．Botkins Nec．

## RIPLEY COUNTY．

The Ripley County Medical Soriety met in regular seswion Tuesday，December 3，and elected the following officers for the ensuing year：President，Dr．J．R．Pate， Milan；vice－president，Dr．L．T．Cox，Napolenn；sec－ retary，Dr．M．J．Comes，Batesville：treasurer，Dr．R． I＇．Olmstead，Versailles．An interesting ease of typhoid perforation，with recorery，was reported by Dr．Pate． and the report was followed by an interesting discus－ sion．

M．J．Coomen，Sce．

## RUSH COUNTY．

The Rush Comnty Medical Soeiety met on Monday， December 9，and the following oflicers were elected for the coming year：President，Dr．W．S．Coleman；vice－ president，Dr．F．II．Green；secretary and trasurer， Dr．L．M．Green；delegate，Dr．C．H．Parsons；censors， Dr．D．D．VanOsidol．R．T．Blount and J．C．Sexton．

1．M．Green，séc．

## SCOTT COUNTY．

The Scott County Medical Society held its annual meeting at Scottsburg，Ind．，on December 9，and elected the following officers：President，Dr．Thomas H．Close： rice－president，Dr．IV．L．McClain；seeretary and treas－ urer，Dr．T．E．Biery ；censors，Drs．O．C．Mhuphy， George II．Cline and A．J．Sarver．Dr．Biery reported an interesting case of broueho－pneumonia，complicated by meningeal inflammation，resulting in death．The symptoms started with romiting，followed by ligh temperature，dilated pupils，spastic contraction of the museles of the face，and later convulsions．

The next mecting of the society will be held on January 14．Waen Dr．J．N．Hurty，secretary of the

State Board of Clealth，will give a demonstration of the new antatoxin and a lecture on tuberculo－i and it． prevention．

Adjourned．
T．B．Biert，Ner．

## SPENCER COUNTY．

The Spencer County Medical Society met at Chri－t－ ney Decenuber 17．Election of officers resulted an fol－ lows：President，Dr．S．W．Stuteville，Grandiew： vicepresident，Dr：S．P．Gwaltney，Christney；secre－ tary，Dr．II．I．White，Grandviews．An excellent talk on Mastoiditis was given by Dr．W．M．Grithth，Presi－ dent of the Kentucky State Medical Asoociation．

Adjourned．
Eva J．Bexton，Nec．

## STEUBEN COUNTY．

The Steuben County Medical Society met in regular owion at the Court IIouse in Angola Friday，December 13．Dr．J．F．Cameron reported a case of glaucoma． and one of appendicitis with probable tubo－ovarian cont plication．Dr．Mary T．Ritter reported a ease of ertopic gentation，showing upon operation a fetu＊of twelve to fourteen weeks development，in whieh cave there were no signs of internal hemorrlage before op－ eration．The cases were discussed by various members of the society．The subject for gencral discussion was Pulmonary Tuberenlosis and the discussion was opened ly IJr．J．F．Cameron，followed by Drs．O．II．Swam－ tusch and H．D．Wood．During the October，November and December meetings the following new members have been added to the society：Drs．Nichols，Duukel． Wade，Lake，MeFarland，Cumingham，Dando and Law－ rence．The following officers have been elected for 1908：President，Dr．1I．D．Wood：vice－president，Dr． O．H．Swantuseh；secretary and treasurer．Dr．Mary T．Rister：delegate，Dr．J．F．Cameron；hoard of ceu－ sors，Drs．F．B．Humphreys，T．J．Creel．P．N．Suth－ erland．

Mary T．Ritter，Sec．

## ST．JOSEPH COUNTY．

The ammal election of offiecr：of the St．Joseph County Medical Snciety took place on Tuesday，Decem－ ber 17 ，the following officers being elected：President． Dr．C．E．Hansel；vice－president，Dr．Walter Peck： treasurer，Dr．J．W．Hill：secretary，Dr．Charles Rosen－ bury：censor，Dr．II．T．Montgomery；delegate，Dr．R． B．Dugdale．The society voted muanimonsly to take up the postgraduate course of study and changed their time of meeting to every Monday evening for that pur－ pore．Dr．W．A．Pusey held a clinic on diseases of the skin，November 20．Which was well attended．

Chas．Rosenbury，scc．

## TIPPECANOE COUNTY．

At the annual meeting of the Tippecanoe County Medical Society held December 23．the election of offi－ cers resulted as follows：President，Dr．Frank II． Bildle，Battle Ground；vice－president，Dr．Adam W． Slurieber，Lafayette；cieasurer，Dr．Chas．Hupe，Lafay－ ette：secretary，Dr．IV．M．Reser．Lafayette；censor to fill vacancy，Dr．G．r．Beasley，Lafayette；delegate， Dr．W．R．Moffit，West Lafayette．
＂Some Preventable Causes of Degeneracy＂was the title of a very interesting paper presented by Dr．R．S． Cunningham．The paper was freely discussed．

IV．M．Reser，Scc．

## VERMILION COUNTY.

It the amual mecting of the Vermilion County Medical Society the following officers were elected: President, Dr. M. L. Hall, Newport; vicc-president, Dr. IV. I'. Darroch, Cayuga; sccretary and treasurer, Dr. O. M. Keyes, Dana; censors, Drs. Casebecr (Newport), Newhouse (IIillsdale), and Newton, (St. Vernice); delegate, II. P. Darroch.

Adjourned.
O. M. Keyes, Scc.

## WABASH COUNTY.

The annual election of officers of the Wahash County Medical Society took place on November 20, and resulted in the election of the following: President, Dr. Loren W. Smith; vice-president, Dr. G. MI. LaSelle; secretary and treasurer, Dr. Laurence E. Jewett; board of censors, Drs. Z. M. Beaman, North Manchester; C L. Dickens, LaFontaine; C. F. Fleming, Wabash.

The Wabash County Medical Socicty was entertained on Wednesday, December 18, by the newly elected president, Dr. Lorin W. Smith, and had as honor guests, Drs. J. Rilus Eastman of Indianapolis; J. C. MeDonald, of Warsaw; and Chas. H. McCully, of Logansport. After a hanquet formal talks were made by Dr. Eastman and Dr. McCully, the former telling much of interest concerning his recent trip ahroad, and the latter speaking on the subject of medical organization. Dr. McDonald presented an interesting case of Freidrich's ataxia. A committec was appointed to investigate the work of the postgraduate system and report at the regular meeting in January.

> L. E. Jewett, Scc.

## TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

That the district medical society is destined to become no mean factor in the promotion of the plan of nedical organization of our state was well demonstrated at the last meeting of the Twelfth Councilor District Medical Society, held in Fort Wayne, October 29. In point of attendance it was remarked to resemble more a state than a district meeting, the registered attendance being 210 members, and many visitors. By a fortunate arrangement of dates the attending members were enabled to avail themselves of an opportunity to hear two splendid talks hy Dr. McCormack on the day previous, the afternoon one to doctors only and in the evening to the public. No pains were taken by Dr. McCormack to spare the physicians just criticism at either meeting, and yet the genial hut sincere way in which hoth public and physician were taken into his confidence was a real satisfaction to all who were fortunate enough to hear the secretary of the Committee on Organization of the American Medical Association.
The program carried out at the District Society recting was as follows:

## tUESDAY FORETOON.

Neurological clinic at St. Joseph's Hospital, conducted by Dr. Hugh T. Patrick of Chicago and Dr. G. W. McCaskey of Fort Wayne.
tuesdiy artersoon.

1. A New Method of Treatment of Trifacial Neuralgia.
.Dr. Hugh T. Patrick, Chicago
$\therefore$ Diagnosis of Organic Brain Disease.
..............Dr. G. W. McCaskey, Fort Wayne
2. Lenkemia .... Dr. S. D. Mentzer, Monroeville 4. Morable Kidncy
............ Dr. Frederick Charlton, Indianapolis 5. Some Surgieal Aspects of the Thyroid Cland...
.Dr. Edward J. McOscar', Fort Wayne teesday evening.
3. Spina Bifida...... Dr. Miles F. Porter, Fort Wayne 2. Extrauterine Pregnancy

Dr, B. VanSweringen, Fort Wayne
3. Brain Tumors (Case Report).

Dr. K. K. Wheelock, Fort Wayne
The officers of the Twelfth Councilor District Medical Society are:
President ............ S. H. Havice, Fort Wayne.
First Vice-President...D. IV. Dryer, LaGrange.
Sceond Vice-President.J. S. Boyers, Decatur.
Secretary.............E. MI. Van Buskirk, Fort Wayne. Treasurer.............. D. C. Wyhorn, Sheldon.
E. M. Van Buskirk, Sec.

## BOOK REVIEWS

Manual of the Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia Universits, vew York, 1890 1903. Fifth edition, revised. With 362 original illustrations, including 22 plates with 62 colored figures. New York: William Wood \& Co., 1907.
This is a remarkahly comprehensive text-book for such a relatively small volume. Its popularity is attested by the demand for five editions and the translation of the work into five foreign languages. The author has succceded admirably in carrying out his plan to say enough but not too much, and the restriction in size has been accomplished by omitting excessive detail, extensive discussion, and lengthy accounts of theories and rare conditions. Uncommon affections, of interest chiefly to the specialist, have been dismissed with a few lines; common diseases, which the general practitioner is most frequently called upon to treat, have been described with comparative fulness. Many excellent illustrations, not a few in colors, aid in elucidating the text, and a thorough and painstaking revision of this last edition makes the book up to date in all particulars.

The Life of Nathay Simth Daits, A.MI., M.D., LL.D., 1817-1904. By I. N. Danforth, A.MI., M.D., Chicago. Cleveland Press, 1907.
This little tribute to the memory of the "Father of the American Medical Association" is an inspiration to every student of medical hiography. Within the limits of so small a volume, full justice to such versatility of character is out of the question, but throughout its pages and hetween its lines is written the story of what can be accomplished by honesty, industry and unity of purpose. From the time of his pledge to his dying mother, when but 7 years of age, to his death at the ripe age of 87 , this master workman was true to his vow to "do good to his fellow-men."

In this day of specialism in medicine one is led to wonder，upon perusing the record of all that was ac－ complished by this broad－minded man，whether or not one day the pendulum will not swing back toward Dr． Davis＇ideal，that of general practice in the broadest acceptation of the term．Certain it is that his uni－ versal fee of $\$ 1$ would hardly meet our present coneep－ tion of justice either to ourselves or our patients，and it is possible that had he lived and worked on in the interests of higher medical education，a subject so dear to his heart，he would have admitted an incon－ sisteney in such a stand．
So much does the profession owe to Dr．Daris that its sincerest gratitude is due the author for this short memoir．

Mavula of Hygiene ayd Santtatioy．By Seneea Eg－ hert．A．M．，M．D．，Professor of Hygiene and Dean of the Medien－Chirurgical College of Philadelphia，ete． Fourth edition，enlarged and thoroughly revised．Il－ lustrated with 93 engravings．Pp．498．Philadelphia and New York：Lea Brothers \＆Co．， 1907.
In this new edition of what must，of necessity．be but a brief resume of the important science of hrgiene． there have been added several pages on the theory of opsonins，the latest U．S．regulations regarding quar－ antine and disinfeetion．and notes on improved methods of sewage disposal．Likewise the important study of rital statistics has heen made to include the late－t $\dot{\mathrm{C}}$ ．S． Census Burean reports．In outlining the duty of the physician in preventive medicine the pertinent remark is made in the introduction that unworthy the name of plysician is he whose sole and primary object is to make money：A brief but interesting chapter on bac－ teriology is followed he a review of the salient hygienic points concerning atmospheric air．an excellent rêsumé of queations of rentilation and heating，water，food， personal hygiene．disinfection，quarantine．cewage，etc． Exeption might be taken to the rather high antiseptic value aecorded peroxid of hydrogen．The hook con－ cludes with a condensed consideration of the suhject of military hygiene，vital statistica and mggestions on the examination of food，water and air．

In the abridgement of so broad a subject，statistice must be largely sacrificed to concise statements of more general facts，and in this work the condensation has been well done．

Diseases of tife Gexitourinary Organs and the Kidney．Br Robert H．Greene．M．D．．and Harlow Pronks，M．D．Ortan of 336 nages，profusels illus－ trated．Cloth．$\$ 5.00$ net：half morocen，$\$ 6.50$ net． Philadelphia and London：W．B．Saunders Companr． 1907.

This work is srotematieally arranged and much space is given to careful examination and diagnosis．The authors one a genitominary surgeon and the other a pathologist，hare given much consideration to general questions in their relation to genitourinary conditions． The methods of examination and the operations found most practical with the authors are described in detail．

The chapters dealing with embrrology．physiology and pathology of the kidner and the discussion of blood pressure and compensation in kidney diseases are especially interesting．The treatment of Bright＇s dis－ pase is presented in a thorough manner．Much stress is placed on careful diagnosis in tuherculosis of the kidney．In the treatment of tuberculosis of the kidney the use of drugs is discouraged．and the results oh－
tained from the use of tuberculin lave not been en－ couraging．
The result of much original work on the pathology of the hypertrophied prostate is given．Two methods of operation for prostatectoms are described，namely， the intra－urethral removal of the prostate through a perincal incision，and suprapubic prostatectomy．
The rolume is adequately illustrated and designed to be of practical value to the general practitioner．

The Commonfr Diseases of the Fife．How to Detect and How to Treat Them．Br Casey A．Wood， M．D．C．M．，D．C．L．For Students of Medicine． With 280 illustrations（many original）and 8 colored plates．Third edition，enlarged and improved．With index．Cloth． 600 pages，$\$ 2.50$ ．Chicago：W．T． Keener \＆Co．， $190^{\circ}$ ．
A more appropriate title for a text－hook on ophthal－ molng．，intended primarily for the student and the physician in general practice，could not have been selected，and the authors have succeeded in producing a work that is unsurpassed for the purpose intended． It is practical from the fact that it is as near as pos－ sible dewoid of technicality and sufficiently comprehen－ sive in the consideration of those diseases which are more commonly met with by the average practitioner of medicine．The point is well taken by the anthors that many of the commoner diseases of the ere whose signs and symptoms are often orerlooked or misin－ terpreted，gn on，in the ordinars course of erents， either to a more or less rapid destruction of the organ itelf．or to considerable impairment of its function． and it is the duty of every practitioner of medicine to recognize these conditions and place a proper interpre－ tation upon them．This can be done by the excreise of the same qualite and amount of eare and intelligence which are commonly brought to the incestigation of disea－es of the lungs，uterus，or any other organs．The authors have therefore considered ophthalmologe from the standpoint of the phrsician in general practice and produced a text－book which is peculiarls adapted to the needs of students and general practitioners．Numerous illustrations．srnopsis headings．and a complete refer－ ence index aid in popularizing the work．The present edition has been thoroughly revised and several new chapters added．The importance of the relationship of nasal and neighboring cavity affections in diseases of the eye has but recentl？been recognized，and a special chapter nas been deroted to this interesting subject．A fow eolored illustrations could profitably be used to elucidate the text，but lack of these is fully compen－ sated for be the clearness and completeness with which each subject has heen landled．

Treatment of Diseases of Children．By Charles Gilmore Kerlee，M．D．，Professor of Diseases of Chil－ dren．New York Polyclinic Medical School and Hos－ pital．Pp．597．Cloth．Price，\＄5．00．Philadelphia： IV．R．Saundera \＆Company．
Under this title is presented a most thorough work deroted to the treatment of diseases of chitdren．The work fills a long felt want in that details of treatment are given great prominence，practically nothing being left to the imagination．and．as the author says in his introductory chapter，such anbiguous terms as＂sup－ portive treatment，＂＂free stimulation．＂cte．，are aroided．and in their place definite directions are given．

The first ehapter is devoted to general considerations and contains much common sense advice pertaining to the general care of the infant and his personal hygiene. The author lays great stress on the necessity for intelligent co-operation on the part of those in charge of the child, without which, suecessful treatment is impossible. In the second chapter are considered the new-born, prematnre, and congenitally weak infant, asphyxia, sepsis, icterus neonatorum, atelectasis, hemorrlagic divenses, tetanus, ctc. The third chapter deals with nutrition and growth, and in this chapter is given the most concise and direct explanation of the theory and practice of infant feeding that we have read, the -ubject being reduced to such simple terms as to come within the ready comprelension of even the lay reader. The next chapter deals with gastroenteric diseases; at tention being directed to the faet, often overlooked, that most of the acute eases are preeeded by disturbance of the process of intestinal digestion and are therefore not as aeute as is generally supposed. The author then takes up the rarious diseases of the tract, giving to each the same eareful attention to details of treatment that charaeterize the entire work. A speeial chapter is deroted to discases of the mouth, throat and unes. then the discases of the respiratory tract, heart, contagions diseases, the mine the male genitals the female genitals, nerrous disorders syphilis, deformities, diseases of the skin, diseases of the ear, glandular diseases, heredity and enviromment, constitutional disorders, infections fevers. temperature in ehildren, vacfination, instructions for the summer, therapeutie measures. gymmastic therapentics, and lastly a chapter onl drugs and drug dosage are given in the order named. The descriptions of various mechanical measures neeessary in the treatment of infants and children are made phain by frequent illustrations. Formulas found useful in the author's experience are given. The chapter on grmmantie therapenties is well illustrated, and is a distinct addition to a work on this subject.

Nifogether, we feel that the book is destined to be of great value to the army of men engaged in general practice, for whom it is intended.

## ABSTRACTS FROM CURRENT MEDICAL LITERATURE

## THE PHYSICIAN AND PROPRIETARY REMEDIES.

Amitting that a proprietary remely, the formula of which is known, and that mar be a useful remedy, can be ethically preacribet by a physician, there can be no powible expuse, H. W: Wiley, Washington, D. C., says (Journal American IVerlieal Association, Novemher 9), for a physician prewtribing under fancy or assumed names ordinary remedies, the existence of which in the compound is unknown to him. Nor should any phrician at the present time allow his name to be used for the recommendation of any propriefary remedy of known composition, no uatter how well he may think of it. It is not his proper function to stand as sponsor for a preparation, the profits of the sate of which must accrue to one or a few proprietors. Many instances of the misuse of physicians' names have come under Dr. Wiley's observation in comection with the study of adulterated druge in the execution of the Food and Drug- Ad of Jime 30, 1906. Still more
humiliating is the direct connection of medical men with medicinal remedies that are sometimes of the most worthless type. The worst of all is the connec. tion of members of the profession with so-ealled opium, morphin and liquor eures. Most of these are originated and carried on largely for profit, for the money instead of the welfare of the unfortunate rictims. There should be sueh an ethical spirit developerl as would make it impossible for any member of the American Medieal Association to commit offences of the character here condemned. A number of illustrative instances are given, without the use of names, of the exil practices referred to.

## THE UNCERTAINTY OF THE OPSONIC INDEX.

On the evening of October 10. Dr. Richard Clarke Cabot, of the Medieal Faculty of IIarvard Univerity, and author of three notable text-books on diagnosis, made an address before the Sangamon County Medical Society which was pregnant with practical sugge-tions and tempered with the soundest of good sense.
During the evening a question was put to Dr. Cabot as to the exact significance of "opsonins" and the "opsonic inder." which are to-day filling the pages of medieal journals and agitating physicians. The distinguished guest had deroted considerable study to opsonins and started his remarks with a bland smile and a mamer which was not indicative of great enthusiasm. Explaining the theory briefly, yet in a manner which made it clearer to those present than the weighty dissertations of essayists could ever have done, he pointed out the techniealities and difficnlties whieh, at the present time, at least, render opsonie work entirely impracticable for the physician in practice.
Dr. Cabot then recalled the risit of Wright, the eminent exponent of the theory of opsonins, to the United States, and the rather tisconcerting incilent of his pilgrimage to the Massachnsetts Consmmptive Sanatorimm at Saranae Lake to show Dr. Tructeau and his staff the effieacy of opsonins in dealing with the viftim of tuberenlosis. Unknown to Wright, the stafl at Saranae Lake had been experimenting with opoonins for about three rears-almost as long as he liad interested himself in the snbject-and thes had ready fifteen specimens of hood of which they asked the distinguished risitor to determine the opsonic index. Wright mondertook his task cheerfully and annomeed results differing with each specimen. He was then told that of the fifteen specimens. seren were taken from different individnals, but eight were taken at the same time from the same subject. According to Wright's results, the eight differed as radieally from one another as any one of them did from the other seven.
It mar be that Wright was a victim of that evasive laboratory malady, "faulty teehnie." but if "the master of opsonins" failed in eight tests out of fifteen, there is little hope for the ordinary physician or even for the laboratory man who had any other iden in his mind than the one subject of "opsonins."
Dr. Cabot is himself a man of wide laboratory experienee and his views of the efficacy of recent methols of laboratory procedure may be accepted as quite authoritative. By heerling his suggestions, the general practitioner may be sated enormous useless labor entailed in following the false gods of diagnosis over a harren and fruitless waste.-Bulletin of the Illinois Ntate Board of Mealth.

## THE JOURNAL <br> OF THE

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## ORIGINAL ARTICLES

 EO-BRON゙SCHOSCOPV.

Jomix .J. Kile, M.D.<br>isdindipolis.

The method of direct inspection of the larens through the mouth has received the attention ol the mectical profession for a great many fears, but has had few adrocates, for the reason that a great deal of skill is required and especiallydesigned instruments that may casily be passed through the mouth and into the larenx withont producing pain or injury to the tissme are necessary.


Fig. 1.-Jackson's separable speculum. A-1B. handle: C. light and speculum.

I number of years aso Kerstem invented the autoscope for direct inspection of the larynd, and since that time Professor Killian of Freiberg has adeled to the armamentarium a tube speculum (see illustration) which is more easily manipulated than the Kerstein antoscope. Fol-
lowing the tube speculum of Killian. ('hevalier Jackion has suggested a sepatrate speculum, which is especially useful in the examination of the laryox as well as an aid in the insertion of the bronchoseope or tracheo-bronchoseope. The rackson tube sperenlum has the advantage of having a light at the distal end. thus assuring the greater (atse in pasing the sperulum diecelly into the


Fig. 2.-Jackson:s separable speculum in position for direct inspection of the laryox.
glottis than where we have to tepend unon illumination with a head mirror or Kerstein lamp as in the Killian method.

There are many difficulties to be encountered in direct inspection of the larynx, among which are spasin of the glottis and strain upon the neek
by prolonged drawing back of the heard. In those suffering from deformities of the neck from rheumatism. ulcerations, etc., which prevent throwing the head far back, the operation is unsatisfactory. For the detection and removal of forcign bodies or morbid growths from the larynx, where the pationt can throw the head far back, direct laryngoscopy is the ideal method of procedure.

In the direct inspection of the larynx in the adult local anesthesia is usually sufficient and is sccured by the application of a 20 per cent. solution of cocain. applied with a cotton-tipperd probe. The first application should be about the base of the tongue, pharynx and tonsils, and after waiting a few seconds the probe may be passed directly over the epiglottis and into the glottis. Ifter a wait of about four or five minutes the anesthesia is usually complete enough to euable a dextrous operator to pass the tube speculum directly into the larynx. However, if this form of anesthesia is insufficient, or the patient is a child, chloroform anesthesia may be necert! Under such circumstances the position ot o patient is the same as that described tracheo-bronchoscopr.

Where there is a small tumor locaten ${ }^{\text {onn }}$ the
 that is, with the aid of a laryngeal mirror, to insert a biting forceps with sufficient dexterity to remove a portion of the growth for microscopical use without at the same time injuring some of the adjacent tissue, and if. perchance, this be a malignant growth, such irritation is to be deplored. Again in the application of escarotics to the arytenoid cartilages it is almost impossible, except in the hands of those greatly skilled, to make an application directly to the diseased area, whereas with the tube.speculum there is no danger of injuring normal tissue when making such application, becanse the lesion is directly under the eye of the surgeon.

Direct inspection of the laryns is of inestimable value in the removal of foreign bodies which have become fastened in the glottis. The old method of opening the trachea and forcing the foreign body ont with an instrument is dangerous to the life of the patient. Of course, there is always a possibility that the exigencies of the case might demand an opening of the thyroid cartilage or trachea for the removal of the foreign body, and the same rule mar be applied to the removal of papillomata. fibromata and other neoplasms. Howerer, the removal of intrinsic malignant growths will necessarily demand some external operation upon the laryny

for the reason that a large area of tissue sloould be removed to insure complete cradication of the diseased tissue. Direct laryngoscopy is most cificient, thercfore, for inspection of the larynx and the removal of foreign bodics and non-malignant growths from the glottis.

The tube speculum as described is quite suffirient to thoroughly ilhminate the glottis. Bcfore insertion into the mouth the speculum should be thoroughly sterilized by dipping in alcolool. dried and smeared with vaselin, after which it is inserted in the same mamner as an wdinary tongne depressor. The head is thrown fir hark, as shown in the illnstration. so as to bring the mouth on a chrect line with the trachea. The speculum is directed to the base of the tongue anterior to the epiglottis: the tongue and hyoid bone are firmly lifted up and held in position and supported for a few seconds so as to tire the constrictor muscles, and after a short time has clapsed the speculum is lifted up and passed orer the epiglottis into the glottis. In passing NiMAOPN into the throat care must be taken that it IS Massed too decp, that is, back of the

 pectif into the larynx. Sometimes it is better for the assistant to stand behind the patient and support the head. The patient is scated upon a low stool, thus giving the operator a better ficld for observation. The speculum can be transferred from the right to the left hand for any instrumentation that may be necessary.

By trachen-bronchoscopy we mean the art of direct examination of the trachea or bronchi, under artificial or natural light. through a spe-cially-dcsigned tube or bronchoscope, either by way of the natural channel or through a wound in the trachea. This method of procedure is especially indicated when we wish to discover deformitics of the trachea, cicatrices, enlarged thrmus or thyroid glands which may be pressing upon the trachea, changes in the mucous membrane of the trachea and neoplasms. Probably the most useful application of trachco-brouchoscopy is for the removal of foreign bodies from the trachea or bronchi.

To Professor Killian of Freiberg belongs the credit of bringing this unique procedure to its present high plane of usefulness. In 1897 Killian first renoved a foreign body from the bronchus and suggested both upper and lower tracheo-bronchoscopy. Tracheo-bronchoscopy is subdivided into upper direct tracheo-bronchos-
copy, which is an approach to the trachea through the natural channel, and lower tracheobronchoscopy, which is an approach to the lung cavity through a wound in the trachea, that is, by the performance of a preliminary tracheotomy.

Tracheoscopy is direct examination of the trachea through the glottis with a shorter tube than that required in upper direct tracheo-bronchoscopy. The tubes required for upper direct tracheo-bronchoscopy vary in size, depending npon the age of the patient. Their lengths and widths carry from $\boldsymbol{r} \mathrm{mm}$. by 9 cm . to 9 mm . by 18 cm.

thesia, otherwise the patient will toss about on the table and prevent the easy manipulation of the instruments and also predispose to injury of the mucous membrane of the larynx and trachea. Where a local anesthesia alone is used the patient usually sits erect upon a low stool, his spinal column in as near a vertical line as possible and head thrown far back and resting upon the knee of an assistant. Of course in those who are rery old where the neck muscles are rigid, or in an individual who is suffering from some spinal disease or some condition which may prevent the bending of the head backward to sufficient degree, this method will have to be abandoned. However, where the head can be turned far back the patient's mouth is opencd wide, the basc of the tongue and the epiglottis are lifted upward with the Jackson separable speculum so as to bring the laryngeal box in the most direct line with the mouth, and in this position the bronchoscope is passed dircetly into the larynx and trachea, after which the speculum may be removed. The proximal end of the bronchoscope is turned to the right or left of the patient's mouth and lack toward the angle of the jaw. By an easy boring motion the bronchoscope is passed into the trachea. If the right bronchus is to be explored the proximal end of the bronchoscope is forced to the left side of the patient's mouth; if the left bronchus, it is forced to the right side, thus a direct line into the bronchial limb is secured. There is usually a great deal of mucus, particularly in adults, which accumulates in the bronchoscope and which may, if the manipulation is prolonged for any length of time, totally obscurc the vision of the operator. To obviate this some form of suction tube is necessary. The one 1 used in the last two operations was an ordinary drainage tube attached to a large ear syringe. Whenever the vicw becomes obscured the assistant should insert the tube and devote himself to keeping the field free from mueus.

The choice of procedures in the removal of foreign bodies from the bronchi of small children depends upon the age of the child, that is, whether or not we shall do an upper or lower tracheo-bronchoscopy. According to Ingals, upper tracheo-bronchoscopy in a child under 3 years of age is unsatisfactory, and in consequence of this a preliminary tracheotomy should be done and the short bronchoscope inserted in the trachea for the removal of the foreign body. If
there is deformity of the larrin or cieatricial bands or any reasou whith might prepent the casy insertion of the brondescone through the natural chammel, a lower tracheobobothoseopy should be performed.

In adults upper tracheo-bronchoseoper is probably the procedure of choice. Killiam has removed over 1 tit bodies from the larens and bomdhi he direct bronchoseope and larygroscopy: In his collection are buttons, fish bones, pehbles. whistles, coins. salety-pins. ete. The question always arises in eases of this character. espectally where the foreign body is lodged in the long, as to the time which should elapse before the surgeon resorts to active operative measures for its removal. History is replete with cases of foreign bodies in the lung which have remained enbededed for weeks or months, finally heing coughed out. With the insention of the bronchoscope it seems to me that it would be adrisable to try to remove the foreign body at the carliest possible moment. If the boty is embedded in the laryon it is espectally necessary that it be remored without delay.

The report of the following cases illnstrates the value of tracheo-bronedoseopy:

Case. 1.-This was a casce of a mant who was shot neat the letit claviculo-sternal articulation, the bullet ranging downward, coming out on the right side below the scapula. There resulted from this injury complete paralysis of the lett adductor nerve producing total loss of voice. Lpper tracheothonchoscopy was perfomed at this time to see whether or not there was a stricture of the trachea. It is nearly impossible to ses further than the second or thited ring of the trachea in laryogosopy. In this case no stractural change was fomed in the trachea and the paralysis was evidently due to womding of the left recurent larvigeal.
(ASE 2.-This was al case of a woman with a supposed forcign body in the trachea or esophagus. The tracher and esoplagus were anesthetized with a ? 20 per econt. solution of cocain. I first tried to do a tracheo-bronchoscopy with the pationt in the upright position, but on account of her inability to throw her head far baek and keep her spinal column rigid without great distress, the examination was unsatisfactory, and in consequence of this I was compelled to put the patient in the recumbent position. I first examined the trachea, passing the bronchoseope down as far as the bifureation. but eould detect nothing. On account of the distress in breathing and difficulty in swallowing it was presmed that the foreign body might be in the esophagus and pressing upon the trachea. In consequence of
this 1 tried to do an esophagoscopy, but on aecount of having no mandrin with the bronchoscope it was nearly impossible to pass this narrow tube into the esophagus. We were emabled, howerer, 10 work it down into the esophagus for a number of inches. 'The mamipulation not being rery satisfactory, the operation was suspended for that daly with the intention of operating the following day with the aid of the mandrin. Howcror, on the following day the patient reported that there was no distress in the region complained of and the foreign body had evidently pasied into the stomately or the condition was one due purely to a neurosis.

CAse 3.-This was a case in which a large piece of chewing gum was sucked into the right bronelms of a man aged is fears. The day bofore appearing for examination, while working. lu suddenly sucked the ehowing gun down into the lung. There was more or less pain, slight distress in loreathing and periodical attacks of conghing. Inder 20 per cent. cocain anesthesia, with the patient in the upright position, with head thrown far back, the bronchoscope was passed directly into the right bronchus through the natural channel. The object could be detereded with the light. I made a number of unsuccessful etforts to grasp it, but there was such an accomulation of mucus in the tube, olstructing absolutely any view of the field, that I was connpelled to withdraw the tube for cleansing purposes. As the tube was withdraw the chewing gum was coughed out. Evidently in my manipulation the grom had been detached, allowing sutfiremen mucus to get behind it that in the effort of conghing the ohjeet was easily dislodged.
('sse t.-This was an infant it monthe old with a supposed forergn body in the right lung. While playing three days before being presented for examination the child suddenly became cranotic, very nearly dying from suffocation. The family at once suspected a foreign body in the lung and thought it was one of two things a nail or a grain of corn. 'This ease was brought to Indianapolis Tuesday night by Dr. Plonghe of Elwood, and through the comrtesy of 1)r. Oliver was referred to me. Dr. Cole immediately mad all $x^{\text {r-ray photograph of the case, but eoukd deteet }}$ no forcign body. Howerer, there was a blurring of the plate near what was presumed to be the bifurcation of the right bronchus. The ehild was seized with periodical attacks of coughing. crying and in evident great distress from pain and difficulty in breathing. Friday morming the infant was in a much worse condition, was pale and rery restless, and all the symptoms demanded immediate relief. Friday evening the child was anesthetized with chloroform, and in the prone position as described, without any par-
ticular effort, the bronchoseope was passed into the right lung. My light was somewhat imperfect and in consequence it was very difficult for me to see through the long tube into the right bronehus. I tried to grasp the foreign body, which could be detected, with a long extraeting forceps. After making a number of efforts, and because the child vomited while the tube was in the trachea, I decided to abandon the route through the natural ehannel and endeavor to grasp the objeet through a wound in the trachea, that is, by doing a preliminary tracheotomy. I had some slight diffieulty in doing the tracheotomy; however, after this was aceomplished a short bronchoscope was passed directly into the right bronchns. With the aid of an ordinary head mirror I could distinctly see the grain of corn filling the lumen of the right bronchus. It was very easily extraeted with the aid of the exuracting foreeps. At the suggestion of Dr. Oliver, the tracheal wound was allowed to remain open, and this was very fortunate, for there was a seeming edema of the larynx and a great deal of edema of the bronchial mucous membrane as well as of the lung structures, and for the first twelve to fourteen hours the child had great difficulty in getting enough air to aërate the blood. On the seeond day the ehild seemed to improve rapidly. There was no temperature, though some restlessness and rapid and difficult breathing. Nourishment was taken both from a spoon and the breast. One-twentieth grain of morphin was given after the operation and repeated Saturday night and likewise Sunday night. Hypodermic injection of strychmia and digitalin were given the morning after the operation. We had hoped by the use of strong doses of morphin and atropin to prevent any increase of the edema of the lung. The day following the operation there was no sound made by the child whatsoever, showing that there was a total loss of the voeal aetion. Sunday morning the child began to breathe very well through the nose and mouth. We elosed the tracheal wound with the finger at times to test this point. It also began to cry very indistinctly, showing that the funetion of the larynx was being gradually restored. About 1 o'clock Monday morning the child began to show some distress in breathing, which continued throughout the remainder of the night, and about 7 o'clock, while the child was taking nourishment from the breast, it suddenly stopped breathing and was dead in a short time. I do not know how to account for the death of the child unless there was a paralysis of the pneumogastrie from the edema of the lung or suffocation with paralysis of the heart from some undue pressure upon the tracheal wound which stopped respiration long enough to produce death from paralysis.
226 The Newton Claypool Bldg.

## DIAGNOSIS OF INTESTINAL OBSTRUCTION.*

Edifin Walker, M.D. EVANSVILLE, ind.

Acute obstruction of the intestines is one of the most fatal diseases the praetitioner has to encounter. The high mortality is due to delay in making a diagnosis. If the condition is deleeted and an operation done in the first few hours, few would succumb; it is, therefore, to the delay of surgical interference that this high mortality is due.

I think all surgeons will agree with Moynihan, viz.: "It is still, unfortunately, true that in the very great majority of eases the surgeon is called upon to act in too late a stage of the disease. It is not too much to say that in a eonseeutive series of twenty cases of average intensity the condition disclosed at the operation will show that in at least fifteen, operation has been too long deferred. To operate early in a case of intestinal obstruction is an experience that few surgeons often enjoy." In speaking of the operation he says: "The surgery of aeute obstruction is disheartening work.
There are few surgeons who, in a series of twenty or more cases, ean show a lower mortality than 50 per eent. Anything over a 10 per cent. is the mortality of delay."

The difficulty, therefore, is the failure to diagnose these cases before irreparable damage is done, and this failure is chiefly due to the difficulties which it presents. The symptoms so closely resemble those of slight digestive derangement, as well as other diseases of the abdominal organs, that it is at times very difficult to distinguish between them. The physician fears that he may unduly alarm a patient or probably plaee himself in an unfavorable attitude by too early suggestion of surgieal intervention. There are not infrequently unscrupulous competitors who are only too glad to make capital out of sueh a position. In every community there are doctors who pose as opponents to operations; they claim great success in treating all sueh cases by potent medical measures known only to themselves. There are those who never lose a case of appendicitis and dissolve gallstones with olive oil. They still have to be reckoned with, but the mareh of popular edueation is fast doing away with them.

The idea that there is any antagonism between medieine and surgery is too preposterous to be discussed here. The general praetitioner who is

[^5]first to recognize the need of operative measures will, in the long run, win popular faror.

We should, in all eases in whieh pain. romiting, eoprostasis and meteorism are the symptoms, be on the lookout for a meehanical obstruction. There are two very common errors at the onset in these cases. The patient has pain, he clamors for relief and a hypodermie of morphin will give it. We have the best authority for giving it, the patient and his friends are delighted with our ability to relieve. In mechanical obstruction the relief of pain does not stay the disease. We must admit, however, that one dose is imperative in many cases, but the necessity of a second should be taken as almost positive evidenee that the trouble is not a slight ailment which will right itself, but a grave one requiring our closest attention. Another crror is to give these patients a purgative, assuring them that its aetion will remove the trouble. If undigested matter is in the alimentary canal or if improper food has occasioned poisoning, this may be of service, but as a matter of fact, in these cases, as a rule, nature asserts herself and the patient has spontaneous evaeuation or even diarrhea; at least, the bowels are easily moved. If, therefore, a few hours have elapsed and no action is obtained, the suspicion of scrious obstruction should be entertained.

Another error at this time is delay in the effort to make an exact anatomical and pathologieal diagnosis. We need only to determine that there is or is not a lesion requiring surgical interference; now how ate we to do this? let me briefly discuss the symptoms and some of the common sources of doubt. Wisendrath says: "If a patient. suffering from a sudden attack of abdominal pain, has constantly recurring vomiting, and erery effort to secure the passage of feces or flatus results negatively, a diagnosis of intestinal obstruction may be made." In addition to these symptoms, tympany is generally present. With this symptom group but little difficulty would be experienced: however. unfortunately, any one of these may be absent and all of them oeenr in other abdominal diseases.

Pain is absent in a few cases, but these are exceedingly rare, and in these the persistence of the other symptoms should put us right. Pain is, howerer, almost always present, is paroxysmal in character, and at times its location, together with the excessive peristalsis, gives us a good idea of the location of the lesion. The pain may be relieved by an opiate, but will som return and there will.be a demand for a repetition of the dose.
The romiting is persistent and worse during
attacks of pain. The eontents of the stomaeh is first ejected, then hile-stained mueus, later feeal romiting oceurs, but that is not until the second or third day and should not be waited for.

I need hardly warn you of the necessity of excluding meningitis; here the romiting is explosive, nausea continuous, the abdomen is flat, and there are the other symptoms, headaehe and fever. I have seen several cases of meningitis which were mistaken for obstruction.

Meteorism is usually carly in obstruction, except when the obstruction is near the stomaeh, when it is absent except in the stomach. It comes on more slowly also when the obstruction is low, that is in the eolon or sigmoid. Tympany occurs in peritonitis, but here there is a decrease, and in extreme cases absence of all peristalsis; with a stethoscope on the abdomen not a sound can be heard, while with obstruction there is increase of peristalsis, which is evinced by gurgling that can be heard for several fect. In obstruetion, as a rule, it comes on rapidly and the bowels become enormously distended. Constipation, which is complete, is the ehief symptom; a little fecal matter washed out by enemas, but there is no full fecal evacuation nor passage of gas. Enemas are either retained or expelled without force.

It is necessary to determine if the coprostasis is due to fecal impaction. In all cases examine the rectum and you may be able to locate the obstruction at that point. You may find it filled with feces, and if the obstruction is higher you will find the reetum cmpty and its walls ballooned. Fecal impaction does not occur nearly so often as is generally supposed; when it does oceur the symptoms are not so alarming, the patient does not appear so ill, by palpation the collection can be found in the colon and there is a history of chronic constipation, of passage of hard round fecal masses from the bowels. Unless these masses have caused obstruction there is no severe romiting or tympany, and in these eases, as pointed out above, the fecal masses can generally be palpated.
Repeated efforts to move the bowcls by purgatives or enemas are only powerful for harm. The question naturally arises: "How long should you wait for the action of purgatives?" I have consulted a number of text-books, but found no definite rule laid down: in fact, it is difficult to formulate any rule which will fit all cases. The difficulty is to keep from applying a fixed rule to those cases of coprostasis in which no true obstruction occurs, and I want it to be distinctly understond that what I am about to say does not
apply to those cases which have slight pain, modcrate vomiting, little or no tympany and where the whole aspect of the patient shows that the condition is not alarming. The fact is we too often forget that when little food is taken the bowels do not move, and under such cireumstances no harm comes from a failure of the bowels to act for several days. If, in fact, no other symptons arise, the mere absence of bowel actions need not worry us: I mention this becanse 1 have seen a number of cases where obstruction had been diagnosed for the reason that the bowels have not acted for a few days, when the presence of other symptoms and the general appearance of the patient should have excluded this disease. When, on the other hand, all symptoms are severe the whole aspect of the case shows that the patient is seriously ill. I can not too strongly urge you that repeated efforts to move the bowels and hours of waiting are dangerous; six to twelve hours is long enough, and in a clear case do not wait at all.

Let us suppose we are called to a patient who is suffering with abdominal pain and vomiting. Unless the pain is extreme, do not give morphin: if you are compelled to give one dose remember that it is not curative and you are to find the cause of the trouble if possible and remore it. If there is a probability of an error in diet, give a dose of castor oil and an anema, and if this is really the cause relief will soon follow. If these measures fail, there is a return of the pain, and vomiting and tympany appears, the patient giving evidence of grave illness, the case is almost surely one which demands surgical interference and stronger purgatives are powerless. Enteritis in rare instances causes all these symptoms, but those in which the bowels do not move are extremely rare. All these symptoms may come from a fecal impaction, but the previous listory and palpation of masses in the colon will exclude this.

In inflammatory diseases we have fever, besides nearly all of them are operative cases and no time should be lost in trying to differentiate in lonbtfinl cases.

Do not forget to examine for hernia, and remember that it is not necessary to find a large mass; I have seen two cases in which a small hernia was overlooked until the sufferer was in ertremis.

You are rarely justified in waiting more than six to twelve hours, and, as I said before, where the symptoms are grave do not wait at all.

I have purposely avoided discussion of the special forms of obstruction, for I want especially
to emphasize the importance of the diagnosis of the obstruction and prompt surgical intervention as the chief point. The accurate diagnosis of the lesion and location should be made when possible, but that shoukd not be allowed to delay action.

Let us now briefly consider chronic obstruction: it is generally due to cancer or other neoplasm, or a gradually contracting stricture, or bands of adhesions. The symptoms which should attract our attention are attacks of pain in paroxysms, the bowels are difficult to move and gradually stronger purgatives are necessary, and as the trouble progresses these attacks are more frequent and romiting and tympany follow; finally we have the same symptom group as in acute obstruction. In fact, we should be on the lookout in all cases of constipation with recurring attacks of pain, if repeated purgation is required. If the obstruction is in the colon the caliber of the stools becomes less and later only liquid stonls pass.

By far the greater number of these chronie ob)structions is due to carcinoma, and the early diagnosis is their only hope. Unfortunately, only a small proportion can be diagnosed early enough for operation, but with proper care a larger numler could be. I believe there are some, and perhaps many, cases of cancer which are ingrafted on a benign tronble. I have reeently seen a case in a man who had suffered with the typical symptoms of partial obstruction for eight years, due to cancer of the sigmoid, and it is more than probable that the initial lesion was benign. I had one man with benign stricture of the sigmoid, who had suffered for fifteen years with attacks of partial obstruction, and an operation was not suggested until he was in extremis.

In all grave diseases of the intestines, where there are recurring attaeks of pain, constipation, romiting and tympany, a very careful investigation should be made, and unless there is some clear contra-indication an exploratory colotomy should be made.

In fact. always bear in mind that an exact diagnosis in these cases is often impossible, but you can generally determine whether the lesion is organic and can be relieved only by surgery. Do not wait until all chance for recovery is lost, lont recommend an early exploration when the chances are gond.

The mortality in these cases would not be high, and when doctors learn to diagnose cases of obstruction carly we will be able to bring the mortality in acute cases to one-fourth or less the present percentage, and in the chronie cases perhaps make even a better showing.

OBSERTATIOAS ON THE SURGERY OF GALLSTONE DISEASE.
Thomas Barier Eastaian, M.D. indianapolis.
It this late date it seems quite superfluous to attempt to establish gallstone disease as one dcmanding surgieal intervention as well as giving rise to a number of pathological conditions in certain visecra adjacent to the gall bladder, yet when cases are almost daily consulting the operator, reciting a history of all sorts of futile efforts to dissolve or dislodge gallstones. or a history of divers and sundry stomach and intestinal disorders, dyspepsia and the like, it is evident that there are yet those who plough their furrows with forked sticks.

The various sodium salts, olive oil and such internal medicaments never did dissolve a gallstone. Ther will not dissolve a gallstone extra corpore, and none of the adrocates of their use has ever given even a scmi-scicntific explanation as to what chemical change they make in the bile or blood to effect the dissolution of the stones. All these salts and oils ever do is to reduce the inflammation in the wall of the bladder and render it more tolerant of its contained foreign bodies.

Nor do the surgeons stand alone in this opinion. Dr. J. H. Musser says: "I have nerer seen any relief to the gallstones from the use of olive oil, but I am bound to say that sometimes there is a relief to the symptoms. Such relief, so far as I can see-and I think it is the consensus of opinion gencrally-is owing to the fact that with gallstones there is usually a hyperacidity, and that because of this there is either simple gastralgia or pyloric spasm. We all know also that when olive oil has been administered the patient ean alnost always bring the doctor a handfull of pseudo gallstones. I think we all agree that, cren though there is a relief of the symptoms, the patients in most instances will soon come to the surgeon, beeause the symptoms continue and something active must be done."

It is conceded that real gallstones do pass out into the intestine, often not through the 'ducts but by perforation, and are discharged in the feces, but in at least plural instances, and particularly after a long course of salts and oil, the writer has found the so-called stones to be composed of saponified oil and salts.

It is well known, of course, that not a few rery able men adroeate the various water cures as worthy of trial before operation, and that this treatinent does in a fair number of instances re-
sult in a symptomatic cure, but it is nerertheless the fact that many of these cases must return at intervals for another temporary cure and, in the meantime, who shall say that the prolonged localized irritation of the stones is not starting up a malignant process in the gall bladder or that a stone or stones originally in the bladder are not working their way into the ducts, there eventually to make the case much the worse, the plainly imminent operation more difficult, and the prognosis more grave. The quiet gallstone is often more dangerous than the one giving rise to the most intense paroxysms.

In this connection Kehr says: "Even the latent cholelithiasis we should always regard with suspicious eyes, for the 'quict work' of gallstoncs is often the most destructive. Carcinoma often arises through stones which cause no distress, and perforations into the hollow organs develop not rarcly without any symptoms. No one should trust latency too much; in malignancy and insidiousness no disease of man compares with cholelithiasis."

The statistics of Riedel ( 52 cases of carcinoma in 6.50 gall-bladder operations) and Peterson ( 34 eases of carcinoma in 168 gall-bladder operations) only serve to corroborate in cold figures the statement made above. The prolonged inflammation of the gall-bladder mucosa frequently results in a proliferation of the epithelium in the depths, with a papilliferous form on the surface. It is not at all necessary that the stone lie in the gall bladder, since anything which results in a damming up of bile and mucus in the gall bladder will result in irritation quite as much as does a stone in the bladder itself. This is explained by F. Pels-Leusden on the basis that in addition to the mechanical irritation caused by a stone, there are other irritative infiuences, such as those caused by the presence of bacteria or of bile of altercd consistency or chemieal character. An carly result of this irritation is a proliferation of the lining epithelium of the gall bladder, and this proliferation shows a marked tendency to go over into the formation of earcinoma.

Considered from an etiological standpoint, gallstones rarely develop, and restitutio ad integrum does not occur here any more frequently than it does in the appendix. Therefore, brief consideration of the bacteria present in the infected gall bladder may not be amiss. In a series of 216 patients operated on by Deaver and discussed by A. O. J. Kelley the infective agents of seventy of the patients were as follows:

|  | Cases. | PER Cent. |
| :---: | :---: | :---: |
| Bacillus coli communis. |  | 32.8 |
| Bacillus typhosus. | 7 | 10.0 |
| Staphylococcus pyogenes aure | 2 | 2.9 |
| Streptococcus pyogenes. |  | 1.4 |
| Staphylococcus pyogenes albus |  | 1.4 |
| Bacillus coli and staphylococcus |  | 2.9 |
| No bacteria | $3 \pm$ | 48.6 |

Naturally, one would expect to find the bacillus coli communis present in the largest percentage of cases, but it is in the bacillus typhosus that the most interest lies for the general practitioner, and here, at the risk of being trite, slight digression is made to emphasize the importance of the connection between typhoid and biliary infection, first noted by Bernheim some twenty-five years since.

In 1896 Manot and Milan demonstrated the bacillus typhosus in the center of gallstones of recent formation in the gall bladder. Cushing found the organism in the bile removed from patients who had died of typhoid fever. In 32 cases of typhoid cholecystitis which were autopsied and operated Ehret and Stoltz found gallstones in 20 .

Chauffard found that 20 per cent. and Cushing 30 per cent. of cases of cholelithiasis gave a history of having had typhoid fever. Nor is it necessary that the attack of typhoid be a recent one, as typhoid organisms seem to be possessed of great longevity in the gall bladder and ducts, Droba and Hunter reporting cases in which the bacillus was found scventcen and cighteen years, respectively, after the oeeurrence of typhoid. And bearing in mind this connection between gallbladder infeetion and typhoid, we must conclude that the latter bears a more important causative relation than is generally supposed by those not engaged in the particular study of gall-bladder pathology.

The symptoms of gallstone disease, in their broadest sense, are not always appreciated as they should be; that is, the gall bladder itsclf frequently cscapes conviction by shouldering the offense on other viscera and particularly the stomach.

There is cvery reason why the gall bladder, by virtue of its anatomy and mechanics, should when seriously affected make itself felt in the syndrome indifferently characterized as indigestion or dyspepsia.

The accredited diagnostic symptoms of gallbladder disease have undergone a radical change within the last few years. It is not long since the cardinal symptom of gallstone disease was regarded as a shooting pain toward the umbilicus. As a matter of fact, it is rare indecd to hear a
patient complain of this symptom. Jaundice is no longer an essential diagnostic element. We may find clay-colored stools or we may not find clay-colored stools in cases where operation positively reveals gallstones; indeed, a stone inust be tightly packed in the common duct before we have this condition.

The pain in the back does not occur in all cases and is not essential for diagnosis. Pain in this location occurs in so many disorders of the vissera in the region of the gall bladder that it might indicate any one of half a dozen of the former. If there is any one train of symptoms whieh should lead one to suspect the ehronic involvement of the gall bladder or its ducts, it is that complex of symptoms carelessly denominated as dyspepsia, and this is true particularly where after prolonged treatment by medical methods now in vogue the patient is left just a little worse and eventually reaches the surgeon weak, thin in flesh, tender over the gall bladder, palpation revealing a general thickening in this region.

The gall bladder and stomach are parts of one physiologic system, and it must be evident in this casc, as is evident in other parts of the anatomy, that serious involvement of the one means serious involvement of the other. The gall bladder is as frequently at the bottom of the trouble as is the stomach. Again, the proximity of the gall bladder to the pylorus affords ample opportunity for trouble. We all know how little irritation is required to produce adhesions, and we know just as well that a persistent inflammation of the gall-bladder mucosa is likely to extend to its peritoneal covering, and, this extension having taken place, we know that adhesions of the surrounding viscera, particularly of the duodenum and pylorus, are likely to occur. It is also evident, when we consider the close inter-relation of the lymphatics of the lower part of the gall bladder and its duets with those of the pyloric end of the stomach, that an infection in these ducts is very likely to extend to the walls of the stomach.

Mechanically, gall-bladder diseases may affect digestion in various ways. Stones may produce pressure. Adhesions may drag upon the pylorus or duodenum, or stones may be so large in the common duet as to interfere with the flow of bile, or in the ampulla of Vater they may be so placed as to interfere with the passage into the intestine of both the hepatic and the pancreatic juices. And these latter conditions may exist for years and not give rise to the sharp, shooting pains or cven to much distress, heretofore considered an essential factor in the diagnosis of gallstones.

One rarely hears a discussion upon this subject in which mention is not made of the fact that gallstones have been found postmortem in patients who never complained of them; that is, the patients never complained of the so-called classic symptoms of the disease. However, it would be exceedingly interesting to know low many of them had suffered for years from the long list of referred and masked symptoms we now know gallstones to bring about.

From a simple incision and drainage, gallstone surgery las developed in its various phases into one of the most important and beneficial departments of surgical practice. As to the indications for operation in gallstone disease, there is little or no question, surgeons for the last year or so having concerned themselves with the indications for cholecystotomy as against cholecystectomy, the latter being of rather recent development, yet a procedure warranted in a considerable number of cases.

The gall bladder unquestionably furnishes an ideal drainage tube where drainage is all that is demanded. The presence or absence of stones does not establish an indication as to which procedure to employ. However, there is a large percentage of cases of inflammation of the mucosa of the ducts and bladder with stones wherein vastly better drainage may be established through the bladder itself than by any other device, and here it may be sajd that after drainage of the gall bladder and its fixation to the abdominal wall, the bladder docs not always atrophy, as the writer has in two cases, upon reopening the abdomen for other causes, found an apparently normal bladder, and in one of the cases the bladder in the previous operation had been found shriveled down tightly upon several small stones.

Where the stomach complications have given rise to the major symptoms, and particularly where pancreatitis is coexistent, it seems that unless the gall bladder is seriously involved simple drainage will give satisfactory lesults.

Igain, where the patient is much reduced from long suffering with stone in ducts and bladder. Where adhesions have formed and where eholemia exists, making hemostasis diffieult to secure, it is frequently advisable to content oneself with removing the obstruction and seeuring drainage. The greatest reasons for removal of the gall bladder lies in the tendency of this viseus to undergo carcinomatous degeneration, which, once developed, rapidly extends into the liver substance itself.

Van IIook says: "Those inflammations that cause distortion of the gall bladder, either by
dilatation or, more particularly, by scondary contractures of the gall bladder, supply the best examples of inflammatory processes demanding eholecystectomy. Where stones are present in the gall bladder, and especially where they lave become embedded in its walls, or where biliary matter of one kind or another coats the wall of the gall bladder, the organ may, unless good reason exists for leaving it, be very appropriately remored."

## REPOR'I OF A SERIES OF LEUKEMIC CASES WITH BRIEF COMMENTS ON THE SYMPTOMATOLOGY AND TREATMENT.

Frank B. Wynn, M.D.<br>indIANAPOLIS

It is not designed at this time to enter into a full consideration of leukemia. I desire simply to report eleven out of fifteen cases of this disease seen by the writer in less than a decade (five withim the past year) and offer brief comments. Of these cases, nine were of the myelogenous and two of the lymphatic variety. Malaria appears to have had a eausative relationship in four cases and injury in one.

The onset in four of the cases was insidions. marked by developing pallor and weakness. These were variously diagnosed as simple or progressive pernieious anemia, till the blood examination revealed the truth. In three the beginning was seemingly abrupt and characterized by severe and persistent pain. I have found pain in the splenic area, at one time or another in all the myelogenous cases, sometimes very severe. On the other hand, pain and tenderness of the bones was present in only two, and then not a marked symptom. In two cases the first symptom was "lump in the side."

I wish especially to emphasize the importance of hemorrhage as a symptom in leukemia. It appeals to me with especial force for the reason that four of the cases here reported died from this immediate eause (two of the lymphatic and two of the myelogenous variety) and a fifth came nearly doing so. The lymphatie eases died of hemorrhage from the mucosa of the nasopharynx and the myelogenous from subcutaneous extrarasations. In this connection I am prone to suggest that some of those cases supposed to be "bleeders," or suffering from purpura, may after all be leukemics. Hence, in every such case there should be a blood examination made.

It is noteworthy that of the eleven cases I report. seven have died. This tells the story of
prognosis. Only one case appeared to be helped by medication, and that was by the administration of large doses of arsenic, and this improvement was only of transient duration.

I belicre, however, a new era has dawned in the treatment of this previously hopeless malady. It has been my privilege to give only two of these eleven eases a fair and prolonged treatment with $x$-ray (Cases 5 and 6). Both were of the myelogenous type. Treatment has extended over two years, moderate in degree and with gradually diminishing frequency. It is a great mistake in my judgment to carry the Roentgenization to severe dermatitis. Not only should caution be exereised in the method of the applieation of the $x$-ray, but still greater eare should be used in studying the physical and constitutional state of the patient. Most necessary are systematie studies of the blood, not alone hemoglobin estimation and the enumeration of the blood cells, but eareful morphologieal studies of the corpuseles.

In one of these cases (Case 5) the spleen has remained normal in size, the gencral condition of the patient has been most excellent, and the state of the blood (exeept a slight leueocytosis$10,000)$ has been practically normal for a year.

The improvement in the other patient (Case 6), although not so marked, has nevertheless shown the subjective sensation and outward appearance of perfcet healtl. From being a weak, dyspneie, edematous and bed-ridden patient, he has been able during the past year to continue his work as clerk in a shoe store without losing a day.

Certainly the results in these two eases afford ancouraging evidence that in the $x$-ray we have the most valuable therapeutie measure for leukemia thus far diseovered. And it is not too mueh to hope that with a more perfeet understanding of the method of applying this agent permanent cures may be effeeted.

## MYELOGENOUS LEUKEMIA.

Case 1.-L. M., a farmer boy aged 10. In Oetober, 189\%, he suffered an attack of influenza, which was followed by persistent weakness and anemia. In January, 1898, Dr. O. B. Pettijohn attended him for a period of three weeks, when he had daily chills, followed by high fever and jaundice. Quinin relieved the condition and seemed to justify a diagnosis of malaria. The doetor was ealled again in April, when he reeognized at once a grave condition and asked counsel. It was at this time I first saw the patient. He was anemic and considerably emaciated; temperature 102 F., pulse 120 and weak. Slight tenderness over the ribs, sternum and right tibia. No enlargement of lymph glands. The abdomen
was prominently rotund, and palpation revealed a firm, non-sensitive, notehed spleen, almost filling the carity; other organic conditions were normal as far as eould be determined. The blood picture was typical. Red cells $1,800,000$, whites 364,000 , hemoglobin 30 per cent. It was estimated that the myelocytes constituted 36 per cent., polymorphonuclear cells 54 per cent., and the remaining 10 per eent. were chiefly small lymphocites, with a few transitional and cosinophilc cells. A considerable number of nucleated red cells was noted.

All therapeutic measures utterly failed in the case. Disheartened by the gloomy prognosis given, the parents took the little fellow to a notorious quack, who promised brilliant results, giving almost daily treatments for nine months, when death came.

A restricted autopsy was permitted. Three guarts of serofibrinous exudate were removed from the left pleural cavity and a like quantity from the abdomen. In the lower lobe of the left lung were a number of pea-sized bodies, pearly white on section. Stained sections showed them to be lymphoid growths. The liver, enlarged to double the normal. showed extraordinary paeking of the capillarus with white cells. A thin fibrinons pellicle eovered the abdominal viseera. Both-liver and spleen were firmly adherent to the abdominal wall.

Case 2.-For the following interesting clinieal history I am indebted to Dr. Bader S. Hunt, of Winchester, Ind.: The patient was a basketmaker, aged 48. There was tubereular taint upon either side of the family. In 1889 he suffered for six weeks with pain in the splenic region, and in 1894 he had a similar attack, attended by chills, fever and pain, often requiring morphia for relief. From 1894 the painful paroxysms came at first every two or three months, but toward the end were of nightly oceurrence, accompanied by violent museular contraetions of the side. The pain was controlled by morphia, but not the involuntary movements.

Toward the end there was great sense of oppression in the ehest. The spleen first appeared below the ribs in 1895, and at his death extended to the umbilicus; weight six pounds. There was no lymph gland enlargement, no osseous tenderness. Strength and nutrition were well maintained. The dominant feature of the ease was pain in the splenie region. Arsenic, iron and manganese were used without benefit. Coverslip preparations gave the typical microseopie pieture of myelogenous leukemia.

Case 3.-Mrs. S., aged 35, German parentage, good family listory. The only previous disease of signifieanee from which she had suffered was malaria, of whieh she had several pronounced attaeks, the last one four years previous to her death. Two years afterward she began to note
increase in the girth and a lump in the abdomen. She passed throngh the hands of two reputable practitioners without diagnosis. She then eame under the care of Dr. T. A. Wagner, who suspected leukemia and sought eounsel. I saw the patient about this time, six inonths before death.
'I'he clinical evidences of the disease were emaciation: weakness, pallor (slightly ieterie at times), ferer ( 101 to 103 F.), sweats, tenderness orer the ribs, and splenic enlargement, occupying slightly more than the left half of the abdomen. The blood examination revcaled a typical picture: red cells 2,900,000, the percentage of mucleated reds was large, white eells 410,000 . No therapeutic measures instituted afforded more than transient benefit. The progress of the disease was rapidly toward a fatal issue, the whole course of the malady being two years.


Myelogenous leukemia. Taken before $x$ ray treatment was begun. Mark shows splenic enlargement.

At the autopsy, besides the splenie enlargement showing fibrosis and mottling on cut surfaee, the most interesting feature was the condition of the ribs. Two of thesc had fractured spontaneously. The marrow was pyoid in eharaeter, and from atrophy the bones were redueed to mere shells, which eould be broken by pinching between the fingers.

Case 1.-M. L., a young troman employed as a scamstress. Family history negative, no history of previous disease bearing upon the ease. The total duration of the disease was about two rears. She liad complained at times during this period of weakness, but did not quit work till a month before her death, when she consulted Dr. William Wands. whose first thought was of pernieious progressive ancmia. A few days later Dr. S. E.

Crose saw the patient. I saw her with thesc gentlemen the day before her death. She was then in a profound state of coma. This had been preeeded by rather sudden deafness in both ears. There was a diseharging furunele behind one ear which had oeeasioned hor a good deal of distress. The loose eonncetice tissue about both eres was enormously swollen from cxtravasated blood, making the faee hidcous in appearance and rendering impossible examination of the pupils. The eervieal lymph glands were somewhat enlarged. The spleen extended only a short distance below the border of the ribs.

No blood count was made, but estimated from eoverslip preparations the proportion of red to white cells was 3 to 1 . The differential estimation gave a large proportion of myelocytes (44 per cent.) and a great many nueleated red cells. It seems eertain that the immediate cause of death in this case was hemorrhage. No postmortem was granted.

Case 5.-L. M., farmer's wife, aged 36, of excellent family history, and mother of one healthy ehild. Never ill till present trouble appeared in Deeember, 1904. She then noted a "Iump" in the side, and during the suceeeding spring and summer shic grew weak, sweat a great deal and the menses ceased for several months.

In Deeember, 1905 , the patient was referred to Dr. O. G. Pfaff for suspected abdominal tumor, and by him in turn to the writer. She was then haring considerable pain in the splenie area and fever ( 100 F. ). The eonspieuous feature of the case. howerer, was the prominent abdomen, due to the enlarged spleen which filled two-thirds of the earity.

Blood examination made at this time gave hemoglobin 55 per eent., red eells 3.200,000, white eells 25\%.000. The myeloeytes constituted 41 per cent. and the polynuclears 52 per cent. of the total lencocytes. Niueleated reds numerous.

The patient has been under somewhat systematic $x$-ray treatment. never, howerer, carried to the point of dermatitis. The splenie area, and the ribs both in front and behind. hare been subjected to short cxposures from a medium vaeuum tube: at first twiee a week. gradually diminishing the frequeney to onee a week, and for the past year not oftener than onee in a fortnight. The clinical evidenees of improvement were rery marked. In three months, besides the return of strength, color and sense of well-being, the spleen diminished to practieally the normal size, and has continued so up to the present time, a period of two rears.

The improvement shown by the blood findings was likewise eonspieuous. Differential studies of the leueocrtes in cover-slip preparations, taken at different times, rerealed the following: In the total decrease of leucoeytes the myeloeytes showed the first and most marked diminution. It was then observed that the number of transi-
tional eells, those with saddle-bag nuelei greatly inereased. I eonstrued this to mean that under the Roentgen stimulation of the blood-making organs the embryonie myeloeytes were manifesting the normal tendeney to evolve into the mature polymorphonuclear cells. The blood picture ultimately beeane that of a mild leueocytosis.

The blood examination of Jan. 23, 1908, resulted as follows: Red eells $4,400,000$, white cells 10,000 . Differential eount gives polymorphonuelear eells 74 per cent., small lymphoeytes 10 per eent, large lymphoeytes 6 per eent., transitional forms, 8 per eent., myeloeytes 2 per eent.

Case 6.-F. E., age 41, elerk. Family history negative. Used liquor to some extent for five years. No sickness till present trouble began in June, 1904, when he noted growing weakness and loss of energy. In sueeession there developed pallor of the skin, loss of flesh ( 20 lbs .), night sweats, tenderness and enlargement of the abdomen. Dyspnea was marked with even light exertion and weakness made rest in bed necessary.

It was at this time (April, 1906) that I was asked by Dr. G. A. Petersdorf to see the ease. The spleen extended downward into the pelvis and to the right of the umbilieus about two inches. It was firm and non-sensitive. Temperature $991 / 2$ F., pulse 120.

The blood gave a white eount of 380,000 , red eells $2,500,000$. A differential eount at this time gave myeloeytes 42 per eent., polymorphonuelears 38 per eent., large lymphoeytes 2 per eent., small lymphoeytes $\%$ per eent., eosinophiles 1 per eent., large mononuelears 6 per eent.; the remaining 4 per cent. were transitional forms.

The patient has taken systematie $x$-ray exposures on an average of onee a week sinee that time. A medium vaeuum tube las been plaeed nine inehes from the body, exposures being made chicfly orer the ribs, in front and behind. Roentgenization has never been earried to the production of more than a very slight dermatitis. The spleen has diminished two-thirds in size. The pallor, weakness and sweats have disappeared and the flesh has been restored.

The ouly lalt in eontinued improvement was an attaek of acute diarrhea in the summer of 1906. On one day he lost a quart of blood, and on the three sueceeding a pint eaeh with very disastrous eonsequenees to his strength.

He has not lost a day from work in a year, and so far as subjeetive sensations are eoneerned he has not enjoyed better health in years.

The blood examination, January, 1908, shows: red eells, $4,560,000$; white eells, 20,000 . The mieroseopie picture is essentially that of leueocytosis, with a few lymphocytes and very rarely a myeloeyte.

Case i.-Mrs. L., aged 51, rather a eorpulent German woman, was seen in consultation with Dr. E. C. Reyer, April 6, 1906, two days before her death. For a year and a half she had eomplained of a tired feeling and headaehes for which she often took tablets obtained at the drug store. It intervals of thirty to sixty days she had very profuse metrorrhagia, whielı aroused in the plysician's mind a suspieion of malignancy. The gyneeologist failed, however, to diseover any uterine disorder.
Sis weeks before the end, for supposed "biliousness," she obtained at a drug store some laxative tablets of whieh she took several. In two or three days the gums, tongue and lips beeame greatly swollen, terminating in extreme uleerative stomatitis, with foul odor, profuse eapillary hemorrhage and very free flow of saliva. This stomatitis, which was thought to be mereurial, improved slowly under loeal measures, but the patient grew weaker, more anemie. A tempera-


Myelogenous leukemia. Taken before $x$-ray treatment was begun. Mark shows splenic outline.
ture developed ranging from 100 to 102 F ; there was slight diarrhea, a somewhat enlarged spleen, and the possibility of typhoid fever was taken into aeeount. Iodids in moderate doses produeed an eruption whieh became hemorrhagie. Later numerous bloody extravasations appeared in the skin, but there was no blood in the urine or feees. The lymph glands were not enlarged. From the rapid weak heart aetion the patient was dyspneie. She manifested great depression. forehoding, and gradual elouding of the sensorium whieh ended in eoma and death.

No blood eount was made in this ease, as the apparatus was not at hand when the only examination was made. Cover-slip preparations stained made the diagnosis of myelogenous leukemia easy.

The estimated proportion of red to white cells was 5 to 1 .

A differential estimation of the leueoeytes gave: polymorphonuclears, 56 per cent.; large lymphocytes. $\tilde{\text { p per cent.; myeloeytes, } 30 \text { per }}$ cent.; small lymphocytes, 3 per cent.; eosinophiles, 3 per eent.; mast eells and transitional forms, 1 per cent.

Case 8.-Wm. H., aged 42 , barber by oecupation. Since the beginning of the Spanish-American war until Norember, 1906, he was a soldier in the U. S. Army. Served in Cuba and afterward in the Philippines. Within the past two years he served as a helper in the U. S. Hospital for tubereular eases in New Mexieo. Had pneumonia a year ago, at which time the enlargement of the spleen was first noticed. He suffered repeatedly from malaria and dengue fever while in Cuba. For two years past has had progressive loss of weight, weakness, pallor (almost a lemon tint), eough, sweats and dull persistent pain in the left lypochondrium. Since the attack of pncumonia a year ago the foregoing symptoms have become more pronounced and there have been added palpitation. dyspnea, edema. fever (temperature often reaching 103 F .) and great splenie enlargement. Physieal examination. .Tan. 2, 1908, revealed a spleen extending into the pelvis and two and a half inehes beyond the umbilicus on the right. The blood examination gives hemoglobin, 30 per cent.; white eells, 335, 000 . There are a great many nucleated red cells, and the myeloeytes are in excess of 40 per cent. $X$-ray treatment has heen begun, but it is too early to expeet any material change in the blood findings (notes of January, 1908).
Case 9.-IV. N., aged 3i. Farmer. Referred to me by Dr. J. E. Nixon. Good family history. When 5 years old suffered from a prolonged siege of malaria with pronouneed "aque-eake." Has had several attaeks of mueous diarrhea. lasting two or three months each time. Had a prolonged attack of rheumatism ten years ago : also for a month the past summer. It seems likely that this alleged rheumatism of recent date was really a manifestation of his leukemia.

His first knowledge of the present trouble was in May, 1906, when there dereloped great splenic enlargement and severe pain in that region which lasted for six weeks. From June to Deeember, 1906, he took Fowler's solution, rumning the dosage up to fifteen drops thriee daily. He experienced great benefit, regaining weight, strength and the spleen returning almost to the normal size. The organ again began enlarging in April. 190\%, and has continued to inerease in size despite the renewed administration of iron and arsenic.

Physical exploration to-day (Jan. 24, 1908) reveals a hard. non-sensitive spleen extending to the umbilieus laterally and downward to slightly
beyond the brim of the pelvis. Blood examination gives: hemoglobin, 55 per cent.; white eells, 140,000 ; polymorphonuclear cells, 44 per cent.; myeloeytes, 25 per cent.; simall lymphocytes, 13 per eent. ; large lymphocytes, 4 per cent.; eosinophiles, 4 per eent.; transitional cells, 10 per cent.

## LV゙MPHATIC LEUKEMIA.

Case 1.-E. W., sehool-girl, aged 15. Family history good. Had suffered from no previous disease of signifieance. During the early spring months she had complained of weakness. The symptom was thought to be connected with the pubeseent period. Her parents thought her eondition benefited by some ostcopathic treatments which she took.

In May, 1906, she came from her home in Oregon to visit friends in Indianapolis. At that time she was execptionally well. As a proof of her strength and buoyancy of spirits, it may be stated that she climbed a cherry tree. She went for a two weeks' visit to a neighboring town, and while there had several attaeks of epistaxis which proved extremely diffieult to control. She returned to this eity in a fortnight, the hemorthage from the nasopharynx reeurred and continued almost without eessation to the time of her death, ten days later. Topieal and constitutional measures were utterly without avail to check the hemorrhage.

I was called by Dr. Frank Manker to see the patient 'in eonsultation two days before her death. Although abmost eompletely exsanguinated, her sensorium was elear to the end, but she was blind from brain anemia. There was an minquenchable thirst. The temperature ranged about 100 F . The pulse was rery rapid ( 120 to 150) and scarcely palpable at the wrist. No evidenee eould be diseovered of organic lesion. Teither the spleen nor lymph glands were enlarged. There was no periosteal tenderness. Urine negative. From the elinical aspects of the ease neither pernieious anemia nor leukemia was suspeeted.

The blood examination revealed: hemoglobin, 50 per cent.; red cells, $3,100,000$; white cells, 110,000 . Differential count: small lymphoeytes, 81 per cent.; large lymphocytes, 14 per cent.; polymorphonuelears, 4 per cent.; eosinophiles, . 5 per cent.; myoloeytes. .s per cent.

Case 2.-R. R. T., aged 22, farmer. family history good. Had appendicitis in 1895 and smallpos in 1905. Early in the summer of 1906, while lifting heavily on a binder, he felt something tear and sudden pain in the splenie region. Tenderness persisted for a fortnight. Even after he suffered diseomfort at times in that loeality. Ten months later he began growing pale and weak, for which the serviees of a physieian were sought without definite diagnosis or benefit from treatment. Six weeks later, July 9, 190\%, he
consulted Dr. J. H. Reed, of Logansport. The patient was then almost exhausted from weakness; his pallor was extreme; there were numerous eechymoses beneath the skin and mueous membrane of the mouth and nose. Legs edematous; dyspnea on slightest exertion; pulse 120; temperature $991 / 2$ to 101 F .; leukemia suspeeted.
This was the condition of the patient when I was asked to see him July 26. Besides the above, a physical examination revealed a tender spleen extending three inehes below the left eostal margin, but only very slight enlargement of the lymph glands. Nio osseous tenderness. Soon after midnight the following day he was seized with epistaxis, whieh was eontrolled only by pressure after six hours of exhausting hemorrhage. A few hours later bleeding recurred from the nose, pharynx and gums and continued despite all therapeutie measures till his death, the day following.
Blood examination: reds, $2,500,000$; whites, 180,000 ; large lymphoeytes, 48 per cent.; small lymphoeytes, 43 per eent.; myelocytes, 1 per cent.; polymorphonuelears, 7 per cent.; eosinophiles, 1 per cent.; hemoglobin, 40 per eent.

## BOOK REVIEWS

Dyspaea and Cyanosis. By Prof. Edmund yon Neusser, M.D.g Professor of the Second Medieal Clinic, Viema. Cloth. Pp., 203. Price, $\$ 1.50$. New York: E. B. Treat \& Company, 1907.

As is stated in the preface to the Ameriean cdition of this monograph, the diagnosis of diseases in the great majority of patients must be determined at the bedside rather than in the laboratory. and hence the basis for this work is furnished by clinical observations. The volume has bcen divided into two general parts: First, dyspnea and cyanosis in disorders of the respiration, and, seeond, dyspnea and cyanosis due to disorders of the circulation. The last four chapters should properly be classified under a third part, as they deal with miscellanenus subjects, no more dependent, perhaps, upon circulatory than respiratory disturbances. The absence of an index precludes somewhat the use of this little volume as a ready referenee work, although the volume affords interesting and profitable reading.

The Pancreas: Its Surgery and Pathology. By A. II. Mayo Robson, D.Sc. (Leeds), F.R.C.S. (Eng.) of London. and P. C. Cammidge, M.D. (Eng.) D.P.H. (Camb.), of London. Octavo volume of 546 pages, fully illustrated. Philadelphia and London: IW. B. Saunders Company, 1907. Cloth. $\$ 5.00$ net; Half Moroceo, $\$ 6.50$ net.
This is a timcly book by authors well fitted for the work. The scope of the work is something wider than the title indicates, for the first seven chapters (12.) pages) are devoted to the comparative anatomy, anatony, embryology, anatomical anomalics, surgical anatomy, histology and physiology, respectively. These chapters give a very adequate exposition of the existent knowledge upon the various subjects of which they
treat, and add much to the value of the work. In the chapter on surgical anatomy, speaking of the proximity of the stomach and pancreas, a case of ulcer of the posterior wall of the stomach involving the pancreas is referred to as follows: "A middle-aged man had suffered from symptoms of chronic gastrie ulcer for several years with romiting of coffee-ground material. On exposing the stomach no evidence to account for the trouble could be found, but when it was opened a large ulcer one and a half by three inches in diameter was discovered on the posterior wall, eroding the panereas." That one might gain a more accurate knowledge of the condition in such a case by opening the stomach is eonceded, but that the opening of the stomach was advisable is doubtful, and that it was necessary to the discovery "of evidence to account for the tronble" is denied. Just here it might be well to remark, also, that it is better cither to adhere to one system of weights and measures. or to both continuously, rather than use one, then the other, and again both, as is done in this book. To say that a "man of 154 pounds weight might he expected to secrete 175 gram.s of pancreatic juice a day" sounds queer and looks bad in print. That secretin is the principle excitant of pancreatie activity; that it (secretin) is produced chiefly by the action of hydrochloric acid on the pro-secretin of the cells of the duodemm and jejunum: that the activity of fats as exritors of pancreatic secretion is due to the formation of soap: that the vagu has no secretory fibers seem to be the eonclusions reached by the authors. "The milkcurdling ferment of the pancreatic juice is probably not of much physiolngic importance." In the chapter on pathology it is stated that as ret the mumber of cases in which rareful macroscopical and microseopical studies of the pancreas have been conducted jointly are so few, that it is impossible to arrive at satisfactory conclusions as to the relative frequeney and importance of the various diseases of the panereas. apart from the elinical evidence. Considerable and important pathologic changes may occur without changes in the gross appearance and inflammation mas cause only slight and easily overlookerl microsonpic changes. The influence of the bile in the production of pancreatitis is established, but how much of this influence is due to micro-organisms and how much to pure meehanical and chomical canses is not known. Fat necrosis forms the subject of one chapter and is discussed in its various phases, apparently with tre conclusion that elinically at least it is a result of di-ease of the pancreas and that the necrosis is due to the tat-splitting ferment. One of the most interesting chapters in the book is that on chemieal pathology, in which are discussed the various ehemieal changes produced in the body by disease of the pancreas. These changes are considered under two heads. those connerted with digestion and those eonnected with internal metabolism. The "improved method" of obtaining the "pancreatic reaction" is deseribed, and while a positive reaction is not regarded as pathognomonie of pancreatitis. it is regarded as "strongly suggestive." The role played by the pancreas in diabetes is discussed in a separate chapter. This is followed by a chapter on the general symptomatology and diagnosis, after Which injuries and diseases of the pancreas are considered. The bibliography is quite complete. There are few typorraphical errors. The illustrations are numerons and good. The trpe. paper, binding and index are satisfactory.

# THE JOURNAL <br> OF THE 

## INDIANA STATE MEDICAL ASSOCIATION

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## EDITORIALS

## THE DIVISION OF FEES.

The division of fees, or the giving of commissions for cases referred, is a subject which is agitating medical men in many communities in this state, and one npon which The Journal is requested to express an opinion. The editor has repeatedly roiced his sentiments on this subject, and, therefore, should be excused if in complying with the request he reproduces, perhaps in the same words, views which he has previously editorially expressed in numerous numbers of the Fort Wayne Medical Journal-Magazine.

The giving and taking of commissions as ordinarily practiced is a species of deception and dishonesty which no right-thinking physician should engage in for one moment. As proof of the fact that it is deception, it is only necessary to say that this traffic is carried on without the knowledge of the patient and with every endeavor to maintain secrecy as to the arrangement. It is a practice that is absolutely dishonest on the part of both the giver and the receiver of the commission, and is as unethical and dishonorable as the practices of the worst of quacks. It encourages deception and fraud, and if permitted to continue and become general, would lower the moral status of the medical profession in the minds of the people.

In some communities where surgeons are freely offering and giving commissions, the practice has developed a species of graft among a certain class of general practitioners which has gone so far that some of them are drumming up surgical cases and writing different surgeons for quotations as to commissions, with the intent of taking the patient to the man who pays the most. We are also informed that the question of necessity for an operation does not enter into consideration providing the patient's consent to an operation is secured. This is the logical outcome of the nefarious business of giving and taking commissions, and the commission-giving and the commission-receiving doctors will come to grief
just as sure as night follows day, for the simple reason that retribution always comes sooner or later to the one who is guilty of dishonest practices.

Fortunately there are many men in the medical profession who are sufficiently conscientious and honest to refuse to give or receive that which they know to be vitally wrong in theory as well as in practice. They recognize the fact that crery medical man is deserving of just remuneration for his services, but that it is the duty of every medical man to charge and collect for his services, and not expect or request some one to do it for him. The fees of the surgeon seem large, and are large as compared to the fees of the general plysician, but that does not justify a division of the fee to make up for the general physician's shortcomings in not charging and collecting an adequate amount for his professional services rendered. We have contended, and still contend, that the average physician is too poorly paid, and we have endeavored by argument and persuasion to influence many of our professional friends to charge fees that are in keeping with the value of the services rendered. If they have not the good sense and good judgment to do this, then they have no one to blame but themselves, and they should not complain when others obtain adequate compensation, nor should they expect those who do obtain adequate compensation to divide with them. We are firmly convinced that the solution of the whole problem will be the exposure of the practice to the public. Let it once be known that any physician is guilty of giving or taking commissions, and trafficking in the misfortunes of patients, and it will not be long before that plysician will lose prestige and practice, and he deserves the fate.

Concerning this question The Journal of the American Medical Association, in answer to a correspondent who invites an expression of opinion, has the following logical argument in the issue of Oct. 19, 190\%: "Let us get down to first principles: 1. To obtain money for one purpose, even though of itself a legitimate one, under the pretense that it is for another purpose, is to defraud. 2. To defraud is dishonesty. Therefore, it is clear that for the operating surgeon to claim a certain fee from the patient, ostensibly for his own services alone, but really for the family physician as well, is dishonest. Such an act is economically dangerous; for he who repeatedly performs a dishonorable act demoralizes both himself and his associates. The inevitable consequence of such acts will be disregard of the patient's interest as the prime motive
in the selection of the surgeon and the substitution of the consideration as to which surgeon will pay the biggest commission to the attending physician.
"Let us now appeal to first principles to solve the question constructively: 1. Every man is entitled to a reasonable recompense for services rendered. 2. That recompense is due from the person to whom the services are rendered. 3. The responsibility entailed on the physician in deciding on the neecssity for an operation and in selecting a suitable opcrator is pre-cminently a service to the patient. So also are the pains taken to furnish the operating surgeon with all those data that the physician's knowledge and prior observation have enabled him to glean with respect to the history of the case, and the personality and iodiosyncrasies, ctc., of the patient. And so, also, is the assistance, if any, that may be rendered at the time of operation or subsequently. Therefore, for any or all of these things the family physician is just as much entitled to compensation as for his previous attendance, and that in proportion to the care and responsibility involved. There can, of course, be no ethical objection to the surgcon including the physician's charges in his bill, provided the patient clearly understands that such a division is to take plaee. But in that casc what advantage is gained? And why should the surgeon collect these fces for the physician any more than the fces for previous services. To argue that the only way to secure the physician his just dues is for the surgeon to include it in his own fee overthrows all possible claim for honcsty in the transaction. If this alleged objection on the part of the laity rcally exists, it is because they do not understand the position of the family physician or the amount of responsibility he assumes. The true solution of the difficulty is to make the laity understand the matter. We can hardly refrain, however, from the belicf that the difficulty exists mainly in the minds of interested parties, who find the practice of division of fces a mcans of illicit gain.
"To sum up: First, if the patient knows of the transaction betwcen the surgeon and the attending physician, there is no objection to such a division. If not, it is clearly a dishonest transaction. Second, the giving of commissions is dangerous under any circumstances, because of its inevitable tendency to bias the physician in his choice of a surgeon in favor of the one from whom the most substantial consideration is likely to be obtained. No other factor ought to enter into the physician's decision than the best inter-
csts of his patient. Third, the division of fees, however theoretically different, is practically identieal in its effects with the giving of a commission."

## HURRIED ENAMINATIONS AND "SNAPSHOT" DIAGNOSES.

A medical man of our acquaintance, who has no assistants, once made the statement that he had given professional attention to forty patients during his afternoon office hours, from 1 to 4 oeloek, and that out of the forty patients ten were new patients who had to have a complete examination. A little mental calculation shows that if the doctor worked without interruption and spent no time in idle conversation he could devote just four and one-half minutes to each ease, providing each case received the same amount of attention. Of course, the doctor lied, and he evidently thought that when he told a lie he might as well tell a good onc.

But the point is, Are there not many doctors who are trying to give attention to too many patients during the limited time of office hours, and are not the patients being "railroaded" through without receiving proper consideration? How much does the doctor know about the average new case which comes to his office if he gives it only the time ordinarily devoted to new cases when the office is full of waiting patients? How thoroughly can he cover the history of the case, the symptoms, the physical examination and the treatment, if he crowds his work into a limited amount of time in order to get through with a large number of waiting patients? Is it not a faet that a waiting room full of patients, every one of whom presumably means a fee for the physician, is not conducive to good work on the part of the physician, and is it not frequently the case that the busiest physicians are the ones who most frequently do an injustiee to themselves as well as their patients by hurried and indifferent work?

There are some physicians who lose sight of everything but the monetary cnd of the practice of medicine, and the desire to be rcckoned among those who have large practices. These men make many "snap diagnoses," or more frequently prescribe cmpirically. That they obtain satisfactory results in a certain percentage of cases can not be denied, but the practice does not deserve rccognition as the right method to pursue or the true attitude to assume. Such men have built up and hold their practices as a result of personality and a studious effort to impress patients with an exaggerated idea of quick perception and
ability. Sooner or latcr the public comes to recognize the true worth of such men and turns to the physician who, with painstaking care, thoroughness and scientific skill, goes over every casc with no thought of time consumcd, but with the true physician's feelings that he owes it to himself, to the patient and to his profcession to understand thoroughly all the features of every case coming to him before passing an opinion or prescribing a definite line of treatment.

If the time at the disposal of patient or physician does not perinit a careful examination, and the determination of such facts as warrant the expression of an intelligent opinion or the prescribing of a definite line of treatment, then it is the duty of the physician to insist upon another appointment, when sufficient time can be taken to make a thorough examination and arrive at definite and reasonably accurate conclusions.

Many very busy practitioners are very thorough and very careful in their work. Such physicians are practicing medicine, first, because it brings a living and, second, because it offers the best opportunity for making a living with the least expenditure of time, energy and brain power.

If a thing is worth doing at all, it is worth doing well, and this holds true most emphatically in the practice of medicine. Hurried and superficial examinations lead to errors in diagnosis which may be avoided if more time and thought is devoted to cvery case coming to the physician. "Not how much, but how well," should be the motto of every conscientious doctor in the practice of medicine.

## SUPPORT THE COUNCIL ON PHARMACY AND CHEMISTRY.

The physicians of Indiana are at the present time being systematically interviewed and "sampled" by the traveling representatives of several manufacturers of proprietary drugs and pharmaceutical specialties. The specialties being introduced have not been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and in one or two instances the manufacturers of these specialties have flatly refused to submit their products to the Council. One of the firms under consideration has rather tartly stated in writing that they do not propose to have their business run by the American Medical Association, and that they do not consider it necessary to secure the cndorsement of the Council on Pharmacy and Chemistry in order to dispose of their products.

The truth of the matter is that a firm taking any such stand fears the rcsults of an examination of their products by the Council, for the reason that they know that they are exploiting nostrums and an examination would disclose the facts. No honest firm will hesitate for a moment to have their products examined by the Council and a report of the findings made public. It is the firms that are decciving the medical profession who are most strongly opposing the work of the Council, and they are receiving support from a certain class of medical periodicals which owe existence and perpetuation to the adrertising patronage of nostrum houses.

We believe that the intelligent and rightthinking physicians of Indiana require no urging to prompt them to refuse to prescribe preparations of unknown composition and therapeutic value, and with no endorsement other than that given by the manufacturers. Enough official preparations of known composition are listed in the U. S. Pharmacopeia and National Formulary to fill the requirements of any physician, and in addition to this a large number of new and nonofficial preparations approved by the Council on Pharmacy and Chemistry of the A. M. A. are offered the profession. There is, therefore, no logical reason why a physician should prescribe any one of the numerous nostrums of unknown formula or composition which are so extensively advertised and the therapeutic action of which is so extravagantly stated by the manufacturers.

The Council on Pharmacy and Chemistry is composed of men of recognized ability and standing and thoroughly competent to pass an authoritative opinion on the composition and character of drugs, chemicals and pharmaceutical specialties. The Council has been organized and cstablished purely with a view to protect the physician as well as the patient, and it is the pleasure and intent of the Council to deal honcstly and fairly with the manufacturers. The work of the Council deserves the approval and the support of every member of the medical profession, and that support can be best demonstrated by refusal on the part of physicians to endorsc or prescribe any remedy not found in the U. S. Pharmacopeia or National Formulary or in the published list of new and non-official preparations approved by the Council.

## SIIALL WE CHARGE CLERGYMEN?

A reader of the The Journal asks, "Shall the physician charge members of the clergy for professional services rendered?" Our answer is
yes, and we will ask our readers to give a single logical reason for not charging clergymen for medical or surgical attention.

We are aware of the fact that in many communities it is the custom to render gratuitous medical and surgical serviees to the members of the clergy and their families, but that does not mean that the eustom is right or that we should always adhere to such a eustom. The average member of the elergy has an income fully equal to the income of the average skilled mechanic and greater than the income of the ordinary mechanic, farmer, slopkeeper, clerk or laborer. In many instances he reccives free rent, and in some instances frce light and fuel in addition to his salary, to say nothing of fees for weddings, funerals, christenings, etc. Is it right that we should charge a fee to the common laborer or ordinary mechanic and let our sleek and wellfed member of the clergy off without the payment of a fee? And why does the average physician donate his services to the members of the clergy? Is it because he feels that the members of the clergy can not afford to pay for services rendered? No. He does it either beeause he has not the moral courage to break away from a vicious custom established by others, or because he really desires to secure the influence of the elergy, and it is generally the latter reason. In other words, the doctor is buying the influenee of the clergy, and the average member of the clergy who aceepts gratuitous medical services is selling his influence, as he also is selling his self-respect. By accepting gratuitous medical services the clergyman is plaeing himself under moral obligations to the physician, and by donating the services to the clergyman the physician is placing himself in the position of desiring such a relationship and being willing to pay for it. There is neither justice nor reason in the practice, and we are pleased to observe that there is a steadily increasing number of clergymen who not only expect to pay cash for their medieal services, but insist upon doing so in justice to their own moral self-respect.

In our judgment, elergymen should be considered in the same manner as patients coming from any other walk of life. If because of financial circumstances the clergyman is entitled to charity, then he should be granted that charity the same as we grant charity to any one else, but we do not believe it is right to donate services in whole or in part to a clergyman simply because he is a clergyman while we at the same time expect and demand some sort of fee from the
man who earns but a dollar and a half per day and perhaps has a large family to support from his earnings. Our religion is not of that kind.

## THE MEDICAL ABORTIONIS'T.

The special committee appointed by the Chicago Medical Society to investigate eriminal practices roughly estimates that 50,000 criminal operations are performed annually in Chicago, and that there are 150 private hospitals and maternity homes in which these practices are carried on and the born and unborn infants destroyed.

What an appalling slaughter of human life, and what a reflection upon our courts and legal fraternity that the murderers are not justly punished for their crimes! But it seems almost impossible to convict an abortionist, owing to the fact that it is difficult to secure evidence even reasonably sufficient to insure conviction in a court of law. There are lawyers and doetors who will sell their souls for money, and the abortionist knows that if he is ever brought into court it will be a comparatively easy thing for him to secure acquittal through the efforts of some conscienceless lawyer, aided by the purchased but perjured testimony of some physician. He also feels a sense of seeurity in the thought that he will be shielded by the woman upon whom he has performed the criminal operation, as also by her relatives and friends.

Chicago's record of eriminal operations is probably no worse proportionately than the reeord of many eities and towns in the United States, and the question comes to us all, How shall we reduce this reeord of crime? To us it seems possible to aecomplish much through the efforts of a united medical profession, aided by an improved sentiment in the legal fraternity. When reputable lawyers and reputable doctors put forth cvery endeavor to conviet rather than aequit the abortionist, then and not until then ean we expect a lessening of the number of criminal abortions. And the penalty for a convieted abortionist should be hanging or a life sentence.

The average medieal abortionist of to-day is a man or woman with limited general as well as medical education, no social or professional standing, and morals perverted. To him or her, criminal practices come easier and bring greater rewards than the legitimate practice of medieine, and the lowered mental caliber is attended by a lessened fear of punishment. Not many men who are compelled to comply with rigid educational and moral requirements in order to gain
legal permission to practice medicine will have the tendency to engage in the performance of criminal operations, and if they have the tendener it will be held in subjection through a wholesome fear of ruincd social and professional reputations.

In the future, therefore, much can also be expected from our higher standards of medical education and our closer scrutiny of the moral and intellectual attainments of those who seek entrance to the medical profession.

## ECONOMIC QUESTIONS PERTANING TO OUR PROFESSIOA DEMAND SERIOUS CONSIDERATION.

No profession is so philanthropic as the medical profession. We are constantly adrocating means which will eventually destroy our own uscfulness. Through our public health boards, with their lectures and free distribution of literature, we are teaching the public how to prevent and cure discase. We are sanctioning the erection and maintenance of public hospitals and dispensaries for the free treatment of people, 90 per cent. of whom can well afford a physician's fees. We are using our influence to secure free antitoxin injections, free vaccinations, free school inspections, free tuberculosis sanitaria, and numerous other free benefits for the people which directly take from many physicians the means of earning a living. We are countenancing contract practice, which every day is widening its sphere of usefulness to a large percentage of our population, while at the same time lowering the dignity of our profession and exerting a demoralizing effect upon fees in gencral for professional services. Ind to cap the climax, the daily papers announce that the courts in some states have decided that physicians have no legal right to fix or maintain uniform fees, while in other states attempts are being made to enact laws permanently fixing a low maximum fee for any service rendered by a physician, and in one state an attempt is being made to enact a law making it compulsory for pliysicians to charge for time and not for skill.

Is it not time for the medical profession to awake to the danger threatening if we are to be sared from a fate that is little short of reducing our profession to a trade, and that trade so tied down by legal restrictions and so harassed by state and municipal competition from the various free inedical benefits that there is left but little upon which the physician can feed? The economic questions pertaining to the practice of
medir.ine certainly demand attention, and every county medical society can well afford to devote one or more reetings each year to the consideration of such questions.

As medical men we look too lightly upon the commercial side of our work and are quite content to be imposed upon in a most outrageous manner, and in a manner which if it applicd to any other profession or calling would not go unnoticed and unchallenged. It is not and should not be beneath our dignity to discuss frcely and to act intelligently and thoughtfully upon these questions which are so vital to our personal interests and to the welfare of our families. We are in entire sympathy with the spirit which prompts medical charity for God's poor, but it is the flagrant abuse of the charity and the submissireness of the medical profession which demand serious attention for our own self-preserration as well as in the interest of justice.

## SCIENTIFIC EDITORIAL

## LA GRIPPE AND ITS COMPLICATIONS.

Ever since 1889, when influenza became pandemic, there has been frequently engrafted on other diseases a train of symptoms which has given the medical man no end of annoyance in reaching a proper diagnosis. It is a well-known fact that for several years after a pandemic of influenza, commonly called la grippe, yes, for many years thereafter, at irregular intervals, a modificd form of this disease has made its appearance in our cities and assumed the proportions of true endemic epidemics, whether the underlying bacteriological factor has been the same (bacillus influenza, Pfeiffer) or whether it has been a modified form of influenza nostras.

The past cighteen years have established the fact that a disease contagious in character, simulating true influenza, has been added to our list of human ailments, that this disease is more than a common cold or catarrhal fever, and that it greatly disturbs the symptom-complex of other discases similar in character or entirely foreign to its etiology. This disease is again with us this year, or has been within the past two months. Those communities from which it has departed are thankful. but are yet suffering from its effects, and this brings us to the purpose of these remarks.

Physicians who were in practice in 1889 and 1890 will remember what consternation was created in their respective communities when the first case of influenza manifested itself - the
panic-like fear which held that community in its grasp while the epidemic continucd. No one but the doctor knew what to do, and cren to him the new discase was a mystery as to etiology and treatment. Repeated epidćmics since that time have familiarized the public with the symptoms and treatment of a onc-time dread visitation. Fear of its conserquences has been lulled to sleep, for has not the corner druggist a supply of "grip pills" and headache powders? Even the everyday physicians have permitted themselves to assume an indifferent attitude and have acquiesced in the popular assumption that la grippe belongs to the category of mumps, whooping cough and measles, for which no particular trcatment is required execpt hot drinks, a foot bath, some cough drops and a laxative. In many cases this may be all that is needed, and the public can not be compelled to employ licensed physicians to treat what may appear as a trivial indisposition.

The writer, whose practice cxtends over fully twenty-five years, believes that he can see a marked change in the symptom picture of discase before and after the advent of true influenza eighteen years ago and its succeeding recurrent epidemics, not only in affections of the respiratory organs but in discascs forcign to the pulmonary system.

Whenerer an epidemic of la grippc. cren in light form, invades a community physicians should be prepared to encounter the most atypical forms of bronchitis, broneho-pncumonia and lobar pneumonia, unusual manifestations of gas-tro-intestinal disorders, an increase in the attacks of nephritis, atypical cases of rheumatism, and after the subsidence of the epidemic a harvest of empyemas and pulmonary tubereulosis, and among children hypertrophied tonsils, adenoids and mastoid discase.

The reader might imagine us extremists who would tinge every indisposition with the malign influences of la grippe. It is not our intention to be too insistent, but simply to point out to the busy practitioncr the nccessity of being on guard in estimating the possible distortion of diseases comparatively easy of diagnosis under normal conditions but frequently perplexing during epidemics of this latter-day visitation.

Probably no diseasc has so nearly approached the white plague in its mortality, and occasionally exceeded it, as pneumonia, and this only of late years. Pneumonia has been steadily on the increase without any satisfactory explanation except that it is a favorite complication of la grippe. And how insidiously it comes on the scene, not with a chill, high fever and typical bloody
sputum, but after two or three days of la grippe. slight pain, sometimes nonc, consolidation of a lobe, scanty sanguino-purulent cxpectoration, moderately bigh temperature, frequently albuminuria and rhcumatic pains. The usual therapeutic measures are of no avail, no matter what favorite treatment be adopted, whether quinin in massive doses, cold or hot applications, or veratrum, the discase does not terminate by crisis, but lingers on like the last days of typhoid.

Empyemas during la grippe epidemics are more frequent as a complication or sequela of pneumonia than at other times. It is the writer's honest opinion that statistics, if available, would prove that empyemas have been more frequent in the last twenty years than prior to that period -not as a primary complication of la grippe but as a sequela of pncumonia during epidemics of the former-at least this has been the writer's personal experience. During this past epidemic as it appeared in his community the writer has obserred an unusual manifestation of gastrointestinal disturbance, protracted nausea and romiting, persistent diarrhea without much pain and with the prostration of cholera nostras.

When the epidemie disease attacks children all the usual points of rulnerability are extremely affected. The rocal cords become so edematous that membranons croup is suspected, and aural symptoms are the rule. Coryza of an extreme type is present, also an irritable cough persisting for weeks, and as sequela liypertrophied tonsils and adenoids. After every cpidemic of la grippe the specialists' offices are crowded for months afterward with tonsillar affections, elongated uvulæ, adenoids, middle-ear diseases, frontal sinus disease and affections of the ethmoidal cells. An unusual mortality constantly prevails among persons orer 60 years of age during the la grippe season.

Any pre-existing ailment is marked by exacerbations. The sufferers from rheumatism experience renewed and violent attacks. Those affected with eardiac affections rapidly succumb. Chronic invalidism of every form is but an open door inviting this grim spectre to commit his depredations. It goes without saying that tuberculous patients are exquisitely sensitive to the infections of la grippe. After an epidemic the number of deaths in the course of the following year is markedly increased.

The writer can not better express his views than by stating that he believes that concurrent and intercurrent diseases during an epidemic of la grippe such as has prevailed throughout Indiana, and is still prevailing in many localities,
shonld be considered and treated as mixed infections, and it is of small consequence whether la grippe is the primary affection or whether it is engrafted upon some other acutely or chronically existing diseasc.

Joifn B. Berteling, South Bend.

## EDITORIAL NOTES

Ove of the prominent physicians of the state writes us: "Tire Journal as compared to the old transactions is like comparing a live man to a corpse."

The Journal has already been the means of bringing many new members into the state association. We hope that it may continue to stimulate interest in onr organization.

We want reporters for our columns devoted to medical news notes and personals. Send us marked copies of newspapers or write out the items. We prefer to know the name of the sender in every instance.

Remember our advertisers. With their patronage they are helping us to publish a larger and better journal than otherwise would be possible. Give them your support, and when doing so mention The Jourval.

Put little confidence in the doctor who introduces the name of some new pharmaceutical specialty into his paper. He generally recommends the new remedy because he has received or expects to receive a consideration for so doing.

Rev. Joinn Thompson, of Chicago, thinks that the Christian Scientists should not be allowed to monopolize the act of healing, and he predicts that the Methodist Episcopal Church will some day practice the art of healing the sick. Of course there is a crying need for a few more fakers pretending to heal the sick under the cloak of religion.

Dr. E. P. Thomas, of Bowling Green, Ohio, is looking for dupes among the medical men of Indiana. He offers "to the profession only" forty-five recipes for the small sum of five dollars. Many of the recipes are for concoctions which the enterprising old faker says are "sure cures" for some of the incurable diseascs, and crery one is offered as a winner.

How often we hear the expression, "The doctor said I came rery near to having typhoid," or "The doctor said I had a "touch' of pneumonia." In this age of definite diagnosis of the infectious and contagious diseases it is time for some of the doctors to catch up with the procession and understand and know that a patient definitcly has or has not one of the communicable diseases.

The secretaries of county medical societics have recently received a letter from Dr. G. W. H. Kemper, chairman of the Committee on Necrology of the state association, asking them to report all deaths of members of their respective societies to the editor of The Journal for publication. These reports should be sent in promptly, and whenever possible the newspapers containing the obituary notices should be mailed to us.

In tue proceedings of the Indianapolis Medical Society, published in this number of THe Journal, is an account of a death from hyoscin, morphin and cactin anesthesia. How many more reports of similar character will it require to prove that hyoscin, morphin and cactin anesthesia is very dangerous and should not be employed? The record of published and unpublished deaths directly due to this treacherous form of anesthesia should be sufficient to condemn the practice of giving hyoscin, morphin and cactin.

Some of the physicians who received a copy of our January number have not been sent a copy of this number. This is due to the fact, as pointed out in our January number, that the postal authorities do not permit us to send The Jourxal regularly to any but paid subscribers. No one who has not paid his dues to the state association for 1908, which includes a subscription to The Journal, can expect to receive The Jourail regularly. Secretaries of county medical societies should impress this fact upon the members of their respective societies.

WE wISH again to remind our county secretaries that reports of meetings of their respective societies should be sent in promptly. This number of The Journal should contain the reports of all county society meetings held during the month of January, but many of the January reports arrived too late for insertion in this number. As the success of our department devoted to society proceedings depends in a large
measure upon the promptness with which we receive rcports from county secretaries, we hope that we may have the eooperation which we ask.

It mas been recently announced that Mother Eddy, founder and high priest of the Christian Science Church, has decided to devote $\$ 1.000,000$ of her fortune to establish a sehool and charitable institution in Boston. Following close after this announcement comes another announeement to the effect that the trustees of Mrs. Eddy's fortune forbid the use of such an appropriation or any other appropriation for the founding of a charitable institution. All of which reminds us that the Christian Scientists as a class are not very strong on the praetical application of charity, and the Christian Scienee healers as a rulc make short work of the patient who is unable to pay a fee for services rendered.

Within twenty-four hours after mailing onr January number we began to receive telegrams and letters from almost evcry section of Indiana offering congratulations and cxpressing words of praise for Tine Jourãal. Several editors of medieal journals in other states have also written letters of fclicitation, and even a few of our advertisers have felt ealled upon to extend compliments and express their appreciation. We are pleased to know that the initial number of Thre Journal has given such general satisfaction, and we sincerely hope that this and future numbers will merit a continuance of the interest and appreeiation alrcady shown.

The "Boy Phenomenon," who has been advertised in some of the Indiana towns as possessing wonderful magnctic healing powers, but who in reality was the rankest of swindlers, has been driven out of the state by the Board of Medical Examination and Registration. The doctor who was employed by the "Boy Phenomenon" has been cited to appear before the board and show cause why his license shall not be revoked for gross immorality in that he has become a party to a seheme to defraud and deceive the credulous sick and obtain money under false pretenses.

The board deserves great credit for this work. and we hope that some of the other notorious quacks and medical pretenders who make Indiana their home will be investigated and their licenses taken from them unless they change their tacties.

Avy person who has suffered repeated attacks of quinsy and follicular tonsillitis, to say nothing
of earache and perhaps suppurative otitis media, and who has been free from sueh distressing manifestations for a protracted length of time as a direct result of thorough removal of the tonsils, will have little faith in the old theory, now being revived by some writers, that the tonsils have a beneficial function and, thercfore, should not be removed. Theory is all right in its place, but in the end it is the practical results which count. If the Creator had intended a pair of large tonsils to have a beneficial function, some of us have been slighted, and the good results succceding the removal of tonsils in thousands of sufferers show that the nearer we come to having no tonsils the nearer we come to being free from numerous painful if not dangerous affections.

Vin Mariane, a nostrum at present advertised in some of the prominent medical journals of the eountry and formerly advertised in the lay press, is now claimed to be absolutely free from cocain. Before the National Food and Drugs Act went into cffect Tin Mariani was put up under a label which distinctly stated that the preparation was not a cocain preparation. After the National Food and Drugs Act went into effect Vin Mariani came out under a label which announced "Screnteen per cent. alcohol by vol-ume-Eaeh ounce represents one-tenth of one grain of coeain." The exploiters of this fraudulent preparation recommend it as good for almost every ill to which flesh is heir, and they wind up by saying, "When everything else has failed try it to prove merits." And some medical journals have thrown aside the eloak of respectability and continue to advertise Vin Mariani after the disclosure of such a record.

Rev. Corisdon Millamd, of Milwankee, highly recommends Duffy's Pure Malt Whiskey beeause it makes him feel younger. Preacher Millard does not say how much Duffy's "fire water" he is in the habit of taking, but we ean readily understand that if he takes cnough of it he will feel hilariously younger and perhaps have an inordinate desire to preach overtime on account of his temporarily renewed mental and physical vigor. Perhaps he also reeommends Cascarets for that "dark brown taste" of the morning after. Anyway, we admire Rev. Millard for his frankness. and wish that there were more members of the clergy who wonld admit that they regularly take "booze" in the form of sneh atroeiously bad cocktails as Hostetter's Bitters, Peruna (the women's favorite toddy) and a score of other
patent medicines which owe their virtue and their enormous sale to the fact that whiskey forms a large part of the ingredients.

Everi county medical society in Indiana should purchase from fifty to five hundred reprints of Samucl Hopkins Adams' series of articles on the nostrim evil and quacks, entitled "The Great American Fraud." and distribute them gratuitously among influential people. The articles first appeared in Collier's Heekly, but have been reprinted in book form by the American Medical Association and will be furnished at cost in quantities for free distribution. Fifty copies may be secured for two dollars, one hundred copies for four dollars, and five hundred copies for eighteen dollars. No society is so poor that $\$ 2.00$ can not be expended in purchasing fifty copies for free distribution as an educating influence. Nothing has ever done so much to acquaint the public with the real evils of the patent medicine and quack doctor methods, and the exposure should be given the widest publicity in the interest of suppression of the evil.

To the Sechetaries of County Societies.The American Medical Association officials long ago urged that all the changes occurring in the membership of the county societics should be reported immediately to the secretary of the State Association, and cards for this purpose were sent to the county socicty secretaries. Unfortunately but few of the cards lave been used, and, in spite of frequent requests, most of the officers have only reported the changes at the time of their aminal report. The establishment of The Jourxal furnishes an additional reason for putting these changes on record as soon as they occur. All of the secretaries of county societies, therefore, are hereby urgently requested to inform the undersigned of any death, removal, expulsion, withdrawal or admission of members whenerer such change takes place, instead of waiting for the ammal report, such information to be given either by letter or on the cards furnished for the purpose-F. C. Heatit, Secretary Indiana Statc Medical Association.

Dr. McCormack has been working in the castern states since leaving Indiana, and from every city and town where he has spoken come reports of large and enthmsiastie mectings. He has been introduced to his audiences by governors, congressmen, judges, clergymen, college presidents and prominent business men, and his
instructive talks, given in a pleasing but forceful manner, have done much to awaken a sentiment farorable to a more general recognition of the great work for himanity being done by the medjeal profession. With a better understanding between the profession and the laity it will be possible to secure greater cooperation of laymen in efforts to conserve the lives and health of the public. It is regretted that we have no more Moc'ormacks to put in the field, for there is room for a dozen such workers, and the American Medical Association never did a better thing than to start this crangelistic work with the public. With the public educated as to what may be accomplished it will be possible for the medical profession practically to stamp out many preventable discases.

The State Board of Health is sending out circular letters to the county councils and county health boards of Indiana, urging that everything possible be done during this year to prevent the spread of discase. The letters call the attention of the officers to the fact that the protection of the public health is of first and utmost importance, and the county councils are urged to make liberal appropriation for the prevention of disease. In the letters the following resolution, adopted recently by the New York City Board of Trade, is quoted:
"Health and the protection of life are more precious to the people and more necessary to their happiness than even the extension of our commerce, the fostering of our agricultural interests, the solving of our financial problems, the cheapness or efficiency of our postal service, the improvement of our rivers and harbors or the enlargement of our nary."

The letters also say that the first step in the protection of the public health is to collect vital statistics. The health officers, the letters say, must know about the deaths and contagious diseases before they can find the enemy intelligently.

Straxge things happen in this world. A noted Indiana author gets "fuller than a goat" on various brands of "fire water," becomes hilariously boisterous, then pugilistic in his demeanor, tries to thrash two policemen and nearly succeeds in doing it, is carried to the police station in a carriage, permitted to go on his own recognizance, and the next day the court allows the episode to pass as though it had never happened. An ordinary laboring man with half as much "jag" would have been beaten into insensibility for striking an officer, carted to the police
station in the patrol wagon, thrown into a cell, and the following morning would have found him sentenced to jail at hard labor for three to six months. But the strange part of the whole proceeding is that the supposed noted author was not the author at all, but his double, who really should have been dealt with severely, as is the case when ordinary mortals get into trouble with police officers. The real author is reported by sympathizing friends as having been home on the evening in question, where he played dominoes with his Sunday-school teacher, after which he read Bunyan’s "Pilgrim's Progress" and his prayer book until time to retire at $3 \mathrm{a} . \mathrm{m}$.

The Committee on Medical Education of the American Medical Association, after careful investigation, has rated all of the medical colleges of the United States on a percentage basis as regards equipment, course of study and requirements of students, and general qualifieations for teaching medicine and granting the medical degree. A rating of 70 or above has entitled the college receiving such rating to be listed among the colleges approved by the committee. The ratings of the committee have been accepted by a majority of the state medical boards of examination and registration.

Our Indiana board has shown a disposition to refuse to accept the ratings of the committee. This, we believe, is a serious mistake and one that has a tendeney to place the board in the position of favoring a lowering of the standard of medical education. The fact that some of the medical colleges of Indiana have not been proven worthy of a rating suffieient to secure entrance to the list of colleges approved by the committee should not for one moment deter the Indiana Board of Medical Examination and Registration from aecepting the ratings of the committec. Any medical college in Indiana which can not prove itself worthy of a rating entitling it to entry upon the committee's list of approved medieal colleges is not entitled to recognition by the Indiana board, and any leniency shown such a college is a reflection upon the integrity of the board.

Timerapeutics is a neglected art. If one does not believe it let him read the physicians' prescriptions in any drug store. Hundreds of ready-to-use remedies and nostrums are prescribed by the average doctor without a knowledge of what exact therapeutic effect is to be obtained from their administration. More often the doctor does not know the ingredients he is preseribing,
but accepts the word of the manufacturer that the proprietary concoction is good for this or that ailment and he prescribes accordingly. It is an easy way to practice medicine, and the doctor is willing to accept anything which offers a means of accomplishing results without the excreise of much judgment or thought on his part. A reason for this practice is that the average doctor is ignorant of the real action of many useful drugs and he knows that he would display his ignorance if he attempted to be his own judge as to what drugs or what combination of drugs are indicated to meet certain pathological conditions. The fault lies with our medical colleges, where too little time and attention is devoted to the study of materia medica and therapeutics. No man should receive his medical degree until he has been thoroughly trained in this branch, and it would be a good thing if he were taught to consider it beneath professional dignity and standing to prescribe anything but preparations the ingredients and quantities of which have been selected by him as a result of aceurate knowledge of their therapeutic action.

An article by Dr. G. Stanley Hall on sexual instruction of boys and girls, which appeared a few months agn in the Ladies' IIome Journal, has aroused considerable discussion, both pro and con, of this interesting subject. Dr. Hall advises explaining the phenomena of reproduction, especially maternity, to boys of $\gamma$ years of age, and couples the advice with the statement that there is a great deal of private vice which could be prevented if boys and girls received sexual instruction at a comparatively early age.

We believe that sexual instruction should be given to boys and girls by the parents, but we seriously doubt the propriety of giving that instruction before the age of puberty. It is a delicate subject and one that will not be properly understood by the boy or girl of 7 to 9 years of age, and it is even questionable if such information would not stimulate an unhealthy curiosity which would be satisfied at any cost. Some children may be precocious and naturally inquisitive concerning sexual subjects, but such are the exception rather than the rule, and should be dealt with accordingly. We are inclined to believe that the best plan to pursue is to encourage healthful activity. Keep the boy or girl busy with honest work and wholesome amusement and direct attention away from sexual subjects during the years preceding puberty. If children are encouraged to confide in their parents, and to obtain companionship as well as wholesome advice
from parents, it is not difficult to keep the average child's mind free from that inquisitiveness and curiosity coneerning sexual questions whieh Dr. Hall seems to think oecupies the mind of the majority of girls and boers at $\%$ to 9 years of age and has to be satisfied.

The Huntington County Medical Society has passed a resolution requesting the newspapers of the city and county of Ifuntington to omit the names of the attending physicians when publishing news conecrning the sick and injured. While the resolution did not meet with the approval of the newspapers, they aceeded to the request to the extent that they agreed not to publish the names of physicians unless requested to do so by the physicians interested in the cases reported for publieation. But, sad to relate, a few members of the society were opposed to the resolution and have now declared their intention of giving up membership in the society rather than submit to the wishes of the other members. As an evidence of their attitude these men have since permitted, if not requested, their names to appear in local papers in conneetion with sensational reports of suecessful operations or treatment.

In our opinion the best plan to be pursued by the Huntington County Medical Society is to take these erring brothers at their word and permit them to relinquish their membership in the society. The soeiety can never be benefited by having on its membership rolls the names of men who so brazenly display their want of self-respect and respect for the medical profession, and who are so admittedly willing to adopt the methods of the quack and medical pretender. We can forgive the man who has done wrong and when his error has been pointed out is willing to make amends, but we do not believe in showing leniency to the man who, knowing that he is wrong and being importuned by his friends and associates to change his course, not only persists in wrong doing, but attempts to make it even more objectionable. The medical men of IIuntington who acknowledge that they prefer to advertise themselves in connection with the cases they treat may be termed undesirable members of the medical fraternity, and unless they are willing to conform to the reasonable and right regulations which any physician of self-respect is bound to uphold then the sooner they join the ranks of the advertising fakers the sooner the respectable clement in the medieal profession will be rid of factors which do not add to its betterment.

## DEATHS

## Deaths of Indiana Medical Men.

Dr. Cilarles Burner died at his home in South Bend carly in January.

Henry N. Karcineer, M.D., Central College of Physicians and Surgeons, Indianapolis, 1899; died suddenly in his office in Indianapolis, from heart disease, January 12, aged 34 .

Lous Kern, M.D., Medical College of Indiana, Indianapolis, $18: 0$; one of the oldest praetitioners of Howard County, Ind.; died at his home in Kokomo, January 10, from senile debility, aged 76 .

Johs K. Smalley, M.D., Medical College of Indiana, Indianapolis, 1882, Jcfiersonville Medical College, Philadelphia, 1887; at one time a member of the county board of pension examining surgeons; president of the First National Bank of Hartsville, Ind., died at his home reeently and was buried January 3, aged 58.

Dr. Joins A. Comingor, for many years a practitioner in Indianapolis and at one time professor of surgery in the Medical College of Indiana, died January 8,1908 , in his eightieth year, at the home of his daughter in Darenport, Iowa, where he has resided for the past two years. The funcral took place in Indianapolis, Jan. 10, 1908.

Dr. W. T. Tarner died at his home in Evansville, January 30 , aged 39 years, from a paralytic stroke induced by uremic poisoning accompanying acute nephritis. He leaves a widow and three children. He was one of the well-known physicians of Evansville, having located there immediately after gradnating from the Barnes Medieal College at St. Louis in 1896. He was born in Speneer County in 1866. Following his eompletion of the eommon schools he entered Indiana University, from which institution he graduated with the A . B. degree in 1891. Before entering the mectieal profession he took up the roeation of school teaching, and for several years served as the prineipal of schools of both Troy and Dale, Ind. In 1890 he was married to Miss Frances Salm, of Troy, Ind. For a number of years Dr. Varner served as city physician of Evansville. He was known as a man of strong principles and upright character, a member of his county medical society, the Indiana and the American Merlieal Assneiations.

Dr. Lewis Kern, dean of the medical profession in Howard County, dicd at his home in Kokomo, Jan. 14, 1908, aged i\%. Dr. Kern was born in Virginia in 1831. When 7 years of age he came with his parents to Shelby County, Ind., and later, while still a young man, came to Howard County. He taught school and studied medicine, finally taking up practice in Alto in 1852, moving to Kokomo in $18 \% 8$. At the time of his dcath he was an honorary member of the Howard, Tipton, Cass and Miami County Medical Societics. Having located in Kokomo at the time when that section was a part of the Miami reserve, he was one of the oldest and best known practitioners in the county and enjoyed the high esteem of his fellow practitioners and the community at large. He was a man true in his fidelity to professional integrity and to his friends.

## PERSONALS

Dr. R. T. Cook has located at Bowling Green, Clay County.

Dr. R. H. Ross, formerly of Cassville, is now located in Kokomo.

Dr. J. C. Gifford, of Brazil, is spending the mid-winter at Manatee, Fla.

Drs. J. H. Ross and L. A. Smon, of Kokomo, are in Florida for the winter.

Dr. Geo. D. Marsiall, formerly of Young America, has located in Kokomo.

Dr. B. F. Sfelebbring has removed from Brazil to Saline City, his former location.

Dr. Willlim S. Leiter, Claypool, was injurcd in a runaway accident, January 14.

Dr. Jarvis J. Howes, late of Bowling Grecn, has located in Sellersburg, Clark County.

Dr. Josepie Saunders, Anderson, is reported to be critically ill with cerebral hemorrhage.

Dr. H. N. Miller and Miss Florence Raff, both of South Bend, were marricd February Sth.

Dr. Chas. W. Fry, of Huntington, has been elected county health officer of Huntington County.

Dr. George J. Studer, Fort Wayne, has been appointed cxamining surgcon of the police department.

Dr. Leonard F. Schmauss and family, Alexandria, returned January 10, after five months in Europe.

Dr. J. Aaros Merner has been appointed health officer of Alexandria, vice Dr. Augustus R. Schacfer, resigned.

Dr. William S. Canfpbell, Lafayette, who is now in California, has been rcappointed health officer of Tippecanoe County.

Dr. Join I. Baird, of Albany, is suffering from a partial right-side hemiplegia, due to an attack of apoplcxy occurring January 30.

Dr. J. F. Smitir, of Brazil, has lately enlarged his hospital, making it thoroughly up to date in every detail. The hospital was established in 1901.

By the will of Mrs. Julia Hoefgen, Crawfordsville, her estate, valucd at about $\$ 2,500$, has becn bequeathed to Dr. Jacol) B. Etter, her family physician.

Dr. Willitar $F$. King has been appointed secretary of the Columbia City board of health, and Dr. David S. Linville, Columbia City, physician of Whitley' County.

Drs. M. H. Young and William Palm, of Harmony, are candidates in their respective parties for the office of coroncr. Dr. Young is now serving his first term and is a candidate for reelection.

Dr. Cifas. F. New, of Indianapolis, professor of pathology and clinical psychiatry in the Indiana Medical College, and Miss Mary Ellen Joncs, of Columbus, Wis., were united in marriage Decomber 25.

Dr. U. H. Holder, of Washington, was suddenly stricken with blindness while suffering with la grippe last month, and was taken to Indianapolis and put under the care of a specialist. He has relurned to his home with recovery of fair vision in the right eye, but has become totally blind in the left.

Dr. Harmy S. Micks, of Muncie, is charged with being perniciously comnected with the "Boy Phenomenon." who claims to enre different diseases by unusual methods. The Indiana Board of Medical Registration and Examination have been asked to take appropriate action. Dr. Hicks, against whom charges have been filed, is a graduate of the Medical College of Indiana, class of 1901. He practiced in Marion previous to locating in Muncie. Dr. John W. White, of Muncie, is reported as having also been connected with the "boy phenomenon" combination, but has scvered his connection.- Abs. Muncie Morning Star, Feb. 4, 1908.

Dr. C. H. Exglishr of Fort Wayne, was held up by a highway robber on the night of February 1. The doctor had just stepped out of his house when he was commanded to throw up his hands or have his head blown off. ILe complied with the request. The thug, in true professional style, turned his vietim around and searched the front trousers pockets, sccuring a small amount of change. The robber proceeded to scarch the hip pockets, the right one of which contained about $\$ 60$. During the proceeding Dr. English gradually edged around until he could grasp the revolver, when a rough-and-tumble fight began, with the physician endeavoring to secure the weapon. The combatants fought desperately for scveral minutes, neither uttering a cry. At one time the robber wrenched the revolver free and snapped the trigger twice with the weapon pressed against the plysician's breast, but the cartridge failed to explode. Finally after a desperate fight Dr. English grasped the highwayman`s throat and began choking him, which brought forth a yell for mercy and attracted attention. Sevcral people rushed to the scene and found the doctor kneeling on the highwayman in the middle of the street. Police officers soon arrived and took the highwayman to the police station, and two days later he was sentenced in the circuit court to from two to fourteen years in the penitentiary on his plea of guilty to the charge of highway robbery.

The revolver used by the highwayman was found near the scene of the fight and was fully loaded, but contained rim-fire cartridges while the pistol was a center-fire weapon. The robber is thought to have been the perpetrator of several of the recent attcmpted holdups in the city. Dr. English is being freely complimented for his courage.

## NEWS, NOTES AND COMMENTS

Dr. G. W. Leee, formerly of Indianapolis, has located in Greenficld.

Tue History of Delaware County, now in press, is authority for the statement that 430 physicians have at one time or another resided in Delaware County.

T'rise meeting of the Second Distriet Medical Society will be held at Bloomfield. Ind., on May 14, 1908. A banquet will be given by the Greene County Medical Socicty to the visiting members.

John D. Rockefeller has given $\$ 2,600,000$ to form the endowment of the Rockefeller Institute for Medical Research, which he founded in New York six years ago. This gift will insure the continuance and enlargement of the institution itself and provide support for scientists engaged for it in medical research in all parts of the world.

Tire La Grange County Medical Society has twenty members. As there are only two other doctors in the county who are eligible to membership and they are expected to join the society at the next meeting, the record of the officers of the La Grange County Medical Society is one to be proud of. We wish that other county societies would make as good a showing.

Trite Kokomo Academy of Medicine was organized on the evening of January 11 in the offiecs of Drs. W. I. Scott and W. J. Martin. The following officers were elected: President, J. O. Garr; vice-president, Edgar Cox; secretary and treasurcr, O. D. Hutto; censors, Drs. N. D. Varner, IV. I. Scott. The Academy meets each Monday in the offices of Drs. Scott and Martin.

The State Board of Medical Registration and Examination, at its annual meeting, January 11, elected the following officers: President, Dr. J. Edwin P. Holland, Bloomington; vice-president, Dr. William A. Spurgeon, Muncie; secretary, Dr. William T. Gott, Crawfordsville, and treasurer, Dr. Moses S. Canfield, Frankfort. The board decided not to recognize the Eclectic Medical College of Indiana as an approved institution.

The Vigo County Medical Society has purchased a stereopticon at a cost of $\$ 125$, and
nearly every lecture or paper read before the society is now illustrated by slides, diagrams and photographs. The society has also purchased 500 copies of "The Great American Fraud" for distribution among the teachers of the county.

Some of the other county societies of the state might with profit imitate the example of the Vigo County society.

At tire regular monthly meeting of the Delaware County Medical Society, Feb. \%, 1908, the following motion was presented and unanimously passed:
"That the society instruct the secretary to write a letter of commendation and congratulation to the cditor of The Journal of the Indiana Stite Medical Association in reference to the style, contents and general character of said journal."

Dr. G. IV. H. Kemper, of Muncie, is writing an article on "What Indiana Men Have Done for Medicine." Dr. Kemper is the author of several books and papers of historical value, and will undoubtedly write a history of Indiana medicine which will be read with much interest by the medical profession of this state and serve to place on record and preserve many facts which a few years later it would be difficult, if not impossible, to authenticate. Dr. Kemper requests us to say that he desires every physician in Indiana who can give him the name of an Indiana physicianliving or dead-who has written a medical book, contributed a valuable article on medicine, performed an unusual surgical operation, or, in fact, donc anything unusual in the realm of medicine or surgery, to write him about it.

Tife Jourxal of the Indiana State Medical Assoclation, devoted to the interests of the medical profession of Indiana, is now issued monthly under the direction of the Council, under the charge of Dr. Albert E. Bulson, Jr., editor, and Dr. Ben Perley Weaver, assistant editor, at 219 West Wayne Street, Fort Wayne. Number 1 of Volume 1, dated Jan. 15, 1908, has just been issued, and shows that this publication at once takes a high rank among its contemporaries. It gives evidence of careful preparation and editing, and we are sure that it will take a strong position in the leading of the Indiana profession in every good line of work. The Indiana journal is to be congratulated on its advertising: we fail to note anything objectionable in the sixteen pages in this issue.-Journal of the American Medical Association, Jan. 25, 1908.

The first number of The Archives of Internal Medicine, published by the American Medical Association, was issued in January. It is a magazine of 150 pages, containing no advertising and issued in the best style of the printer's and bookinaker's art. The editorial board consists of such well-known men as Joseph L. Miller, Chicago; Richard C. Cabot, Boston; David L. Edsall, Philadelphia; George Dock, Ann Arbor; Theo. C. Janeway, New York, and IV. S. Thayer, Baltimore. The initial number contains nothing but five original articles, but those are of the ultra scientific type and are an evidence of the high class of research work which it will be the mission of The Archives to report. The Archives of Internal Medicine will be issued monthly and two volumes will be published annually, each to consist of about 600 pages. The subscription price is $\$ 4.00$ per year.

## SOCIETY PROCEEDINGS

## ADAMS COUNTY.

It the regular meeting of the Adams County Medical Society, held on Dec. 13, 1907, the following offirers were elected to serve for 1908: President, Dr. H. F. Costello, Decatur; vice-president, Dr. I. L. Mattax, Genera; secretary-treasurer, Dr. Marie L. Holloway, Decatur. After much discussion it was deeided not to adopt the postgraduate course for the present, but as an experiment to take up some review work for a few evenings. Dr. Graham read a very interesting paper on "Conjunctivitis," which was discussed by all present. The meeting adjourned to meet the second Friday in January, 1908.
The soeiety met in the office of J. M. Miller, Decatur, on Friday. January 10. Minutes of the previous meeting read and approved. Dr. H. F. Costello gave a very eomprehensive and interesting talk on "Anatomy," which served to take many of the members back to their collcge days. The meeting adjourned to meet the seeond Friday in February.

Marie L. Holloway, Nec.

## ALLEN COUNTY. <br> FORT WAYVE MEDICAL אOCIETY. (Meeting of Jan. 7, 1908.)

Society called to order at St. Joseph Hospital by President W. D. Calvin, with 38 members and guests present. Reading of minutes postponed. The mecting was a regular clinical meeting, and was in charge of Drs. Rosenthal and Bulson, who exhibited cases.

Glaucoma.-Case report and patient exhibited by Dr. Bulson. Patient, aged 64 , said that about fifteen years ago he began to notiee a halo around lights. This manifestation continued a short time and then disappeared, but was followed by pain at intervals in the right eye. The pain secmed to be periodic, and at times would disappear for several weeks. At first the pain was worse at night, but finally it beeame just as severe during the day. Vision hegan to fail several years later and became much impared three or four years ago, follow-
ing a severe siege of pain. The attending physicians pronounced the trouble glaucoma. Treatment did not scem to stop the progress of the disease, and finally the right eye went totally hlind, thongly it continued to be painful. One year ago the left or good eye began to show symptoms of pain and impatired rision, and suddenly went blind for a few days, but finally became better. Under appropriate treatment the disease scemed to be held in check, but the blind eye continued to grow worse, and was finally removed in order to save him from suffering. Sinee the removal of the blind eye the eye that was good has failed so rapidly that now not even light is distinguished and the pain in this eye is severe. Dr. Butson presented the patient for examination, and showed that the socket where the eye had been removed is filled with granulation tissue. The left, or only remaining eyc, is congested, has a shallow anterior chamber and dilated pupil, and the tension is decidedly increased. There is also haziness or steaminess of the cornea which prevents ophthalmoscopic examination. Under eserin treatment the pain has diminished to some extent, but has not disappeared, nor has there been any marked diminution in the tension. Dr. Bulson said that he would perform iridectomy with a view to relieving the patient of his suffering and perhaps by a reduction of the tension secure a little vision. He held out little lope of securing anything but a relief from pam, and in case this was not aceomplished the only thing left was removal of the eyeball.
In diseussing the case Dr. Iavice said that all these cases of glaucoma are doomed to blindness unless earefully treated or operated, and even then a large percentage of the cases will go to the bad. He said that increased tension could not always be deteeted and a diagnosis would have to be made ly the ophthalmoscopic examination. This is particularly true in cases of simple chronic glamema in which there are no congestive symptoms.

Several questions were asked, and in answer Dr. Bulson stated that the haln around lights is eonsidered a very eharacteristic symptom of glaucoma. The eardinal symptoms of acute glatuma are congestion of the eye ball, increase of the tension, shallowing of the anterior chamber, dilatation of the pupil. cloudiness of the cornea, as well as ancsthesia of the cornea in some cases. If an ophthalmoscopic examination can be made, cupping of the dise will be detected. In simple glaucoma there is rarcly congestion, and oftentimes no increase of the tension, no shallowing of the anterior chamber, no dilatation of the pupil, and the diagnosis has to be made from cupping of the dise and contraction of the fiek of vision. Myenties are only useful in those cases where they contract the pupil. Operation is of signal henefit in some eases. but fails utterly in others. There is a division of opinion among authorities as to how long myotics slonuld be used before resorting to operative procedures.

Spontaneous Cure of Glioma. Case report by Dr. Bulson. Patient, aged 29, gave a history of having been blind in one eye from birth. Three or four wecks ago the blind eye became red, painful and tender. When spen a week or ten days later the eye exhibited all the eharacteristic symptoms of an iridn-eyclitis. There were tenderness, injection and subnormal tension. No ophthalmoscopic examination possible owing to the cloudiness of the media. Patient was given appropriate treatment for several days withont result. Enueleation was then adrised and accepted. On removal of the eyeball a staphylomatons bulging of the selera and to the
side of the optic nerve was detected. On hardening and cutting the specimen a tumor abont the size of a large pea was found in the vitreous ehamber, immediately opposite the staphylomatous bulging, and apparently springing from the optie nerve by a pedunculated attathment. Dr. Rhamy, the pathologist who examined mieroscopical sections, reported that the tumor is a glioma which has undergone degenerative changes, thus indicating what is exceedingly rare, a spontaneous emre. The optic nerve, posterior to the eyeball, was not found diseased.
Dr. Bulson stated that considering the fact that glioma is malignant and generally destroys life, this case is unique, though there are a few similar ones on record and several cases reported in which in children a cure has resulted from excision of an eyeball containing glioma.
Double Herniotomy.- Case report and exhibition of pation ber Dr. Rosenthal. Patient, boy, aged 14, operated upon ten dars ago and making an uneventful recovery. Commenting on the methods of operation in these cases Dr. Rosenthal said that there were two methods "of suture for closing external wounds, subcutanenus and cutaneous. The former makes the better looking wound and is less likely to be infected. As to the operation the speaker said that he preferred the Ferguson operation in operating upon children because there is less trauma to the cord and vessels. He then described in some detail the steps of the operation.

Tuberculous Peritonitis.-Case report and patient exhibited by Dr. Rosenthal. Patient, female, 30 years of age, was operated on one week agn. The diagnosis was one of appendicitis and involvement of the right tube and orary. Tpon opening the belly a tuberculous eondition was found. There was a mass of adhesions, and in this was found a sinus containing muco-purulent material. The tubes were removed, as also the appendix. The bowels were found demuded of the serous eoat in the region of the tumor and there were numerous tage of adhesions. On account of these, as well as on account of the fistula and the character of the contents, it was thought advisable to resect the bowel, and this was done, the Murply button being used. Dr. Rosenthal said that in using the Murphy button the ineision across the bowel should be in such a mamer as to not ent off the circulation. The gut should also be sutured around the button to reinforee the attachment. In the case exhibited, the bowels moved on the following day and have moved through the button ever since. The patient still has the button, but it is expected that it will be passed at any time, though in some eases it is retained for periods of from three to four weeks.

Suprapubic Prostatectomy.-Case report and patient exhibited by Dr. Rosenthal. Patient, male, aged 60 . was suffering from the effect of a large prostate. Upon being catheterized more than a quart of urine was obtained. Suprapubic prostatectomy was made. The bladder was found extremely large, reaching to the ziphoid appendix and had a septum in it. The adhesions prevented the patient from completely emptying his hlalder. Patient has made an uneventful reeovery and is now very comfortanle.

Sepsis Following Operation for Retroverted Fibrcid Uterus.- Case report and patient exhibited by Dr. Rosenthal. Patient was operated upon and apparently was doing well when she suddenly developed a chill and rise of temperature on every other day. Assuming that she might have malaria quinin was administered in 10 grain
doses, and as this prevented the development of chills and fever for a week, it was thought that the diagnosis was correct. She then began to have chills and fever again, and an examination of the blood shows no malarial organisms. She is suffering from sepsis.

Adjourned.
J. C. Wallace, Sce.

## (Meeting of Jan. 14, 1908.)

Society called to order by President W. D. Calvin, with twenty-five members present. Minutes of previous three meetings read and approved. The papers of the evening were by Dr. Guy A. Smith, on "Anatomy and Histology of Epithelial Tissues;" Dr. Chas. G. Beall. on "Anatomy and Histology of Connective Tissue:" and Dr. B. W. Rhamy, on "Anatomy and Histology of Muscular and Nervous Tissue." These papers were a part of the postgraduate program adopted for the year.

Motion was made and earried that the committee appointed to investigate the alleged conditions concerning commissions be discharged.

Application of Dr. Kaadt was received and referred to the board of censors. The board of censors reported farorably on the application of Dr. A. E. Fauve, and on motion he was declared elected to membership.

The annual reports of the secretary and treasurer were read and referred to the auditing committee. Motion was made and carried that the secretary communieate with the congressional representative from this district to the effeet that it is the unanimous sense of the Fort Wayne Medical Society that suitable remuneration be granted by this Congress to the widows of Drs. Lazear and Carroll.

Adjourned.
J. C. Wallace, Sce.

## (Meeting of Jan. 21, 1908.)

Society was called to order by President W. D. Calvin, with twenty-cight members present. The meeting was devoted to postgraduate work. Dr. Rawles took up the subject of "Chondroma, Osteoma and Mroma," giving the location, varieties and microscopic and gross appearance of these tumors. Dr. G. Van Sweringen presented the subject of "Fibroma and Lipoma." giving location, varicties and mieroscopie and gross appearance. He exhibited a number of gross and microscopic specimens to illustrate his talk.

Following the discusion the society roted to hold the next meeting at the assembly room of the court house, at which time the lawyers are to take part in the program.

The secretary then read a list of names of physicians who are eligible to membership in the society. Motion was made and carried that the secretary write a letter to each physician on the list inviting him to become a member of the society. The board of censors reported favorably on the application of Dr. Kaadt, and on motion he was duly elected.

A letter from the Kentucky Medical Socicty concerning nostrums was read and on motion referred to Dr. Bulson for revision, with request that he present resolutions to the society covering points in the letter.

Adjourned.
J. C. Wallace, Sec.

## BARTHOLOMEW COUNTY.

The regular meeting was keld in the Public Library at Columbus on January It. The program consisted of an address by Dr. Albert C. Kimberlin, of Indianap-
olis, on the subject, "Pericarditis," with presentation of pathological specimens. The discussion was opened by Dr. A. M. Kirkpatrick. Geo. T. McCoy, See.

## CLAY COUNTY.

The Clay County Medical Society meets in Brazil the third Thursday of each month. The next meeting will be hekl on February 20, when Drs. Heath and Kimberlin of Indianapolis will address the society. About half the members of the Clay County Medical Society constitute a medical study club which mects in Dr. Hollingsworth's office each Thmrsday evening for postgraduate study, according to the plan outlined by the American Medical Association. At the last mecting an interesting and profitable program was offered. Microscopical demonstrations of histological and pathological tissues were made by Drs. Hollingsworth and others, and many interesting macroscopical specimens were exhibited and studied in connection with the reports on tumors as well as in connection with the case reports and demonstrations on the skull while studying the physiology and pathology of hrain structures.

The officers of the county society for 1908 are as follows: President, Dr. S. G. Hollingsworth, Brazil: vice-president, Dr. R. W. Hawkins, Rrazil; secretarytreasnrer, Dr. G. W. Finley. Brazil: censors, Drs. II. J. Pierce, Cloverland: W. H. Orr. Brazil; and F. C. Dilley, Brazil; delegate to the state association. Dr. Frederich Nussel, Brazil.
G. W. Finley, See.

## DAVIESS COUNTY.

The special annual meeting of the Daviess County Medical Socicty was held January 9. at Washington, Ind. Dr. W. N. Wishard of Indianapolis gave an interesting and instructive talk on the "Diagnosis and Treatment of Enlarged Prostate." Papers were also read by Dr. R. J. Danner, of Elnora, on "The Treat. ment of a Cold," and by Dr. T. F. Spink on "PostGraduate Work." Dr. C. A. J. Reed, of Cincinnati, had arranged to give a pnblic lecture at the People's Theater in the evening, but illness prevented his coming. At 8:30 p. m. the members and their wives enjoved a banquet at the Meredith House.

At this meeting Dr. Maude Arthur of Glen Dale was admitted to membership in the society. She is the first of her sex to enter the local field, and is meeting with deserved success.
T. F. Spink, Sec.

## ELKHART COUNTY

At the January meeting of the Elkhart County Medical Society the following officers were elected: Presi dent, Dr. J. II. Snapp. Goshen; vice-president, Dr. Wr A. Stauffer, Elkhart: secretary-treasurer, Dr. Geo. W Spohn, Elkliart.

## FOUNTAIN-WARREN COUNTY.

At the December meeting of the Fountain-Warren Medical Society it was decided to adopt the post-gradnate course of study, and as the territory includes several towns with poor facilities for weckly meetings. it was decided to organize a local society in each of the chief towns, with weekly meetings in cach. Every three months a joint mecting will be held, at which elinical reports will be presented and the work of the different sections taken up in detail.
C. G. Bechett, Sce.

## GRANT COUNTY.

At the regular meeting of the Grant County Medical Society. held on , Tanuary 2S, the committee on postgraduate work made its report whielı was discu-sed and favorably considered. The committee on publie lealth and legislation was instructed to ascertain if any candidate for the state legislature held views that were antagonistic to anv legi-lation affecting public health whicl may be introduced at the next session.

A most excellent paper on "The Effects of Liglit" was read by Dr. C. A. Warwick, which corroborated Woodruff's findings that in the land of the sunshine here, as under similar conditions in the tropies. the nerrous system is markedly affected, and more so in blondes than in brunettes; that light is an active agent capable of doing much good or harm, and that we should be less orthodox in its application and follow more closely natural selection.

Dr. Joseph Maurer read a paper on "Otitis Media," which was illustrated hs charts.
O. W. McQUOWN, Scc.

## GREENE COUNTY.

The annual meeting and banquet of the Greene County Medical Society was held at Linton on Jan. $16,190 \mathrm{~S}$. Dr. Potter, of Indianapolis, delivered a brilliant and interesting address on "The Early Recognition of Tuberculozis." A number of distinguished risitors were present from out of the county, and an exceptionally enjorable and profitable meeting was the result. Dr. August F. Knnefel, of Linton. Was elected president, and Dr. Frank A. Van Sandt, of Bloomfield. secretary and treazurer for 190s. The next meeting of the society will be at Switz City on February 13.
F. A. VAN SaNidt, Sce.

## HANCOCK COUNTY.

The Ifancork Counts Medical Society. at its regular meeting on December 7 , elected the following officers for 190S: President, Dr. C. A. Barnes, Greenfield; vice-president, Dr. C. K. Bruner, Greenfield; secretarytreasurer, Dr. E. R. Gibbs, Greenfield; board of censors, Drs. J. A. Comstock, I. B. Griffen and C. K. Bruner.

At the January meeting of the societs a paper on "Neuralgia" waz presented by Dr. C. A. Barnes. The paper reported some very interesting eases showing remote causes of neuralgia. A general discussion followed. The application of Dr. G. W. Lee was referred to the board of censors. E. R. Gibbs, Sec.

## HUNTINGTON COUNTY.

The regular meeting was held on Jan. 14, 1908. The society placed itself on reeord concerning newspaper adrertising by physicians in connection with news items. by unanimously adopting the following resolution=:
"Whereas, The promiscuous coupling of the names of plysicians and surgenns in connection with cases occurring in their practices as reported in the press of the city and countr of Huntington violates the ethical practices of the niedical professinn and also riolates Chapter II. Article I, Section III. of the Code of Ethice of the American Medical Association, which code las been adopted by the Huntington County Medical Society; therefore, be it

Ricsolver, Tlat it is the sense of the society that an eflort be made to have such violations abolislied; and therefore, be it

Resolved. That it be requested of the nerrspapers of the eity and counts of Huntington that in the publicaitoll of their news in relation to the sick and unfortunate, the luames of the attending phrsicians and surgenns be omitted."

While this resolution did not meet with the approval of the papers. the editors acceded to the request on the society to the extent that they will not publish the names of plyysicians unless requested to do so by the physicians interested in the eases reported in the news items. A small number of members of the society were opposed to the resolution and have declared their intention of giving up their membership in the socicty rather than submit to tne wishes of the rest of the medical fraternity.

Dr. Ervin Wright read a very interesting paper on "Braill Storm," which was generally discussed.

Maurice H. Krebs, Scc.

## JEFFERSON COUNTY.

The Jefferson County Medieal Society had its regular meeting Jan. 5. 190s. and elected the following officers: President, Dr. Chas. Denny, Brrantsburg; viee-president. Dr. Carl Henning, Hanover: secretary and treasurer, Dr. J. Cooperider. Madison. The sub. ject of discussion was "Bronchitis." The next meeting of the society will be held February 19, and the subject for discuscion will be "Rheumatism."
J. Cooperider. scc.

## MADISON COUNTY.

The Madion County Society has adopted the postgraduate course of study and has been divided into two sections. The first section includes Anderson, Pendleton. Lapel and Perkinsville; the second section, Elwood. Alexandria, Orestes and Summitrille. Each section meets weekly, with a joint meeting monthly, at which a review of the work of the month is given. The monthly meeting is migratory, with Anderson, Elwood. Alexandria, Pendleton and Summitville as the meeting places.

Ven H. Cook. Scc.

## MARION COUNTY.

INDIANAPOLIS MEDICAL SOCIETY.

## (Meeting of Jan. 7, 1908.)

Society called to order by President Pfaff. Reading of minutes of previous meeting postponed. Applications of Drs. Lindemuth, Shimer and Lowder, having been posted for thirty days, were read the second time and referred to the council. Applications of Drs. Gay. lord and Dowd were read for the first time and ordered posted. The secretary-treasurer read his report for the year 1907.

The election of officers resulted as follows: President, Dr. F. B. Wynn; vice-president. Dr. T. W. DeHaas; secretary-treasurer, Dr. R. H. Ritter; councilors to fill vacancies, Drs. S. E. Earp and H. E. Gabe.

Dr. Pfaff, the retiring president, delivered his address, which was an historical review of the work of the societr, in which he mentioned the fact that many of the great men in American medicine have gone into larger fields from the halls of the Indianapolis Medical Society. He dwelt upon the opportunities before the society at this time, and in the future to wield a greater
influence in the great problems of public health and social welfare．He made a plea for greater activity on the part of the society in the consideration of these questions．

In view of the feeble health of Dr．W．H．Wishard， and his absence from the city，the secretary was in－ structed to transmit to him the greetings from the society．

The newly elected president，Dr．Wynn，upon request， made some remarks in which he thanked the society for the honor conferred upon him and emphasized the ob－ ligations resting upon each member of the society to do all in his power to advance the interests of the organ－ ization．

The selection of a staff for the colored orphans＇liome was left to the judicial council．

Adjourned．

## R．H．Ritter，Sec．

（Meeting of Jan．14，1908．）
Society called to order by President Wynn．Minutes of previous meeting read and approved．Applications of Drs．Chapman，Witt and Stinger were read for the first time and ordered posted．The council reported favorably upon the applications of Drs．Henry and Wells and the report was adopted．Motion was madc and carricd that in future no names of physicians be carried upon the membership rolls unless dues have been paid．

The program of the evening consisted of case reports．
Unusual Number of Gallstones．－Case report by Dr． John Kolmer．The patient，aged 40，had suffered from recurrent attacks of pain in the region of the liver，but with no positive evidence of gallstones．Patient was operated on．On opening the gall bladder 417 stones were removed，one of them being imbedded in the cystic duct．Recovery was complete．The interesting features of the case were the number of stones present，the ab－ sence of jaundice or any rheumatic or infectious dis－ easc．and the age of the patient．

Strangulated Hernia．－Two cases reported by Dr． John IV．Sluss．In the first case a man，aged 45，with an old oblique inguinal hernia which he had for years held with a truss，suddenly found that the hernia had descended and was causing him much pain．Taxis failed to reduce the hernia，and as there were trpical symptoms of obstruction．including pain，nausea and weak，rapid pulse，patient was taken to the hospital for operation．On opening the sac the gut was found to be blue－black，but there were no greenish color nor erosion of the peritoneal surface．The bowel was opened in the usual way．Improvement was uneventful until the end of the first week，when a cough developed with bronchitis．He died on the ninth day．Autopsy revealed broncho－pneumonia and acute fibrinous peri－ carditic．

Case two，man，aged 35，with an old hernia．had only in recent months worn a truss，and on the morning he was taken ill he had failed to apply it．The hernia descended and in spite of the pain he went to his work in the kitchen of a hotel and remained there until the middle of the afternoon，when he applied at the dis－ pensary for relief．Attempts at reduction under a gen－ cral aneathetic were unsuccessful．Although there were no slock，only slight nausea and moderate tympanitis， there was a certain elasticity of the tumor that pointed out the absence of bowel．No bowel was found in the sac，but the omentum was anchored to the bottom of the sac by a firm fibrons cord．A part of the omentum
was resected and the rest reduced．All went well until the fifth day，when the temperature rose to 105 ．The pulse was not disturbed，there were no nausea，ab－ dominal distension or tension．In a few hours there was a profuse eruption of urticaria which rapidly sub－ sided under intestinal cleansing．Further recovery was uneventful．
Syphilitic Epiphysitis．－Dr．O．N．Torian exhibited a child from the Eleanor Hospital suffering with this disease，and presenting the usual manifestations．

Esophageal Stricture．－Dr．J．V．Recd exhibited a child， 4 years of age，from the Eleanor Hospital，who several years ago swallowed lye，with the subsequent development of an esophageal stricturc．Dr．Reed produced a gastric fistula through which the child is being fed with gratifying improvement in the gencral condition．
Sarcoma of the Groin．－Dr．T．B．Eastman described the remoral of a mass from the groin which had been diagnosed as an appendiceal abscess，but which proved to be a sarcoma arising from an undescended testicle．
Ectopic Pregnancy Ruptured Into the Bowel．－Dr．T． B．Eastman reported a case in which he had cut down on a mass in the pelvis which proved to be the sac of an old ectopic pregnancy which had ruptured into the bowel．A resection of the bowel was necessary because of the impossibility of closing up these rents．Since time was a most important element in the operation this resection was done with a Murphy button，and the recovery of the patient was excellent．

Strawberry Seeds Mistaken for Crystals．－Dr．S．E． Eaip reported having received some time ago a number of small reddish granules，supposed to be crystals， which were passed in large amounts from the bowel． Dr．Earp sent some of the granules to some of the state institutions，but failed to receive any information from them．After considerable study himself he finally discovered that they were regetable seeds．Inquiry re－ realed the fact that many strawberries were grown in the district and were favorite articles of diet．

In the discussion Dr．T．B．Eastman，in commenting on Dr．Sluss＇cases，said he had seen several cases of hernia in which the omentum had come down with the bowel，had lapped itself about the bowel，and ap－ parently acted as a cushion or pad，preventing harmful pressure on the bowel．

Dr．D．F．Lee reported a case in which a man had an old inguinal hernia on one side for many years．He slipped on the ice and fell heavily．Shortly afterward he noticed a lump appearing in the other groin．This had some signs of a hernia．but still lacks the necessary diagnostic signs．He is in doubt as to the precisc nature of the tumor．

Dr．John Kolmer described a recurrent carcinoma which first appeared as a lump on the groin of a woman aged 38．This resembled somewhat the picture given be Dr．Lee．

Dr．H．II．Weer，referring to the sudden derelopment of abdominal pain，reported the case of a man who was rather suddenly seized with severe pain in the side， which was diagnosed as appendicitis．In a short time he had copious movements of the bowels，in which were found numerous small clumps of crystals of sodium oxylate．The condition was easily recognized as acutc colitis．Inquiry revealed the fact that the man had been eating freely and frequently of green fruit and vegetables．Complete recovery occurred after the ordinary medication and change in the diet．

Dr. T. V'. Keen reported on the positive results of the Calmette ophthalmotuberculin tests. In one case the reaction could be verified with the ordinary means of physical examination.

Ir. R. H. litter spoke of the postmortem findings in one of the cases reported by Dr. Sluss. The external wound was almost completely healed and the peritoneal wound was so perfectly and smoothly healed that it required eonsiderable search and a strong light to find it at all. There were no peritoneal adhesions. Just beneath the hepatic flexure of the colon there was a knuekle of small intestine that showed eonsiderable diseoloration of the gut wall next to the mesenteric altachment for a distance of about eight inches. This was the only portion of the bowel showing any lesion whatever. and it was concluded that this was the portion of the bowel that had descended into the hernial sac. This discoloration was not due to necrosis, for the tissue was firm. It was apparently only an extravasation of blood into the tissue. The interesting feature was the location of the loop of bowel after the hernia had been replaeed. There was also found an aeute pericarditis, and this had not been recognized before death. Scattered through both lungs were numerous small areas of broncho-pneumonia. There was a cough after the operation, which grew worse, and just before leath there was a sharp rise of temperature. The history of the patient after the operation was very suggestive. Sueh a history should always put a surgeon on his guard. A cough, increasing in severity after the operation, with or without a rise in temperature, not evidently due to wound infection and other evidences of illness, in the majority of instances means pneumonia. Acute pericarditis is also often overlooked as shown by antopsy.

Death from Hyoscin, Morphin and Cactin Anes-thesia.-Case report by Dr. T. B. Noble. The operation performed was laparotomy. The anesthetist insisted upon using the tablets of hyoscin. morphin and eactin. three of whieh were given at intervals of a few hours before the operation. The patient eame on the table breathing heavily, slightly eyanotic, and the whole body rigid. Ether was administered, and it was thirty mimutes hefore the operation could proceed at all. Even then the abdominal museles were so rigid as 10 make all manipulation very difficult. but as it semmed impossible to relax her, he finished the operation with the patient in this condition. The patient went off the table in much the same condition as she came 10 it. Consciousness was never regained, but the patient died rather suddenly a few hours later, apparently from heart failure. Dr. Noble said that he believed the death was due directly to the drugs used and not to the ether or the direct effects of the operation.

Adjourned.
R. H. Ritter, Scc.

## (Meeting of Jan. 21, 1908.)

Societr called to order by President Wymm. Minutes of previous meeting read and approved:

Tuberculin Therapy was the title of a paper presented ly Dr. WV. T. S. Dodds. The speaker said that cmpiricism in the treatment of tubereulosis is fast becoming obsolete. Laboratory methods and laboratory technic have dereloped to such a stage of perfection that, assisted by biologic agencies, there is no longer any reason for the haphazard and careless findings iolerated a fow years ago. It has taken years of hard labor to place tuberculin in the position to whieh it
rightfnlly belongs. The trouble was and is now that the majority of the men who are attempting the use of tubereulin do not understand the reaetions whiel take place in an individual who is subjected to doses of a biologie product as strong and powerful as any of the tubereulin products which we now have at our command. The action of tubereulin is almost exactly opposite 10 that of antitoxin, because we introduce toxin the same as is alrearly being produced in the tissue by the growth of the tubercle bacilli, while with antitoxin we use a substance which, by its own action, nentralizes the toxin which is being produced by the growth of bacteria in the body. In conclusion Dr. Dodds gave the following rules as a safe and eonservative method of producing immunity in tuberculosis:

First, tuberculin should be used in only ineipient cases or in purely surgical tuberculosis; second, the initial dose should not be larger than .0001 mg .. and he prefers to begin with .00001 mg . ; ihird, the interval between injections ean be determined only by the length of the negative phase, which will vary materially in different individuals; fourth. the initial dose should be established if possible by the opsonie index; fifth, if a hypersusceptibility is established then you must reat until this has disappeared, when jou can again begin with your initial test; sixth, tubereulin therapy is best given by laboratory men, or at least by clinicians who can control the increase of dosage by laboratory findings.

Opsonins and Vaccines, with Report of Cases.-This paper was presented by Dr. H. S. Thurston. The speaker said that the theory of Wright has been assumed to be correet in regard to the protective bodies designated by him as opsonins. His methods of diagnosis and treat ment of certain infectious diseases have been followed The opsonic index was not taken in all cases because the clinical symptoms were a sufficient guide. In all cases of tuberculosis the opsonic index was taken every other day from ten days to fourteen days and then weekly. Autogenous vaccines were used in practieally all cases except in tuberculosis, where Koch's new tuberculin T.R. was given. Stock opsonins were used a few times, but their influence was so little that their use was discarded and autogenous vaccines were substituted. Most eases had single infections and it was easy 10 isolate the disturbing organisms and make a vaccine. Small doses of raccine seemed to have given better results than large ones. The dose whieh gives the minimnm local reaction without any general manifestation seems to have the best influence. In five tubercular cases, at first a small dose of tubereulin was given, then the dose was increased in frequener and strength. The cases did not improve but began 10 grow worse. The tuberenlin was then discontinued for a few days. when it was resumed under smaller dosage and with marked improvement of the eases. The use of a preservative in the raceine has been discarded. The vaecine is diluted to any desired strength and sterilized in glass bulbs blown out of ordinary glass tubing. No cloudiness of solution developel as when a preservative was used.

The report of cases included the combined work of 1)rs. Reed, Shimer and Thurston. Out of eleren cases of acne, five were reported as well, four improved, and two unimproved. In one ease the patient had been suffering from acne for fourteen years, two injections at intervals of a week relieved the patient of the lesions, and there has been no recurrence.

Five cases of furumculosis were reported, all of which are well. In only one of the five cases was a second in-
jection of autogenous vaccine required. At the time of the injections the boils were punctured and cupped, but no antiseptics were employed.

In two cases of chronie urethritis the staphylococeus was isolated, autogenous vaccine was given, and both cases are improved. In one case of suppurating sinus leading down to the kidney, in which the colon bacilli infection was demonstrated, four injections of autogenous vaccine resulted in healing of the kidncy wound.

Seventeen cases of tuberculosis were reported. Three were observed for diagnosis. In one ease the opsonic index was negative for tuberculosis, and later elinical observations bore out the opsonic findings. In one case nothing definite could be determined by the index. In the third case the opsonic finding was positive, and four weeks later tubercle bacilli were found in the sputum. There was a marked improvement in all cases of genitourinary tuberculosis and one casc is apparently well. A suppurating wound of long duration lias healed and remained closed. There has been improvement in praetically all the cases of pulmonary tuberculosis. In one case of suppurating tubercular adenitis with sinuses, seven weeks' vaccine treatment has resulted in the closure of two of the sinuses, and the swelling of the glands has diminished at least two-thirds.

In the discussion, Dr. Potter called attention to Koeh's insistence on certain rules in the administration of tubereulin and the eareful selection of cases. While the great mass of medical men have discarded the use of tuberculin, a small number have persisted in its use. but without any definite theory as to its action. The great advantage of Wright's theory is that it gives us a definite basis for the use of tuberculin. Dr. Potter said that he used tuberenlin both for diagnosis and for treatment, and has had various and anomalous results. Rather strange to say, le has seen most marked improvement from the use of large doses. In several cases he has used a considerable dose for diagnosis with the production of intense reaction. This was later followed by great improvement of the condition of the patient. He has had diffieulty in holling and controlling patients through the long period necessary for the satisfactory administration of this procedure. Ite can hardly believe that in private practice the use of tuberculin will be suecessful. but in proper sanitaria it promises much. The discovery of Wright is a distinct advance and help in the pombat with infections.

Dr. J. V. Reed said that he was convineed from his experience with the vaccines that there is great value in this method, although the whole question is just now in the experimental stage. The danger of doing actual harm is real. In treating local infections some of the older methods will still be employed. Abscesses should be opened and drained, washed out with a normal or stronger salt solution, and if possible eupped. Strong antiseptics should be aroided as they are almost universally anti-opsonins. He reported one case of tubereulosis of the knee in which treatment has consisted wholly in the injection of tuberculin and the application of Bier's handage. Treatment was hegun in August, $190^{\circ}$. and at the present time the case is practieally well.

Dr. T. V. Keene described the various varieties of tuberculins on the market at the present time and the manner of making. The opsonic index is raluable in treatment only in regard to the negative phases. The index in tuberculosis is very hard to estimate because of the tendency of the bacilli to clump and cause eonfusion in the counting. The best indication in treat-
ment is the change in the loeal physical signs. Clinical signs as a rule are more valuable than the index.

Dr. Tucker of Noblesville is still doubtful as to the phoice of tuberculins. At the present time he is treating five cases, using diflerent forms of tuhereulin. Treatment has been in progress for eight months, lunt he still is without conclusions.
1)r. J. R. Eastman said that he had recently leen in the laboratory of Wright and Doughas. In surgical and genito-minary tuberculosis he found that Wright and Douglas did not pay much attention to the index. He believed that a great field has been opened up for further study and progress in our treatment of infections. This matter is taken very seriously by the London surgeons who send many eases to Wright and Donglas. Dr. Eastman ealled attention to the work of Spingler in Switzerland who is using vaceine made from cultures of bovine tubercle bacilli.

Dr. C. E. Ferguson said that he had recently been in the laboratory of Wright and Donglas and he believed that the statements attributed to Cabot concerning Wright's work in this eountry shonld be carefully investigated, and if the statements given out by Cabot are found to be correet, even then the results are subject to explanation. Any one who las done any of this work knows the difficulties of the technic and the necessity of having a perfect emulsion. Wright might have as easily as any one else shown a discrepancy in his results if he lad not been able to prepare his own emulsion. The roluminous and accurate records of Wright's laboratory remove any question as to the aeenracy of the procedure and prove that experienced and capable workers show a wonderful uniformity of results. Dr. Ferguson stated that the index can be raiced in tuberculosis, but it is true that it can not be maintained permanently. The subject is as yet too young to allow any one to condemm or to speak dogmatically about it.

Dr. T. N. Hurty spoke of the careful laboratory work done at the Saranac laborators, and by von Ruck at Asheville. The work of the latter has been most painstaking and persistent, and has vindieated all the claims made for it. Von Ruck uses the outdoor treatment and the watery extract of tubercle bacilli to produce specifie immunity.

Dr. Dodda closed the discussion with a brief stetement as to the difficulties of this method of treatment, and emphasized the necessity of a thorough understanding of the questions inrolved and the various theories of immunity.

Adjourned.
R. H. Ritter, Ser.

## MIAMI COUNTY.

The Miami County Medieal Society held a regular meeting in Peru January 3I. Society was called to order by President E. II. Griswold, with thirtr-four members and gucsts present. Minutes of the previous meeting were read and approved. The question of adopting the postgraduate eourse was taken up and thoroughly discussed, and on motion it was decided that the course should be adopted and that hereafter the society hold weekly meetings. The president xppointed a program committee, consisting of Drs. Carter, Spooner and Goodrick. Dr. Carl, who had prepared a poper for the meeting, was unable to be present owing to the serions ilhess of his father. Motion was mode and carried that the president appoint a committee to confer with the school board with a view
to seeuring an unfini-lied and unoceupied room in the basement of the eity library for the use of the society.

During the progress of the meeting a short reeess was held, during whieh time the members of the soeicty, togetber with guests from soeieties of adjoining counties, organized the Fleventh Couneilor Distriet Medical Society.

Adjourned.

D. C. Ridesour, Scc.

## PORTER COUNTY.

The Porter Countr Medieal Soeiety met in regular session in the Woodmen's Hall, Valparaiso, on January -. Two interesting papers were presented, one on "Intestinal Indigestion," by Dr. E. J. Ball, the second on "Seute Nephritis," by Dr. A. B. Dobbins. Both papers were followed by free diseussion. Three applieations for membership were rejected on aecount of unethieal advertising in newspapers.
P. R. Ubmston, Scc.

## ST. JOSEPH COUNTY.

The St. Joseph Countr Medical Soeiety held a special meeting in South Bend Tuesday, January 28. A very interesting program was presented. Dr. R. C. Shanklin of South Bend read a paper on "One Phase of Race Suieide." The diseussion was formally opened by Dr. J. W. Hill of South Bend and Dr. J. C. Fleming of Elkhart. "Surgery of the Gall Bladder" was the title of a paper presented by Dr. Thos. J. Eastman of Indianapolis. The discussion was formally opened by Dr. J. B. Greene of Mishawaka and Dr. C. A. McDonald of Warsaw. Dr. G. W. Spohn of Elkhart presented a paper on "Diseased Conditions Caused br Mouth Breathing: Prevention." Dr. J. A. Cook of Goshen presented a paper on "A Prief Résumé on General Anesthesia." The discussion was opened by Dr. R. B. Dugdale. of South Bend and Dr. W. H. Thompson of Winamae. Dr. A. C. MeDonald of Warsat presented a paper on "Operation of Neuroties: Final Results with Report of Cases." The formal diseussion was opened by Dr. Charles Stoltz of South Bend and Dr. W. C. NeCuteheon of Cassopolis. Mieh. The soeiety tendered a banquet to visiting guests in the evening. The society is now holding weekly meetings and has taken up the postgraduate work as outlined by the Ameriean Medieal Association.

Chas. S. Rosenburr, Scc.

## SULLIVAN COUNTY.

The Sullivan County Medical Soeiety, at its regular mecting January $S$, eleeted the following officers: President, J. E. MeComell, Carlisle; viee-president, E. M. Deputr, Dugger ; secretary-treasurer, E. M. Corbin, Sullivan; delegate to the state association, IT. N. Thompson, Sullivan; censors, Drs. E. D. Thiston, Sullivan, J. R. Crowder, Sullivan, and C. T. Briggs, Sullivan.
E. M. Corbin, Scc.

## UNION COUNTY.

The Union County Medieal Society met in annual session at Liberty, Dee, 4, 1907. and eleeted the following officers: President, Dr. E. R. Beard, Liberty; secretary and treasurer, Dr. E. P. Weist, Liberty; board of eensors, Drs. F. T. Dubois, M. F. Veraker and J. E. Morris; delegate to the state association, Dr. Garrett Pigman, Liberty. Regular neetings will be held the first Wednesday of alternate months, beginning with February.
E. P. Weist, Scc.

## WARRICK COUNTY.

I meeting of the Warrick County Menlieal Society was held in the B. II. A. rooms, Boonville, Dec. 10, 1907. Meeting was ealled to order by President G. J. Hoover at 10 a.m. Dr. A. M. Hayden, of Evansville, presented a paper on "Some Points in the Diagnosis of Cancer of the Stomach." Dr. Dalton Wilson reported two cases of periearditis, one of which eame to autopsy. The early part of the afternoon session was devoted to business, among other things a eommittee being appointed to revise the constitution and by-laws, and to report the second Tuesday in January. Dr. E. D. Voungblood then read a paper on "Yeurasthenia."

Daltor Wilsox, Scc.

## WAYNE COUNTY.

It the annual meeting of the Wayne Countr Medieal Societr, the following offieers were eleeted: President. Dr. O. N. Huff, Fountain City; vice-president, Dr. C. P. Colburn, Riehmond; seeretary-treasurer, Dr. A. L. Bramkamp, Richinond: eensors, Drs. H. B. Bord, M. F. Johnston and M. E. Hervey. The societr has adopted the postgraduate course and through a special commitree is taking an active part in a vigorous. systematie eampaign for pure milk. Through the influence of the society a federal inspection of all animals slaugbtered for loeal consumption has been seeured. A referenee library and a pathologieal museum is being established in eonnection with the societr.
A. L. Bramkamp, Sec.

## FOURTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The third annual meeting of this societr was held in Columbus, Thursdar, Oet. 31, 1907, with seventy members in attendance. The meeting was formally opened by an address of weleome by Dr. J. D. Marshall, president of the Bartholomew County Medieal Societr, with response by Dr. L. B. Hill, of Seymour.

Professional Ills.-This was the title of the annual address delivered by the president of the soeiety, Dr. A. J. Osterman. of Seymour. On motion the paper was referred to the publieation eommittee of The Jouranal of the Indiava Medical Association. The minutes of the previous meeting were then read and approred, and the treasurer gave his anmual report, whieh was also approved and aeeepted.

Acute Intestinal Diseases of Children in Summer. The seientific program was ushered in with a symposium on Aeute Intestinal diseases of Children in Summer, to which papers were eontributed by Drs. C. $\Pi$. Gibson, Batesville; A. D. Freeman, Osgood; A. G. Osterman, Sermour; J. K. Hawes, Columbus; and E. [. Wood, Columbus, The papers were all very interesting and instruetive, and brought out an extended diseussion.

Dr. M. J. Coomes, of Batesville, reported a ease of Uterine Sub-Involution with Pseudo-Diphtheritic Com. plieation. This report was freely discussed.

At the afternoon meeting it was decided to hold the next meeting at Madison, and the following officers were elected for the ensuing year: President, Dr. E. D. Freeman, Osgood; vice-president, Dr. Seott Culbertson, Tevay; secretary, Dr. George H. Denny, Madison; treasurer, Dr. Jaines H. Green, North Vernon.
The eouneilor, Dr. W. H. Stemm, then spoke on the advisability of having two meetings each year, and
this was alno advocated by Dr. G. T. MeCoy, of Colum bus. I motion to hold the next meeting the lant Thursday in May, I90s, was defeated.

Inguinal Hernia.-This was the title of a paper by Dr. G. If. Denny, of Madison, which wats illustrated by several charts showing the steps in the Ferguson operation. The paper was a very comprehensive one and was well discussed. Other papers on the afternoon program were as follows: lheumatism, Dr. George O. Cosby, Burnsille: Typhoid Fever, Dr. John W. Benham, Columbus: Pathology and Treatment of Typhoid Fever, Dr. William J. Norton, Nope; Fibroid Tumors of the Ltems. Dr. W. H. Stemm, North Vernon; Hysteria, 1)r. R. F. Olm-tead, Verailles; The New Anesthetic, Dr. C. F. Kercheval. Greensburg; Anomalies of Olsstetrical Prantice, Dr. 11. F. Davenport, Korth Vernon; Glaucoma, Dr. R. W. Cochran. Madion: The Use of Inspection in Diagnosing Diseases of the Eye ly the General Practitioner. Dr. J. II. Ritter, Seymour; Arterioscleronis. Dr. M. F. Gerrish. Seymour: Aente Gastritis, Dr. Benjamin F. Armbruster, Columbus; Some General Remarks on Nepluitis, Dr. Charles L. Williams, Greensurg; Menstrual bisorders, Dr. G. Butler Hill, Seymour; I Plea for Definite Diagnosis in Disease of the Nerrous S'stem, Dr. Curtis Bland, Greensburg; Xasil Catarrh, Dr. J. A. Cooperider, Madison; Oxaluria, Dr. F. MI. Mueller. Lawrenceburg.

At the conclusion of the seientific program, Dr. D. C. Peyton, of Jeffersonville, president of the Indiana State Medieal Anoociation, was introduced. Dr. Peyton made a few remark- on potgradnate work in the comty socictics, and clus wats also followed by remarks in a similar strain by Dr. WI. H. Stemm, vice-president of the state aswociation. It the conclu-ion of the meeting the members and gunets enjoyed a banquet at the Christian Church, given under the auppices of the Bartholomew Comety Medieal Society:

Johs Little Morbis: Ner.

## EIGHTH COUNCILOR DISTRICT MEDICAL SOCIETY.

In response to a requent from Dr. Kemper, I leg to report to you the following facts about the Eighth Councilor District Medical Society, which was organized two years ago. About 1.50 out of 184 members of the Madison, Delaware, Randolph, Jay and Blackford County Societies are members of the District Society: It holds its meetings twice a year, in April and October.

The officers of the society are: Dr. G. IV. H. Kemper, president; Dr. C. L. Botkin, vice-president; Dr. M. A. Austin, secretary-treasurer. An advisory committee is made 11 , of one member from eath of the county societies. Dr. Harrictt Wiley, Portland; Dr. U. ( G . Poland, Muncie; Dr. M. M. Clapper, Hartford City; Dr. C. L. Botkin, Farmland; and Dr, M. A. Austin of Anderson are members of this committee. Membership in the District Society is Jimited to members in good standing in the county soeietics. The cost of membership is $\$ 1.00$ a year which pays for two dinners, these dimmers being a feature of every meeting.

The expense of advertising the district meetings has been met by a pro rata assessment amounting to abont $\$ 4.00$ a year for each county society. It has been deemed adrisable to eliminate from the eighth district the presentation of the customary medical papers, and papers on medical economics are requested of those
who are anked to accept praces on the program. Local and forcign talent is impartially utilized to make the meetings a success, and an attendance of 60 to so per cent. of the membership has rewarded the officer- of the society for their efforts.

At the last meeting, held in Mnncie on October 22 , Dr. II. A. Spurgeon, of Muncie, read a paper on. "How can the State Board of Health and County Med ical Societies act togetner to Improve Sanitary Conditions and Prevent Disease?" Dr. Chas. R. Sowder, of Indianapolis, read a paper on "The Country Medical Organization: How to make it Interesting and l'rofitable." These paper: were followed by a free disenssion.

The ladies of the High Street Methodist Church served an exedtent dmer at 1 octock. Following this, Dr. E. (i, Reymard, of Cnion ('ity, re-ponded to the toast, "Ethical Advertising." Dr. Reynard", talk was particularly plea-ing and possessed an amount of watire which gave donble interest to his view: on the -ubject. Dr. I. N. Trent, of Muncie responded to the toast, "Some Animals 1 Have Met." He brought with him his double barrelled shotgun loaded with huck - hoot for the cheap doctors who take care of the "Eagles," the "Moose." and the "Owls," on a contract basis Dr. R. O. Meflexander", of Indianapolis, spoke on "Butting In." and made a happy talk on the greater benefits to be derived by ntilizing home talent rather than calling on foreign assistance. Dr. J. T. Dickes, of Port land, spoke about the next meeting to be held in Jay ('ounty, April. 190s. Dr. A. E. Otto, of Alexanulia, was ninable to be present on account of illness. He was to have spoken on. "Chub Practice." Dr. W. N. Wishard, of Indianapolis, who was to have responded to the toant. "The Doctor In P'olitics," telegraphed his regrets, having been detaine by his professional work.

> M. А. Austin, Nef.

## NINTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The Ilouve of Delegates of the Ninth Councilor District Modical society met at $11 \mathrm{a} . \mathrm{m}$. in the Public Lilrary at Lebanon, Nor. 21, 1907. The following olficers were elected to serse for the ensuing year: l'resident, Dr. Chas. Chittick, Frankfort; firt vicepresident, Dr. IV. II. Achmiz. Lehanon: second vicepresident, Dr. II. II. Thompron, Noblesville; secretary, Dr. George F. Keiper, Lafayette; treasurer, Dr. F. Cox, Kokomo.

Dr. ('on, the treasurer, made his report showing a halance of di2. $^{2} I$ in the treasury. After auditing it the same was approved.
It wa- ordered that each county society be assessed ten cent- per momber per year to defray expences of the annual district meeting.
The following committees were appointed:
Sciextific Work.-Dr. Charles Chittick. Frankfort; Dr. R. J. Ball, Lebanon; ex-officio, Dr. G. F. Keiper, Lafayette.
Public Policy and Legislation.-Dr. Manl J. Bar cus, Crawfordeville; Dr. S. M. Cotton, Goldsmith: Dr L. S. Varner, Kokomo; ex-officio, Dr. Chittick, Frankfort; Dr. Gcorge F. Keiper, Lafayette.
It was ordered that the secretary have printed and distributed to each member the Constitution and By Laws.
The following resolutions were adopted unanimonsly and recommended for adoption by the general meeting
in the aftemoon, and to the comnty associations for adoption:

Wrifreas. Through the eupidity and avarice of drug manufacturers, many no-trims and so-called proprietary medieines have been put on the market and used hy doetors in the treatment of sick people; and,

Whereas, The majority of the physicians of the Inited States, acting in their orginized capacity through the American Medical Association, which is composed of the county and state medical societies of the country, have established a Council on Pharmacy and Chemistry, whose sole purpose is to examine new preparations not in the United States Pharmacopeia or National Formulary for their chemieal and pharmaceutical purity: and.

Whereas, The said Council has examined many hundred of such preparations and have found the large majority of them to be fraudulent or worthless, or both. and has published a list of those which it has approved: now, therefore. be it

Resolved, That the Ninth Councilor District Medical Society, and the medical profession in sympathy with it. in session assembled, hereby expresses its confidence in the Council on Pharmacy and Chemistry of the American Medical Association, and in order to make the work of forec and effect among the physicians of this distriet and their sick and affleted patrons; be it further

Resolved. That in so far as may be practicable, we and each of us will confine our prescription writing and the use of drugs to those preparations contained in the Cnited States Pharmaeopeia and National Formulary, whieh has been established as the law of the land by the National Pure Food and Drugs Aet, and that we will not use, or permit to be used, any proprictary preparation until it has received the approval of the Council on Pharmacy and Chemistry of the American Medical Association: and, be it further

Resolved. That we condemn the acceptance of adverfisements of fraudulent nostrums and proprictaries by the medical and religious press, and that we and each of us decline to receive any eopy of any medical or drug journal, whether owned and controlled by a medical society. layman, druggist, or doctors, which advertises sueh preparations after Jan. 1, 1908.

We, the undersigned, and each of us, hereby pledge ourselves to abide by the above resolutions and to use no medical preparations which are not contained in the official Lnited States Pharmacopeia or National Formulary, or in the list of New and Non-Official Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association, and that we will subscribe for no medical or religious journal, nor will we receive such journal from the postoffice whieh advertises fraudulent or worthless nostrums and proprictary medieines after Jan. 1, 1908.

That these resolutions be forwarded to the Journal of tife Indiana State Medical Association and the Journal of the American Medical Association in order to show the profession of the country that the physicians of the Ninth Councilor District of the Indiana Medieal Association propose to free themselves and their patients.

The above resolntions were submitted to the district association meeting in the afternoon and adopted. On motion the House of Delegates adjourned.

AFTERNOON SESSION
The meeting was called to order at $2 p, m$ by President Chittiek, with fifty-four members and a number of guests present.

The secretary reported the business transaeted by the House of Delegates in the morning, and submitted
the resolntions, which were manimonsly adopted. During the reading of the resolutions Dr. George $H$. Simmons, editor of the Journal of the American Mcdical . Lssociation and General Secretary of the American Medical Association, came in, and on request spoke in endorsement of the resolutions.

The first paper of the afternoon was by Professor Burrage of Purdue I'niversity, who spoke on the "Opsonie Index." The paper was diseussed by Drs. Beaskey, Clark, Dinsmore and Moffet. Dr. Piul J. Barcus then read his paper on "Oxygen in General Ancsthesia." and it was disenssed by Drs. Newcomb, Williams. Kennedy, Rowland, Miller, Boonhill, MeAlexander, Bolden and Moffet.

The third paper was by Dr. Gco. Rowland, on "Mamagement of Acute Delirium Tremens." It was discussed by Drs. Beasley, Fitch and Hort.

On request, Dr. Simmons then addressed the mecting on the work of the American Medical Association. On motion, a vote of thanks was extended him.

The title of the next paper was "The Doctor and Superstition." by Dr. Femald. It was discussed by Dr. Ball.

Dr. Cotton presented the last paper, taking for his subject, "Laboratory Versus Bedside Diagnosis." It was discussed ly Dr. Wynn and Professor Burrage. Dr. Barcus. in behalf of the Montgomery County Medical Association. invited the District Society to meet at Crawfordsville next October. The invitation was accepted umanimously. On motion the socicty adjournerl to a banquet at the Metholist Episeopal Church.

George F. Keiper, Sec.

## ELEVENTH COUNCILOR DISTRICT.

The Eleventh Councilor District Medical Society was organized in Peru Jan. 31, 1908. The election of officers resulted as follows: President. Charles $H$. Mcrully. Logamsport: secretary-treasurer, Naurice H. Krebs. Huntington; committee on by-laws. Charles H. MeCully. Logansport, M. H. Krebs, Huntington, G. D. Miller, Jogansport; committee on program, O. W. MeQuown, Marion, W. R. Quick, Delphi, C. L. Wright, Huntington. Dr. Krebs offered the following resolution with reference to medical legislation:

Whereas, We are approaching the period when it will be necessary for the people of this district to eleet representatives for legislative offices, both state and national ; and,

Whereas. The medical profession as an organization and as individuals, is vitally interested in legislation in reference to medical organization, public health, hrgiene and sanitation; be it

Rcsolved, That the Medical Society of the Eleventh Councilor District seek an expression of views from eandidates for legislative office: and, be it further

Resolved, That we are unalterably opposed to any candidate whose views are opposed to medical organization and the advancement of publie health and sanitation; and, be it further

Resolved, "1 hat this organization appoint a committee consisting of the couneilor and a member from each county of the district which shall be empowered to seek such expression of views from candidates, and to adrise the medieal fraternity against all eandidates whose views are opposed to medical organization.

After considerable discussion action upon the resohttion was deferred until the next meeting.

Maurice H. Krebs, Scc.

# THE JOURNAL <br> OF THE <br> Indiana State Medical Association 

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager<br>BEN PERLEY WEAVER, B.S., M.D., Assistant Editor<br>OFFICE OF PUBLICATION : 219 W. Wayne Street, FORT WAYNE, IND.

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Number 3

ORIGINAL ARTICLES

## TREATMEN'T OF 'TUBERCULAR GLANDS <br> AND GOITER WITH THE $X$-RAY, WITH REPORT OF CASES.

Albert M. Cole, M.D.
Professor Electrotherapeutics and Radiology, Medical College of Indiana.
indianapolis.
The value of radiotherapy in superficial cancer and many skin diseases is well attested by many observers, but that the $x$-ray possesses decidedly curative action in certain diseased conditions below the skin is not so widely known. It was long ago shown that the chief effect of the ray is expended upon the skin; but that we can obtain cffects upon the deeper structurcs, no competent obscrver will deny. Anyone who has watched the action of this agent upon the glandular and splenic cnlargements of Hodgkin's disease or leukemia will be impressed by this latter statement.

However, failure has attended the use of the $x$-ray in several interual diseases that were, in the beginning of Roentgen therapy, thought to be curative by this new agent. To-day no reputable authoritics make any claim to cure cancer below the skin with the $x$-ray, although in rare cases they have disappeared under its use; but as a palliative and to prevent a recurrence after operation, Roentgenization should be adrised. In leukemia it has thus far brought only disappointment, notwithstanding the pronounced effects upon the spleen and blood. In Hodgkin's disease the results have been better, but as yet the mortality is very high. We must consider, however, that in the above diseases we are dealing with very grave disorders of unknown etiology that have thus far resisted every therapeutic measure.

When we turn to some other subdermal diseased conditions of a less malignant nature, we find that the success of Roentgen therapy is more pronounced. Only during the last few years has the $x$-ray been advised for tubercular glands and goiter, and lately many favorable reports from competent observers have attested the value of this new treatment and have brought it into wider recognition.

There will be many skeptics, however, who will deny or doubt the efficiency of the $x$-ray or any other non-surgical agent in what has always been considered a surgical disease, such as tubercular glands. Moreover, it can not be denied that therapeutically, for various reasons, the $x$-ray has fallen into a certain disrepute among many physicians. I shall not attempt to explain away these reasons, but will state the fact that no therapeutic agent has been so abused as the $x$-ray, and so long as this agent is employed by many physicians who are ignorant of its physics, its action and the proper technic of treatment, so long will we hear of severe burns, failure to achieve results, and many objections to its use. The $x$-ray, if intelligently used, does not admit of half the dangers of many of our drugs, and certainly not a small fraction of the dangers of anesthetics and the surgeon's knife.

In cmploying the Roentgen treatment in tubercular glands and simple goiter the proper technic is most important, for without it only indifferent results can be obtained. The technic of treatment should be altogether different from that used in surface conditions. Only a moderately high vacuum tube should be used, reading No. 4 on a Walter scale, or backing up three or four inches of spark. The tube should not be brought closer than six inches to the part, and the treatment given every sccond day for eight or ten minutes with one and one-half amperes of
current through the primary. The face should be well protected with lead foil. After six to ten treatments I am now using a picce of sole leather orer the surface treated, which acts as a filter to absorb the low penetrating rays which affect the skin. When employing the fitter I prolong the treatments to twelve or fifteen minutes. I change the tubes often, for the reason that in my experience better results are thus obtained, some tubes giving better therapeutic effects than othcrs. When the first symptoms of dermatitis arise, stop the treatment. Usually twelve to twenty (xposures may be given before mild inflammatory srmptoms, such as redness, slight burning or itching, supervene. At times there is considerable tanning of the skin, especially when the leather filter is not used.

When the treatments are suspended it is best to allow a month's rest, and then if necessary repeat. The average case will require from twenty to forty treatments. The best results in most cases are obtaincd only after prolonged treatment, whose effects are carried to a point short of a marked dermatitis. The timid operator will fail in these cases; the over-bold will sometimes cause a painful burn, but this accident will occur very rarely if the proper technic is followed.

In exophthalmic goiter I cmploy a high racuum tube (No. 6 Walter) placed fifteen or cighteen inches from the thyroid gland; the time of cxposure, ten to twelve minutes, three times a week. I desire no effect upon the skin except a slight tanning. The treatments are thus continued until there is a relicf of symptoms, and then I advise treatment once a week, gradually lengthened to once a month for a considerable time.

In tubercular glands the effect of the $x$-ray is a gradual diminution in size. Usually there remains some enlargement, which is fibrous tissue ( the $x$-ray affects this but little) surrounding the discased glands. This enlargement usually disappears after a year or two. If there is pus it must be evacuated before beginning the treatment.

In simple goiter the gland is reduced in varying degrees. In recent soft goiter there is usually complete reduction; in long-standing hard thyroid enlargement there is a reduction in size of one-third to one-half. Some observers report total failure in a small per cent. of these cases. In my own experience I have had no complete failures in cases of either tubercular glands or simple goiter. In exophthalmic goiter the treat-
ment is usually decidedly palliative, and in rare cases curative.

I now append some condensed case histories and results:

## TUBERCULAR GLANDS.

Case 1.-Mr. L., an Italian, aged 30, came to me three years ago with an enlarged gland the size of a walnut over the clavicle. There was no tubercular family history. The gland was removed surgically by Dr. F. M. Dorsey. Six months later there appcared in the upper corvical region a large mass of glands the size of a small fist. - The Roentgen treatment was advised, and after twenty exposures the mass was reduced twothirds. After a rest of several months the lower cervical glands on the same side began to cnlarge. The patient decided to try a change of climate, and returned to his old home in Italy, where these lower glands were removed surgically. There have been no recurrences. The upper mass of glands treated by the $x$-ray has completely disappeared.

Case 2.-Miss E., aged 16, came to me in the spring of 1906, on account of enlarged gland the size of a hickory nut in the middle cervical region, which had appeared six months previously. There was a family history of tuberculosis. Fifteen $x$-ray exposures were given, followed by one month's rest, when it was found that the gland was reduced one-half. It has remained quiet since, is becoming smaller, and is in all probability cured. An accompanying acne of the chin also disappeared under the influence of these Roentgen treatments.

Case 3.-Miss M., aged 15, consulted me two years ago on account of enlarged cervical gland below the right ear. She had first noticed it one year previously. The enlargement was the size of a small egg. Twelve exposures were given, and after an interval of sercral months there was noticed a marked reduction in the size of the tuinor. The patient has passed from under my observation, so I can not report the present condition.

Case 4.-Miss F., aged 30, was referred to me in the spring of 1906 by Dr. Hayworth, of Noblesville. There was no tubercular family history. Five years previously the right cervical glands began to enlarge, and after two and onehalf ycars had attained such size that an operation was decmed necessary. After a time the other side of the neck became involved, and the whole chain of glands enlarged very rapidly. In January, 1906, they were removed surgically, but the upper portion of the wound failed to heal and the nearby glands bccame involved. When I first saw the case in July there was a large mass below the left ear and a small cnlargement the size of a walnut under the chin; both were rapidly enlarging. Twenty-nine treatments were given over a period of ten weeks. Considerable dermatitis
was excited through the prolonged treatment, in order to control this unusually severe case. After a rest of a month, treatments twice a week were given until fifteen were administered. At the end of this time the enlargements had almost disappeared, and at present, four months after the last treatment, the case has all the appearance of being cured.

Case 5.-Mr. G., aged 25, consulted me in May, 1906, on account of a large tumor in the right cervical gland. It had been present for six months and was growing rapidly. A questionable diagnosis of tubercular glands was made, although certain characteristics of sarcoma were present. After twelve treatments there was noticed a considerable reduction in size and the tumor became less hard. The patient then disappeared and the history remains incomplete.
Case 6.-Miss W., aged 16, was referred to me last June by Dr. Bates, of Broad Ripple. The family history was tuberculous. Under the right ear there appeared a large mass of glands the size of a baby's fist. The tumor was rather soft and palpitant, but showed no distinct evidence of pus. Lower down in the cervical region there was another enlarged gland the size of a marble, which was very hard. This patient has taken about tirenty-five treatments, with a marked reduction of the size of the glands. At present she is continuing treatment.

Case 7.-Miss M., aged 19, was referred to me last year by Dr. J. F. Robertson, of this city. There is a tuberculous family history. The upper cervical glands were markedly enlarged. Fourteen treatments reduced the glands more than one-half in size. The patient passed from my obscrvation, so I can not state the present condition.

## SIMPLE GOITER.

Only three cases of simple goiter have been treated in the last year by the $x$-ray. Before this time I have used the static wave current, which gives very fair results in most cases, but is slower in action and not so satisfactory as the Roentgen ray.

Case 1. -Miss P., aged 22, consulted me in fall of 1906 for simple goiter of several years standing. The voice was affected, and at times the patient could not speak above a whisper. She had been treated with drugs without any improvement. Roentgen treatment was advised, and fifteen exposures were given, followed by a month's rest. At the end of this time the voice was completely restored and there had been a reduction in the thyroid to one-half its former size. During the eight months which have intervened there has been noted a further reduction in the size of the gland.

Case 2.-Miss D., aged 20. This case was very similar to the onc just described. There was almost complete disappearance of the thyroid enlargement after a dozen treatments.

Case 3.-Mr. M., aged 40. He came to me ten months ago with a very large, hard goiter of ten years' duration. He complained of mild pressure symptoms. He wore a No. 17 collar. Thiry -five irradiations were given over a pcriod of three months. At the end of this time there was a reduction of about one-fourth. A No. 16 collar could be worn comfortably, and the patient was so satisfied that no further treatment was undertaken. At present there are no pressure symptoms, and the thyroid seems somewhat smaller than at the close of the treatments.

## EXOPHTHALMIC GOITER.

Case 1.-Mr. L., aged 22, referred to me last spring by Dr. J. A. MeDonald of this city. The disease was first noticed two years previously. On examination there could be noted a slight enlargement of the thyroid and a moderate exophthalmos. The pulse was 120, great palpitatiou, some dyspnea, and fugitive sweatings were complained of. This patient was given two or three treatments a week for several months, with considerable amelioration of his symptoms. The pulse is usually between 80 and 90 now, palpitation is only occasionally felt, and there has been improvement in a general way. Since July only oceasional treatments have been given.

## CONCLUSIONS.

1. Tubercular glands are very amenable to Roentgen treatment. When the glands are broken down, pus should be evacuated, followed by the ray.
2. Simple goiters in a large percentage of cases are successfully treated with the Roentgen ray. Even in long-standing cases, with considerable hardening of the glandular structures, there may be effected a considerable reduction. A small percentage of these cases fail to respond at all to the Roentgen treatment.
3. Somes cases of exophthalmic goiter are smptomatically improved by the ray, and there have been a few cures reported.
4. The technic of the Roentgen treatment in these diseases is exceedingly important. No curative results can be expected unless the proper skill is employed in the application of the ray.
5. No unfavorable effects have ever been reported. There may be a possibility of a painful dermatitis, which, however, should be exceedingly rare if the proper technic is used.

DISEASED CONDITIONS CLUSED BY
MOUTII BREATIING, IND THEIR PREVENTION.*
George: IV. Spohin, II.D.
ELKIIART, IND.
The function of breathing includes both inspiration and expiration. The object of respiration is to supply oxygen to the blood and to throw off carbon dioxid and other waste products to the expired air. The interchange of gases in the air resicles is carried on by osmosis.

The nose is usually spoken of as the organ of smell, but its chief function is to prepare the air for respiration. As generally understood, air should be warmed, filtered and moistened before inhalation. The nose has a special construction for this purpose. The three large turbinated bodies in each nostril are well supplied with blood ressels. They warm the air as it passes to the pharynx and furnish a large surface upon which dust or any particles of foreign matter can lodge.

Every twenty-four hours there is thrown off from the nasal mucosa from sixteen to twenty ounces of serum. This supplies the air with its proper humidity as it passes to the pharynx and lungs.

The respiratory organs, from the nose to the air vesicles, are lined with mucous membrane the histology of which differs in different organs. The mucosa of the air vesicles contains but few glands and only one layer of epithelium. It is stated by some writers that when there is not sufficient moisture in the cells the epithelium piles up so that osmosis can not be carried on properly. Because the vesicles have but little if any moisture of their own secretion the air should contain the proper humidity as it enters the air vesicles, or otherwise there would be a lack of oxygen in the blood and the carbon dioxid would not pass off properly. There is not the same smooth and velvety touch to the pulmonary as there is to the oral and nasal mucosa. Fortunately there is a hardness and firmness to the former which is a protection against disease. A mucous membrane lacks the horny layer of the skin, and unless its surface is moist it can not do its physiological functions.

A dry mucous membrane in any part of the system will soon become diseased. This is illustrated in the conjunctiva in advanced Graves' disease, where the eyelids ean not cover the eveball. Hence any portion of the respiratory

[^6]mucosa which lacks in moisture must fail in its normal functions. Air taken througl the nose to the plarynx and lungs carries with it the proper moisture and distributes it over the whole mucous lining; but air taken by the mouth not only lacks in proper moisture and warmth. but it causes a dryness and irritation of the mouth, pharynx and all the lower respiratory tract. It becomes a substitute unfitted for normal respiration.

The serum is naturally aseptic as it passes through the nasal mucosa. Carried to the lungs with the inspired air it bathes the whole respiratory lining; but when allowed to remain in the nose, as in the case of mouth breathers, it becomes a rich field for bacteria. This condition generally results in chronic catarrh. The natural direction of the air column as it passes through the nose is upward, backward and downward. It tends to kcep the nose open and free, and in many cases corrects slight inflammations. It also acts as a prophylactic to catarrhal troubles by clearing the mucosa of all excreta. But imperfect nasal rentilation and respiration will soon lead to catarrhal troubles and nasal obstructions.

In nasal breathing the respirations are very much deeper than in mouth breathing. The former is like drawing air through a long tube, and thus all the muscles of the thorax are put at work. In fact, nasal respiration will compel one to take long, dcep inhalations, thus developing the whole thorax, while oral breathing, with its shallow respirations, develops a short and narrow chest, or the so-called "pigcon breast."

The human being is the only animal that breathes through the mouth. The painter throws the spirited horse upon the canvas with the nostrils distended, but not with the mouth open. When the veterinary surgeon has a horse that hreathes through the mouth he expects it to die very soon.

It is a law with some tribes of Indians that mothers must compel their children to breathe through the nose. The mouth of the infant is tied shut and, Spartan-like, the little one must breathe through the nose or die. Even the uncivilized recognized the needs of growing strong warriors and strong wives. The Indian learns his lessons from Nature.

There is a principle in physics that moisture is essential to carry on osmosis. Mouth breathing causes such a dryness in the air resicles that the cells fail to do their normal work. When the air fails to give up its oxygen and take on the carbon dioxid the blood becomes imporerished and this leads to anemia and other diseases. Good
blood can not be obtained without sufficient oxygen. The habitual mouth breather is generally lacking in vigor, showing a lack of red corpuscles and hemoglobin. Anemic cases are frequently sent to the country by the attending physician for fresh air, but all patients can not enjoy this privilege. In many cases there is such complete muscular relaxation during sleep that the mouth opens. Many cases that are not suspected by the family are mouth breathers. They are often treated with iron and divers tonics with no success. But after giving them good free masal respiration and compelling them to breathe through the nose it is surprising to note what results are obtained even with the same tonics that previously failed.

Hoarseness is often caused by oral breathing. It is a common occurrence with mouth breathers to retire in the evening fccling well and arise in the morning with a husky roice. The cold air produces a dry and congested state of the rocal cords. Nor is this condition produced only during sleep; a drive or walk in the open air, especially if it is cold, will often cause hoarsencss. To breathe through the nose at all times prevents this. No one should walk so rapidly or cxert himself to such an extent that the supply of air through the nose is not adequate.

We are a people of mouth breathers. The habit is growing, even with all the work that has been accomplished by the medical profession. One can stand on a busy strcet corner and observe how many of those passing are mouth breathers. Out of every one hundred of those who do not smoke nor chew thirty-five practice mouth breathing. If this condition is allowed to continue it will weaken us as a nation, both physically and intellectually. No one can think as well with the mouth open as when it is closed. The physical and intellectual giants obtain their air by way of the nasal route. To correct this oral breathing requires more than the work of the laryngologist. It requires the support of the family physician.

Croup is a laryngitis that is usually caused by mouth breathing. If there is ample breathing space through the nose and the patient has the mouth closed there can be no croup. In croup the lumen of the larynx is decreased, or there is a spasm of the glottis, both of which are caused by the effect of the cold dry air on the larynx. The ordinary treatments will verify these statements. The inhalation of medicated steam gives relief because the warmth and moisture overcome the laryngeal hyperemia. The emetic treatment gives relief by compelling Nature to throw
out at the offending point moisture which causes relaxation.

Spasm of the glottis from any cause is more casily orercome by exclusive nasal respiration. To illustrate: if water or any foreign body drops into the larynx or trachea, oral breathing will irritate the condition, but slow, deep nasal inhalations will sooth the irritated spot and supply the proper mental stimulus. The oft-repeated sore throat may sometimes be due to constipation with attending autointoxication or exposures, but careful observation will prove to the patient that oral breathing is generally the cause. It is a common occurrence for some persons to retire in the evening fceling well and arise in the morning with a sore throat, all caused by mouth breathing.

There are three classes of cascs that breathe through the mouth, viz.: those that have nasal obstructions and can not breathe through the nose, those that have ample nasal space but lack in mental stimulus to the masseter muscles, and those that are imbecilic. The first class necds operative work for relief. The second class breathe through the mouth only when extremety tired or relaxed. They rarely acknowledge that they crer breathe through the mouth even during slcep, but the condition of the pharynx and not the opinion of the patient should be the guide for the physician. This class of cases should wear an anti-mouth breathing appliance during sleep. Even the physician, retiring late at night, tired and worn out, had better have his mouth tied shut during sleep than arise in the morning with a sore throat, husky voice and a dull headache. The third class of mouth breathers are subjects for an asylum.

The headache coming on during the latter part of the night or on arising in the morning may be uremic, but it is not an uncommon thing to find the case one of lack of nasal respiration. Any one doubting this can easily verify the statement by securing proper nasal breathing. In uremic headache the pain will not cease by changing position in bed, but a nasal headache will cease by closing the mouth and spraying the nares. Excellent results can be had with this latter class of cases by giving them the free and open nose. Then to overcome the old habit of mouth breathing, let them wear the anti-mouth hreathing device every night for three or four months.
In febrile diseases, as typhoid fever, pneumonia, etc., patients will often breathe through the mouth for weeks. The dry parched mouth, cracked lips and sordid teeth should be a condition of the past. There is generally no nced of
this beeause feters do not cause congestion of the schneiderian membrane. The dryness of the nares will give the patient a "stutfy sensation," but this can be easily controlled with mild oily sprays. In fact nothing will be necessary in many cases of fever. If all the respiration is wholly nasal the nose will not become so disagreeably dry nor will the patient's ferer be as high as it would under mouth breathing. Proper nasal respiration will not only give the patient more comfort and rest, but it will increase the oxygen in the blood and thus lower the temperature and respiration. Patients can be taught to keep the mouth closed. The suggestion will be a mental stimulus which acts well on the masseters.

Some writers clain, and with good reason, that the bacillus of rheumatism and tubercular bacillus enter the system by way of the tonsils. The tonsil is a gland and is supposed to have the same function as any lymphatic gland. The normal tonsil stands as a citadel and prevents the entrance of bacteria and toxins into the general system, but the discased tonsil forms a culture field for bacteria and opens the way for entrance into the system. The child is born with tonsils, but not diseased tonsils, and why should the tonsillar gland become inflamed more frequently than other lymphatic glands? The natural lubricant of the mueosa is its own secretion. Remove this moisture and there will soon be a denuded epithelium, which opens the way for bacteria to be taken into the system, and results in a sore throat. This is just what happens during mouth breathing. The cold air evaporates the mucus of the pharymx and the repeated attacks of sore throat leave chronically diseased tonsils.

It is a common occurrence to have a simple rhinitis terminate in a bronchitis. The patient speaks of his "cold having gone to the lungs." The physician speaks of it as having "extended by continuity of tissue." The fact is the rhinitis caused a nasal stenosis, the compulsory mouth breathing caused a pharyngitis and bronchitis which sometimes leads to tuberculosis. The writer does not wish to convey the idea that oral breathing is the direct cause of tuberculosis or any other disease. It does its part in eausing or, at least, influencing pathologieal conditions.

Oral breathing causes relaxation and thickening of the lips. In some cases the upper lip becomes so thickened and shortened that it will not cover the incisors. Such an unfortunate condition can be avoided if the children from infancy
are taught to breathe wholly through the nose. In open mouth cultivates looseness, relaxation and indifference, as is indicated in many of the Lfrican race. A closed mouth cultivates firmness, decision, strength of character and positiveness, as is shown in some of the tribes of the American Indian. The brain is the seat of all important nerve impulses. If the mouth is open the fault generally lies in the brain. The nasal obstructions and the physical deformities that are met in the exceptional cases were aequired cither from habit or inheritance, and even inheritance was due to habits of the ancestors. To overcome a habit it is sometimes necessary to do as Holmes suggested-to begin the correction two or three generations before the child is born.

If the child is taught and compelled to breathe through the nose, and given to understand that oral breathing is absolutely wrong, the nasal route will become a fixed habit. Parents do not understand the necessity of this. They do not understand that good blood is absolutely essential to good manhood and good womanhood, and that this desideratum can not be secured without the requisite amount of oxygen in the blood.

## CONCLUSIONS.

1. All respiration should be nasal.
2. At birth the child's respiration is nasal and not oral.
3. 'The lruman being is the only animal that becomes a mouth breather.
4. Nasal breathing will prevent diseases of the respiratory mueosa.
j. Oral breathing will cause diseases of the mucous membranes.
5. Oral breathing becomes a liabit or a necessity.
\%. If a habit, the fault lies in the brain.
6. In adults the proper mental impulses will correct the habit.
7. In children the habit can be stopped with suggestions or by wearing an anti-mouth breathing device.
8. If oral breathing is a necessity the nose and throat should be freed of all obstructions. Diseased tonsillar tissue in the postnasal space or in the pharynx should be removed. Neoplasms, hypertrophies, exostoses, deviations or anything which interferes with nasal breathing should be removed.
9. Every case of mouth breathing can be improved and most cases can be cured.

# PROPHYLANIS, THE ESSENTIAL FUNCTION OF THE TONSIL.* 

Benjamin H. Oradoff, M.D. CHICAGO.

I believe that prophylaxis is a function of the tonsil. This belief is based on obserrations and studies. That the functions most important to the organism are manifest as soon as the being is ushered into the world is apparent by the fully developed, highly functionizable tonsil at birth. Immunity against the hoards of bacteria that infest the human organism as soon as it becomes a scparate individual is one of the earliest and most essential functions to be established in order that the organism can maintain an independent existence. I propose in this paper to show that the tonsil, for a time at least after birth, is coupled essentially with the function of establishing this immunity.

## PHYSIOLOGICAL DESCRIPTION.

To one attempting a somewhat careful investigation of the literature ${ }^{1}$ concerning the tonsil, it is remarkable how little has bcen written on their functions. By this I mean functions that are real physiological processes, not liypotheses of mystical foundation.

The tonsil is an organ that has attracted the attention of some of the most able men of our land. It has been the nidus for research and investigation along lines of anatomy, their clinical significance, and the technic of their removal. But with all regard for these men and their wellspent energies, they have not solved the problem which gives the tonsil a right for its real existence. ${ }^{2}$ In the present status, then, we may say that the tonsil is an organ having no real important physiological value, that it would probably be a prophylactic step to remove the tonsils of healtliy individuals.

Spicer ${ }^{3}$ gave the tonsil the function of elimination of certain elements from the system. He is most heartily supported by Brown ${ }^{4}$ and others. Fox ${ }^{5}$ allots to the tonsil the power to absorb the products of salivary digestion, and he is supported in his viers by such men as Hill. ${ }^{6}$ A barrier to bacterial inrasion-per orum-is the

[^7]function given them by Gulland. ${ }^{\top}$ He seems to have based his theory on Stohr"s phenomena, which is merely the enormous emigration of leucocytes from the tonsil into the buccal cavity, and the great work on comparative pathology by Metnichnekoff. ${ }^{8}$ Wood ${ }^{2}$ has claimed for the tonsil a primogenial source of leucocytes. If this be true, as lie concludes, then we have been wrong regarding the embryological origin of the white corpuseles of the blood. The function of furnishing an internal secretion comparable to that of the adrenal gland has been advanced by Masini. ${ }^{10}$ Whatever importance may attach to these functions, as well as many others, I will not take space to consider, and to what extent the tonsil carries them. We do know that at the time of life when they are ordinarily remored. the human economy knows no loss. So, then, it would not seem unreasonable to conclude that the function which explains the reason for the real existence of the tonsil has ceased to exist before tonsils are removed ordinarily.

## EMBRIOLOGICAL DESCRIPTION.

The first evidence of the appearance of the tonsil occurs about the fifth month of fetal life. ${ }^{9}$ It develops in the sinus tonsillaris, which is the distal portion of the second visceral cleft or groove, after its separation by the growth of the palatal process. It is in the latero-distal portion of the sinus tonsillaris that the lymphoid accumulations, vessel aggregations and epithclial domgrowtl appear, and this down-growth continues until the sinus tonsillaris is all but filled, the rery proximal portion remaining as the recessus supratonsillaris. This development explains rery satisfactorily the direction the trypts assume, the points on the surface from which the ressels cnter, the absence of afferent lymph ressels, and. finally, the time at which development is begun shows that the function calling for them is one imposed on the organism after dcrelopment had reached quite a high degree of complexity.

When we consider that the organism was far alnng the path of development before there arose that rivalry in the struggle for existence which ultimately meant symbiosis and parasitium, and that here began the function which called for a structure to support it, and finally that the tonsil begins to make its appearance about this time, i. e., late in the process of development and is mature by birth; considering these facts we can

[^8]not but see the happy associations of this most cssential problem which the organism was compelled to meet, and the evolution and resulting functions of the tonsils.

Immediatcly after birth the individual is infested with many different species of bacteria (Miller ${ }^{19}$ has recognized more than thirty species in the mouth of healthy individuals), to which an immunity must be established : to many of these species the immunity once established is permanent and we know them then as non-pathogenic bacteria. From this the period of established immunity lessens in time until they are placed in another class, the pathogenic bacteria. However, were it not for a process by which inmunity can be established in the system before bacteria entering the body have time to there multiply and produce their poisons and in turn be absorbed, the individual would probably sucsumb in most instances; or, in other words, if the individual was compelled to await the multiplication of bacteria within the tractus intestinalis, and the subsequent toxemia and final immunization, the latter would certainly be seldom established. So the tonsil provides nicely for this difficulty by producing immunity not associated with a toxemia and the actual time required is so very short that by the time the system is to labor under the toxemia it is far along in the process of immunization.

## ANATOMICAL DESCRIPTION.

The tonsil may be described as consisting of four structural elements, ${ }^{11}$ the connective tissue capsule with its trabecule, the loose, finely reticulated connective tissue meshes filled with lymph cells, the germinating lymph cells composing the tonsillar follicles, and the crypts with their stratified epithelium.

The peritonsillar glands ${ }^{12}$ are mucous glauds situated in the immediate vicinity of the tonsil and whose ducts empty into the crypts at their depths. It is these glands which keep the crypts filled with a material that scrves as a most excellent culture media for the different species which, on landing within the nasal or buccal cavity, are collected almost iminediatcly into the crypts, ${ }^{15}$ and there so managed that the proper substances are distributed throughout the system and there incite the elaboration of protective substances. In other words, we may say that the crypts serve as the culture tubes for the body, in which the

[^9]vaccine of that particular species of bacteria is manufactured, or, as Good ${ }^{13}$ so appropriately expresses it, "The battlefield in which the first fight occurs between bacteria and the leucocytes." The position of the tonsil has contributed greatly. to the successful exeeution of this function. Were it not for a very important function being enhanced by the position of the tonsil, it would seem to be a serious mistake in nature to place this most susceptible structure where it is to be the subject of serere traumatisin from so many sources.

The tonsil is so located within the grasp of thic muscles, i. e., the muscles composing the pillars and the superior constrictor ${ }^{14}$ that it is mechanically thrust against each bolus of food as it passes by en route to the stomach during deglutition. Its location affords another important factor. The cilia of the nares and accessory nasal sinuses ${ }^{15}$ keep a constant flow of the lymph in which they cxert their power toward the fossa supratonsillaris where it finally accumulates. ${ }^{16}$ It is marvelous, to say the least, when we consider critically the phenomena which exist in the tonsil, viz.:
(a) Emigration of phagocrtic leukocytes ${ }^{17}$ into the buccal cavity giving rise to the so-called salirary corpuscles, ${ }^{18}$ Stöhr's phenomena.
(b) Passing beneath the cryptal epithelium on non-living matter.
(c) The current of lymph that constantly collects within the crypts from the tonsillar surface and sinks beneath the epithelium.
(d) The scrutiny with which the living matter (bacterial) is selected from this lymph current and retained within the crypts.

With these established observations in mind we can readily see how a perfect equilibrium can be maintained whereby a certain species of bacteria remains just long enough within the crypts to elaborate sufficient vaccine which, when transported by this lymph current throughout the srstem, to establish immunity and subsequently return enough bacteriotrophic substances, e. g., opsonins and phagocytes, ${ }^{20}$ to annihilate that species of bacteria from the tonsil, and establish immunity in the system. Stöhr's phenomena serves to avoid the harmful collection of non-living ma-

[^10]terial within the tonsil. The phagocytes select these particles of dust from the flowing lymph and transport them into the oral cavity.

## sUMMARY.

1. Location of the tonsil explaincd. The most suitable point for the certain collection of a specimen of every species of bacteria entering and lodging within the oro-nasal cavities.
2. Stöhr's phenomena explained. The removal of dust from the tonsil, and destruction to some extent of the bacteria within the crypts.
3. Miraculous sclective ability of the eryptal epithelium bettcr understood. The baeteria of the lymph eurrent constantly sinking bencath surface, carrying non-living matter, have an affinity for the contents of the crypts, i. e., the secretion furnished by the peritonsillar glands.
4. Removal of the tonsils in the adult being a prophylactie step, rather than a detriment, the essential function has been prineipally or wholly completed.
5. Why so little distress is brought to bear on the organisms, when it is subjected almost synchronously to invasion by such great numbers of bacteria. Immunity is established through the action of the tonsils, devoid of the usual toxemia associated with infeetion and its subsequent immunization.
6. The function which explains the reason for the real existence of the tonsil.

These facts have been brought to my attention through an cffort to obtain a pathological report on one hundred pairs of tonsils, removed by Dr. Good in his clinics at the dispensaries of the Chicago College of Medicine and Surgery.

Heyworth Building.

## PRACTICAL NOTES FROM A GENERAL PRACTITIONER OF MEDICINE.

George Rowland, M.D. COV́INGTON, IND.

It has been my obscrration, as a general practitioner of medicine, that numcrous people and not a few physicians depend altogether too much upon drugs and medicines alone in the management and treatment of diseases. In sueh instances medicines alone are expeeted to accomplish everything ncedful. The multiplicity of new remedies, alleged to be curative for all the diseases of man, and the avalanche of advertisements fresh from the stcam presses, crowded upon the masses, has much to do with this state of affairs. Patients will always take medicine when they will not take advice, and the physician
knows or should know that it is the adviee they need and not the medicine. The physician whose force of character makes his advice sought after and followed is the one who accomplishes the most good.

Likewisc it has been my observation that there has been and now is too much self-medication by the pcople. And in the instances where medication is right and properly needed the wrong medicines are self-administered. Instances are very numerous of late years of young unmarried men, who, when afflicted and not having been aceustomed to consult a regular physician, consult with their intimate companions, resulting in the laying of the case before a druggist from whom voluminous advice and expensive supplies are secured, with the result of an aggravation of all the difficulties and requiring much time to correct.

Long years ago it was my observation that in the treatment and management of sick people cach individual patient had self-powers, more or less, for recovery, which are known in modern medical language as the opsonins. Such condition is a very important faetor as an aid in the patient's recovery. Not to disturb, not to diminish nor to in any way injure such power was constantly uppermost in my mind. Numerous times when a stomach needed to be emptied in great haste one or two pints of the warm normal salt solution promptly introduced into the stomach were vastly superior to any emetie usually found in medicine cases, thus saving the patient's self-powers and hastening recovery.

With the rapid and modern increase of our knowledge of infection, contagion and inoculation. these terms have a very much lessened value. We have learned now that there is no sharn line of distinction between infeetion, contagion and inoculation, for in a single disease any one of the three methods may be operative. As an instance, in a disease like scarlet fever it may be conveycd by milk and is, therefore, infection, by direct eontact or contagion, and by the injeetion of some fluid, as that of saliva, or its falling upon an abraded surface, and is, therefore, inoeulation. Ind, under our statute law, in the cases of infection and contagion the rules of quarantine should be observed, but not so literally under the third instance. I only mention this to show the impropriety of the indiscriminate use of the terms infection, contagion and inoculation.

The rapid progress of eivilization and of human knowledge will soon bring the future physician to the point where his chicf duty will be not to treat disease but to point out how it may be prevented. The prize fights and football
games, with their results, may continue in dcfiance of the humane societies; the profligate, the inebriate and the glutton may persist in spite of the reformer, and through all the numerous avenues of human aetivities the physician's warning will continue to go unheard, but from all this vexatious turmoil and confusion there will still be heard the physician's roice pleading prevention. Witness the cases of blood poison and lockjaw after each of our notorious and glorious celebrations of July 4.

The first obserration of a damaged or fissured nipple, soon after delivery, slould put the medical attendant on his guard to prevent mammary abscess. These troublesome things have very seldom appeared of late years, and can always be prevented by timely and proper attention. Such abscesses are produced usually by septic infection through erosions, fissures or through the external orifices of the milk ducts and the accumulating engorgement of stagnant milk. By enjoining rest in bed, rest of the inflamed organ and not allowing the child to suckle from it. administering saline cathartics, abstaining from fluids, feeding oatmeal gruel, giving proper attention to the nipple, and, last but not least, by the application of numerous adhesive strips one and one-fourth inch wide, firmly binding and compressing the mammary gland to the extent of squeezing out the blood, like water from a sponge, thus continuously preventing the breast becoming engorged with blood. the condition may be controllcd. For many years it has been my custom to apply these adhesive strips in such a manner as to produce immediatc and permanent relief.

Chloroform should never be administered to a patient under any circumstances cxcept by a physician of experience. It is always a dangerous remedy, and when given the effect should be watched with extreme care. The patient should receise it fasting. The room should be well aired, quiet, with but few attendants, and no excitement. The patient should be recumbent. The pulse, the respiration and, in fact, the patient as a whole should be earefully and continuously watched. No rule can be given as to how much chloroform should be administered. Nationality of patients is an important factor. An Trish man or woman will require fire times as much chloroform as a German, a Portugucse, a Swede or a full-blooded negro.
In gunshot wounds the wound of exit is always very much larger than the wound of entrance, and it is always important to sccure copious drainage in the direction the missile has passed. This is important to prevent infection of adja-
cent tissues. For the first forty-eight hours the more frequently the wound is properly dressed the better the results that will obtain. This statement will meet with objections from numerous practitioners, but with an experience of nearly forty years' practice, with such numbers as usually fall to the lot of a general practitioner, I have no reason to abandon the method.

The rapid application of cold and frcezing mistures to produce insensibility for the purpose of performing an operation should be condemned. The reason for this is that after the tissues have been frozen the cells fail to regain their former functions when the normal temperature is rcstored, and the blood does not enter the involved area, and hence a local death.

In the treatment of acute rheumatism the administration of medicines is usually of less importance than the correction of the habits and customs of the patient. Advising the patient what he should not do would fill a large volume, but the proper things he should do are simple, ferw, plain and easily understood. A comfortable bed, a room temperature of about $i 0$ to $i 5$ degrees F., a full hot bath, sufficient purge, every affected joint wrapped well with best commercial cotton, an abundance of cold water and lemonade without sugar, any kind of light broth and crackers, bread and milk and no other diet, a Dover powder as required in a capsule to secure rest, and that is about all. For a continuous medicine a teaspoonful of colored sweetened water every two hours will come as near meeting all the requirements as any or all the multiplicity of medicines recommended for rheumatism. It must be remembered that the true nature of what is alleged to be acute rheumatism is not known. There is no speedy method to carry these cases of acute rheumatism on to an ultimate successful recorery. Time is an important factor. Too much medication and frequent doses are very annoring and burdensome to the patient, denying him the opportunity to recover.

In the management of conrulsions of babies it has been my obscrvation that it is much easicr to treat the patient than to manage the excited parents, friends and a room full of attendants. There is really no eause for alarm in infantile convulsions. Proper attention will give good results. Too much domestic interference is far more injurious than otherwise. It is natural for some babies to have convulsions. I have told mothers that they may look for convulsions in their babies and not to be alarmed. There is a taint in the general makcup of the babe and an inherited predisposition transmitted. When the proper environments are met an explosion of con-
vulsions ensues. To the layman the scene appears frightful, but to the medieal attendant it is a physical objective symptom, full of numerous valuable suggestions for its proper successful treatment.

The early medical writers urgently recommended that for the treatment of uterine hemorrhage it was always important to clevate the foot of the bed from twenty to thirty inches. That same suggestion is equally as useful in the management of acute diarrhea or acute dysentery. Many years ago it was my custom to take advantage of such position, especially in the treatment of young children and babies. A few years ago an Irish girl, aged 20 years, eame under my eharge from another physieian. Her previous health was good in every respect. She was attacked with acute dysentery. I was called in the night, and so violent was the ease that the sister of the patient informed me that during the previous fifteen hours the patient had been assisted upon the commode 150 times. She was being rapidly reduced and in much distress. Immediately the foot of the bed was raised thirty-six inches. This was objected to strcuuously for a few hours, but the objection was disregarded, and in the sueceeding twenty-four hours the patient was assisted upon the commode but three times. Little or no medication was required. After a proper time the bed was gradually lowered and the patient went on to a successful recovery.

There is no question in my mind that the frequent operations for the removal of the appendix for the treatment of appendicitis are very often uncalled for and should be condemned. I have personal knowledge that an appendicitis operation had been urgently recommended and met by a refusal on the part of the patient and friends, and the patient went on to a good recovery. The operation for appendicitis is not a dangerous one, but there is too much of a widespread tendency for early operations, and the patient's recovery is attributed to the removal of the appendix, whereas the patient might have recovered without an operation.

## WHAT THEY SAY ABOUT US

The Journil of the Indiafa State MediCal Assoclation is the latest addition to the list of state publications. It is a eredit to the organization, and the editor, Dr. A. E. Bulson, Jr., of Fort Wayne, is to be congratulated upon the splendid appearance and table of contents of the first issue.-The Journal of the Michigan State Medical Society.

Tire latest recruit in the ranks of medical journals published by and for the medical profession is The Jourdal of the Indiana State Medicil Assoctation, the first number being that for January, 1908. To say that it is a fine tribute to the Association which it represents is merely to give no more than due credit to the able editor, Dr. Albert E. Bulson, Jr., Fort Wayne, who for many years edited the Fort Wayne Medical Journal-Magazine with credit to himself and his publication. But Dr. Bulson, with rather musual broadmindedness, has reeognized that the proprietary journal can not serve the best interests of the medical profession so well as the publication of and for the organization representing the whole of the profession, and he has, therefore, discontinued the Fort Wayne Medical Journal-Magazine, or, rather, merged it with The Jourail of the Indiana State Medical Association. That this newest of state journals will be welcomed by the physicians of Indiana, we have no doubt; that it will greatly aid in perfecting and maintaining the urganization of the medical profession in that state is a forcgone conclusion; that it will keep the place in the first rank of medical journals to which it is entitled by this initial number, may be safcly believed. And not the least pleasant thing to note in regard to the newly-born journal is the statement that it will adrertise no preparations other than those of the Pharmacopeia, the National Formulary, or such as have been approved by the Council on Pharmacy and Chemistry of the American Medical Association. Some state journals-notably New York-still maintain that they will not accept the ruling of the Comncil alone, but will be guided by individual judgınent. "Individual judgment" is not worth a rap when one is dealing with a bunch of liars, and of all liars the nostrum man is king. He can tell more lies, of more kinds, in more ways, with more smblance of truth, in a more sanguine and apparently truthful way, with more persistency, more deliberately and with greater profit-to himself-than any cuss that has yet been discovered. It takes time, patience and much money to disclose thesc lies, and all these things are being spent by the Council-but not by any state medical organization or its publication. As a natural result, we find that the profession in the great state of New York is having foisted upon it, through the pages in its own journal, some nostrums for the presence of which the physicians of Indiana will not have to blush with shame.-California State Journal of Medicine.

# THE JOURNAL <br> OF THE <br> <br> INDIANA STATE MEDICAL ASSOCIATION 

 <br> <br> INDIANA STATE MEDICAL ASSOCIATION}

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

## MARCH 15, 1908.

## EDITORIALS

## A PLEA FOR THE ASSISTANCE OF THE COLNTY SOCIETY SECRETARY.

Before the publication of the initial number of The Journal we wrote to every county society seeretary whose address we could obtain and made a courtcous request for cooperation in making The Journal successful as an organ of the whole profession of the state. We requested every secretary to furnish us his correct name and address, the frequeney and time of meetings of his respeetive soeiety, complete reports of every meeting, and as many news notes and personals concerning the profession in his locality as possible to secure. We fully explained that it was our intention and desire to make The Jourval of particular interest to every physician in eaeh county in the state, but that our efforts in this direction would not meet with the best suecess unless we could have the cordial and willing assistance of the county secretaries to whom we are rightfully entitled to appeal for cooperation.
We are pleased to acknowledge the fact that many of the secretaries promptly eomplied with our request, and are now our most ralued assistants by continuing the work begun. Other secretaries have been repeatedly urged to give us their cooperation before we could stimulate them to action, while some secretaries have absolutely failed to make any response of any kind whatsoever. Our County Society Direetory eontains some blanks as a result of this apparent indifferance or negligence.

Three questions have been asked every county society sectetary, and in some instances the questions have been asked a number of times, the information being desired for our directory'. The questions were: 1. Give your eorrect name and postoffiee address. 2. How often does your society meet? 3. What day does your soeiety meet? Some of the seeretaries answered all of the questions promptly; some answered the questions incompletely and seemed provoked because we requested more complete information; some wrote in answer to repeated letters that they had answered the questions onee and did not know why they should do so again, while a few entirely
ignored the repeated requests. One sectetary wrote us a long letter to the effect that he had no time to furnish suel information as we requested, and we reminded him that with the same expense of time and effort that he put on his letter to us he could have furnished us with the information desired and a report of several meetings of his county societr.

Now, the truth of it is, we are asking for that which it should be a pleasure for any eounty secretary to furnish and for which we should not have to beg. No secretary is so busy that he can not give us the little we ask. And this reminds us that it is always the busiest men who have time to do things and are always accomplishing something which not only makes for themselves but for others as well. We each owe something to others as well as ourselves, and in the practice of medicine if we pursue a narrow, selfish eourse we will never make any advances.

The Journal has been started with a view to broadening and increasing the number of benefits which the Indiana State Medical Association affords its members. The Joursal demands an enormous amount of work on the part of the editors, far more perhaps than the average reader jmagines, and this work is earried on most of the time when rest from the duties of regular labor would seem indicated. But The Jourval work is carried on cheerfully and uncomplainingly in the hope that it is of some real service and value to the medical profession of Indiana, and as such will be appreciated. To be of most service The Jourval must be the organ of all the physicians, and as such we must report the proceedings of the rarious county societies and information of interest regarding the members of those societies. How essential it is, then, to have the assistance of the countr secretaries in procuring this information, and in the interest of the profession how willing the secretaries ought to be to furnish the information. And how it lightens our burdens and how it helps us to make Tife Jourval better.

We want to make this a personal appeal to the sceretaries for the cooperation which we have solicited. We have our faults and they are many, and we may fail to properly indicate our appreciation of assistance, but our shortcomings in this direction, often due to exactions upon our time by the burdens which fall upon our shoulders, should not be considered as an evidence of lack of appreciation of assistanee. On the other hand, even our failure to give proper credit should in no way influenee any person in not giving what he can to the cause of the medical profession as a whole.

## THE INSURANCE EXAMINATION FEE.

Following the report of the Committee on Insurance of the American Medical Association and the recommendation that the county and state societies take such action as is deemed wise and proper to secure for medical men five dollars as a minimum fee for medical examinations for life insurance, the medical men in several states, as a result of mited effort, have succeeded in securing favorable action from a large number of insurance companies upon the request for a flat five-dollar rate. Of the three large New York companies which had reduced the fee to three dollars-the New York Life, the Mutual Life, and the Equitable Life-only the New York Life still continues the three-dollar fec, the others having restored the five-dollar rate.

Some of the best managed, and therefore the safest, companies have always paid the fivedollar rate in the warranted belief that a trustworthy medical examination for life insurance is worth five dollars, and that with the payment of such a fee it is possible to regularly secure men of ability and experience to act in the capacity of medical examiners. Some of the newer and smaller companies belong to this list, but there are many companies who, from false ideas of economy, continue to pay less than five dollars for their examinations.

Among those companies paying the five-dollar rate for life insurance examinations are the following:

American National Life, Galveston, Texas.
Boston Mintual Life, Boston.
Citizens' Life, Louisville, Ky.
Commonwealth Life, Louisville, Ky.
Capital Life, Denver, Colo.
Colorado Natioual Life, Denter, Colo.
Connecticut Mutual Life, Hartford, Conn.
Equitable Life of New York.
Etna life Ins. Co., Hartford, Conn.
Fort Worth Life, Fort Worth, Texas.
Guarantee Lifc. Houston, Texas.
Manlattan Life, New York.
Massachusetts Mutual, Springfield, Mass.
Mutual Benefit Life, Newark, N. J.
Mutual Lifc of New York.
National Lifc, Montpelier, V't.
New England Mutual Life, Boston.
Northwestern Mutual Lifc, Milwaukee.
Pacific Mutual Life, Los Angeles.
Pacific Mutual Life, San Francisco.
Provident Life \& Trust Co., Philadelphia.
Penn Mutual Life, Pliladelphia, Pa.
Reliance Life, Pittsburg.
Southwestern Life, Dallas, Texas.

State Mutual Life, Rome, Ga.
Southern States Life, Atlanta, Ga.
lt will be observed that not one of the Indiana companies is included in the above list, and yet there is no logical reason why they should not pay the five-dollar rate. If the Indiana medical men will take such a stand as has been taken by the doctors of Texas, Kentucky and some other states, the Indiana companies will very soon see the necessity, if not the justice, of paying the five-dollar rate, which is a respectable as well as a just fee for the services required.

As long as the medical men of Indiana remain ununited and inactive in the consideration of this question, just that long will the insurance companies of Indiana continue to impose upon us. What has already been accomplished in securing a restoration of the five-dollar rate by such strong companies as the Equitable and Mutual of New York has come through the mited action of medical men in other states. We have not contributed to the movement. But we should not wait for medical men of other states to accomplish for us all that can be accomplished in the way of securing proper recognition from the Indiana insurance companies, but let us at once put forth an effort to secure our just dues.

To bring about the desired results in this life insurance examination question, it is only necessary for the mombers of the various county societies in the state to individually and collectively refuse to make any complete life insurance examinations for less than five dollars and then religiously stick to the decision. United action on the part of even a majority of the county societies of the state would place all of the life insurance companies paying less than the fivedollar rate in a decidedly uncomfortable and dangerous position in Indiana. The cause is a just one and entitled to the consideration and action which we recommend.

## THE GREAT IVHITE PLAGUE.

In the light of our present knowledge of tuberculosis and the necessity for prompt recognition of the disease in order to accomplish results for the patient as well as protect those with whom the patient comes in contact, it would seem unnecessary to call the attention of the medical profession to the known means of promptly and certainly diagnosing this dread destroyer. But as a matter of fact there are medical men in every community who are constantly failing to rccognize tuberculosis until it las reached that
adranced stage where the best results for the patient have been reduced to the minimum.

Cases of advanced pulmonary consmmption are very frequently diagnosed by supposedly good physicians as "chronic stomach disease," "liver trouble," "chronie la grippe," "chronie bronchitis," ete., until the disease progresses to the point where even a layman ean make the diagnosis and it is too late to accomplish such benefit for the patient as would have been possible had correct diagnosis and appropriate attention been adopted earlier in the history of the disease. Some physieians never make a diagnosis of pulmonary eonsumption until the afternoon fever, with flushed face, the steady loss of weight, the night sweats, and the prolonged cough with its attendant expeetoration of purulent material, conelusively points to the nature of the disease. Other physicians wait until tuberele bacilli are found in the sputum before making a diagnosis of the disease, apparently forgetting that when tuberele bacilli are found in the sputmm the disease is already well advanced.

We owe it to ourselves as well as our patients to make an carly diagnosis, and the earlier we detect the disease the better the chanees of securing good results from appropriate treatment.

There is now no exeuse for neglect on the part of the physician to have the sputum of any patient examined bacteriologically. If he is not competent to do this work, the sputum should be sent to some one who can do it, and our State Board of Health now has a laboratory where such examinations are made and without expense. The existence of tuberele bacilli in the sputum is an infallible indication of the existence of tuberculosis. The presence of elastic fibers in the sputum denotes destruction of lung tissue, and in a large proportion of cases this also indieates the existenee of tubereulosis.

But of particular importance is the method of diagnosing the disease before tubercle baeilli are detected in the sputum, and here we refer to the injections of Koeh's tuberculin for diagnostic purposes and the more recently used ophthalmotuberculin reaction.

The method of employment of these tests is so fully given in late text-books and current medical literature that it is unnecessary to enter into description in detail. Suffiee it to say that by the injection method the patient is given a dose of one milligram after a careful two days' record of temperature, taken every two hours, has been made. If no reaction occurs a larger dose of two or three milligrams is given. Reaction occurs from ten to fourteen hours later, the tem-
perature often reaching 103 or 104 degrees. The reation is considered significant, but with the view of eliminating a possible eoincident rise of temperature from other causes it is adrisable to repeat the test two or three weeks later, when if a similar reaction is secured the diagnosis of tubereulosis may be considered fairly eonclusive.

The ophthalmo-tuberculin reaction, whieh has come into prominence during the last few months, depends upon a local rather than a systemic reaction for its value as a diagnostic aid. A one-half or 1 per cent. aqueous solution of dried Koch's tuberculin is employed, and one or two drops of the solution, freshly prepared, are instilled in one of the patient's eyes. A local reaction, consisting of the development of a conjunetivitis with stringy secretion, occurring from three to twelve hours later, may be considcred fairly positive as to the presenee of tuberculous infection in the system of the patient.

While there may be some inaceuracies in the results seeured from one or both of these tests, they are so generally recognized as being distinctly of value as diagnostic aids in a very large proportion of cases that it is unwise for us to ignore their value, and we should employ them in those suspected cases in which positive diagnosis ean not be arrived at by any other means. In no other way is it possible for us to do justiee to our patients or to ourselves.

## INYESTMENTS FOR THE MEDICAL MAN.

"Get rich quiek" schemes seem to have a peculiar fascination for the average medical man, if we can believe the stories of our friends who have sustained losses and the reports from promoters who in confidence confess that the most readily secured patron is the doetor. And the worst part of it is, the greater the swindle the more likely the doetor is to invest, providing a smooth-talking promoter gets hold of him. Worthless mines, stocks, bonds, oil wells, patents and numerous other things hare been the means of indueing the doetor to part with his hard-earned money. The doetor lias also been a ready patron of numerous companies, without tangible assets, organized purely with a view to produce profit for the promoters and in which the innocent doetor has invested on the supposition that he was being let in "on the ground floor." These fraudulent companies are usually not satisfied with the returns from the sale of their worthless stoek, but manage to secure, on one pretext or another, numerous assessinents or
adrances which still further blceds the stockholding victims. If, perchance, the doctor happens to get into a company that really develops into a profitable conccrn, the ehances are ten to one that the large stockholders or promoters will succeed in some way in securing his interest without affording him an opportunity of securing profit, and perhaps not even permitting him to get off without loss.

If the doctor desires to invest his surplus income in a way that promises to make the investment safe as well as profitable, he can do no better than buy productive rcal estate in his own community. In this connection we shall quote the riews of threc prominent men:
"Every person who inrests in well-sclected real estate in a growing section of a prosperous community adopts the surest and safest method of becoming independent, for real estate is the basis of all wealth."-President Rooscvelt.
"Real estatc is the best investment for small savings. More money is made from the rise in real estate values than all other eauses combined. To speculate in stocks is risky, and even dangerous, but when you buy real estate you are buying an inhcritance."-William Jennings Bryan.
"No investment on carth is so safe, so surc, so certain to enrich its owner as undeveloped realty. I always advise my friends to place their savings in realty near some growing city. There is no sueh savings bank anywhere."-Ex-President Cleveland.

## THE GRANTING OF PATENTS TO PHYSICTANS.

"IVhy should not a physician enjoy by right of patent the fruits of his genius as well as anyone elsc?" This was the trite question recently propounded to us by a physician.

The answer to the question depends entirely upon the purpose a man has in the practice of medicine. If finaneial gain is his goal, then naturally he can sec no wrong in an attempt at eontrolling the output of something intended for the benefit of the human race. If, on the other hand, he has entered the practice of his profession in the true spirit of the Hippocratic oath he has taken, he would no more think of asking of a fellow-practitioner a royalty on a mechanical idea put into working form than he would refuse to divulge without remuneration a peculiarly efficacious drug or combination of drugs in a given set of symptoms or disease. Imagine for the moment Koch demanding of the scientific world a bounty for his discovery of the
tuberele bacillus, Lister for his original work in asepsis and antisepsis, and Jenner for his discorery of vaceination. A right-minded worker in any vocation will receive his reward in one form or another just as Jenner did in his award of $£ 10,000$ from Parliament. If the compensation be not monetary, then the knowledge alone of haring done mankind in general a service, or having made the world better for his existence, is a reward, the measure of whieh can not be taken.
That moncy is not only a comfort but a necessity of life there is no disputing, and the physician owes it to himself and to his family to be fairly paid for his serviees and skill, but that he should so debase his calling into a trade as to demand a special monetary reward for a scientific achievement, mechanical or otherwise, is certainly not in kecping with the highest ideals of our profession.

## A SEQUEL TO THE DIVISION OF FEES.

Recently there has come to our notice one of the sequcls of the baneful influences exerted upon the lay mind by the pernieious practiee of division of fees in surgical cases.

Living in a small town, within the confines of which an unscrupulous doctor bartered in "drummed up" operative cases, a woman underwent repeated aente attaeks from a chronic, recurring appendicitis and pelvic inflammation. Naturally cnough, relief by surgieal intervention was not accepted, because of the impression that she was merely another one of the victims intended for mulct. Subsequently she suffered with similar reerudeseences in two different cities, and finally in her suffering aceepted operation as a dernier ressort. As might be surmised, she suecumbed, leaving four motherless children, besides a husband, who doubtless blames the operation for the loss of his wife, whereas, in reality, a timely interval operation would, in all probability, not only have cured the patient, but prerented much needless suffering for her.

Just how long a physician believes he can pursue the nefarious practice of trafficking in the misfortunes of others without coming into his own at the hands of his clientcte is a matter of little coneern as eompared to the greater harm he is eapable of bringing upon the profession and public at large in his vieinity. The time has eome when the "eommission man in medicine" no longer merits the protection of honest praetitioners of medieine, and the quickest and surest way of remedying the eril is by publicity. Abuses in our profession, so flagrant as this has come to
be, should no more be exempt from public scrutiny than the recently exposed wrongs in the financial world. Indeed, if we mistake not. cren greater protection from such erils should be accorded the public because rital interests and not property rights are at stake. Once let the light shinc in and the public will do the rest.

## CHLOROFORM YS. ETHER ANESTHESIA.

It would seem that the superiority of ether over chloroform as a general anesthetic for routine work had, in point of safety, been established beyond all doubt or cavil, and yet there are those who continue to jeopardize their patients' lives three times as much with chloroform as would be done by the use of ether.

As is well known, the mortality from chloroform anesthesia has been rariously estimated at from one in two thousand to one in five thousand, while that of ether has been found to be one in twelve thousand to one in twenty thousand. And not only has the ancient conception of kidney irritation by ether been overthrown, but it has been definitely proven that chloroform has not only just as marked an effect on the kidneys, but a more prolonged one. Furthermore, the obscrvations of Bevan, Favill, and others establish berond a question of doubt that the condition of acid intoxication or hepatic insufficiency, so much more common after chloroform than after ether, bids fair to become no negligible quantity. The only possible time when a choice might legitimately be made in favor of chloroform would be in intracranial work where the question of rascular tension might be of importance.

In riew of these facts, can the surgeon who continues to demand chloroform anesthesia feel anything less than a sense of guilt for a chloroform fatality when he has at hand an equally, if not more, efficacious agent with a known mortality of only one-third that of chloroform?

## SCIENTIFIC EDITORIALS

## GASTRO-INTESTINAL DISEASES.

The systematic review of current medical literature tends very naturally to make one believe that this is an age in which gastro-intestinal diseases stand prominently in the foremost place of subjects which interest the progressive physician and surgeon. The adrances of chemistry have converted much, that was purely theoretical and based upon hypothesis a few decades ago, into al-
most absolute knowledge. Investigators, in their study of metabolism, liave made clear much that was formerly obscure. A better knowledge of chemistry, physiology and pathology, and their intimate connection in the investigation of diseases of the gastro-intestinal tract, has been of invaluable assistance to the physician and surgeon in their cfforts to afford relief to suffering liumanity. In addition, abdominal surgery has aided much in the endearor to place the diagnosis and treatment of these diseases upon a firm and solid foundation. Is a result of the painstaking efforts of scientific investigators, both phrsicians and surgeons, quite a surgical literature is to-day conspicuous. That much has already been accomplished can not be questioned; that greater adrances may be expected is the candid opinion of erery member of our profession.

Notwithstanding the fact that marked adrances have been made; notwithstanding the fact that careful macroscopic, microscopic, bacteriologic, chemical and surgical investigations have made clear many problems; there still remain many indefinite and unsettled questions which can only be solved by a combined effort on the part of both the physician and the surgeon. In other words, not only the solution of unsettled questions, but that the rank and file of the profession may understand and fully appreciate those problems which have been solved and made clear, demands the earnest and hearty co-operation of wery physician and surgcon. Until such a cooperation is accomplished I am satisfied that the general profession will occupy the same position toward many gastro-intestinal diseases that it did ten years ago.

While the majority of us believe that some discases are purely medical, and that others are purely surgical, in character, we as a profession must recognize the fact that not a few gastrointestinal diseases occupy a borderland position. This fact alone, it seems to me, is sufficient to justify the assertion that ideal work in the diagnosis and treatment of sucl diseases must of necessity demand the co-operation of both physician and surgeon.

Many vexed questions, pertaining to diagnosis and especially treatinent, very naturally arise and call forth a difference of opinion between the physician and the surgeon. According to Ochsner, neither is likely to be able alone to form a just opinion, because each naturally sees principally the failures and not the successes of the other. In order that these differences may be eliminated as speedily as possible, it is essential, on the one hand, that the surgeon does not ignore the good work already accomplished by the physi-
cian, and, on the other hand, it seems most important that the physician should make a regular practice of witnessing surgical operations. Both physician and surgeon must work hand in hand to discover the etiology of a disease, to make its diagnosis and prognosis certain, and to formulate correct therapeutic indications for the same. Many of the results in the realm of gastro-intestinal diseases we owe to the physician, and many we owe to the surgeon who actually makes autopsies in vivo. However, in spite of the numerous researches and statistics from both sides, they have not completcly elucidated many most vital questions.

Unfortunately, at the present day, in the treatment of gastro-intestinal diseases, we must recognize two extremes, namely, the surgeon who not only fails to recognize a disease as being purely medical in character, but is eager to resort to surgical interference; and, on the other hand, the physician who not only refuses to recognize the value of surgery in certain diseases, and in case he docs, fails to refer his patients to the surgeon at an opportune time. Such extremes do not indicate a harmonious working together of the profession; they do not indicate a working of the physician and surgeon, hand in hand, with the idea of formulating correct therapeutic indications. Granting that there is much room for improvement on the part of both, it can not be denied that, at the present time, the surgeon's word regarding many gastro-intestinal diseases carries the weight of authority, and already almost identifies an early operation with a radical cure. However, he may any day be surprised by discoveries of progressive physicians which will eause certain operative procedures to meet the same fate as did tracheotomy in true diphtheria. While we are awaiting the arrival of this fortunate epoch, the profession as a whole, in justice to both the physician and the surgeon, must limit itself in any given case to protecting the patient from the two extremes-eagerness to operate, and failure to recognize the right time for operation.

There are probably no pages in the history of surgery that are so encumbered with descriptions of useless methods as those dealing with surgical interference in gastro-intestinal diseases. Various and numerous have been the methods of technic which have been advocated, and to-day it is an easy task to find an author who is willing to advocate something new. The ever constant and laudable striving after perfection by investigators is to be commended. The steps upon the road to success have been infinite in number, and yct they have not all been steps in a forward direc-
tion. Even to-day the subject is not free from the incursions of the eager surgeon, enthusiastie as to the claims of his newest methods, despite the fact that such methods are uncecessary. No one will deny the fact that it will be a very difficult task for a surgeon to advocate any one method which will receive universal acceptance. However, when such a method has been established "it will undoubtedly combine in the highest degree two essentials--simplicity and safety."

The same is true of the countless pages in the history of medicine that are so laden with useless descriptive methods pertaining to the diagnosis and treatment of gastro-intestinal diseases. As with the surgeon, the steps of the physician have not all been in a forward direction. Notwithslanding the great number of ingenious and complicated chemical methods which have been derised, the daily toiler in this field of work endeavors to make his diagnosis by the use of methods which are extremely simple. Success does not ahways follow his earnest efforts. and he is ofttimes unjustly criticized on account of his inability to make an early diagnosis of a disease, in which properly directed and early surgical interference would in all probability be followed by most brilliant results. On the other hand, we ofttimes hear unjust criticism of the surgeon for his early exploratory laparotomy in a case where the physician finds his methods insufficient for the making of a positive diagnosis. However, it is a well-known fact that where the physician shows a deficiency in his work, a careful perusal of medical literature will show a surgeon keeping pace with him.

In general, quoting Dr. George W. McCaskey's words, it may be said that every case of progressive and intractable stomach disease, especially if developing in an otherwise healthy patient, should not be allowed to continue for more than four or five weeks without an accurate diagnosis being made by a competent physician. If the patient does not improve with favorable environment and proper local and general treatment, but instead grows progressively worse, there comes a time when an exploratory laparotomy should be advised for the twofold purpose of determining the presence or absence of a neoplasm and its removal if present. The same will apply to all diseases of the gastro-intestinal tract. If such a rule were followed by every physician, the skilful and competent surgeon would be enabled to obtain results that can never be obtained in any other way.

While it is the duty of every physician to improve his methods of investigation in order that
he may do his work well : while it is his duty to assist the surgeon in securing better results, and while he deserves censure for failing to perform this duty, yet. on the other land, the primary essential of the surgeon is that he be a competent man. He must take a broad and compreliensive view of the subject. He should show a tendency to be conservative and not too radical. His early experience and training should be of such a eharacter as will enable him to choose wisely between the operative and non-operative. A four, eight or twelve weeks* postgraduate course will not, and docs not, make him a competent surgeon.

The late Mr. Greig Smith fixed the surgeon's standard of attainments for abdominal surgery in these words: "To be prepared, at the appearance of any complieation, to apply the best known surgical teclinics ; to do what is wanted, and no more than is wanted; to have the manner and method of each procedure mentally laid down in clear and definite lines, and to perform the operation in a steady, straight-forward, workmanlike manner, through the endless complications that may arise, is no trifling eall on the capabilities of a human being. Much of it may be learned by intelligent practice at the expense of the patient; much may be learned by careful study and practice on the dead body, but most of all will the young surgeon derive information from close and personal attendance at the operations of our great masters."

Gastro-intestinal surgery is no longer a field for legitimate and rersatile experiment. Certain fixed and useful laws and customs have been laid down by the dearly bonght expericnee of great men. The surgeon in this field of work ought to begin fully equipped with suel knowledge as has been gathered for him. Good work must neeessarily imply the learty eo-operation of good, honest and competent physicians and surgeons. Both are essential; both must work hand in hand, as neither plysician nor surgeon can ever lope to attain brilliant results in this work alone and unaided. Alois B. Grafram, M.D.

> Willoughby Bldg. Indianapolis.

## EYE-STRALN AND WHO SHOULD TREAT IT.

## A PLAIN TALK TO THE GENERAL PRACTITIONER.

Erery specialist should know something of general medicine, and every general practitioner should know something of the different specialties. It is a lamentable fact that the ophthalmologist finds it very difficult to induce physicians to read his papers or give lim a hearing. This
eomes partly from the notion that the eye is too mysterious and obscure for the average man to expect to know much regarding it. Then, too, ophthalmology has been a special field so long that it scems more divorced from general medicine than any of the other specialties.

Whenerer any field is ignored by the regular it offers a good opening for the irregular and the quack. We see this in the prosperity of the osteopath, due to neglect to teach massage in our medical schools, and the prominence of the Christian Seientist, dne to the indifference of physicians to the great power of the mind orer the body. And now, for similar reasons, we see mechanics, merchants and peddlers encroaching upon the field of ophthalmology, due to the failure of the general physician to reeognize the vital importance which eye-strain bears to eve disease and the necessity of haring it corrected by medical men.

Let us consider together, then, doctors, a few of the important points about cye-strain-something you can not afford to ignore, for many of you are yourselves sufferers personally from this affliction and you lave many patients who will go unrelieved unless you give this subject due attention. Seek not to brush it away with any remarks about exaggeration-that is not logical. Because some claim too much for this factor as a cause of suffering is no reason for deelaring that it is not a factor, nor for ignoring its importance.

The first man to draw the attention of the profession to this matter, in any prominent way at least, was not an eye specialist but a neurologist, Dr. s. Weir Mitchell. of Philadelphia. It is true that we have to-day some oculists. like Gould, for instance. who go to an extreme in attributing so many ills to eye-strain, but many oculists, and the majority of the profession. unfortunately, go to the other extreme, almost ignoring the subject altogether-far worse for the poor sufferers as well as for the profession. The truth as usual lies between the extremes. Eye-strain does not cause all the ills of life, and its remedy, glasses, should not be regarded as a panacea. But there are many symptoms due to eve-strain, and they will not yield to any treatment but the proper adjustment of glasses. This is a eommon, everyday experience with the oeulist, and is becoming so well known to the intelligent laity that they seek the relief experieneed by their friends or suggested to thcir own good sense when they note the aggravation of their symptoms on using their ejes constantly, and the relief after giving them rest.

Eye-strain canses two kinds of symptoms; the
first are localized-congestion and inflammation of the eyelids, styes, chalazia, and in extreme cases possibly inflammations within the eyeball itself. The other kind of symptoms is of a reflex or nervous character. The muscles of accommodation and fixation of the eyes are constantly at work, or practically so, when we are awake, the hardest work being done, of course, when used at close range and upon fine objects. Normal eyes do this work usually without trouble. The hyperopic or short eyeball requires excessive action of the focusing muscle to make clear pictures on the retina, and the astigmatic eye requires unequal action in different meridians while the fixing muscles, if not properly lalanced, are kept parallel only by constant effort. This cxcessive and unusual work, continual "nagging" in many cases, gives rise to nervous symptoms, most frequently frontal headache, sometimes occipital or temporal pain, occasionally nervous indigestion, dizziness, nausea, extreme nerrousness and insomnia. A long continuance of such symptoms may seriously affect the general health. It is no uncommon thing to hear parents say that their children are in much better health since they began to wear glasses, and the explanation is easy, if they are relicred of headache, insomnia or nerrous indigestion.

All thoughtful readers of this article will probably concede the truth and reasonableness of the above position. But what shall we say of those who claim that serious nervous diseases, even epilepsy and insanity, may be due to eye-strain? One is almost tempted to question the sanity of those making such extravagant claims. Eyestrain might aggravate such affections but surely could not cause them. Migraine probably has many causes, an inherited predisposition being a frequent factor, with indigestion, worry, overwork, eyestrain, female troubles and other factors as the exciting causes.

Now for the practical part. These symptoms of eye-strain show disturbance of function if not organic disease of an important part of the human anatomy. Their relicf belongs to the domain of our profession. In other words, the prescribing of glasses for cye-strain is practicing medicine. Unfortunately our medical law originally exempted non-itinerant opticians, from fear that their opposition would defeat the bill. The last legislature did worse, creating a board of optometry to license opticians for this part of the practice of medicine.

As every physician resents the prescribing of medicinc by the druggist, so every oculist has equal reason to object to the prescribing of glasses
by opticians, jewelers or peddlers, who are mechanics and merchants with no training to prepare them to do the important work of prescribing for eye-strain. Some people regard this work as simply mechanical. They forget that the eye is a complex, vital organ, that the non-medical man frequently puts glasses on cyes that need treatment for disease, and that he has no right to use cycloplegics to paralyze the accominodation, the only thorough way to determine the refraction in a large proportion of cases: for the use of these substances would be practicing medicine and would be dangerous in his hands. Innumerable instances could be given of the awful mistakes of opticians in putting glasses on people suffering from intra-ocular tumors, glaucoma, cataract, chorioiditis and other affections, and preseribing concave lenses for eyes requiring the opposite, glasses greatly aiding to suffering instead of relieving it.

Let the profession, then, unite and say that the optometry law shall be repealed and that the medical law shall be so amended as to make the prescribing of lenses for eye-strain, in law what it is in fact, the practice of medicine. Meanwhile let no doctor so stultify himself as to refer his cases of eye-strain to the optician or any other quack. F. C. Heith, M.D.

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## THE ETIOLOGY OF MOTION SICKNESS.

In a revicw of the literature of sea-sickness or motion-sickness, as it is more properly called, one is at once impressed with the great rariety and divergence of the theories that have been offered relative to its causation, and at once begins to question whether or no any one of these theories is in any degree correct. I have been forced to the conclusion that there are but few facts to be offered in support of some of these theories. That an interrupted descent of the liver. being the heaviest viscus, should serve as an etiological factor, as some have supposed, is not at all probable, since so many of the natural morements of the body involve this same principle without the resultant sickness. Neither does the disturbed pressure of fluid in the semicircular canals present a theory without fault, though I beliere this to be a little nearer the truth than the former. Hotion sickness sometimes results from purely visual disturbances which in no manner could change the pressure direction of the fluid in these canals. Neither can it be said that motion sickness is caused alone by either visual or auditory
disturbances, for both the blind and the deaf are susceptible.
since the principal factor in the cause of motion sickness is motion in some form or other, and since the most pronounced symptoms are romiting and unsteadiness of gait, no etiological theory is worthy of consideration that does not bear a direct relation to motion and to the center for romiting situated in the fourth rentricle. The exact quality of motion concerned in this peculiar affection seems to be sontewhat evasive. It has been asserted that the necessary factor is a regularity of undulation, but the theory is at once untenable when we recall that there is scarccly a more certain method of inducing motion sickness than the circle swing which is often quite free from this particular form of motion. Neither is there any rhythm or regularity in the motion of a steam or electric ear, in which we not infrequently find a cause. In ship, on board which we have the most pronounced cases of motion sickness, we meet with irregularity, rhythm and undulation. The pitching of the ressel is more likely to induce the sickness than ihe rolling motion, and the downward motion more potent than the upward. In the old-fashioned swing it is the downward sweep which is most likely to cause a disturbance, while in the steam or electric car, in which we are least likely to meet with the sickness, we find little or none of this peculiar quality of motion. This peculiar quality of motion seems a rather indefinite term, but I am at a loss to know just how to designate it. I think I can describe it in no better terms than to say it is a combination of muscular sense and the sense of equilibrium, by muscular sense meaning that peculiar sensing of the state of muscles and just what morements are required to maintain an equilibrium ; a sort of pressure sense or sense of support or confidence in one's position. This quality of motion is to my mind the one directly concerncd in the causation of motion sickness.

Let us see how this view harmonizes with the anatomical and symptomatic facts of motion sickncss. This so-called muscular sense is the peculiar property of the cercbellum, the posterior columns of Burdach and Goll, and the direct cerebellar tracts. These columns in their course to the brain are in close anatomical relation to the center for vomiting in the fourth ventricle, and any impressions carried along these tracts must of necessity influence this vomiting center and its blood supplr, naturally stimulating it to activity. Near to this center for vomiting we have a center for sweating, and a vasomotor cen-
ter depressant in character; and in conjunction with the romiting of motion sickness we find depression and sweating. We also have a center for co-ordination of the eyes, and the disturbance of this center gives disturbance of vision. Not infrequently it results in romiting. unsteadiness of gait, depression, etc.

In the act of romiting from any cause whatever we have concerned the third, fourth, fiftl, sixth and eightl nerves, the ragus, the glossopharyngeal, and sometimes the nerres of the kidney or testicle. Not one of these nerves but can be traced in direct anatomical relation to the center for romiting or indirectly through these columns of muscular sense. The effect of position in riding in a steam or electric car is offered in support of this theory. In riding with the face forward we meet the ground and coming objects in a perfectly natural manner and we are much less likely to suffer from motion sickness than if we ride backward, in which latter position the ground seeus to recede from us, learing us without support. These same effects are obserred in certain patients who suffer mildly from watching moring pictures in which the observer seems to be riding on a ship or in a car, showing that the stinulus may be of a purely psychic character, no muscles being called into use to execute the imperfect orders of the imperfectly stimulated brain. Again, in the extremes of age the individual is accustomed to a sense of insecurity of position and support, and we meet with fewer cases of motion sickness in these individuals. Will any one suppose the liver of the child or the aged less likely to displacement than that of the iniddle-aged or that with these there is less probability of an equal distribution of fluid pressure in the semicircular canals? There is sometimes experienced something akin to motion sickness when certain individuals stand on high towers, bridges, etc. In this instance there is again a sense of insecurity, an indefinable something drawing one into the abyss. The faintness, etc., are unexplainable save on this same theory of a disturbance of the muscular sense, this time from purely psychic influences.

How these rarious factors operate to influence the center for romiting is, of course, in some degree problematical, but to me the most probable solution to the question is in a theory that the continued, repcated afferent and efferent impulses necessary to a maintenance of equilibrium or sense of security of position act as a local vaso excitant and occasion a dilatation of the blood ressels of the fourth rentricle and consequently excite the romiting and sweat centers.

I believe this theory to be still further borne out by the fact that all remedies which are of service in the treatment of this disorder act either as vaso constrictors or so depress the cerebral and cerebellar functions as to make the individual less susecptible to motion or other influences.

Chis. H. McCully, M.D., Logansport.

## EDITORIAL NOTES

Seres prominent cities in New Jersey have elected plysicians as mayors. This speaks well for the good judginent of the New Jersey voters, as it also indicates an increasing willingness on the part of medical men to enter politics.

Twelfe physicians are needed to take care of the poor in the city of Tolcdo, Olio. The County Infirmary Board has passed resolutions limiting the amount to be paid any one plysician to $\$ 25$ for six months' service. We believe that a physician who gets up right carly in the morning and is "real pert" in his work will be able to hold the job and earn at least 10 cents an hour while doing the work required by the generous Infirmary Board of Lucas County, Ohio.

Beware of the collection agency that requires you to pay a "membership fee" or requests you to advance moncy for postage or anything clse. Any person or agency who will not take accounts and collect them on a straight commission basis, and without any adrancement of money for any purpose, is not worthy of patronagc. Accounts should not be turned orer to any one for collection without first determining that the collecting agent is thoroughly responsible and that correct periodic reports of collections will be rendered.

The next annual session of the State Association will be held at French Lick June 18 and 19. Members who desire to present papers at the meeting should have them referred promptly so that the secretary of the Association can list them on the completed program, which will be published in The Jourval. County secretaries should make it a point to refer only good papers. The compilation or paper copied wholly from text-books should not be given a place on the State Association program. Generally speaking, our meetings are productive of more benefit to the members when there are fewcr papers and more discussion.

During February several of the departments of the public schools of Fort Wayne were closed for a few days at a time on account of scarlet ferer. With commendable energy and good judgment the city board of health, aided by the school board, suppressed the spread of the discase by suitable disinfcetion and quarantine measures. But the fact that children suffering from mild forms of scarlet fever attended school for a few days without the nature of the disease being discovered is an argument in favor of the medical inspection of our schools. We hope to see the time when this feature will be a part of the duties of all health officers, and suitable salaries paid to insure not only competency in the work, but warrant for the devotion of the entire time of the health officers to public health matters.
"How I Came to Originate Osteopathy" is the title of an article by Andrew T. Still appearing in the Ladics Home Journal. We have always thought Mr. Bok was possessed of a fair amount of common sense and good judgment, but we are inclined to believe that he was a fit subject for a lunacy commission when he aecepted for publication the article to which we refcr: The rank absurdity of some of the statements and claims put forth by Still ought to have barred his article from acceptance by any level-headed editor of a lay journal having the least intention of publishing the truth. But the fact that the article is a shrewd piece of advertising for the osteopathie cult permits the query: Is it possible that Mr. Bok was paid for the publication of the article, and, if so, how much? It should have brought a large pecuniary profit.

The latest social organization in New York is "The Association of Thaw Jurors." It will be a select organization and membership will be limited to those upon whose shoulders hung the fate of Thaw following his two trials. It is now in order for some of the acquitted murderers who have been freed by such jurors as those bcfore whom Thaw was tried to form-select (?) social organizations. Thaw, Nan Patterson. Mrs. Bradley, Mrs. McDonald and several other notorious moral degenerates who have luckily escaped the gallows and righteous punishment ought to be star performers in such an organization. The acquittal of these lecherous homicides and the mavdlin sympathy bestowed upon them by a sentimental publie and a sensational press is a disgrace to our courts and a reproach to our civilization.

La Grippe: is prevalent in various sections of Indiana. The State Board of Health in the report for January says that during the month $1: 6$ people in Indiana died from the effects of la grippe. 'This ought to indicate to physicians and the public that la grippe is not a trivial disease. but one which should be reckoned with as a source of serious results. The prevailing tendency is to give la grippe cases too little attention. Complete rest, warmth. suitable diet and elimination until the patient is well will go a long way toward preventing serious if not fatal complications. Above ererything else, the patient should be confined indoors until well. Many persons recovering from la grippe and not considering themselves sick enough to remain indnors have suffered from serious complications from injudicious exposure and too early return to work with its drain upon an already debilitated system.

It is announced that Philadelphia has taken up modern ideas as regards membership in lrer county society and no longer excludes a physician from membership simply because he lappens to have graduated from some school other than a regular one. In doing this the society is following the suggestion of one of its former presidents, Dr. Jolin B. Roberts, who, in an address to the society, said that "the society should be liberal enough to accept as a nember any physician whose education and personal character make him a fit associate for intelligent men." He further said that "the test of qualification for membership should not be the college from which the applicant received his diploma, but an education enabling him to understand and appreciate the science of medicine and the honest purpose to treat his patients by all means and methods which experience, inrestigation and research show to be scrviceable."

A FEW men in medicine, like the law has in Hughes. of New lork, would work wonders in freeing us of some of the cvils rampant in our midst. such as the division of fees, giving of commissions, etc. While we would be the last to seek notoricty through the public press, yet the profession could well profit by Hughes' example of taking the people into confidence, as le did when exposing the insurance, beet sugar, and traction evils. And he took the pains to see that the people were correctly informed, not leaving the task to a third-rate news reporter who is looking for a "scoop." These abuses in medicine should, of course, be thoroughly discussed first
among ourselves and erery attempt made at righting them without need for publicity. But that failing, the public las just as much right to know that it is at times being fraudulently dealt with by doctors as it has to demand a pure food and drug law that tells them when and how much poison they are taking.

T'ies manager of the Kondon Manufacturing Company of Minneapolis does not require a nerve tonic. He is sending samples of "Kondon's Catarrhal Jelly" to Indiana plysicians with the recommendation that it will be found the very best remedy for chronic nasal catarrh and all catarrhal affections of the upper respiratory tract and should, thercfore, be prescribed for the cure of such affections. The literature accompanying the sample says that the jelly does not contain any cocain, morphin, chloral or other dangerous drug, but, judging from the effects of $\cdot$ the jelly on the mucous membrane and the metliods employed by most vendors of proprictary catarrh remedies, we do not feel warranted in betting any of our small change on the truthfulness of the manufacturer's statement. Anyway, the Indiana physicians will prove themselves good subjects for a lunacy commission if they use or prescribe "Kondon"s Catarrhal Jelly," a seeret proprictary remedy which is advertised to the public and samples of which are distributed promiscuously to the laity.

McClure's Magazine deserves the unstinted support of the medical profession for the faithful portrayal of the true character and history of Christian Science and its founder, Mrs. Eddy. If Miss Milmine's treatment of the subject be accurate as to data, and we have every reason to believe that it is, it is easy to understand why this cult has seemed to flourish as it las. First, it appeals to a class of people of whom there are many who, like Mrs. Eddy herself, have, from childhood up, been hysterical and pampered, with little to divert their attention from themselves and their ills, real or imaginary. Sccond, whatever other faults or virtues Mrs. Eddy has possessed, she has been gifted with an unusual heritage of keen business instincts. Charity and personal consideration for others have ever occupied a place secondary to her own selfish interests, and through her indomitable will many a precocious student has been forced into the background the moment he gave promise of eclipsing his preceptor. Though to the great majority of thinking people her methods of accomplishing her ends are revolting, and her practices disgusting, yet
there are ever the blessed few who do, and probably ever will, love to be hoodwinked. What a pity that the vencrable matron of many husbands (and few children) has had to be so constantly hounded by that bête noire to her existence, "mesmerism !"

A binc to equalize the salaries for both sexcs of public school teachers has rccently been introduced in the New York lcgislature, and has met in opposition the argument that male teachers are, as a rule, married, with family responsibilities, while the same does not hold for teachers of the opposite sex.

Be that as it may, and putting aside the question of the equalization of salaries, we wish to call attention to the necessity for higher salaries to teachers in general. With the increased educational requirements, the lengthencd time of training and the greater cost of living and acquiring a good college training, there should be a commensurate increase in the remuncration to this sacrificing profession. The time has passed when an individual with the ordinary common school cducation is equipped to teach our children the subjects required for college preparation. And, aside from the mere didaetic learning acquired from their texts, we are expecting more and more training from our teachers. We want them to represent high standards of intelligence and refinement, to be well rersed in eurrent as well as historical events, to be alive to questions of public health and lyygiene, and in every way capable of being entrusted with the training of our children in so far as it is to be carried out away from home. Hence the necessity for getting the best that can be had.
"Is ir not time that we should be aroused to the importance of protecting our own interests when one of the senators of our own state, a man who has reccived for years the highest honors in our commonwealth, openly antagonizes the 8,000 physicians of Ohio, affronts their representatives, accuses them of ulterior motives, and, worse than these, opposes publie health measures of vital importance to the well-being of our citizens, in the interests of those criminals against humanity, the selfish and soulless trade monopolies? His characteristie attempt to evade the issue by declaring that he voted for the Pure Food Law will not mislead the medical profession, which, through its representatives, watched his strenuous efforts, detecting his 'fine Italian hand' throughout in endearoring to emaseulate the bill, and finally saw him, ehagrined at his defeat,
roting for the measure simply because public sentiment demanded it."-Ohio State Medical Journal.

Senator Foraker is no worse than many other men in Congress who belicve that doctors and the limmanitarian measures proposed or supported by doctors are good targets at which should be aimed the poisoned arrows of opposition. Yes, we believe it is time for the medical profession to take a land in politics-not partisan polities, but the polities which make for the interests of the medical profession and for humanity.

An officer in one of the state medical associations in the south writes us as follows:
"Your Council did an excellent thing the other day when it resolved to inquire into the position of every candidate offering himself for politieal oflice in your state, in order to ascertain the position upon matters relating to the inedical profession and the public health. The question of the doctor in politics is an important one, and within the proper limitations it is eminently desirable that the doctors take note of political exigencies and necessities. We have been pursuing this principle for nearly two years in our state, with the result that this year the legislature has just given us everything we asked for without a word of important opposition."

We might quote similar sentiments from letters received from other medical men outside of Indiana. It all indicates that the doctor is taking a great interest in polities, and purely with a view to benefiting the medical profession. No other organization of men, from hod-carriers to ministers, have so thoroughly ignored the question of politics, and it is high time that medical men now take such an interest as will insure some attention on the part of politieians to those interests which are of vital concern to the medical profession.

Tife Jourtal is not going to take a hand in partisan politics, and will not rceognize any politician because of his party affiliation, but it will discuss the question of the fitness of men in politics, and the interests they represent. so far as medical affairs are concernet, and this disenssion will be without fear or favor.

Dr. J. N. Hurty, Secretary of the State Board of Health, has recently inspeeted the public schools of Terre Haute and found a condition of affairs there which is not conducive to good health for school children. Some of the school buildings were found in a dilapidated condition, the rooms poorly ventilated and heated, and in some of the schools pupils were found in such a
condition of ill health as to warrant the services of a physician. In an address before the school board and citizens of Terre Haute, Dr. Murty pointed out the defeets and said that the seeret of betterment of the conditions would be found in the establishment of regular medical school inspection.

It is hoped that Dr. Hurty will inspect the public schools in other cities and towns of the state, as we believe that the conditions found at 'Terre Haute are no worse than will be found in nine-tenths of the cities and towns of Indiana. By his plain talks to school boards and the public Dr. Hurty can aronse a sentiment among the people in favor of the medical inspection of our schools, and with the influence of the medical profession back of him it ought to be possible to secure laws and ordinances providing for this much needed feature.

In our judgment, the regular medical inspeetion of schools sliould be in the hands of county and municipal boards of lealth, acting under the advice and direction of the State Board of Health. The officers entrusted with this work should be selected because of their competency and peculiar fitness for the position, and they should be paid salaries sufficient to make it possible to enlist their entire time in the work.

Some of the agents of life insurance companies paying but $\$ 3$ for medical examinations are now saying that their companies pay $\$ 5$ for a medical examination. The doctor who puts his confidence in such a statement without laving some written expression of opinion from the company sometimes finds to his sorrow that his bills for life insurance examinations are paid on a basis of $\$ 3$ for each cxamination. Examiners should also be on the lookout for companies that pay $\$ 5$ in some states and $\$ 3$ in other states. The simplest way to aroid being imposed upon by either agents or companies is to have a written statement from the iusurance company seeking medical services to the effect that $\$ 5$ will be paid for any life insurance examination. If this poliey is adopted it will prevent some of the life insurance companies from seeuring competent examiners until they change their medtical examination fees, but the company which will not pay $\$ 5$ for a life insurance examination is not entitled to the services of any reputable and experienced physician, and the life insurance companies that secure cheap incdical examiners through a sense of economy only are unsafe companies and the public should know the lact. So far as we know
there is not a life insurance company organized in Indiana that pars a respectable fee for nedical examination. We know that in some portions of this state these companies have accepted examiner's of inferior qualifications because the better physicians would not sell their services for the small fees offered. This means the possibility of acceptance of bad risks and attending great losses to the eompanies, which they deserve for their short-sighted poliey. It is up to the medical men of Indiana to unite on a policy which will place the Indiana companies in a position where they will see the error of such false economy.

In mesponse to a letter from a county society secretary asking for information concerning his socicty, we have received a letter which we think deserves publicity. The letter, in part, is as follows:
"In answer to your favor of recent date I am sorry to be obliged to make the following statement, but the facts seem to warrant it: Our society exists in name only. I took it upon myself to pay the dues of the members accredited to this county. If I never reecive return from said aceredited members I am free to say that it would be no more than has oceurred before. It is supposed that we have four meetings yearly, but the fact is we liave no mectings, and if I should drop out there would be no society.
"I am the youngest man practicing medicine in the county, but, as I am 50 years past, that does not count for much for men of up-to-date practices and the possession of advanced ideas concerning medicine, as I am the only one owning a microscope and a reasonably good library. Most of the physicians in the county meet the question of maintaining a society with the expression, 'What's the use? There's nothing in it.' These men do not hesitate to frecly eriticize the methoc!s and work of others, and they deliberately seek to secure the patrons of other physicians or assume charge of the cases of other physicians in a most unethical way. They even, in ignorance or through intention, make such diagnoses as swincpox, waterpox, Cuban itch, and call smallpox chickenpox, etc. To those families who lave contagious discases, properly diagnosed and quarantincd, these physicians send word that if other doctors were employed less trouble would be encountered with quarantine laws. These men look with disgust upon any proposition to maintain a medical society, and yet pretend to be reputable, regular practitioners of medicine.

Now, with this statement of facts, can you suggest a remedy? I can "t."

We sympathize with any progressive, ethical physician who finds it necessary to live in a community where medical affairs are in the condition above described. Fortunately there are only a fer such communities in the State of Indiana, and we hope that as the organization movement spreads over the state the few communities of this character will be wiped out altogether. We contend that any reputable medical man with the slightest spark of enterprise in him can alone succeed in making ignorance and unethical conduct decidedly unpopular with the people of his community, providing he so conducts himself that the people of his community are able to distinguish between the good and the bad. We admit that it is discouraging for a man who tries to do the right thing to have to contend with such embarrassing conditions, but it ought not prevent the following of right rules of conduct. It is far easier to fall into the rut with others than keep out of it, but in the end the example of progressiveness and adherence to ethical practices has its influence in stimulating others to emulate the example. We, therefore, suggest to our medical friend who is laboring under such disadrantages to keep up the good work and eventually he will secure his reward. Incidentally we hope to enlist in his support the good offices of the councilor of the district in which these unfortunate medical men live and the help and encouragement of active and influential members of societies in adjoining counties. Such a county needs evangelistic work, and we hope that we may be able to supply the need, and that later we shall be able to report that there has been a change of sentiment and action as a result of our efforts.

## CORRESPONDENCE

## DEATH FROM CHLOROFORM ANESTHESIA.

Greexsburg, Ind., Jan. 30, 1908.
To the Editor:-I regret to make the following report of a death from chloroform anesthesia, but duty to the profession compels it.

History.-Harold D., aged almost 6, when a few months old, was severely burned in the right hand and to a lesser degree on the right side of the face. Otherwise he gave a negative history.

Examination.-With the exception of a slightly noticeable scar on the right side of his face and a deformed right hand he was a well-devel-
oped and a perfectly healthy bor. The deformity was due to the contraction of the scar tissue, leaving the little and ring fingers almost wholly contracted, the middle finger about half contracted, while the index finger was only slightly contracted. All the joints were free and movable. Operation was adrised and both mother and child were anxious that it be done. On Jan. 22, 1908, the operation was done under chloroform anesthesia. My confrère, Dr. I. M. Thomas, who has given chloroform hundreds of times, a man who is exceedingly careful in all his work, administered the anesthetic. The patient took the anesthetic beautifully, his breathing was evell and regular at all times, his pulse was continuously steady and of good quality. Within 12 to 1.5 minutes from the beginning of the anesthetic, without warning, the patient ceased breathing and, do all we could, we could not resuscitate him, though his radial pulse was perceptible for nearly a minute longer. Eridently it was a clear case of paralysis of the respiratory center.

Curtis Blaxd, M.D.

## REPORT OF A CASE OF HEART-BLOCK.

Fort Whane, Ind., Feb. 2r, 1908.
To the Editor:-The following report of a case of heart-block may be of sufficient interest to warrant publication:

March 9. 190i. Patient, Mr. S., aged 65, laborer. Father killed at age of i1. Mother died at age of 66 , cause unknown. Wife died at 40 years of age of puerperal fever. Has one boy, aged $\because 6$, and one girl, aged 1s years, both in good health. Wife never had any miscarriages. Last chiid was born dead. Has always worked hard. Very moderate user of alcohol. Forty years ago was struck on the right side of the head and was unconscious ten minutes. No rencreal diseases. Gets up once in the night to roid urine. In excellent lealth until present illnees, which began one week ago, when he suddenly became dizzy, fell down and remained unconscious about half a minute. No convulsion or stupor afterward. Since then has had sereral dizzy spells, but did not fall until yesterday.

Physical examination shows a well-nourished man, with well-dereloped muscles and good color. Pupils equal and react to light and convergence. No Rhomberg's sign. Knee-jerks normal. Sensation to pain, touch, and temperature normal. Marked arcus senilis, both eyes. Temporal arteries barely palpable. Lungs negative. Heart apex in mipple line in sixth interspace. Some accentuation of second sound at aper. Pulse, 33 per minute. Tension not marked to touch.

Slight systolic murmur at apex, transmitted $1 / 2$ in. into axilla. Blood pressure, sitting (Riva Roceo), 190 mm. Weight one year ago, $15 \%$ pounds. Present weight, $14 \%$ pounds. Urinaly-sis-Amount in 24 hours. 3 pints; speeifie gravity. 1023 ; bare trace of albumin; no casts, no sugar. Given 1 drop spt. glonoin, t. i. d.

Mareh 16, 190i.-Reports attacks not so numerous. Blood pressure, 150 mm .

Hec. 2J, 190i.-Attack of influenza, during which dizzy spells were somewhat more frequent.

Jan. 13, 1908, 10 a. m.-Called hurriedly to see him. He had taken by mistake a teaspoonful of potassium nitrate at i:30 a. m. At $80^{\circ}$ eloek a. in. had a severe dizzy spell and continued to have them every few minutes until 1 o'elock p. m. He was pale and in a good deal of distress. Rational during attack; no convulsions. Radial pulse, 23 per minute. Tenous pulse in neck, 108 per minute. During a severe dizzy spell radial pulse was 18 per minute, venous pulse in neck 120 per minute. With the stethoscope at the apex and a finger on the radial artery, a distinct first and second sound could be heard corresponding with the radial pulse. In the intervals of the radial pulse faint sounds could be heard corresponding to the venous pulsations in the neck. These sounds were heard more distinctly with the bell of the stethoscope at the base of the heart. At $1 \mathrm{p} . \mathrm{m}$. he had a bowel movement, passed considerable gas, and from then on had no more attacks that day.

Cilas. G. Beall, M.D.

## DEATHS

Dr. IV. H. Reed died at his home in Hartford City, February 18, aged 54 years. He was a graduate of the Curtis School of Medicine, which was formerly located at Marion.

Dr. Edward Walker died at his residence in Delphi, Feb. 16, 1908. He was born in Erie County, Ohio, March 14, 1829. By the death of Dr. Walker, Carroll County is left without a representative of the old pioneer doctors.

Dr. Thos. C. Neit, born April 21, 1839, at Frankfort, Ky., died Feb. 1, 1908, at his home in New Albany, Ind., after three days' illness due to uremie poisoning. Dr. Neat graduated in (incinnati and was a military surgeon in the ('ivil War.

Dr. S. L. Broulette died February 2 at his home near Clay City, aged 65. He was a grad-

11ate of the Medical College of Ohio, and for many years was a successful practitioner. He was attacked last year with a malady which proved to be malignant and fatal.

Dr. Elmer Sifirts died at his home in Bloomfield, Ind., Feb. 6, 1908, aged 46 years. The immediate cause of death was edema of the glottis and larynx as a result of neurotic edema angiosa. He was a member of his eounty and state medical associations, and at the time of his death was treasurer of the Green County Medical Society. He graduated from the Kentucky School of Medicine and for several years praeticed medicine at Lyons, Ind.

## PERSONALS

Dr. A. B. Kvapp, of Washington, Ind., is in the South for his health.

Dr. Mayfield, late of the Soldiers' Home in Lafayette, has located in Brookville.

Dr. James A. Constock, of Greenfield, has been ill for several weeks with sciatica.

Dr. John A. Little, of Logansport, has returned from an extended vacation trip throughout the West.

Dr. T. R. Соoк, formerly of Solsberry, has been admitted as a member of the Clay County Medical Society.

Dr. K. K. Wheelock, of Fort Wayne, has returned from Texas, where he visited for several weeks.

Mrs. Emala E. Dryer, wife of Dr. D. W. Dryer, of LaGrange, died at her home Friday morning, March 6, aged 42 years.

Dr. D. M. Shoemaker, of Brookville, has recently retired from the praetice of medicine and gone to live with his son in Chicago.

Dr. Z. M. Beaman removed from Urbana to North Manchester in December. The doetor was of the 1906 class, Indiana Medical College.

Dr. E. 1R. Gibbs, of Greenfield, seeretarytreasurer of the Hancock County Medical Society, has been ill for the last few weeks with mumps.

Dr. Warres R. King, of Greenfield, has accepted an appointment as assistant surgeon at the Soldiers' Home, Lafayette, Ind., to begin with February 20.

Dr. Leila Andrews, formerly located at North Manchester, is now located in Oklahoma City, Okla. She was a very prominent member of the Wabash County Society.

Dr. IV. D. Weis has been appointed secretary of the Board of Health of Hammond. He has recently returned from a two weeks' visit at the Mayo clinics at Rochester, Minn.

Dr. J. S. Coverd.lle, of Decatur, who has been a sufferer from bronchial asthma during the winter, has gone south for rest and recuperation. His son, Dr. Earl G. Coverdale, will look after his business in his absence.

Dr. Eirl G. Coverdale has just returned from Chicago, where he has liad a position as interue in the Eye, Ear, Nose and Throat Hospital. He will be associated with his father, Dr. J. S. Coverdale, but will make a specialty of eye, ear, nose and throat diseases.

## NEWS, NOTES AND COMMENTS

The graduating exercises of the Hope Hospital Training School for Nurses at Fort Wayne were held on February 23 and 24. A class of ten received degrees.

The Indiana State Nurses’ Association will hold a regular meeting at Fort Wayne, Friday and Saturday, March 2 rand 28. Nil nurses of the state are cordially invited to attend.

Agitation has been started toward having a new and much-needed pavilion for contagious diseases, other than smallpox, on the City Hospital grounds in Indianapolis, but sufficiently removed from the main building.

Dr. IV. A. Erans, Health Commissioner of Chicago, has been visiting and studying the sanitary conditions of all Indiana cities along the lake shore. The prevailing typhoid fever epidemic has been the special object of study.

The annual meeting of the Eighth District Medical Society will be held at Portland, April 16, 1908. The morning session will be devoted to a symposimu on "Race Suicide." The banquet
at noon will be followed by the customary series of after-dinner specches.

Dr. J. N. McCormack gave a very interesting and entertaining lecture before the Farmers' Institute at the Opera House in Seymour, Ind., on the evening of January 31. The Opera House was crowded and the audience listened with marked attention to the speaker's remarks.

Mrs. J. E. Morris, wife of Dr. J. E. Morris, the oldest physician of the Union County Medical Society, died at her home in Liberty, February 4. Mrs. Morris will be deeply mourned by the large circle of friends who have known her during her more than 40 years' residence in Liberty.

The Hodgkins Fund Prize of $\$ 1,500$ is offered by the Smithsonian Institution, Washington, D. C., for the best treatise that may be submitted to the International Congress on Tuberculosis, which meets in Washington, Sept. 21 to Oct. 12, 1908, on the subject, "On the Relation of Atmospheric Air to Tuberculosis."

The doetors of Charles City, Iowa, adopted a fee bill and entered into an agrecment to maintain a certain standard of fees. Several of them have since been indicted on the charge of atlempting to fix, regulate, and maintain prices. The case will be carried to the Supreme Court to determine whether the anti-trust laws have been broken.

The physicians of one of the suburbs of Paris have recently adopted the following schedule of fecs (the equivalent in U. S. money is given) :

For ordinary day risits to laborers, 60 cents; to small merchants and salaried clerks, 80 cents; to large manufacturers, merchants and rich land holders, $\$ 1.00$. From $10 \mathrm{p} . \mathrm{m}$. to $\% \mathrm{a} . \mathrm{m}$., for each visit, $\$$.

The committee of arrangements for the meeting of the State Association to be held at Freneh Lick, Junc 18 and 19, has decided to issue a handsome souvenir program. The program, aside from giving information concerning the meeting, railroad rates and connections, hotels and other items of interest, will contain cthical advertising, the income from which will be used to defray the expenses of the meeting.

Examination for internes on the house staff of the City Hospital, New York, will be held on

March e: and 28 of this year in New Lork City. The City Hospital has a large general service, with about 800 beds, comprising all branehes of medicine, and the length of service is 18 months. All applications for the position should be addressed to the clairman of the Executive Committee, Dr. Smith Ely delliffe, 64 West Fiftysixth street, New Y'ork.

The Middle Section of the American Laryngological, Rhinologieal and Otological Society held an annual meeting at Indianapolis on February 22. The meeting was devoted to a symposium on "The Suppurative Discases of the Temporal Bone." Of the Indiana physicians on the program. Dr. George F. Keiper, of Lafayette, presented a paper on "The Treatment Other Than Surgical of Suppurative Diseases of the Temporal Bone," and Dr. John J. Kyle, of Indiamapolis, presented a paper on "The Radieal Mastoid Operation."

A series of publie lectures is being given in the Public Library Building at Chicago under the auspices of the Chicago Medical Society. In December the following lectures were given: "The Nethod by Which Inscets Carry Disease," by Dr. Howard T. Ricketts; "The Importance of Proper Yentilation in the Dwelling," by Dr. Sanger Brown, and "The Use and Abuse of the Eyes; Why So Many of Us Are Wearing Glasses." by Dr. Willis O. Nance. Other public lectures under the anspices of the society will be given throughout this year.
$W_{e}$ are far from constituting ourselves the champions of Christian Science, or blinding our own or others' eyes to its glaring ineonsistencies and dangerous springs of action. But we have repeatedly asserted, and we now reiterate, that if upon its essential concept there have been grafted wild absurdities and hazardous practices it is chicfly beeause medical seience, which should have been the logical exponent of the truths which Christian Seience has distorted, has stupidly ignored their significance and negleeted their application.-Medical Standard.

The Philadelphia Medical Schools, at an informal conference, adopted, through their leading representatives, the following resolution:
"Resolved, That it is of the utmost importance for accuracy in prescribing, and in the treatment of disease, that students of medieine be instrueted fully as to those portions of the United states Pharmacopeia which are of value to the
practitioner, and that members of the medical profession be urged to prescribe the preparations of that puldication: and, further, that this resolution be forwarded to the medieal and pharmaeeutical journals in the United States."

The dentists of the United States Army are anxious to be established as a department of the army with permanent locations. They are now hurried from Ameriea to the Philippines, to Panama, to Cuba, to Alaska and all parts of the United States on a moment's notice and there is no apparent head to the dental serviee. Attorneys representing the dentists are now in Washington in consultation with congressmen and senators, endeavoring to secure legislation whiel will provide for a dental department having similar rules and regulations as now pertain to the medieal department.

A movement is on foot for the organization of a health board of municipalities along the south end of Lake Miehigan, for the purpose of devising ways and means of disposing of sewage instead of permitting it to flow into the lake to contaminate the people's water supply. At a recent meeting held in Michigan City, it was decided to call together the health boards and other offieers of the towns along the south end of the lake to meet in conjunction with the state boards of Indiana and Illinois, to promote the morement to protect the water supply of the lake from further eontamination. Dr. W. A. Evans, Health Commissioner of Chicago, is the prime mover in the plan.

The members of the Carlisle County Medieal Society (Kentneky) have adopted a fee bill, and plans for the distribution of "information lists" concerning the credit of patrons, which promises to result in economic returns to the members. Each member binds limself to report the names of patrons who have persistently refused or neg. leeted to settle accounts for medical or surgical services rendered, to render statements to his patrons at least quarterly, to abide by the minimum fees as set forth in the fee bill adopted, and to uphold and abide by the code of ethics. The penalty for violation of the agreement is a fine of from $\$ 5$ to $\$ 10$, or expulsion from the society; as may be determined by a two-thirds rote of the members.

Rockefeller is just now in the limelight and it will be of interest to note what he has done for medicine.

He has given away $\% 0$ per cent. of his Standard Oil income to public objects, and the amount
reaches $\$ 102,055,000$. Those partienlarly applied to medical interests are: University of Chicago, $\$ 21,400,000$; Rush Medical College, $\$ 6,-$ 000,000 ; Institute for Medieal Research, $\$ 2,000,-$ 000 ; Harvard University, $\$ 1,000,000$; Johns Hopkins, $\$ 500,000$; Indiana University, $\$ 50,000$. Perhaps some of the miscellaneous gifts not itemized might include some under this head, and the amount prior to 1892 was $\$ 7,000,000$. Mr. Rockefeller could not do better than endow several large hospitals.-Central States Medical Monitor.

THE following appropriations have been made by the Philippine Commission for the Philippine Medieal College: Thirty-three thousand six hundred and twenty dollars for salaries and wages; $\$ 26,574$ for contingent expenses ; $\$ 720$ for maintenance of internes, and $\$ 280$ for the purehase of elinical apparatus. An appropriation of $\$ 12,-$ s00 was also made for the endowment of beds in St. Paul's Hospital. The advisory board has suggested to the board of control that a school of midwifery be cstablished in connection with the school. The new hospital, for which $\$ 390,000$ has reeently been appropriated, will contain a maternity ward and, on the establishment of that ward, the necessary material for giving praetical instruction in midwifery will be available.Chicago Medical Recorder.

The American Association for the Adrancement of Science held its fifty-eighth annual meeting in Chieago during the week beginning Dec. $30,190 \%$, and was one of the largest and most important gatherings of scientific men that has taken plaee in this country, over two thousand being in attendance. The Association performs a highly important service for the advaneement of science and the diffusion of knowledge. The annual meetings furnish a clearing-house to which men of science of the whole country bring the results of the year's work, and from whieh they return to their homes with a renewed interest in researeh. These meetings are held in widely separated places and consequently extend an intelligent interest in seience and lcad to a greater appreciation of the importance.

The physieians of Ohio are planning to introduce in the next session of their legislature the following bills: One to regulate the manufacture and sale of proprietary medicines within the state, securing the full benefits of the provisions of the National Food and Drugs Aet; a
bill creating the position of medical officer of health; a bill amending the law regarding criminal abortion: a bill forbidding the advertisement in the public press and elsewhere of cures of venereal diseases and of flagrant medical frauds; a bill providing for the registration of vital statisties; a bill re-establishing a local board of health for cities under the merit system. and a bill providing for the appointment of all public medical officers from nominations made by the state and county medical societies.-The Journal of the A. M. A.

Extract from cable dispatch to Cincinnati E'uquirer of Oetober 26, from Manila, P. I., relative to Secretary W. H. Taft:
"The secretary also inspected the newly estabhished medical school in Manila. Speaking to the medical students, he said he considered this new work fully as important as any work taken up by the gorermment, and that the islands were in need of physicians and a hygienic system of living. He paid tribute to American doctors. Without the knowledge of tropical diseases gained by American doctors during the Spanish-American war, the construction of the Panama Canal would have been impossible, but with this knowledge they have been able to clean up the canal zone and make it healthy, and the completion of the canal is assured. In conclusion, the secretary complimented the medical school upon the harmonious cooperation of American and Filipino instructors."-Lancet-Clinic.

Under the auspices of Rush Medical College, Northwestern University Medical School, College of Physicians and Surgeons, Chicago Medical Society, Chicago Surgical Society, and the Nicholas Senn Club, memorial services to the late Dr. Nicholas Senn were held at the Musie Mall, Fine Arts Building. Chicago, Sunday, Febrnary 2, at $2: 45 \mathrm{p} . \mathrm{m}$.

Prof. Albion W. Small, of the University of Chicago, acted as chairman. Dr. Frank Billings, speaking for Rush Medical College, took as his subject "Nicholas Senn as a Teacher." Dr. Albert J. Ochsner, representing the Chicago Surgical Society, spoke on the subject "Xicholas Senn as a Surgeon." Dr. William E. Quine, representing the College of Physicians and Surgeons, spoke on "Nicholas Senn as a Man." Dr. Henry B. Favill, representing the Chicago Medical Society, spoke on "Nicholas Senn as a Physician," and Dr. D. R. Brower, representing the Nicholas Senn Club, spoke on "Nicholas Senn as a 'Traveler."
'The Supreme Court of Ohio has reeently decided that witnesses ealled as experts can be paid only ordinary witness fees and not the speeial fees which have been allowed them as experts. The decision was made by the supreme Court in the ease involving the payment of $\$ 25$ per day fees to Drs. Baldwin and Parker in the Taylor murder trial. This means that physicians in the future must see that they have a clear and binding understanding for special witness fees before agrecing to give expert testimony. Before the service is rendered the prosecutor deals in glittering generalities; he does not wish to agree to pay a certain sum lest "it might prejudice the case in the minds of the jury," but assures you that "you may rely upon it that it will be all right." Sometimes it is, and sometimes it isn't, and it behooves the members of the medical profession to protect themselves in adrance and in some way see to it that they may have some assuranee of fair remuneration for the responsibility incurred in the giving of expert testimony and for actual time lost.-Abs. Ohio State Medical Journal.

A pifsician who crossed the ncean upon the same steamer with Dr. Som slows the characteristies of Dr. Semn by the following report: "Upon these occasions, when other men would have been absorbing health and vitality from the beauties of the ocean and the quiet monotony of the journey. Dr. Senn was found from $8 o^{\circ}$ cloek in the morning until 11 o'clock at night, day after day, in the smoking room of the ship, with a pile of books, manuscripts, notes and referenees, utterly and completely absorbed in his work, writing, thinking and studying, while he smoked his famous brand of Mayville cigars, utterly unconscious of the noise and clamor of the games of other mell going on about him, self-contained, absorbed, deep in the world of thonght and work, so far removed from his surroundings that no greater ineongruity could possibly be imagined." And what is true of Dr. Senn on ship board was true of Dr. Senn in his library, on the train, in the hotel or wherever he might be. His eapacity for work was unbounded, and no limitation of time, marked by the hands of the clock or by the rising and setting of the sun, in any wise modified his persistent impulse for work when work was to be done-and with Senn there was always work to be done.-Abs. Wiscon$\sin$ Medical Journal.

The International Congress on Tuberculosis will meet in Washington, I). C., Sept. 21 to Oct.

12, 1908. This congress meets once in three vears. It las never met in Ameriea, and after this year may not meet in this country for many vears to eome. 'The congress will earry on for three weeks public diseussions of the tuberenlosis problem, led by the most eminent authorities on this subject in this and other countries. Offieial delegates will be present from nearly all eivilized countries. There will be a course of special lectures, to whiel all members of the eongress and the general public are invited. The congress will be divided into sections, giving ample scope for perception of both seientifie and lay members. There will be a great tubereulosis exposition in which one ean see what is going on the world around in the eampaign against tubereulosis. There will also be clinies and demonstrations throughout the whole period of three weeks, giving medieal and lay delegates object lessons on the eauses and prevention of tubereulosis. The proeeedings of this congress will require four volumes, and these are free to all members of the eongress who have paid their membership fee of $\$ 5$. Applications for membership should be sent to Dr. John S. Fulton, Seeretary Gencral, 114 Colorado Building. Washington, D. C.
'Tine Old Women.-They have been with us since Eve grew old, and, like the poor, will always abide. If they are such an evil as most doctors elaim they are, then it is pertinent to ask, What ean be done with them? Many times a dismissal of them will earry with then the patient. We must learn to use them to our own adrantage, and make friends and advertising mediums out of them. They are the crities who must be reekoned with. Under no eircumstanees should you lose the mastery of the situation with these critics looking on. Give them all something to do. One heating cloths, another brings a glass of water, and an errand or task for each-anything to keep them busy. They will sing your praises all over town if handled right. Do not forget to tell them, when you go, how mueh help they have been to you. The "old women" ean make or mar your career; utilize them to make it. A few moments' conversation with them, direeted along the right spirit, with a little tact, will remove the "thorn in the flesh" to most doetors. They can be made just so many solicitors if treated with consideration and policy. Few doctors realize what a field there is here for helping themselves. Get wise-make friends; master all forees; direet sentiment. Talkers either help or hurt; it lies with you.-Chicago Medical Times.

The Nickel Plate Railroad had a wreck near Fort Wayne early in the fall of $190 \%$. Several Fort Wayne plyysicians and surgeons were called to assist in caring for the injured. It fell to the lot of Dr. Charles E. Barnett to care for a woman who liad been severely injured about the head. Numerous cuts about the eyes, nose, ears and scalp were given attention. There was also a fracture of the skull which demanded the surgeon's consideration. A bill for $\$ 100$ cotering the serrices rendered was presented the railroad company and refused payment. Suit was brought against the company and the same has recently been decided by Judge Hcaton, of the Superior Court, by allowing the full amount of the claim. In making the decision Judge Heaton said:
"How shall we decide wheu doctors disagree? Six eminent doctors say plaintiff should have $\$ 100$ or more. Six doctors of equal credit, in the judgment of the court, say he should have $\$ 50$ or less. A lady is injured in a railroad wreck. Her face is cut, ears and nose torn and skull fractured. The plaintiff is selected by Dr. Dinnen, the chief surgeon of the defendant railroad, to treat these injurics, and no fault is found with the skill or ability with which plaintiff performed that service. I conclude that a high degrec of skill was required to treat such injuries to avoid leaving scars or paralysis of facial muscles and to treat the fractured skull. Dr. Barnett, the plaintiff, testifies as to the character of the injuries, the service performed, and values his services at $\$ 100$. In the opinion of the court, that is a rery reasonable estimate. I will not render a compromise decision. I give judgment for $\$ 100$."

## SOCIETY PROCEEDINGS

## ADAMS COUNTY.

The Adams Comity Medical Society met in regular session on February 14, with most of the Decatur members, and Dr. Wilson, of Berne, present. Dr. Waldo E. Smith read a very interesting and comprehensive paper on "The Physiology of Digestion," which was much appreciated by those present. Adjourned.

Marie L. Holloway, Sec.

## ALLEN COUNTY.

## FORT WAYNE MEDICAL SOCIETY. <br> (Meeting of Jan. 28, 1908.)

Society called to order by President Calvin, with over 100 members and guests present. Minutes of previous two meetings read and approved. Application of Dr. Frank Greenwell was read and reported to the board of censors. The meeting was a joint one between the physicians and lawsers.

The Legal Aspect of Malpractice was the subject of an address by Attorney H. W. Townsend, in whieh
he presented the subject from a legal standpoint. The speaker said that in looking up the records of jurisprudence he was able to find only about twenty-four malpractice suits entered in the courts of Indiana. and among these there is just one for the improper administration of medicines, all of the others being surgical or quasi-surgical cases. Eighteen of the cases were affirmed in the lower court. and twelve of the eightcen in the higher court. The reason that there is such a large proportion of cases that are surgical instead of medical is that the layman is not so able to tell that there has been a misapplication of remedies while it is comparatively easy to detect defects resulting from surgieal work. The law only requires that a practitioner shall have the average skill of practitioners in such locations generally.

There are two forms of action: One for the violation of a contract, and this may be brought any time within six years, and the other for negligence, and this may be brought at any time within two years. The speaker said that if physicians were more active in making prompt collections there would be fewer malpractice suits. He said that if the physician has any idea that the patient is going to enter suit for violation of contract or for negligence in treatment, it is better for the physucian to get his bid in first and collect for the services rendered, cven if collection has to be forced by legal process. If the doctor snes for his hill and the pationt swears that the services were worthless, but notwithstanding this fact the doctor gete a judgment, such judgment will be a bar against the patient's case should there be a suit for malpractice. It is the duty of the patient to follow the instructions of the doctor, and it is the duty of the doctor to be very particular in giving instructions to the patient.

From a legal standpoint. if a patient is of sound mind and mature judgment. and insists on an operation against the judgment of the doctor, in law the doctor is not reaponsible for the performance of such operation. In this comection a case was cited in which the lower court found in favor of the pationt, a judgment of $\$ 3,000$ being rendered, but this verdict was reversed by the higher courts. In giving gratuitous services the doctor is just as liable as if he were paid for the services, and it does not matter by whom employed. A doctor called in consultation is also liable for bad results occurring before or at the time of consultation, providing he makes no effort to remedy sueh bad results. In this connction a case was cited in which a Vermont surgeon set a fractured limb improperly, and a surgeon who saw the case later and might have corrected the deformity, but did not do so, was held liable. In Pemnsylvania a doctor set a dislocated arm and it failed to heal in the proper manner. Another physician was consulted in his absence and anesthesia was administered with the intention of redueing the disloeation. The father would not allow the operation. In the suit against the original surgeon for malpractice, the courts held that the father was not required to permit the second operation in order to do away with the liability attached to the first operation.

A physician is not liable for the actions of a nurse unless the said nurse is working under the directions of the physician. Regarding the responsibility for the care of sponges during an operation, the doctor, ac-

for malpractice. all prejudices are in favor of the lay witness. as an cducatel witness is the worst witness to make an impression on a jury An educated witnese gets no slow on cro-s-examination.

The Medical Aspect of Malpractice was taken up by Dr. M. F. Porter. The -peaker said that a doctor who is conscientious and capable may be sued or threatened with a suit for malpractice, but is in no danger of being mulcted. The man who undertakes to do a thing he is not competent to do is either ignorant or dishonest, and lays himself liable to malpractice suits and to conrictions thereon. Honesty and competencr, then, are the great safeguards against annoyance from malpractice suits. These safeguards are practically perfect in the presention of verdicts against one for malpractice. but thes frequently fail to prevent the threatening of suits.

Simply stated, then, the law requires of the doctor lionesty and competency. Possibly there are degrees or grades of honesty, as there are degrees and grades of light and shade, lut personally. I lold that a man is either honest or dishonest, just as a given surface may be said to be black or not black, or white or not white. A man may be more or less dishonest than another. but if he be lionest, lie is honest. and there is the end, and no man can go farther on that road. Degrees of dishonesty there certainly are, but degrees of honesty are to ny mind impossible. Two equally honest men may differ much in their ethical concepts and conduct. but this significs different degrees of etlical perception, different dcgrees of knowledge, not different grades of right. The honest man may want to do right, but because of lack of wisdom do wrong.

How much must a doctor know of the known in medicine to be competent in the cyes of the law? This depends much on where the particular doctor. whose competency is to be judged, lives. At first thought this seems strange, and more un-American than strange, for it would seem that human life and comfort should have the same ralue in the eyes of the law in Puckerbrush that it las in the largest city. and the keynote of our Constitution declares that all men are born equal. Yet if one stops to think he will conclude that the gravitation of the best men in all walks of life is toward certain centers offering better or more desirable enviromment, and that this gravitation is as natural, and therefore as inevitable, as the gravitation of the finer grains to the bottom of the sand pile, and that thercfore the requirement of the law which provides that to be competent a doctor must be possessed of a degrec of knowledge which will measure up to the average of that possessed by his confrères is right and reasonable.

I was once told by an eminent jurist that law in its easence is common sense. This is of course equivalent to saying that some of the legislative enactments are not law, which is of course true. Doctors who are both competent and conscientious are not infrequently sued for malpractice. Usually the problem mathematically stated is about as follows: A mean. meddlesome doctor + shrster lawyer $=$ a suit for malpractice. Sometimes there is to be added a blackmailer. but perhaps more often a man too ignorant to appreciate the limitations of medical science and therefore lonestly of the opinion that he has been maltreated.
I regret that honesty compels me to say that the first cause in manr malpractice suits is a doctor, and
more to be regretted still is the fact that this doctor's pernicious activity is usually due to a small soul, combined with mental myopia. "'Tis true, and pity'tis, 'tis true," a man may be mean cnough to instigate a suit against a fellow-practitioner, but he will not do it if he is wise, for he knows that "crows come home to roost." Hence. I say that the instigator of these suits is usually both mean and lacking in common sense. Inadvertent remarks, made without more or less forethought, but misinterpreted, is another one of the causes of the institution of malpractice suits. Over-anxiety on the part of the doctor, interpreted by the patient as a lack of knowledge or skill on the doctor's part, is another of the causes of the institution of malpractice suits. The best prophylaxis is that the doctor shall know himself, which means that he shall know his own limitations and the work for which he is competent, as well as that for which he is not competent, and to do sucli work as well as tho $=e$ in the neighborhood in which he lives.

Envy and jealousy on the part of phrsicians is not infrequently an inciting cause for malpractice suits. The man who succeeds is not infrequently made the target for uncomplimentary remarks and criticism by his envious confrères. and this may lead to a suit for malpractice on the part of some ignorant or misguided patient.

Fractures are among the most difficult surgical conditions the surgeon meets, and yet the popular idea is that fractures are rather trivial affairs. A doctor mar repair a broken limb as well as anyone can possibly do it, and yet the limb may not look good and may be practically useless. To-day it would he difficult to convince an intelligent judge or jury that all had been done that could be done unless the $x$-ray has been em ployed in the treatment of a fracture.

The safeguard for a doctor in treating a patient who will not follow directions is to tell the patient emplatically, "you follow my directions or get another doctor."

The entrusting of the counting of sponges to nurses in a well-organized hospital is in the best interest of the patient, and makes it safer for the patient, but the law holds the doctor responsible. It would seem that the law sloould look first to the patient's safety.

Discussion.-Judge Heaton emphasized the fact that whatever a physician holds himself to do he is held by the law to do well, and whenever he attempts to do that which he is not competent to do he is liable to a suit for malpractice.

Dr. McCaskey asked the question if a physician is called in an emergency and did the very best he could nnder the circumstances, and did it badly, would he be held responsible? Judge Heaton, in answering, said, "Ies, under the law, but looking at it from a humane standpoint, no judge or jury would give the doctor the worst of it."

Attorney Hoffman suggested that the lack of a proper law requiring that those desiring to practice law should come up to a certain standard may be considered as a reason for the existence of shyster lawvers. He agreed with Dr. Porter in the statement that to aroid malpractice suits the physician should be honest and should know what he is doing.

Lawrer Guy Colerick said that lawyers were often compelled to take cases which, after trial, were proved to be based on false premises, because before the trial the lawyer has no way of seeing the other side and the
trial is the only way to get at the truth. In other words, a lawyer must assume that his client's case is true until, by proper courts, it is proved truc or untrue.

Dr. Buchman said that the surgeon has the whole responsibility, while the lawyer has an umpire and set of rules and laws and decisions to guide and direct him. The surgeon, on the other hand, must rely on his own judgment in many instanees. While the vast majority of fractures unite kindly, yet some do not do so, and oecasionally under the very best care there are failures. This is almost impossible to satisfactorily explain to a jury, which, in the majority of instances, is made up of men of not rery strong mental attaimments.

Lawyer Townsend said that in emergencies if you feel that yon are not competent you must refuse or the law will hold you liable. Yet, from a humane standpoint it would be very hard to get a jury to inflict penalty on one who had done the very best he could do in such an emergency. On the counting of sponges the principles of law say that if the doctor feels competent to count sponges he can not delegate that work to the nurse, but must be held responsible. With reference to the liability of a company surgeon, Mr. Townsend said that it is fundamental in law that the company is not liable if they can prove that they did the right thing in securing a competent surgeon. By so doing they clear themselves.
In closing the discussion, Dr. Porter said, with reference to the counting of sponges, that he did not think that the doctor should be held responsible for the counting of sponges in a well-organized hospital, and that the patient's interests were better served by having a competent nurse look after that part of the work. He said that it was his practice to hold the nurse responsible for the counting of the sponges, and that he would continue to do so, law or no law, for he believed that in so doing he was acting in the best interests of the patient, and that was of first concern to him.

Adjourned.
J. C. Wallace, Scc.

## Meeting of Feb. 4, 1908. )

Society called to order by the secretary, Dr. J. C. Wallace, with 35 members and guests present. On motion, Dr. Fr. W. Mcraskey was called on to preside. Minutes of previous meeting read and approved.
Hydatid Mole of the Uterus.-Dr. Drayer reportcd a case of hydatid mole of the uterus and presented a fresh specimen. Patient, aged 42 , mother of seven children, missed two periods. Bleeding began, and diagnosis of abortion at about two months was made. Uterus was packed and 1 dran of ergot administered On subsequent visit the mass exhibited was found expelled. The cervix was found well dilated. (Hysterectomy was done one week subsequently.)
In the discussion of the case, Dr. Rosenthal said he believed it to be a hydatid mole. If it is malignant patient will not get well, even after removal of the uterus, as this is not the early stage if it is sarcoma. He believed this has to do with her pregnancy and that she will get well after curettage
Dr. Porter say's it is a synertioma malignum. It looks like fatty tissue. The undeveloped pregnancy is shown in the body of this specimen. He adrises
removal of the uterus at once, as the woman is 42 years of age. A large number of syncytioma oecur in women who have been possessors of hydatid moles.
Dr. Duemling says he believes that if this is really malignant the patient's fate is sealed, and if not she will get well after curettage. He has seen three such hydatid moles, two in the same individual.
Dr. Nierman said that this condition of syncytioma is extremely malignant and is disseminated by the blood stream.
Dr. Greenwell, of Huntertown, was elected to membership.
The regular postgraduate program was carried out and consisted of papers, talks by Dr. MI. F. Porter on "Angioma and Lymphangioma;" Dr. H. G. Mertz on "Sarcoma," and Dr. J. B. Jiceror on "Carcinoma." Dr. Porter gave the varieties, structure, distribution and prognosis of simple nevus and cavernous nerus. He said that the latter should be removed, not only because they sometimes become rery unsightly, but on account of the danger of their undergoing malignant changes. The best method of removal is by excision. The plexiform angioma or cirsoid aneurism occur more frequently in the negro race. They are most usually found in the scalp. Lymphangioma is a multiplication and increase in the size of the lymph vessels. Lymphatie cysts are most frequently found in the neck. They also occurs in the omentum and mesentery. In the sigmoid mesocolon they have been mistaken for ovarian tumors. Chyle cysts may form anywhere in the mesentery where there are lymph vessels. They are most often found at the junction of the bowel and leaflets of mesentery. They may produce obstruction of the bowel, and Dr. Porter said that he had seen one case of chyle cyst producing volvulus, which was mistaken for a case of appendicitis, as the tumor was in that region, and the patient died. He said that in 1906 he had occasion to look up the literature on chyle cysts of the mesentery and found a record of twenty cases. He exhibited a drawing illustrating a chyle eyst of the mesentery which had occurred in his own praetice.
Dr. H. G. Merz then read a paper on "Sarcoma," describing the strueture, microscopic section, distribution, age and prognosis of the different varieties, and considered the general character of sarcoma, such as rascular supply, metastasis, capsule, infiltration, lymphatie supply and secondary changes.

The third paper of the evening was by Dr. J. B. Mcevoy, on "Carcinoma." His diseussion covered both glandular and squamons-celled cancer, and took up the question of distribution, gross and microscopie appearance, lymph and blood ressels, secondary changes and differential diagnosis.

In opening the discussion, Dr. Beall said it was a peculiar fact that hypertrophy of the subcutaneous tissue in the colored race is often well marked. One form is that of the keloid. In regard to sarcoma, he said that the ordinary mole has the microscopic appearance of sarcoma. This might explain the tendency to beeome malignant, the change, however, usually being carcinomatous.

Dr. Rosenthal, in discussing telangiectatie tumor, reported a case on the face of a child one and one-half years of age. The growth extends over the face and back of the ear, and is nearly as large as a man's fist, soft, pultaceous, and fluid can be expressed by pressure. Over this growth, and extending down the neck,
there are two large veins, the size of the little finger. The skin is very thin: partial atrophy welt marked. He has treated two such cases by injecting them with steam and intends treating this one the same way. As a rule. in injecting steam he says you get no slongl, the tissues becoming white at once and absorbing. Careinoma are deeidedly infections, hence the necessity of being rery careful not to transplant or infect new ground with knives, needles, etc.

Drs. Nierman and Rhamy also discussed the papers.
In closing. Dr. Porter said that all sarcomas are comective tissue, while carcinomas are cpithelial tumors. Hence the fibroid is a sarcoma in every sense except its behavior. A sareoma is malignant because its cells have a tendency to multiply, but do not beeome mature. The nearer they come to maturity the less malignant is the tumor. When macroscopic and microscopic appearances of a tumor give evidence of a matignant condition of the tumor it should be removed. Tumors should always be regarded as suspicions and be remored as soon as possible.

Drs. Merz and McEvoy closed the discussion of their papers.
. A djourned.
J. C. Wallace, Sec.

## (Meeting of Feb. II, 1908.)

Society met in the assembly room and was called to order by President Calvin. with 25 members and guests present. Minntes of the previous meeting read and approved. The regular postgraduate program was continued and the following papers and talks, illustrated by microscopic and macroscopic specimens, were given: "Papiltoma and Adenoma." by Dr. J. D. Nercer; "Dermoid Cysts," by Dr. H. G. Nierman; "Cancer of the Tterus," by Dr. C. H. English.
Dr. Porter opened the discussion hy saying, with reference to cancer of the uterus, that if we wait for the so-called symptoms of carcinoma of the uterus, we have waited too long. If a thorough physical examination is made in suspicious cases, and a microscopieal examination of scrapings is made, carcinoma will he found much more often. Much better results are secured by remoral per ragina than by any other method. Complete removal of the pelvic lymphatics, as mentioned by some writers, is practically an impossibility. He said that the $x$-ray had cither cured a mumber of inoperable cases of carcinoma for him or else they have recovered in spitc of the use of the $x$-ray and other treatment. With reference to prognosis, he said that carcinoma in a young individual, other things being equal, is much more unfavorable than in elderly persons. He is of the opinion that the immediate repair of the cervix is bad surgery except where hemorrhage makes it necessary. Immediate repair of the perinemm is, as a rule, the correct procedure unless the tissue is so badly bruised that it is letter to allow Nature to take care of the condition.

Dr. Porter said that he took exception to the expression that dermoids of the ovary are rare, if Dr. Nierman will allow that the so-called dermoids are dermoids. From a technical standpoint dermoid cysts of the ovary are the worst cysts of the ovary to remove. They not infrequently undergo malignant change.

Dr. B. Yan Sweringen reported a case of dermoid in the region of the appendix, which seemed to spring
from the onentuin. In taking it out it came loose from its attachment and it was impossible to find the origin of the tumor, but it was supposed that it originated from the right orary. He reported another case of dermoid eyst of the abdominal wall, communicating with a dermoid within the belly. Operation was refused.

Dr. Beall said that to avoid the tendency to recurrence papilloma should be widely removed. A papilloma in an elderly individual shonld be very earefully watched. He said that it was not surprising that dermoids arise in the testicles and ovary. Some slight stimulns may stimulate the cells to form new beings.

Dr. Drayer said that he had treated a number of eases of cancer of the uterus with the $x$-ray. Some have recovered and some have not. Of those who recovered he was not sure whether they recovered becalse of the $x$-ray or in spite of it. He said that repair of the cervix after involution is the proper procelure. Primary repair should only be done to stop hemorrhage.

Dr. C. E. Barnett, referring to cancer of the uterus, said that the removal of the deep iliac glands is of doubtful efficacr. Wertheim, by a careful selection of operated cases, has a mortality of less than 6 per cent. This indicates that a careful selection of cases is of importance in deciding on the value of operative procedures.

Dr. Weaver said that cervical carcinoma occurs much more often in mothers than in nullipara. He considered it bad practice to curette or incise a piece of tissue for examination with the idea of performing an operation later if thought adrisable. He contended that a frozen section should be made immediately white the operator and the patient are ready for immediate operation should the pathologist report malignancy.

Dr. Rhamy said that dermoids of the testicle are rare, but teratonas of the testicle are not so rare.
Resolutions concerning nostrums, recommended for adoption by the Kentucky State Medical Society, were again presented, and on motion the same were unanimously adopted.
The president appointed Drs. E. M. Van Buskirk, J. B. McEroy and J. H. Gilpin a committee on public health and hygiene.

Adjourned.
J. C. Wallace, Sec.

## BLACKFORD COUNTY.

At the ammal meeting of the Blackford County Medical Society the following officers were elected for the year 1908: President, C. Q. Shull, Montpelier; vice-president, Charles A. Sellers, Montpelier; secre-tary-treasurer, M. M. Clapper, Hartford City; delegate to the State Association, IV. E. Thornton; alternate, IW. A. Hollis; board of censors, Samuel Hollis, J. D. H. Lorimor and Charles A. Sellers. The society decided to adopt the postgraduate course as recommended by the American Medical Association. The society will be divided into two sections for weekly meetings; one section to meet in Montpelier each Tuesday night and the other section to meet in Hartford City on each Wednesday night. The society as a whole will meet at Montpelier on the last Friday of each month to review the work done by the sections.
M. M. Clapper, Sec.

## CLAY COUNTY.

On the erening of February 20, the Clas County Medical Society entertained as guests the dental surgeons and pharmacists of the county. together with a number of risiting physicians from other counties, including Drs. Brayton, Kimberlin and Heath of Indianapolis, Dr. Cook of Bowling Green, Dr. Mercer of Reelsville and Drs. Weinstein, Luckett, M. R. Combs and C. N. Combs of Tcrre Haute. A very practieal paper was presented by Dr. A. A. Spears of Brazil on "Care of the Tceth and its Relation to the General Healthr." Dr. Heath read a paper on "Eye Lesions of Diabetes," which was highly appreciated. The principal address of the evening was then delivered by Dr. Kimberlin on "Pericarditis." This proved most intensely interesting, as it was frecly illustrated by more than a dozen prepared sperimens showing the great variety of lesions caused by this affection.

A luncheon and smoker was provided by the local committee of arrangements and served by them in the Elks' banquet rooms adjoining the hall. During the discussion of this feature, all present became mutually better acquainted, and with felieitous specehes by Drs. Brayton, Combs, Kimberlin, Heath, Smith and District Councilor Dr. J. H. Weinstein, the later hours were most pleasantly employed. Adjourned.
G. W. Finley, Séc.

## CLINTON COUNTY.

A regular meeting of the Clinton County Medical Society was held on Jan. 2, 1908. Jnteresting papers were presented by Dr". James WV. Hadley on "The Therapeutic Value of Sulphate of Calcium," and I . G. Chittick on "The Ophthalmo-Tuberculin Reaction," with report of eleven cases. At this meeting of the society it was decided to procure the services of an attorney as common collector. The attorncy is to furnish each doctor a list of the persons who do not pay their doctor bills and from whom it is impossible to make collections.

Adjourned. A. G. Chitick, Aeting Nee.

## ELKHART COUNTY.

The Elkhart County Medical Society met in regular session in the office of Dr. W. B. Kreider, Goshen, on February 6, with 25 members present. Dr. Kreider read an interesting paper on "The Principles and Therapeutics of Light." and referred particularly to the therapeutie use of the leucodescent lamp. The paper was well discussed. The regular meetings of the society are held on the first Thursday evening of each month.

Adjourned - Geo. IV. Spohn, Sec.

## HENRY COUNTY.

At a recent meeting of the Henry County Medical Society the following officers were elected to serve for one year: President, J. A. Tully, Millville; vice-president. H. E. Hiatt, New Castle; secretary-treasurer, E. K. Westhafer, New Castle. The society meets in New Castle the second Thursday of every other month, beginning with February.

Adjourned.
E. K. Westilafer, Sec.

## GREENE COUNTY.

The Greene County Medical Society met at Switz City on February 13, with President Knoefel in the
chair. On account of exceedingly bad weather but few members were present. Next meeting will be held March 12, and the subject for discussion will be "Acute Mania."

Adjourned.
F. A. VanSandt, Sce.

## JACKSON COUNTY.

At the ammual meeting of the Jackson C'ounty Medical Society the following officers were elected to serve for the year 1908: President, C. E. Gillespie, Crothersville; vice-president, I. B. Hill. Seymour; secretarytreasurer. G. H. Kamman, Sevmour ; board of censors. J. Ki. Ritter, Seymour; M. F. Gerrish. Seymour: A. May. Crothersville; delegate to the State Asaociation. L. B. Hill, Seymour ; committee on Public Health and Legislation, D. J. Cummings. Sr., Medora; M. F. Gerrish, Seymour; J. K. Ritter. Sermour. The society mects at Seymour on the first Thursday of each month at 3 ocloek p. m. The society has adopted the postgraduate eourse as recommended by the A. M. A.. and has rented a suite of rooms over Cox's drug store, where all the paraphernatia of the society is kept.
G. H. Kamman, sfe.

## JAY COUNTY.

The regular meeting of the Tay County Medical Society was held on February 14, and was the first meeting under the program of the postgraduate course of sturly as outlined for county societies by the A. M. A. Dr. C. E. Caylor presented the subject of tumors, viz.: "Fibroma, Lipoma, Chondroma, Ostenna, Myoma, Myxomit and Neuroma." He illustrated his paper with charts and drawings, which made it very interesting. W. D. Schwartz, of Portland, read a paper on "Benign Tumors of the Breast; Causc. Diagnosis and Treatment." There was a good attendance and much interest manifested.

Adjourned. M. T. TAY, Sec.

## LAKE COUNTY.

The Lake County Medical Society met in regular session at Hammond on February 6, with 1.5 members present. Dr. E. M. Shanklin read an excellent paper on "Tumors in and Around the Eye." which was illustrated by numerous sketches and pictures showing the various eye lesions under consideration. A general discussion followed, in whieh many practical points were emphasized, and in particular those points which are of particular interest to the general practitioncr in his daily work.

A communication from the secretary of the state hoard of health was read, in which was pointed out the failure of many physicians to use proper terms in giving the causes of death when signing death certificates. Cards were distributed illustrating the varions terms improperly used bş physicians in signing reports.

The society unanimously adopted resolutions condemning all forms of contract practice where a limited amount of service is rendered for a fixed sum.

Dr. A. S. Schleicker, sceretary of the board of health of East Chicago, explained the objects of the Chicago and Suburban Health League. It was generally recognized that a combination of the health departments of Chicago and surrounding municipalities would prove of great value to the entire district. Weckly reports of the prevailing diseases in each district are to be sent to the central office on Saturdas. On Monday a
general report from the central oflice is to be sent to each member of the League. By this means it is hoped that the transmission of eontagious diseases from one distriet or eity to another may be prevented.

Dr. W. A. E゙rans. Health Commissioner for Chieago and Secretary of the League. will be asked to address the Lake County Medieal Society at its March meet ing.

Adjourned.
William D. Weis, Sec.

## LAPORTE COUNTY

The La Porte Comity Medical Society met in regular session at LaPorte February 14. Dr. F. A. MeGrew read a very interesting paper on "The Surgical Side of Gastric Uleer," and Dr. II. W. Wilson presented a well-prepared paper on "Pneumonia." Both papers merited and received much diseussion. Dr. F. T. Wilcox reported an unusual ease of "Torsion of the Great Omentum, with Operation and Recovery." The next meeting of the society will be held at Michigan City on April 10.
Adjourned
J. W. Milligan, Sec.

## LAWRENCE COUNTY

The Lawrence Countr Medical Society met in regular session on Thursday, February 6. Dr. J. A. Gibbons read a well-prepared paper on "Bronehopneumonia," after which followed a lengthy and general discussion. Dr. G. W. Walls reported a ease of central placenta previa. The patient. Mrs. H., third pregnaney, at the seventh month of gestation, began to flow profusely. The hemorrhage was found to come from a placenta covering the whole outlet of the uterus. Hemorrhage soon ceased, and directions were left to eall assistance immediately should it reeur. Ten days later the symptoms returned. Examination showed dilatation of the cervix to the size of a lalf dollar. Uterine contractions absent. Consultation was ealled. Foreed dilatation was resorted to and a quiek delivery made by pushing through the placenta and doing a podalie version. Only a small anount of hemorrhage followed. Eight dars later the temperature rose to 104 degrees. The uterus was thoroughly douched with an antiseptic solution, and from that time recovery was uneventful. Dr. Walls urged the necessity of adopting prompt measures for the treatment of this elass of eases, and said that the pulse and reapiration should be carefully watehed to warn one of coneealed hemorrhage.

Adjourned.
Claude Dollens, Sec.

## MADISON COUNTY.

At the ammal meeting of the Madison County Medieal Society the following officers were elected to serve for the year 1908: President, L. E. Alexander, Pendleton; rice-president, William A. Boyden, Anderson; seeretary-treasurer, Benj. H. Cook, Anderson; censors, S. C. Newlin, William A. Boyden and T. O. Armfield. The society meets the fourth Tuesday of each month, exeept June, July. August and September. Each alternate meeting is held at Anderson, begimning with February. The other meetings are held at other towns in the eountr. The January meeting was held at Alexandria, the Mareh meeting will be held at Elwood, the May meeting at Pendleton, and the November meeting at Summitville. Sinee the adoption of the migratory feature the interest of the society has been much better.

Benj, H. Cook, See.

## MARION COUNTY. <br> THE MHMIN.POLIN MEDIC.LL SOCIETY <br> (Meeting of Jan. 28, 1908.)

The society was ealled to order by the president, Dr. IIym. The minutes of the last meeting were read and approved.
The erening was taken up with a general and informal discussion of the work of the society. The discussion was concerned, chiefly, with the eharacter of the programs and the relation of the society to matters of public health and welfare. Nearly every one was heartily in favor of the "Case Nights." It seemed to be the concensus of opinion that all ease reports should be carefully written up, that more purcly medical eases should be reported, that the especially interesting and valuable features of the cases should be emphasized and that a greater number of men should be urged to appear on these nights. It was also suggested that the progran be not ton long and so controlled as to allow more discussion of the eases reported. Drs. Brayton and Earp, as representatives of the Comeil. explained fully the work of the Council in making up the program, and their absolute dependence for the program on the voluntary contributions of the member: of the soeiety. It has not been the custom of this soeiety to ask eertain individuals to contribute papers except in rare instances, and the plan pursued has ahways seemed the best. Several of the speakers thought that work should be assigned by the Council to various individual members either as isolated papers or as symposia. Dr. Potter suggested the plan of inviting prominent medical men to address the society from time to time, and also that some collective investigation be begun in this community by eommittees.

In the diseussion of the wider activity of the society, Dr. Clark, president of the eity Board of Health, was strongly in favor of the society actively supporting alt measures tending to the improvement of the public health and benerolence. He also believed that it should assist most vigorously in the prosceution of illegal practitioners and charlatans.

Among the other suggestions made were that the proceedings should be reported by a stenographer and published in detail: that those who are assigned to diseuss papers should be informed as to the contents of the paper so as to allow some preparation beforehand; oceasional meetings deroted to a review of the progress of the various branches of medical seiene; and the appointment of standing committees to earry on the broader work of the society.
Dr. Freeland made a plea for greater interest in the City Hospital. This would be of benefit to the members of the society and help great in pushing forward the institution to the place where it should be.
Those who took part in the diseussion were Drs. A. W. Brayton, T. B. Noble, R. H. Ritter. O. G. Pfaff, E. D. Clark, f. D. Kahlo, Theodore Potter, J. V. Reed, F. C. Charlton, J. R. Eastman. Hannalı Graham, S. E. Earp. Henry Ostroff', H. J. Weil. J. H. Payne, J. L. Freeland and C. F. Neu. The soeietr adjourned.
R. H. Ritter, See.

## (Meeting of Feb. 4, 1908.)

The society was called to order by the president, Dr. Wynn. The minutes of the last meeting were read and approved. The application of Dr. Charles D. Humes was read the first time and ordered posted. The program was made up entirely of case reports.

Calculus of the Ilium. Reported by Dr. O. G. Pfaff. Patient, woman, aged 42. For the past year had occasional attacks of abdominal pain with vomiting. She was subject to spells of eonstipation. She was suddenly seized with a serere pain in the abdomen, followed by vomiting which became stercoraceous. Operation after about forty-eight hours disclosed a hard mass in the ilium which proved to be a calenlus wholly occluding the lumen. This was remored and the patient did well for a few hours when, without any premonition, she suddenly died. This is the seenond ease of this kind that Dr. Pfaff has seen in the past six months.

Removal of Cyst of the Ovary in the Presence of Pregnancy.-Reported by Dr. O. G. Pfaff. Patient, woman. aged 24, five months pregnant. A small tense erst was discorered imbedded in the left cul-de-sac. Beliering that this would interfere with delivery, the abdomen was opened and the cyst of the ovary removed. The patient made an uneventful recovery and went home in two weeks.
Successive Operations on One Patient for Gallstones. -Reported ly Dr. O. G. Pfaff. Patient. woman, aged 45 , was operated on for gallstones and a number of medium-sized stones remored. She recovered promptly but returned in a short time complaining of the same symptoms. A second operation found an encysted stone in the eystie duct and another imbedded in the hepatic duct. These together with the eutire gall bladder, were removed. Again there was a prompt recovery. Several weeks later she again returned complaining of the old symptoms. A fine probe introduced into the old tract came in contact with a hard mass. After freezing the surface a small incision was made and one stone the size of a marble was removed, as well as five or six smaller stones. The patient returned home and nothing lias been heard from her since.
Intussusception in an Infant.-Dr. E. D. Clark reported the case of invagination of the bowel of an infant aged nine months. The child suddenly began to cry and persisted in this till the mother bepame uneasy and called in the family physician. The next morning there were frequent morements of the bowels with some blood and mucus. It this time a sausageshaped mass could be felt and the diagnosis of intussusception was made. Operation was done two days later. Three feet of the ilium with its mesentery was found to be inraginated into the colon together with four or five incles of the colon itself. The mass was dark red but not gangrenous. The infolding was easily reduced, the bowel immediately filled with gas and it seemed unnecessary to anchor it. The little patient made an uneventful recovery. Dr. Clark discussed bricfly the diagnosis and treatment of such cases.
Operation to Lengthen the Sciatic Nerve.-Dr. J. R. Eastman detailed a plastic operation for the elongation of the seiatic nerre. The patient was a girl about 15. Two years previous she had had a severe attack of typhoid, followed by a deep phlegmonous suppuration of the posterior aspects of both legs extending almost from the hips to the ankle. As a result of this local infectious process, there gradually developed marked contractures with shortening of all the flexors on the knees, and on both sides the legs were tightly flexed upon the thighs. She also became very fat. At operation both legs were straighteued by elongation of the tendons implicated in the contractures. In spite of freeing the sciatic nerve and bringing great strain on
it it refused to stretch enough to allow the permanent straightening. The elongation was made by splitting the nerve for three inches, then severing by cutting the fibers upon the right side above and upon the left side below. Then the ends of the fibers of the outer half of the nerve were united to the ends of the fibers of the iuner half, thus completely disarranging the axis cylinder ends, and was mited to its corresponding central end. The patient was kept in plaster-of-Paris bandages for three weeks to prevent recurrence of the contraetion. Later hot and cold applications and massage were employed. After three years the girl, though still obese, walks without crutches and goes up and downstairs without difficulty. Motion of the feet is almost perfect. being still slightly defective in the left. Sensation is not impaired.
Myomata.-Dr. Goethe Link reported three cases of myonatoma on which he had operated. He also exhibited the specimens which showed typically the three regions from which these tumors may develop.
Brain Hemorrhage.-Dr. Paul Coble reported the case of a man who was found unconscious and taken to the City Hospital. The next morning he regained consciousness and told that he had had a number of such attacks. Soon after he again became unconscious and died on the third day without regaining conspiousness. Autopsy revealed a recent diffuse hemorrhage situated over both Rolandic areas and for some distance on both sides. The cerebellum was congested and on the under side was found a firm. dense, fibrous clot, irregular in outline, about one-half inch in diameter. The patient had told during his brief period of consciousness of frequent severe pain up and down the spine, which was probably the to the old cerebellar elot, while the pres. ent trouble was due, evidently, to the recent meningeal hemorrhage.

Inguinal Hernia.-Dr. J. II. Oliver reported the case of a man who had had an inguinal hernia for five years. One morning soon after arising his hernia suddenly descended and the tumor reached an enormons size; the mass hung down almost to the knees; reduction was impossible and the man was remored to the hospital for operation. The sac was found to contain omentum, small intestine, transverse colon and almost the entire stomach. It was necessary to puncture the stomach and remove a large quantity of fluid before the contents of the sac could be reduced. The patient seemed to recover well from the operation for a few hours when he suddenly became worse and died. On antopsy the stomach was found in its normal loeation, but the puncture wounds could be easily seen.

Discussion.-Dr. Stillson was much interested in Dr. Eastman's work with splicing the sciatic nerve. He has frequently resected nerves about the orbit for the relicf of pain and has been struck with the difficulty in preventing the reunion of the cut ends. In one case in which he removed at least one inch of the supraorbital nerve there was permanent relief, but in many others, in which it was impossible to remore so much but still a considerable length had been removed, reunion had occurred as evidenced by the return of pain. It would seem to him that in such large nerves as the sciatic, elongation by stretching ought to be satisfactory, especially if the ends could be made to even approximately mect.

Dr. Eastman called attention to the difference between the restoration of sensation and motion after section of a nerve. The former is usually much sonner and more complete than the latter. He has seen ilius
in a child produeed apparently by a ealcarious mass situated in the mesentery directly opposite the site of the invagination. This was probably from an old intlamed gland.

Dr. J. IV. Slus recently saw a ease in which the musculo-spiral nerve had been severed by a cut on the arm. The wound had been closed withont repair of the nerve and there was complete paralysis of the distribution of this nerve. The wound was opened and the ends of the nerve exposed. The upper end imbedded in the sear tissue was in good eondition but the lower end seemed to be atrophic. The ends were overlapped and sutured. In thirty-six hours the fingers could be extended and in three weeks there was almost eomplete restoration of function of the arm and hand. He emphasized the significanee of acute intestinal obstruction in a child. It usually means intussuseeption.

Dr. D. F. Lee reported a ease of extremely large inguinal hernia of long standing. Prolonged rest in bed, with elevation of the hips, eventually almost putting the patient in the suspended position, somewhat redueed the size of the mass. Twiee operation was done. Each time some improvement was noted. The patient died of an intercurrent trouble before complete cure could be effeeted.

Dr. Goar confirmed Dr. Oliver's description of the contents of the hernial sae in the ease reported. He had seen the patient five years previous for his hernia. At this time the gut could be reduced but the omentum fould not be.

Dr. Oliver has seen restoration of function early after suturing of several nerves which had been injured scveral years before. In three eases when it was neees. sary to elongate the nerve he had split the nerve and slid down a piece to fill in the gap. In each ease the restoration of function was most satisfactory. The society adjourned.

1. H. Ritter, Sec.

## (Meeting of Feb. II, Ig08.)

The society was ealled to order by the president, Dr. Wynn. In the absence of the seeretary the president ealled Dr. T. V. Keene to the seeretary's desk.
Dr. Barnhill invited the society to attend the meeting of the western section of the Ameriean Laryngologieal Society to be held on February 22 in the rooms of the soeiety.

Dr. T. V. Keene presented the following resolution regarding a contagious hospital in conjunetion with the present City Hospital:

Resolved, That the Indianapolis Medieal Society heartily endorses the movement inaugurated by the City Board of Health, the Commereial Club, and the staff of the City Hospital, to sceure a pavilion at the City Hospital for the reception and treatment of contagious diseases other than smatlpox.

Resolved, That a eopy of this resolution be sent by the seeretary of this society to the mayor. the president of the Common Council and the ehairman of the finance committee of the Common Council.

This resolution was diseussed by Drs. Freeland, Earp, Wilson and Kimberlin and then adopted. Dr. Keene then moved that the president of this society and the president of the judieial council comprise a committee to represent this societr and to act with the City Board of Health, the eommittee on grounds and buildings of the staff of the City Hospital, and the committee from the directors of the Commercial Club in such manner as may seem best indieated to lend to the securing, for the eity, of this much needed improvement to the City Hospital. This motion was carried.

The Treatment of Diabetes was the title of a paper read by Dr. Geo. 1). Kiahlo. The first essential in treatment is now, as it has always been, the diet. Next to this are mineral waters and general hygiene. lorugs are of least importance. In accurate diagnosis must inelude a careful study of metabolism based upon ealorific requirements, the digestive eapacity and the amount of food lost by failure in oxidation in each ease. To do so requires quantitative estimation of sugar contained in twenty-four hours' urine, as also urea exereted in the same period, taking into consideration quantity, kind of food and liquids ingested and exereise taken. The olject in the diet is to prevent the glycosuria and at the same time maintain a normal mutrition. To determine the earbohydrate toleranee we give a test diet containing 100 grams of bread. As soon as sugar is absent we inerease bread by 50 grams each day until sugar reappears, then give a diet, the earbohydrate content of which is a little below the limit of tolerance. Potatoes or cereals may then be substituted for a part of the bread.

In redueing earbohydrates, the urine must be watched for the presence of acetone bodies, partieularly oxybutyric acid, as, when this substance exists in the urine in quantity, there is danger of coma and earbohydrates must be inereased. Diet lists, as ordinarily found in the text-books, are suggestive and useful, but must he morlified to meet individual requirements. There is no food that is suitable in unrestrieted amounts, and consideration must be given to the question of digestibility as well as to that of nutrition. Carbohydrates should be permitted in as great amount and variety as can be tolerated, and often considerable variation will he found in the ability of the patients to assimilate different forms of sueh food. Fruits should be allowed if possible. Meats are especially valuable, partienlarly those containing eonsiderable fat. Fat foods, as olive oil. butter and cream are the most valuable of all. The essayist reported 142 eases treated at Freneh Lick Springs, ineluding both diabetes mellitis and glyeosuria. The results were as a rule highly satisfactory. In the mild eases sugar disappeared from the urine in from three to four days without alteration in the diet. In those of medium severity a week to ten days was required to produce the same result, and in the severer forms of the disease from two to three weeks. The improvement observed was not only in the reduetion or disappearance of glueose, but in an improvement in digestion and nutrition and in an inereased tolerance for earbohydrates, as also an amelioration in symptoms due to complieations. In addition to the effeets of the water, patients moler treatment at a resort have the advantage of rest, ehange of seene, opportunity for outcloor life, and as a rule, better faeilities for the regulation of the diet. As regards prognosis. the essayist expressed the opinion that a majority of eases taken early are eurable: for what is primarily a glyeosuria develops into a diabetes through improper eare. The discase when it appears at an early age offers little hope of reeovery, and much is not to be expected in eases whiell are already far advanced. In those cases in which it is impossible to eliminate glyeosuria entirely, life unay be often prolonged to its full expeetaney without diseomfort or great deprivation. Alkaline mineral waters aet by diminishing acidosis and by increasing tolerance for carbohydrates and the relief of complieations. These results may often be obtained also by the use of biearbonate of soda and earbonate of
calcium. The salicylates are useful in cases showing a tendency to the uric acid diathesis. Opiates may be employed in cases in which we are mable to relieve glycosuria by dietetie and hygienic measures. The best preparation is codeine, which should be administered in minimum doses to accomplish this result.

The Value of Dermal Diagnosis.-Paper by Dr. S. H. H. West. This study was not from any special viewpoint, but was an effort to show how all specialtics are materially aided by tracing all skin manifestation to their causes and deciding if they be sequelæ or causative factors.
Discussion.-Dr. Earp: But little is known regarding the ctiology or pathology of diabetes, and as a consequence the treatment is largely empirical. He reviewed the various theories regarding the causation of this discase and aceepts Opie's theory of the association of diabetes and pancreatic diseases. The Islands of Langerhans are usually involsed; invariably there is a lesion present although it is frequently a simple atrophy. The theory of Sajous regarding the relationship of the pituitary body and the pancreas was discussed, but the speaker did not view this theory with the same degree of acceptance that he accorded the theory of Opie. He does not believe in the Spartan interdiction of starches in the dietary as desirable in the treatment, but would be rather conservative in the matter of the withdrawal of starehes wholly from the diet schedule. The vigorous exclusion from the daily diet frequently distinctly harms the patient more than the continuous ingestion of sugar. He agreed with the essayist that a quantitative estimation of the amount of sugar excreted should be made in all eases, as only by this means ean an accurate estimate of the calorific value of the utilized food be made. The medical treatment did not offer much hope in the way of permanent effect, and he agrecs with Hare and Sajous that arsenic in the form of Fowler's solution, and opium were of the most service. Alkaline treatment should be pushed upon the slightest symptom of coma appearing.
Dr. C. R. Sowder: The diagnosis can not with aceuracy be made upon a single finding of sugar in the urine; glycosuria docs not mean diabetes. One should have a patient under observation some weeks before lazarding a positive diagnosis of diabctes. It is likely that most of the cases reported in litcrature as haring recovered have been eases of transient glycosuria and not real diabetes. A case should be under observation from one to six months before a definite diagnosis of diabetes is made. He summarized the treatment under three heads, diet, hygiene, drugs.

Dr. Kalllo and Dr. Weer elosed the discussion and the society adjourned.
T. Victor Keene, Scc. pro tem.

## (Meeting of Feb. 18, 1908.)

The socicty was called to order in the elinical amphitheater of the City Hospital by the president, Dr. Wymn. The minutes of the last meeting were read and approved. The application for membership of Dr. D. F. Lee, accompanied by a certificate of membership in the Boone County Medical Society was read the first time and referred to the council. Dr. Wynn announced the appointment of the following members as the committee on publie health, A. C. Kimberlin, H. H. Wheeler, T. V. Keene.

Arthritic Lesions.-Dr. Louis Burekhardt presented a number of illustrative cases.

Case 1.-Young woman with ordinary acute polyarticular rheumatism. This was a typical casc. Incidentally attention was called to the fact that this case has been treated by passive hyperemia induced by the elastic bandage. The relief from pain was remarkable, so marked in fact that the patient asked to hare the bandage reapplied when it was left off for a time. The whole condition had rapidly improved under this plan of treatment.
Case 2.-Man of about 50, with typical gouty accretions in the ears and on the hands. This man suffered from severe pains in the legs which were supposed to be rhcumatic in nature, but a closer examination revealed the fact that he was suffering from flat foot.
Case 3.-Woman who had an acute attack of arthritis, supposedly rheumatism, some years ago. She now shows marked enlargements about the plakangeal articulations of both hands. There has been a hypertrophic osteitis.
Case 4.-Woman who has a persistent atrophic inflammation of the joints of both hands, most marked ini the metacarpo-phalangeal articulations. There is now subluxation, rigidity and great deformity of many of these joints.

Incompetence of the Aortic Semilunar Valve.-Dr. A. C. Kimberlin presented a man with a pronounced incompetence of the aortic semilunar value. With the Erlanger sphygmomanometer he demonstrated the rarious tests for determining the functional eapacity of the heart. Following Schapiro's method this man showed a difference of six beats when he lay down. Herz's self-checking test by flexion and extension of the forearm gave a normal reaction in this man. Levv's method of eompressing the femorals showed an inerease of 22 mm . Graupnier's showed a slight fall in blood pressure after exercise. Aceording to all these tests this man's heart showed a good functional capacity and the prognosis is good. Dr. Kimberlin exhibited a chart of the results of these tests on another case which failed to appear. In this case all these procedures showed a weakened heart in marked contrast to the results obtained in the patient presented.
Discussion.-Dr. A. E. Sterne spoke of the diagnostie value of the capillary pulse in certain heart lesions. He attached great importance to it. He believes that the instruments for the cstimation of blood pressure have added much to our knowledge. The Erlanger is by far the best of all these.

Dr. R. H. Ritter spoke of the increasing interest shown in the use of mechanical means of diagnostic study. Like the microscope and stethoseope they at times give little or no information, but at other times they are of immense value and substitute accurate, scientific information for mere philosophie speculation. Too much should not be expected of these mechanical means any more than their real value should be neglected. Their actual value should be properly appreciated. Neither the blood pressure instruments nor any other will be of any service to the ignorant man.

Dr. Clark spoke of the use of braces for flat foot. A properly made brace should be strong enough to bear the full weight without breaking down, and should extend up along the inner side of the foot so as to prevent the bones from rolling in. The ready-made articles are defective for this reason and also because they do not possess sufficient strength. He thinks these braces should be made from plaster casts of the foot taken when there is no pressure on the foot. The society adjourned.
R. H. Ritter, Scc.

##  APOLIS.

The Younger Plysicfans' Club of Indianapolis gave its accond smoker soeial at the Commercial Club on Saturday, Feh. S, 190s. at \& p. m., and if enthusiasm and smoke count for aught the organization has already demonstrated its success, and raison dêtre. Prof. Stanley Coulter gave a short but very intercsting and helpful talk on "Side Lines of Interest to a Ploysician:" urging all to beware of ruts and maintaining that true happiness lay in a broad culture. Afterward all repaired to the asscmbly room above, where many things of gond checr awaited the inner man.

The Younger Physicians' Club was organized last October, and the following officers were clected: Presiident, Dr. C. F. Neu; vice president. Dr. P. B. Coble; sccretary-treasurer, Dr. J. R. Thrasher. The purpose of this organization is purely social, and its object to bring the practicing physicians of the city in closer touch with each other. The club offers four smoker socials a year, and at such occasions all things medical and scientific are rigorously tabooed, and the doctors give themselves over strenuonsly to things of lighter nature. All practicing physicians of the eity in good standing are eligible to membership. Drs. Gabe, Garrett and Walcs were appointed by the president, Dr. Neu, to screse on entertainment committee and provide for the next smoker social to be given some time in May.
J. R. Thrasher, Sec.

## ORANGE COUNTY.

At the amual meeting of the Orange County Medical Socicty the following officers were elected for 1908: President, R. E. Baker, Orlcans; rice-president, W. IV. Sloan, French Lick; secretary-treasurer, J. I. Maris, Paoli; censors. C. II. Stewart, Orleans; C. E. Boys. West Baden; L. Lindley, Paoli. The society meets every other month throughout the year.

Adjourned.
J. I. Maris, Sec.

## OWEN COUNTY.

A regular meeting of the Owen County Medical Society was held on Jan. 9, 1908, at whieh time the following officers were elected to serve for one ycar: President, C. H. White, Cataract; vice-president, Ralph R. Coble, Spenecr; secretary-treasurer, Allen Pierson, Speneer. The socicty holds regular mectings the third Friday of each month in the Public Library in Spencer. Adjourned.

Allen Pierson, Sec.

## PUTNAM COUNTY.

The meeting of the Putnam County Medieal Society was held Thursday, Febrnary 25, in the City Library at Grecneastle, and was well attended, not only by the regular members of the profession, but also by members of the faculty and students of the university. Dr. Ford. chicf surgeon of the Big Four railroad, was to speak first at 10:30, but did not arrive at that hour, and Dr. Myers, at the head of the medical department of the State University, delivered an able lecture on "The Anatomy of the lsrain." He brought with him the finest anatomical specimens of that organ ever exhibited to a*Grecneastle meeting of physicians. He began by exhibiting and describing the menbranes of the brain; then taking up the subdivisions in their minutis, locating and showing all the ventrieles,
cranial nerves, and sulci of the brain substance; locating also, as far as known, all the sensations of sight, hearing, tasting and smelling. His lecture was cxceedingly interesting. Dr. Ford lectured at 1:30 on "The Divisions of the Brain." The interest in merlical matters was greatly inereased by the risit of these able men. Adjomrnet.
J. V. Bastin, Sce.

## STEUBEN COUNTY.

The Stenben County Medical Society held a regular meeting on Jamary 10 . The subject for discussion was "Tuberculosis," and a very interesting and instructive mecting resulted. The members of the society expressed themsclies as well pleased with The Jourval, and wish to extend encouragement and best wishes.

Adjourned.
Mary Ritter, See.

## SWITZERLAND COUNTY.

At the ammal meeting of the Switzerland County Medical Socicty, held Jan. 2, I908, the following officers were elected to serve for one year: President, Scott Culbertson, Vevay; vice-president, J. H. Smith, Vevay; secretary-treasurer, John H. Shaddy, Vevay. The society meets on the sccond Friday of each month.

Adjourned.
J. H. Shaddy, Scc.

## UNION COUNTY.

The ammal meeting of the Union County Medical Society was held at Liberty on December 4, and the following officers were elected to serve for one year: President. E. R. Beard, Liberty; secretary-treasurer, E. P. Weist, Liberty; censors, F. T. Dubois, Liberty; M. F. Vereker. Kitchel; and J. E. Morris, Liberty; delcgate, Carrett Pigman, Liberty.
E. P. Weist, Scc.

## VIGO COUNTY.

The Vigo County Medical Society held its annual banquet Jan. 7. 1908, at which time the following officers were installed: President, B. V. Caffee, Terre Haute; vice-president, R. H. Leavitt, Terre Haute; secretary-treasurer, C. N. Combs, Terre Haute; delegate. M. R. Combs, Terre Haute: board of censors, O. R. Spigler, Terre Ilaute; J. R. Yung, Terre Haute, and C. S. Carmichael, Sceleyville.
The regular mecting of Fcbruary 18 was of exceptional interest, the subject being "Pneumonia." The lectures were by Drs. Kutch, McConnell and Layman. Slides showing the different stages of the disease and a pure cnlture of the pneumococcus were shown by the lantern. The entire fresh lungs of a man dying during the early part of an attack of lobar pneumonia were exhibited, and also a dissection of a fetus showing the embryonic pulmonary structures.
A public meeting was held on February I8, with the city council, school board, city officials, principals of the schools and faculty of the state normal, to consider the question of Medical Inspection of Schools. Dr. E. D. Clark, president of the Indianapolis City Board of Health, read an able paper on the subject, which was discussed by Dr. J. J. Kyle of the faculty of the Indiana Medical College, and Dr. Eugene BuehIer, Indianapolis City Sanitarian. Dr. J. N. Hurty, secretary State Board of Health, followed with a practical illustration. He had been in Terre Haute all day and inspected a certain school, one of the worst in the city, and the statement of the conditions
he found and the diseases he noted in ecrtain pupils was a most convincing plea for the establishment of medical inspection in Terre Haute.

> C. N. Coombs, Sec.

## WABASH COUNTY.

The regular meeting of the Wabash County Medical Society was held at the County Hospital in Wabash on Wednesday, February 19. The treatment of puerperal fever was the title of a paper presented by F. S. Kilson of North Manchester, which proved very interesting and brought out an extended discussion. In addition to the paper a clinic was held by Dr. L. W. Smith at which an operation for appendicitis was performed. The president of the hospital, Miss McDougal, served dinner to the members and invited guests.

> J. E. Jewett, Sce.

## WARRICK COUNTY.

At the annual meeting of the Warrick County Medical Society the following officers were elected to serve for one year: President, J. G. Hoover, Boonville; vicepresident, Thomas Wright, Boonville; secretary-treasurer, Dalton WVilson, Yankeetown; delegate to the state association, WV. A. Hewins, Chandler; censors. W. H. Mills, Boonville; N. M. Spradley. Tennyson; E. L. Ioungblood, Boonville. Threc new members have recently been taken into the society, namely: J. T. Samples, Boonvinle; Williain Walden, Newbirg; Walter P. Robinson, Boonville. The society meets the seeond Tuesday in each month at Boonville.

## Adjourned. <br> Dalton Wilson, Sec.

The Warrick County Medical Society at the meeting of Tuesday, January 14, adopted the constitution and by-laws recommended by the state association and the American Medical Association and has applied for a charter. The officers are: President, Dr. J. G. Hoover, Boonville; secretary, Dr. Dalton Wilson, Yankeetown. The society lias twenty-four members.

## TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The Twelfth Councilor District Medical Society will meet at For't Wayne, Tuesday, April 7, 1908. This society has established a reputation for a high class of practical scientific work and those who attend the next meeting may look forward to a program of musual excellence. Dr. James Nevins Hyde and Dr. J. Clarence Webster, both of Chicago, will be the guests of honor and present addresses. There will be a morning session devoted to clinies, and afternoon and evening sessions deroted to papers and addresses.

## BOOK REVIEWS

The Sexual Instinct. By James Foster Scott, B.A., M.D., C.M. Second edition, revised and enlarged. New York: E. B. Treat \& Company, 1908. Pp. 473. Price, $\$ 2.00$.
This is an excellent little treatise on a subject of vital importance to both layman and physician. In this second edition two new ehapters have been added and a useful index has replaced the table of contents of the first edition, a thing that always adds to the ralue of a work that can be used for reference.

The conscientious physician can not peruse this little volume without feeling an increased responsibil-
ity in his rocation, any more than the fair-minded layman can fail to find in it a faithful portrayal of the evils consequent upon the tritely expressed "early sowing of wild oats." One of the strongest points the author emphasizes is the fallacy of the "double standard" of morals which is so commonly accepted by the world at large. Likewise the history of the various attempts at the regulation of prostitution are reviewed, and the inconsistency and failure of such proven. It is greatly to be hoped that such productions as this will help along the one possible way of combating the "great black plaguc" by educating the public in sexual matters and renereal prophylaxis.

International Clinics. Sol. 4, Seventeenth Series, 1907. Pp. 308. Profnsely Illustrated. Philadelphia and London: J. B. Lippincott Company.
This volume of a well recognized high grade quarterly seems unusually rich in material of interest to both the gencral practitioner and to him who limits his practice. The general subjects considered in this number are: Treatment, medicine, surgery, gynecology, genitourinary diseases, orthopedics, neurology and otology. One of the most intercsting contributions under the head of treatment is that of Warthin's on the "Comparative value of Roentgen irradiation and the administration of arsenic in the treatment of lenkemia." Under medicine Calmette presents his results and technic of the opthalmo-reaction to tuberculin as a diagnostic measure in human tuberculosis. which reaction, if ultimately proven trustworthy, will be a great boon to the diagnostician as well as the patient who must submit to it. A beautifully illustrated radiographie study of gastroptosis is offered by Pancoast. In surgery Greene presents a second part to his study of surgical syphilis. In the other departments as well, so much of value appears that the whole volume is well worth careful perusal throughout. Indeed it is difficult to do justice, in a short review, or even to mention in the most cursory manner. the meritorious things that are to be found herein.

The Principles and Practice of Modern Otology. By John F. Barnhill. M.D., Professor of Otology Laryngology and Rhinology, Indiana University School of Medicine, and Ernest de W. Wales, B.S., M.D.. Associate Professor of Otology, Laryngology and Rhinology. Indiana University School of Medicine. Octaro of 575 pages, with 305 original illustrations, many in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, $\$ 5.50$ net. Half morocco, $\$ 7.00$ net.
In the preface of this work the authors state that among others the following objects have been kept in riew: 1. To modernize the subject: 2 . To correct certain traditional beliefs: 3 . To advocate the earliest possible prophylaxis or treatment; 4. To emphasize the importanee of a thorough examination and a definite diagnosis as a basis for rational treatment; and, 5. To thoroughly illustrate the text. They have succeeded admirably in accomplishing their purpose. The methods of practice in otology have changed rapidly during the last few years, and this becomes emphasized by reading the authors' detailed and complete description of the more modern and latest accepted methods of practice as followed by leading otologists in this and other countries. Of particular interest and importance are the recommendations and description of various operative treatment for the relief or eure of aural pathological conditions, and here the latest and
most approved information is given. One of the striking features of the book is the wealth of beautiful and accurate illustrations which elucidate the text. There are also a few instructive ehapters on subjects directly associated with the practice of otology, but not usually found in works of this character. Considered as a whole, the work reflects great credit upon the authors and is deserving of its descriptive title.

Diseasfe of the Nose and Thboat. By D. Braden Kyle, M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia. Fourth Edition Thoroughly Revised and Enlarged. Octavo volume of 725 pages, with 215 illustrations, 28 in colors. Philadelphia and London: W. B. Saunders Company, 1907. Cloth, $\$ 4.00$ net. Half morocco, $\$ 5.50$ net.
One can not critically examine this work without being impressed with the fact that the author has covered the subject of diseases of the nose and throat in a very practical, thorough and comprehensive manner. The diseases are elassified aceording to the pathological alterations caused by them, and each chapter is complete in itself, so that the reader on turning to a certain subject may find under that heading the matter desired. A particularly commendable feature is the taking up of each subject from a gencral standpoint and the consideration under diagnosis, pathology and treatment of all systemic conditions in their relation to the special diseases of the throat and nose. Much attention has been given to the etiology and pathology of the various diseases so that by such detailed description the treatment is indicated and easily directed. In considering the subject of treatment definite doses or strengths of solutions to be used have been given, and operations or other procedures minutely described. Considerable space has been devoted to certain diseases which are somewhat rare, and this materially adds to the valne of the book. The popularity of the work is attested by the demand for four editions within a few years. This last, or fourth edition, has been entircly and thoroughly revised. A large number of new articles have been added and many additions and alterations have been made in the other chapters in order to bring the work thoroughly up-to-date. The work is excellent in every particular, and will continue to mect with approval from students, general practitioners and specialists.

Surgery: Its Principles and Practice. In five volumes. Br 66 eminent surgeons. Edited by W . W. Keen, MiD., LL.D., Hon. F.R.C.S., Eng. and Edin., Volume 3. Oetaro of I132 pages, with 562 text-illustrations and I0 colored plates. Philadelphia and London: W. B. Saunders Company, 1908. Per volume: Cloth, $\$ 7.00$ net; half morocco, $\$ 8.00$ net.
In this volume is treated the surgery of the head by Harvey Cushing; the surgery of the neek, by E. Wyllys Andrews; the surgery of the thyroid gland, by A. Kocher; the surgery of the larynx and trachea, by George Emerson Brewer; the surgery of the thorax, by the same author; the surgery of the breast, by John M. T. Finner; the surgery of the mouth, teeth and jaws, by Edmund Owen; the surgery of the tongue, by John Chalmers Da Costa; technie of abdominal surgery, by John C. Munro; surgery of the abdominal wall, and surgery of the peritoneum and retroperitoneal spaee, by the same author; the surgery of the esophagus, by Georg Gottstein; surgery of the stomach, by

1. W. Mayo Robson; surgery of the liver, the gallbladder and biliary ducts, by William J. and Charles II. Mayo; surgery of the pancreas and the surgery of the spleen, by B. G. A. Moynihan.

Cushing divides his subject, the head, into four parts-the scalp, the cranium, the meninges and the brain. Each subject is treated in a very practical and thorough manner. He makes a plea, very properly, for more neurologic study by those who would practice neurologic surgery. One or more quotations, medical and otherwise, precede each part of this chapter and add to the literary entertainment afforded the reader.

Perhaps the most interesting part of the chapter on the surgery of the neck by Andrews is that devoted to "operations," and especially that portion devoted to Crile's operation, which is terscly described and thoroughly illustrated.

The ehapter on diseases of the thyroid gland could have been written by no one better able to perform the task than Albert Kocher; hence it follows as a matter of course that this chapter is classic in character. The danger of excision of goiters is so slight ( 3 in $\mathrm{I}, 000$ in Kocher's hands) that surgical treatment is advised in all goiters with nodules that are degenerating, diffuse colloidal goiters which do not respond promptly to iodin, goiters producing either pressure or cardiae symptoms, abnormally situated goiters and rapidly growing or sensitive goiters. Excision is the operation of choice. It is to be regretted that the author does not give the bibliography of his subject as do all the other writers in this volume.

The ehapter on the nose and accessory sinuses is disappointing. Nasal deformities is disposed of in four pages, of which one and a half are given to paraffin injections. The propriety of treating such subjects as rhinorrhea, tubcreulosis of the pharynx, acute superficial tonsillitis and follicular tonsillitis in a work of this eharacter is questionable. The tonsillotome is advised for the removal of enlarged tonsils, and no mention is made of complete removal by dissecting them out.

In the chapter on surgery of the larynx there is introduced quite a little matter that is purely medical. We are told by the author that intubation and tracheotomy yicld about the same results in diphtheria of the larynx. This is a mistake. The percentage of recorcries is much larger in intubation than in tracheotomy. Local antiseptics used in the way of sprays, gargles and local applications as advised by the author probably do more harm than good, espeeially in children. Barring the above exceptions this chapter is satisfactory. The surgery of the thorax is by the same author and treats of the injuries, diseases and malformations of the chest walls and contents. Sauerbruch's cabinet is described and its advantages named.

The surgery of the breast is very properly alloted a chapter of its own which is sufficiently comprehensive, is written in a very clear and entertaining style, and in addition to other illustrations contains three beautiful plates.

The mouth, teeth and jaws are treated in one chapter, and the tongue in another, and by different authors. Just why this was done is not apparent. More space is given to a consideration of the surgery of the tongue than to that of the mouth, teeth and jaws combined, which apportionment seems not in accord with the relative importance of the subjects. The consid-
eration of dental caries and pyorrhea might better be left to works on dental surgery.
The technic of abdominal surgery, surgery of the abdominal wall, and surgery of the peritoneum and retroperitoneal space are the subjects of the next three chapters, respectively, and are written by John C. Munro. Because they are so terse, so comprehensive and evince such true conservatism and sound surgical judgment, thesc chapters deserve special eommendation.
The surgery of the exophagus is a very complete presentation of this rather minsatisfactory chapter in surgery.
One naturally expects mueh of a chapter on surgery of the stomach by Mayo Robson, and it is but fair to say that his expeetations are fully met in, this chapter.
The chapter on the surgery of the liver, gall bladder, and bile ducts is written by the Mayos. The chapter is divided in two parts; the first is devoted to the liver, and the second to the bile ducts and gall bladder. Both parts are introduced by a concisc statement of the embryology, anatomy and plysiology of the struetures. A better exposition of the subjects in the space allotted can searcely be conceived. Among the com plications arising from gatl-stones we fail to find any mention of obstruetion of the bowel from large stones, The two closing chapters are by Moynihan, of Leeds, England, and deal with the pancreas and spleen, respectively. A very valuable part of the chapter on the pancreas is the description of the technic of examina tion of the urine and feces in suspeeted cases of pancreatic disease. Splenectomy offers the only hope of cure in Banti's diseasc. The operation should be done before serious ehanges have oeeurred in the liver or bone narrow. The danger of the operation per se is slight. The bibliography of eaeh subject is given at the end of the chapter in which it is treated, with the exception of that of goiter. The illustrations are many and good. This volume is a fitting companion for its worthy predecessors.

## ABSTRACTS FROM CURRENT MEDICAL LITERATURE

## THE MEDICINES THE PHYSICIANS SHOULD PRESCRIBE.

Among the many very interesting subjects discussed in an admirable address delivered before the Kentucky State Medical Association by Dr. George H. Simmons, secretary of the American Medical Association, reference was made to the work being done by the Council on Pharmacy and Chemistry as the most important of all the good things with which the American Medical Association is to be credited. Concerning this work, Dr. Simmons says:
" 1 . The council investigates such proprietary medicines as the manufacturers offer for investigation. If, on investigation, the council believes the preparations are what they are claimed to be, and if they comply with the rules, they are accepted. A full description of these preparations is published in The Journal A. M. A., and afterward incorporated in a book, "New and Non-Official Remedies," for easy reference.
"2. For obvious reasons, the council can not take up a preparation for investigation and inclusion in this book unless the manufacturers are willing, and submit it for the purpose.
" 3 . This work is primarily in the interest of manu-
facturers of proprietaries. The majority of them are opposing it especially is this true of those who put out typical nostrums-and consequently they will not submit their preparations. Even many of the legitimate pharmaceutical houses are secretly opposing this work, and will continue to do so unless they find it good policy to do otherwise.
" 4 . The work is directly in the interest of physicians and indirectly of the public. Naturally, therefore, if physicians do not co-operate with and support the eouncil, manufacturers will not. If physieians do sup port it, the viewpoint of the manufacturers will change.
" 5 . There is one effective way by whieh physicians can co-operate and change the viewpoint of the manufacturer, and that is by refusing to use any proprietary medieine that is not to be found in the approved list.
"And this is the appeal that I want to make to every member of the medical profession of Kentucky Give this movement your support by refusing to recog nize as worthy of your consideration any proprietary medicine that has not been investigated and approved Ind in making this appeal I want to assure you that it will not require any sacrifiee on your part, nor will your patients suffer. If one in five of the physicians of the United States will do what I am asking you to do, the greatest evil that rests on American medicine will be removed-the curse of the nostrum and the blight of commercialized therapeutics.
"It is a simple thing to ask and is easily done. The book, which coutains a full deseription of the recognized articles, can be had for the asking, and a list without descriptions costs but a postage stamp. Do not forget that this propaganda is affecting one of the most profitable enterprises of the day, one from which millions of dollars profits are drawn annually; that linked with it, and a part of it, is the 'patent medicine' business, and that these are combined in the opposition."-Abs, Kentucky Medical Journal.

## THE ORGANIZED MEDICAL PROFESSION AND POLITICAL DUTY.

Politics and medicine meet on eommon grounds within the limits of state medieine and public hygiene. Disraeli said "the first duty of the statesman is the public health." This truth applies also to the organized profession. The eo-operation of political and medical organizations in this common field of action would result in the realization of the grand possibilities of sanitary seience for the public good. The ultimate object of both medicine and politics is the public welfare. Their co-operation for the publie health defense is the measure of mutual obligations. This ideal can be attained only after establishing right relations between medicine and politics. Although they seem foreign to each other, the failure of each to meet its obligation to the publie welfare is the real cause of their estrangement.
An awakened public conscience is demanding a conscientious performance of duty. On analysis of the situation, the public has learned that health interests have not been protected in accord with the advance of sanitary science. Public officials do not properly estimate the value and importance of sanitary administration. The people know that this subject is neglected, from congress to the town council; they realize now, as never before, that political authority runs to partisanship rather than to public health affairs, that sanitary organization is too often a part of the political machinery.

The people also realize the fact that the medical profession is derelict in public duty. Activity on the part of the laity resulting in the passage of the pure food law, and the detailing of the "Great American Fraud" by the popular press, were required to teach the profession its defenscless disregard of the publie health.

The fight against that pandemic disease, tuberculosis, by organized effort is being conducted almost singlehanded by the laity. Sanitary offieials, as the expressions of partisan politics and an indifferent medieal profession, do not aid the publie, as their name would indicate, not even in their capacity to make official records, for the reason that physicians refuse to cooperate. Public health authority should be the joint expression of good politics and good physicians.

The medieal profession has been too much absorbed in scientific work to engage in public health affairs or to "meddle in politics." Besides, the dignity of professional men, as a rule, keeps them out of politics. There is a feeling of repugnance toward any movement that offers to inject polities into medicine. The fear is that medical organization will be used for partisan purposes. Certainly this will never lrappen, medieal organization will nerer be used as a political machine in the interest of any party.

The question is not how mueh polities may be injected irto medicine, but how much medicine should be injected into politics, as exampled by the Bureau of Legislation of the Ameriean Medical Association. Viewed in this light there is no exeuse for the pseudo dignity of physicians that inhibits their performanee of public duty. To secure the co-operation of political parties and goverument officials for the publie health would add to the dignity and usefulness of the profession. This publie service is needed to keep the profession in tune witl an altruistic age. It is needed in every community. This neeessity threads it way into every arenue of life, penetrates public office and institions, mumicipal and state government. The public health service naturally in the keeping of the medical profession has much to do. Our army sanitation, a national disgrace, and the necessity of a federal health commission languish, like lrungry dogs, at the door of eongress. Typhoid fever rums epidemic from water taps in thousands of homes, because of the sanitary misrule of the eivie authorities. Tuberculosis and other communieable and preventable diseases continue their ravages upon health and life for the laek of official and medical eo-operation. There is need of medical service improvement in nearly all public institutions.
The publie scrvice of the medical profession is further needed to correct the evils of proprietary medieine and the fraud of eltarlatans. This service is needed to protect medical interests and standards from the incursions of quacks and cult-bound healers. It is needed to place health boards upon a sanitary basis and to inaintain the medical practice act.
Self protection is the object of many other associations, and if for no other reason medical men should give more attention to medical ceoromics.-Ohio State Medical Journal.

## THE ELIMINATION OF DEGENERATES.

Degeneracy is a defect which differs from disease in that it ean iot be cured. It is an incurable defeet and means there is something lacking in the mental or nervous makeup. Degenerates are increasing faster than the inerease of the general population. All the
states are continually finding it necessary to erect new institutions for the eare of the degenerate, the delinquent and the dependent. The class known as degenerates includes most of the insane, the idiotie, the epileptic, the confirmed incbriates, the imbecile, the scxual perverts, the prostitutes, the tramps, the eriminals and the habitual paupers.

Education does not and can not eliminate degenerates. There is but one way, and that is to prevent their being created. The duration of the lives of the insane, of criminals, of idiots, of epilcptics and habitual paupers has been inereased about eight years in Indiana in the last two decades. The average duration of life in the same period for the whole population has inereased only four and one-half years. The perfect eare given the defective class is the cause of the increased duration of life. This inerease is a disadvantage to the degenerates as well as to society in general. But. sentiment demands that the eare be given, and it is well for the sane and the strong that this sentiment exists. It is the good animal that makes a suecess of life. It takes good animals to make a nation strong and persistent. Only good human animals are wanted.
The restrieting of propagation must be adopted. This is necessary to preserve the nation and even the race under the present conditions of eivilization. These truths have led Indiana to adopt seientific and practical methods for eliminating the unfit. The law affecting the problem from the marriage side was passerl in 1905. "No license to marry shall be issued except upon written and verified application. The form of application slall be supplied by the state board of liealth and said board may revise said forms from time to time as may be advisable. No license to marry shall be issucd when either of the contracting parties is an imbecile. epileptic, of unsound mind. or under guardianship as a person of unsound mind, nor to any male person who is or has been within five years an inmate of any county asylum or home for indigent persons, nor shall any license issue when either of the contracting parties is afflicted with a transmissible disease." The marriage is illegal without a license, and a penalty of $\$ 100$ fine lies against any county elerk for issuing a license contrary to law. and the same penalty lies against any person authorized to marry who does so when the applicants have no license.
Strongly enforeed, this law, without doubt, will reduce degeneracy in some degree, but will not very greatly affeet the evil. The second law aiming at the prevention of the creation of degenerates passed at the last session of the Indiana legislature, permita castration, but vasectomy is the operation usually performed. It is simple, without the slightest danger, does nnt mutilate, and may be performed in three minutes without loeal or general anesthetic. Since October, 1899, Dr. H. C. Sharp, surgeon of the Indiana Reformatory at Jeffersonville, has operated upon 300 eases, and up to the going into effect of the law most of the men sterilized by vasectomy submitted voluntarily to the operation. Dr. Sharp says: "I have never seen any unfavorable symptoms. There is no atrophy, no eystic degeneration, and no disturbed mental or nervous condition following rascetomy. On the contrary, the patient becomes of a more sunny disposition, brighter of intellect, ceases bad practices, and advises his fellows to submit to the operation for their own comfort and good."-Dr. J. N. Hurty, Secy. Indiana State Board of Health. Abs. Illinois Medical Journal, January, 1908.

## THE JOURNAL

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# Indiana State Medical Association 

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager<br>BEN PERLEY WEAVER, B.S., M.D., Assistant Editor

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## ORIGINAL ARTICLES

## SPONGES LEFT IN THE ABDOMEN.

AN UNESUAL CASE WHICI TIROWS A NEW LIGHT ON THE SUBJECT.

Miles F. Porter, A.M., M.D.
Surgeon to Hope Hospital: Irofessor of Surgery in the Indiana Medical College, the school of Medicine of I'urdue Unirersity.
FOHT WAYNE, IND.
Mrs. N., referred by Dr. Fisher, of Markle, Ind., was admitted to Hope Ilospital, Feb. 22, 1908. Family history goort. Menses came at 10 years, regular. Wias married eight years ago and has one child. Had measles two years ago. Three years ago had hematuria for a time. which cleared up and she has had no trouble of this kind since. Has had attacks of pain and tenderness in right side of belly for two years. At first these attacks were accompanied by fever. but not lately. Has had constant pain for the past two months, during which time she has been able to get out of the house but twice. Bowels regular.

Examination. - Dark complexion, well nonrished, hazel eyes. Hyperesthesia of skin and tenderness to pressure over quite a large area of the abdomen, the center of which area is at McBurney's point. Bimanual examination reveals a small tender mass in right orarian region and tenderness in left, but no tumor.

Diagnosis.-Chronie appendieitis with salpingitis duplex.

Operation. - Midline incision. Right small parovarian cyst, double hydrosalpinx and obliterating appendicitis were found. The cyst was exeised and both tubes and appendix removed. The subsequent record shows a perfectly normal recovery. The patient left the hospital Mareh 15, 1908 (twenty-two days after the operation).
feeling well. Eight days after she left the hospital I got a telephone from Dr. Fisher saying that he had removed several pieces of gauze from her vagina. (on inquiry from him, I learned that the picces did not tear off but came away. or rather were removed with forceps, in the shape of rolls abont the length and size of a lead peneil (Fig. 5), and after all presenting were removed others would present in a few hours, requiring that he risit her three or fonr times a day to take them away. The doctor thought that the pieces eame from the pelvie cavity througl, "an opening in the right side of the ragina about the size of a lead pencil."

On the next day but one after learning of the matter I risited the patient at her home with her doetor, found the patient on a cot apparently suffering some pain, which she said was due to more pieces "coming dorm." She did not look sick. In reply to my question, she said she felt well until she got a jolt on the ear on her way home. and that since then she had been haring pain, which was worse at times, and had not been so severe since the pieces legan to come away. The first knowledge the doctor had of the nature of the trouble came through the patient's husband, who told the dector that there was a piece of ganze protrnding from the ragina. I asked to see what had been removed and was shown a large number of pieces of different texture, whereupon I remarked that the goorls was not such as I used as sponges, that there were more picees than had been used all told in the operation, and that consequently they had not been left in the woman's belly by me. It was averred that they could get into her belly only through the wound made by me and at the time it was made, because it had been closed, healed by first intention, and was still elosed. The patient facetiously remarked
that she "supposed she swallowed "em." "No," I rephed, "hat you swallowed them they would not come out through the vagina." Dr. F. now asked the patient if she thought more "picees were down," and being answered in the affirmative. he introduced a speeulum and found that she was right. I removed the speenhm and introducing my finger I eame upon a small wad of something which upon removal proved to be a piece of ordinary white muslin about three inches wide by seren inches long, twisted into a rope

(Fig. j). doubled upon itself so as to make a small irregular ball or wad (Fig. 6). It was perfectly elean and was so saturated with what looked and smelled like urine that on squeezing between the finger's several drops were squeezed out. I examined the ragina with my finger, assuring myself that there were no more "picees" there, that there was no hole leading into the pelvie cavity, and that in fact it was a perfeetly healthy vagina and in no wise unusual exeept its
cleanliness, for whiclı, of course, the frequent wipings it received were accomtable. In the presence of the patient, her mother-in-law and the doctor I said, pointing my finger at the patient: "Doctor. I don't know where those rags come from, but that woman knows-well, and could tell if she would." The mother-in-law objeeted to my statement rather forcibly, but the patient said nothing. I then took the doetor ontside, told him that the woman was a malingerer, and that we would give her a chance to put some more rags in for removal. We recovered one more piece before we left. Before leaving I insisted upon both the doctor and myself making a thorough inspection of the vagina with the eye and the finger as well. This was done, but no abnormality was found. It should be stated that some of the "pieces" were tinged with blood, but none of those removed during my visit were so tinged. I brought ten specimens with me, from some of which the aceompanying illustrations were made. The figures are about half the aetual size. Figures 1, 2, 3 and 4 show the texture of four different kinds of goods found. I did not look to find more kinds and ean not say positively that the ones represented are a complete exhibit of the variety in the stock. Eight days after my visit Dr. Fisher reported "no more exhibits." So far as I know, no threat was made of a suit for damages, nor did the patient or her mother seem out of humor with me. The lusband was at his work and not present during my visit, although he presumably knew the day before that I was to be there, as I had sent word that I was going.

The woman is a malingerer, of course. but the interesting query arises as to her object. Without discussing the subject I will mention the possible explanations that oceur to me.

1. Desire for money.
2. Desire for sympathy.
3. Desire to avoid work.
4. Sexual perversity.

During the patient's stay in the hospital nothing pointing to a neurotic comlition was noted. Indeed, she was regarded as an unusually nice and agrecable patient. The case is placed on record because, so far as I know, it is unique, and for the further reason that it throws, what is to me, a new light on the subject of foreign bodies left in the belly at operations.

## TREATMENT OF ACNE VULGARIS.

Alembert IV. Braytox, A.ML. M.D.
Irofessor of liseases of the Skin and Syphilology in the Indiana Medical College. INDIANAPOLIS, IND.
Ache vulgaris is the most prevalent of skin diseascs. The predisposing cause is youth; 80 per cent. of the cases begin before the sixteenth year. With puberty comes hair on the parts before hairless, and the sebaceous glands of the face and back-survivals of a period when the whole body was hairy-expcrience in an abortive manner the impulse to growth given ly the ripening of the ovaries and seminal glands, the development of the breasts, and the entire pilo-sebaceous system.
Acne is common in young men, who usually pay little attention to it. It is a source of annoyance and mortification to young women, the greatest impediment to their sexual allurements, crippling them in their natural desires to appear well in society and to achieve their natural functions as women-to have a home and a husband and their normal position in social life. This disease may be cured, or at least controlled, during this storm and stress period of girlhood, when they are
"standing with reluctant feet
Where the brook and river meet,"
and, therefore, every doctor should be as familiar with acne and its treaturent as with that of eczema or syphilis. Cure or control the acne of a young girl or woman, and you will secure the gratitude of herself, her family and her friends.

The young man or girl comes to the office with a nose, chin and forehead which feel greasy; the face is studded with comedones and blackheads; there may be white or red papules, and these intermingled with large, pustular and dull red, deep, indurated nodules. The same conditions may be on the back. chest and tops of the shoulders, the skin of the chest and back greasy as obscrved by sight and touch. This is acne in a severe form; it may be rery slight; it may be that the whole face is red, swollen and looking as if the skin would slough.

The patients, it women, and particnlarly unmarried women, are gloomy; they seek retirement; they go veiled; they are kept from social, business and cducational opportunities and privileges; they suffer from introspection; they are housebound; they may become the victims of melancholy and insanity. To cure them, or to alleviate the disease so there will be no extensive pitting or disfigurement, is as great a necessity and victory as to arrest a beginning tuberculosis, or cure a sphilis or gonorrheal urethritis.

We may accept the varying views of L'nna, of sabouratd, or of Gifehrist, as to the parasitic origin of acne, but this is not so important in practice as to begin an empirical treatment at once. Treatment should begin with the first acne papules and pustules on the face of the schoolboy or girl, thus preventing scarring and pitting and shutting the youth out of the joys and opportunities of the golden years from puberty to the close of adolescence.

The condition of the skin must be improved, as with eezema, so that it will be resistant to invasions. Eczema is a catarrh of the skin due to malnutrition. The keynote of success is proper feeding and exercisc. combined with elimination of toxins. The constitutional treatment for ache is not very diverse from that for eczema. Build up the skin, empty the follicles of their grease and pus and the invading bacilli. Keep the skin aseptic, so there may be no extension. Use freely the curctte, the lancet and the comedo expressor to emprty the follicles. Improve the regimen. Closing a long paper on the treatment of acne, Dr. George Henry Fox, of New lork, says: "If I were asked to give the treatment of acne in the ferrest possible words I would simply recommend a strict diet, cold morning sponge baths, systematic exercise, massage of the parts, the frequent use of the curette, and the application of antiseptic lotions."

And nori as to the details of the above treatment, hygienic, dietary, medicinal and local.

First, the hygiene. Daily cold or tepid baths on arising, with brisk towel friction of the entire skin; once a weck a warm soap and water bath before retiring; a half hour's walk morning and evening for the sedentary and housebound; wellrentilated bedrooms and eight hours of slcep; deep breathing; horseback riding; golting, skating, housework and dancing are all good forms of excrcise.
second, as to diet. Do not give too strict rules. Stimulating foods, highly-spiced: beer, spirits, tea and coffee should be aroided. They are bad in cxcess and lead to orcreating. A cup of cottee for breakfast, water for dimer, and a cup of tea for supper, may be permitted. Elimination may be secured by a quarter of a grain of calomel at night and a heaping teaspoontul of light calcined magnesia in the morning before breakfast in a glass of water. The water alone, with a teaspoonful of salt, may do for many. Discard fresh breads and cakes. Pastry and fried foods are obnoxious, and too much sugar and candy should be avoided. Eat slowly, chew the food well, take little or no water at meals. Milk, if good, taken betreen meals or at bedtime if out
late. or if hungry, is estecmed by Dr. L. D. Bulkley of New York, and was adrocated by the late Dr. Joseph Eastman of Indianapolis. Milk is an excellent diet in eczema and the errthemas. and notably in pruritis, becanse of the large anoment of its calcium content, thens alkalinizing the blood. shorteming the time of coagulation and preventing leakage into the skin.

Water may be taken an hour or two after meals. The bowels should be made to move at the same time eacle day. This is a matter of habit and can be secured by effort. The writer sympathizes with Dr. Edwin Walker's views that purgatives are the ferepuent cause of constipation. hat he also believes in the night dose of calomel. for selected cases, as it is lavative, diuretic, a glandular stimulant and given in decreasing doses from one-rpuarter grain to one-cighth or one-tenth at night, with the magnesia misture or the glass of warm water on rising, will secure a regular morning labit of moring the bowels. and so oppose antointoxication.

The old "Startin's solution." the "Mistura ferri aridi" serves a good purpose in plethoric girls witl costiveness, a coated tongue and much local hyperemia of the face, the hands and feet. It is as follows: Sulphate of magnesia, one ounce; sulplate of iron, ten grains: common salt. thirty grains; dilute sulphuric acid, two drams; infusion of gentian, enough to make four ounces.

The dose is a large tablespoonful in a glass of water one-hald lour before breakfast, and at night if neerled. 'Thlis is a valuable laxative, diuretic, iron tonice and stomachic stimulant. It was a great fasorite of the obder school of practitioners in Indianapolis-Drs. T. B. Harvey, J. R. Eastman, li. N. Toold, L. II. Dunning, among scores of others-really the old "Dorser"s solution," which radiated from the old Ohio Medical College after its great value in the drsentery of pioneer days was recognized by Dr. Dorsey of Cincinnati. Arsenic, from $1 / 40$ to $1 / 20$ grain three times a day, is often beneficial, because of its specific effeet upon the skin.

Third and last. the local treatment. And here we can not go far astray for the path of the dermatologist has been liberally sprinkled by the White Lotion, the Lolio Alba of dear old Dr. Duhring of Philadelphia for the last forty years, and made so dazzling white that no doctor who reads any modern skin book can fail to find it. In nime out of ten books on the skin this lotion is deservedly given the leading place. I quote Dr. Hardaway of St. Louis, who has just brought out the most practical and generally useful work on Cutancous 'Iherapentics yet published. "Chief
among the local remedies for acme stands sulphur, and perhaps the most gemerally nseful metloce of its application is in the form of the lotio alba." 'To make this invaluable lotion, use a good article of liver sulphur-yellow, hard and malodorous lumps. from well-sealed tin cans. It costs 3.) cents a pound, and a pound witly a pound of smplate of zine will make eight quarts of the lotion.
'The menal preseription is one dran each of the potassimm sulphide and sulphate of zinc. dissolved in four ounces of rose water. The best way to make it is to dissolve an ounce of the potassimm sulphide in one-half pint of water, and an ounce of sulphate of zine in another halfpint: then pour them together in an open basin and stir well until you have a thick, creamy, pure white mixture. Put in a quart bottle and dispense to patients in four or six-ounce bottles, and show them how to dab it on the face, back, cte., with a lit of cloth. hest once or even twice thoronghly at niglat, so that the face is well whitcned. It will fleek off in the morning and may then be reapplied lightly. This lotion may be used as weak as from twenty grains of each of the salts in fomr ounces of water up to the consistency of a thin paste. It is invaluable for common acne, and also for acne rosacea, for pustular ecezema, ecthyma-in brief, for all pustular conditions of the skin ; it also prevents boils and cures scabies.

Rose water is not essential in making this lotion; any dean water, hard or soft, hot or cold, will do. 'Ten drops of glyeerin may be added to each onnce to soften the harshmess. A dram of White sulphur may also be shaken up with each four or six ounces. An excess of sulphate of zine makes it too astringent and peels the faee. but this frequently does goorl. In excess of the sulphide makes the lotion alkaline and soft to the feel. It must always be shaken. so that the precipitate of sulphur. of potassium sulphate, and the white pulverulent and hydrated zine sulphide thrown down will be well mixed with the water. Ladies will often come back to get the lotion for a cosmetic. If the face is harsh, sealy or peeled, reduce the strength by adding water, or substitute for the day an ounce of cold cream, to which is added a dram of sulphur-really the most desirable sulphur ointment, excellent according to Jackson, used once a week for dandruff of the scalp, especially if strengthened with thirty grains of salicylic acid to the ounce of the sulphur ointment.

The third step in the treatment by sulphur is the use of a good, well-seented boro-talcum powder to which is added one-fourth of its bulk of
white sulphur. These are shaken together in a box and used to whiten the face on going to school or in society. It eovers the acne redness where present and continnes the sulphur treatment, which summed up is as follows:
(1) Wash the face well at night with eold or tepid water and good soap; tincture of green soap is desirable. Open with a slrarp lance all pustules, scrape off all acne tops, wise the comedone expressor, dry the face and whiten with the white lotion. (2) In the morning fliek off the white powder with a soft towel. It is not then necessary to wash the face. Use the ointment of sulphur in the morning if the skin feels dry and harsh in spots or places. Or apply the lotion lightly if about the house. (3) On going out use the powder as a cosmetic and at night wash the face and begin the treatment again.

The patients should see the physician at the office twice a week until under way with the treatment. The surgieal work - opening the deep pustules, curetting the shallow ones, expressing the comedones, ete.-should be done by the physician himself, but some patients become expert in the work. The use of the white lotion with orrection of diet, attention to hygiene, and such remedies as are indicated, will be enough for most patients.

For some eases the Kummerfeld sulphur lotion is excellent and sufficient. It is essentially a handful, half an ounce, of white sulphur, shaken in eight ounces of lime water, or, more elaloorately: white sulphur, half an ounce; pulrerized eamphor, fifteen grains; glyeerin, one dram; lime water and rose water, three ounces of each. Mix, shake well, apply night and morning. This lotion does not show on the face; it may be used ofter and is rery effieient.

With the above treatment, raried as systemic conditions may require, the disease can be controlled and almost universally cured. This we have proved by a long and satisfactory experience. The treatment is simple, not expensire, and accessible to thousands of patients seattered over the country whose faces would otherwise le pitted and scarred by neglect of these simple toilet measures, for such in practice they are.

Much has been hoped for in rebellious cases of aene by the use of bacterial injections, the dosage and spaeing of the doses being regulated by the frequent estimation of the opsonic index. Stock vaceines are unecrtain in this treatment; the autogenous vaccines are preferable. This treatment means that the patient must go to a place where this most delicate method is thoroughly understood and constantly practiced. The expense is great; the laboratories are as yet but
few and the results are not at all positive. In the summary of his notable paper on the treatment by opsonic methods of boils, sycosis rulgaris, acne, pustular dermatitis and septie ulcers, Dr. Whitficld, professor of dermatology in King's College, London, in a paper read before the Sixth International Dermatological ('ongress in New York last September, said: "In acne the treatment is uncertain, in some cases being most brilliant and in others without the slightest arail." The same unecrtainty was expressed by Professor Jay F. Schamberg, of the I'niversity of Pennsylrania, and loy Ir. Yon Eherts, of Montreal, in papers read on the same subject before the congress. These three notable papers on the treatment of the suppurative diseases of the skin after the method of Wright, emanating from London, Philadelphia and Montreal, respeetively, are of the highest value to the physician and surgeon: they may be read in the December, 190i, issue of the Journal of Cutaneous Discases.

The hegienie. dietic and local treatments which have been detailed in this paper may be combined with the opsonie method and also with the $x$-ray treatment in those few cases of acnewhich are not cured or alleviated after a reasonable period.

The $r$-ray treatment is often efficient and is regarded as the best single treatment of acne by rarious writers, among them Pusey of Chicago and Hardaray of st. Louis. But these same authors all admit that the older forms of treatment are too raluable to be abandoned, and that some cases of acne are incurable by the rays alone. Other authors and practitioners of long experience before and since the $x$-ray therapy was introduced, only resort to the $x$-rays in a few extreme cases. Among those who have been very guarded as to the use of the ray treatment are 1)rs. L. D. Bulkley, (ieorge T. Jackson and George Henry Fox of New York, and also Dr. F. B. Wym of Indianapolis, who has used the ray treatment in perhaps a larger range of discases than any other of our local practitioners.

The dangers are manifold; atrophy, telangieetasis. permanent erythemas, permanent loss of hair, and even incurable burns. The number of these aceidents with the rays deereases with the perfect technic and experience of the operators.

The $x$-ray acts in various ways: leucocytosis is increased; the lymph supply is made greater about the lesions, thus increasing the local opsonie index. But these excellent results are also sceured by dictetic, hygienie and medieinal measures, and also by Bier's method of passive hyperemia. Originally applied to tuberculous arthri-
tis. this method is now employed in a wide range of discases, as has been especially exemplified before our local and state societies by Dr. Lonis: Burckhardt ol Indianapolis in numerons essity: and discussions. Moschowitz has successfully applied the method to paronychia, cellnlitis and more recently to ache. Small cupping glasses with rubber bulbs are applied for one or two minutes at brief intervals through the space of an hour, in daily sittings, with improvement apparent in from two to five days. The same method has long been used by Stelwagon in emptring the small pus areas which complicate severe ache. It is becoming a common treatment for boils, earbuncles and large abscesses, sueh as those of the breast. Cupping glasses with an inch-wide mouth and rubber suetion ball may be used for the acne lesions.

In the good effects upon the tissues mentioned the ray treatment and the passive hyperemia treatment have much in eommon. The bactericidal effect of the rays lies in their power to increase the local opsonic intex just as it is increased by the old treatments-the soil is made obnoxious to the sced. But the rays also bring about a vascular constriction and produce atrophy of the sebaceous glands in which all aene begins. The uncertainty of eurrents, the variance of tubes, the personal illiosynerasy of the patient, the factors of knowledge gained by experience on the part of the operators, must all be given weight, and these collectively make it impossible to state in any given case what the result, beneficial or harmful, of ray treatment may be. The legal rule is now established by precedent that if the ray operator possesses and exereises the average knowledge of the treatment he is not responsible for the injuries that may oceur. The palient should always be warned of the dangers of the ray treatment. This warning is not only cantionary but is morally and legally obligatory upon those operators who use the ray treatment upon minors, becanse of the danger of producing sterility, temporary or eren permanent, in young men and women, an accident that has not infrequently happened to the ray operators themselves and to their patients, both male and female.

But not one case of acne in a hundred ean be treated with $x$-rays; and as the great majority of adoleseents have acne which should be relieved, the ordinary medicinal, hygienie, dietary and local treatments which have served so long and so certainly should not be ignored or negleeted.

Not infrequently physicians have brought their daughters to me for advice as to an aene which had already pitted the eheeks but which yielded promptly to a rational hygienic, dietetie,
intermal and local treatment such as is indicated above. Had it been commeneed as soon as the first eruptions of acne oecurred the pitting and searring might have been aroided and the pleasures and possibilities of girlhood and womanhoorl inereased.

330 Newton Claypool huidding.

## PLANTIC OPERITION FOR ELONGA'IION OF THE SCIATIC NERVE. <br> Joserif Rilus Eastaran, M.D. INDIANAPOLIS, IND.

The olservations of Waller, made in 1850, in effect that both peripheral and eentral degeneration oceur after division of a motor nerve, are, after many years of dispute. in the main acceptable. At present it is clear that complete peripheral degencration occurs and that centripctal atrophy extends over several nodes of Ranvier. Division of a sensory nerve is followed by ehanges essentially the same. After division of a sensory nerve peripherally to the spinal ganglion. degeneration begins which eventually extends throughout the whole nerve and inchudes the end organs. If cut between the eord and the ganglion, centripetal degencration extends into the cord (Keen) .

In traumatic degencration the cut ends of the medullary tubes swell, and the neurilemma cells are ehanged into an homogeneous, deeply-staining mass. The axis eylinders beeome thickened and marked by beadlike masses and the mrelin droplets described by Nasse exude.

Later the medullary sheath breaks up into small particles. The axis eylinder undergoes fragmentation of its fibers and the staining reaciions are lost.

In regeneration after division the neuelei of the peripheral neurilemma cells enlarge with proportionate increase of ehromatin, evidence of active proliferation. Leucocytes remove the débris of the degenerated axis eylinders.

These phenomena have been observed constantly. However, whether these proliferating neurilemma cells of the peripheral portion of a divided nerve actually re-establish the degenerated axis cytinders is doubtful. Many authors have said that all new axis eylinders must grow out from the central end from a eentral ganglion cell or from an undegenerated fiber extending from the central end of an axis eylinder. This means that such a new bridging fiber must occasionally grow for more than fifty centimeters to reaeh its end organ.

Ballance believes that, after division, periph(ral axis eylinders are regenerated in sections,
different segments of the neurilemma distal to the cut forming new short nerve fibers which erentually join ends, forming a continuous axis crlinder. There is, therefore, still a question as to whether all regeneration is from the central cut end.

It any rate, it is eertain that within a few days after division fine febrils grow out from the central end of the axis cylinder, penetrating the substance of Schwann and entering the surrounding granulation tissue. If the peripheral and is not too far away, these fibers bridge the defect. If protected and guided ly an enclosing tube of deealcified bone or formalinized artery, sueh outgrowing fibers will, as is well known, traverse a distance of several eentimeters. It is suspected that an attraction like that of ehemotaxis draws the bridging fibers to the peripheral end.

Gotch and Harrison, ${ }^{1}$ believers in the central outgrowth theory of regeneration of divided nerves, observed that after division and suture of the seiatic nerve in the rabbit, sensation reflexes appeared first in the peripheral portion nearest the point of suture, and at later periods at more distant points in the peripheral end as if the new axis cylinder were slowly growing from the central end along the track of the peripheral portion.

The length of time elapsing before return of motor response varied directly aceording to the proximity of the site of division and suture of the supplied museles.

Robert Kennedy, ${ }^{2}$ upon the other hand, remarks that "from the clinieal point of view there is a well-established observation which the eentral view of regeneration of nerves ean not explain. This is the early return of sensation after secondary suture of divided nerves. When the dirided nerve has remained ununited for, say, a period of three months, and when the area of skin supplied by that nerve has remained eompletely deroid of sensation, then after-suture sensation returns in the insensitive area in a day or two. The sensation which is found restored is of an ordinary kind. Thus, the pricking of the skin with a needle eauses acutely painful impressions."

Kennedy states that "Ranvier's central outgrowth view can not explain such rapid restoration. for, in the first plaee, unnaturally rapid growth of the new fibers from the eentral end would be required, as no sensation could be felt till the axis exlinders had reached the end-organ. In the second place, there would be a difference of time in the reappearanee of sensation, accordingly as the section of the nerve was near or far

[^11]2. Murphy's Year Book, 1907.
remored from the end-organs, which there is not. As regards suture of a nerve immediately after scetion. sensation takes mueh longer to appear, and this is what one would expect, as time is required for regeneration of the new nerve fibers in the distal segment. Where suture is performed at a time remote from accident, the distal seginent has already had time to form its new nerve fibers. The only difficulty is to explain the very early passage of impulses across the plane of suture but this, in Kennedy's opinion, is probably brought about by the junction of nemilemma cells, newly produed from both the eentral and peripheral ends, the gap being thus bridged and the impulses apparently having the power to pass along the protoplasm of such cells."
"The reason why motion recovers later than sensation is owing to the faet of the rapid degeneration of the museles after nerve seetion, which degeneration must be repaired by the nervous impulses reaching them through the restored nerve."

The last statement of Kennedy is not easily understood unless we assume that degeneration of muscle begins instantly and proeeeds with lightning rapidity after division of a motor nerve.

It is remarkable, in view of Kemnedy's explanation, that in cases of immediate suture, the motor response is always tardy. The eireumstance of constant tardy motor response after immediate suture is more plausibly explained by assuming that some time is required to re-establish eontinuous and complete working neurones after the inevitable destruetion, a more definite readjustment being essential for the transmission of co-ordinate muscular movements than for the carrying of mere tactile sensation.

From observation made in the past few years, Kennedy is of the opinion that the muscular tissue never disappears entirely although separated from the nerve centers, and this is important from the surgieal point of view, as operation may be undertaken with prospects of suecess although the muscles have been paralyzed for very long periods. ${ }^{2}$

The position at present oceupied by Mott, Halliburton, Edmunds, Cajal, Langley and Anderson ${ }^{3}$ is the one whieh most investigators are taking. They believe that the axis cylinder has an exclusively eentral origin. They have observed the neurilenma proliferation in the periphcral segment of the cut nerve, but think that this aetivity is for the purpose of building "scaffolding" for the guidanee, support and nutrition of new outgrowing nerve fibers, and are unable to

[^12]acerpt the view of the antagonists of the old Wallerian statement-that the peripheral neurilemmal caln produce new axis eqlinders. If we couk fairly asome that whereas new eentrally developed axis colinders are esential for motor response. sellsation may be paseed along the neurilemma of a eut-off peripleral segment, the chapter would be clear.

Pecrese collected sixty-two cases of division of the groat seratie nerre, and there are twelre reported cases of sinture of the ends. These re-port- show great disparity in the time of restordtion of selsation. For example, in the case of Bossnet, the ends were sutured fire days after the accident, and after almost a year there was still great disturbance of sensation. The anterior lalf of the dorsum of the foot showed distinct anesthesia and the whole of the calf was marked by deep hyperesthesia. In a case of Lamelongue, sensation returned after six hours. In a case of Roswell Park, it returned after thirteen dars.

In so much as the technic was practically the same in all casco. it seems strange that Bossuet's patient noticed no sensaltion whaterer for three montlis. Murphy sars the disparity in theae re-port- tend- to discredit them.

The case which the writer wishes to report herewith is unique so far as can be determined, as in this car the sciatic nerve was split and clongated hy three inches, whereas the twelse reported cases of suture of the sciatic represent end-to-end apposition of divided ends simply.

Miss R.. aged 1.). had pased through a serere attack of trphoid fever some two years prior to her admision to the service of the writer. During the proces- of the typhoid infection there dereloped a deep phlegmon along the posterior aspects of both lower extremities. extending almost from the hip to the ankle. attended by all the local signs of active phlegmonous inflammation, follown by suppuration as well as profound constitutional depression. As a result of this local infective process. there gradually developed marked contractures with shortening of all of the flexors of the knees and on both sides the legs were tightly flexed upon the thighs.

Is the girl convalesed from the acute infeetion she began to take on Hesh until at the time of her admission, notwithstanding she was barely 15 and not tall for her age. she weighed more than 180 pounds. She was, therefore, rery obese.

The right leg was straightened by elongation of the tendons implicated in the contracture. It was possible thus to straighten the right limb. Epon the left side, after all of the tendons had been elongated. it was seen that the sciatic nerve still resisted extemsion of the leg. maintaining
the limb in the position produced by the contracture.

The seiatic nerve was, therefore, freed from its point of branching to a point four inches distant from the hip joint and traction brought to bear upon it, approximately up to the limit of cighty pounds. but without the desired result.

It is known to be unsafe to stretcle the sciatie nerve more than one-twentieth of its length.

Perineuritic and super-implanted scar tis-ue had so impaired its elasticity that it seemed quite impo-sible to clongate the nerve trunk sufficiently by゙ stretching.

There are, as is well known. several other methods of elongating nerses. For example. by grafting in a section of nerve from a freshlykilled rabbit. dog or other animal or one remored from a recently amputated limb. The nerve may be cut and the conds connected "par distance" by. nmmerous strands of catgut, which serve as grides for the growth of new axis crlinders. such strands should be enclosed within a tube of decalcified hone or Cargyle membrane. which also slould surround the nerve for a short distance abowe and below. This insulation prevents interferenee by granulation tissue.

Other intermediary substances have been used, but these all serve as conductors of axis crlinders. In adilition to these methods, the nerve may, in slitable cases. be elongated by flaps cut from the central and peripheral ends. turned toward eaeh other and united as in tendon suture.

In the ease here reported the elongation was made by -plitting the sciatic nerve for three inches, then serering by cutting the fibers upon the right -ide above and the left side below. In other words, cutting out from the median slit at cacle end in opposite directions. Thus the ends of the fibers of the outer half of the nerve were united to the fibers of the inner half, completely disarranging the axis eslinders and breaking neurons so that no peripheral axis cylinder end was by any chance united to its corresponding central portion. In so much. howerer, as it has been quite clearly prosen that there can be no complete restoration of motor function. until the axis crlinders are newly dereloped from central cut end-to-end organ, it is clear that the methorl employed is not open to serious critieism as might be carelessly imagined. It is true that the limited experience which surgeons lave had in nerve suturing has indicated that the uniting of the ends after the method of tendon suture or transplantation of nerres gires results in no wise better than nor different from those seeured by the simple suture "par distance:" that is. simple. long distance suture with eatgut or silk. the
parity rarying with more or less accuracy aecordstrauds simply rumning from one end to the other where ther can not be brought into coaptation. In any cases all axis eylinders must grow from the central cut end (whether the cut be a plain transerse one or an irregular one like that used in the reported case) to the end organs.

In the suture of nerves it is always wise to use a flat Hagedorn needle with a dull end like the Kousnietzoff liver needle so that the axis cylinders are not piereed by the needle but simply pushed aside, the needle passing between them, and in order that scar tissue may not interpose itself between the end. Cargyle's membrane or other protective should (envelop the nerve ends. These precautions were used.

After the operation the legs were dressed in plaster-of-Paris bandages for three weeks to prevent recurrence of the contractures. after which massage, loot and cold douches and eleetrieity were employed.

The operation was made on Dec. 8, 1905. At present, notwithstanding the girl is still extremely obese and of slight musculature, she walks without rutches and aseends and descends stairs without diffieulty. she extends and flexes the right foot perfectly, but the left foot only slightly; that is, through an are of less than an inch at the tip of the great toe. She can flex the toes of the right foot. but not those of the left. she can adduct the right foot, but adduction is impossible in the left foot. she ean stand upon the right foot alone, but not on the left alone. Neither foot hangs down; that is, there is no drop foot. Neither toe catches as she walks, but the left toe shuffiles slightly. Morement in the arch of the right foot is normal, but the girl ean not bend and straighten the arch of the left foot. There is no flattening of the areh upon either side.

Sensation is not impaired on the sole of either foot. In fact, it is quite normal all orer the foot and lower leg; that is, she is quite eonseious when the left foot and leg are touched and ean determine with considerable preeision the character of the instrument employed. She flexes both knees almost normally.

It is harely possible that lad the union been made "par distance," using eatgut suture eonduetors enclosed in a deealeified bone tube, the outgrowing axis cylinders might hare found the site of their end organs more readily. It is possible that with more time there will be a better result as to motor restoration, for it is perfeetly clear to everyone who has had any experienee whatever in nerve suturing that return of sensation may be expected to preeede motor restoration hy months in practieally every case, the dis-
ing to the distance between the site of dirision and suture and the muscles supplied, whieh distanee, in the writer's ease, was great.

The fact that motion returns so late in this case where the nerve was sutured immediately after division is in support of the central outgrowth and neurilemma seaffolding doetrine. At the time of suture no time had been allowed for peripheral neurilemma seaffold building and the museles had undergone distinet atrophy from non-use during the long eonvaleseence.

## What they say about us

The Fort Wayne Medical Journal-Magazine has been merged into The Jouraid of the IN゙difia Stute Medical Assocration, the first number of which appeared January 15.

If one may judge from a single copy. the new journal will bring eredit to the medical profession of Indiana and to its editors.- New England Medical Gazette.

It is a rery great pleasure to welcome the appearance of T'HE JocrNal of the Indiana state Merlical Association.

This journal made its debut the first of the current year, and in two numbers which have thus far appeared it bids fair to take a prominent plaee among the best of the state journals. Experience has proven their value and those states which have been hanging back are now rapidly falling into line. Ohio in this, as in other matters, has demonstrated its progressiveness and our Journal, now in its fourth volume, extendits congratulations and best wishes to our sister state.-Ohio State Medical Journal.

The Jourcill of the Indiasa Stute Medical Isooctitiox is the title of the nem Indiana state jonrnal, published by Dr. Albert E. Bulson. Ir., of Fort Wayne, Ind. The Indini JocrNAL is but slightly smaller in page than this journal, printed on tinted, calendered paper, and is rery neat and attraetive in its typography and general appearance. The first two volumes have started off with a list of rery excellent original papers, the first number with a fine lithograph illustration. The editorial columns prove that the editor has been wisely selected. W"e are glarl to mote that the advertising pages are free from the objectionable advertising still earried by a number of our state journals. The inestimable ralue of a state medical publication has been thoroughly demonstrated in Texas, and we extend to the new State journal our hearty congratulations and best wishes.-Texas State Journat of Medicine.

# THE JOURNAL 

OF THE
INDIANA STATE MEDICAL ASSOCIATION
Devoted to the Interests of the Medical Profession of Indiana
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## APRIL 15, 1908

## EDITORIALS

## MEDICAI COLLEGES MERGED.

The medical profession of Indiana will rejoice in the knowledge that the medical college merger is now an accomplished fact. The following is the acconnt of the matter as given by the Fort Wayne Journal-Gazette of April 6:
$\therefore$ Indicapolis. April 5.-President Bryan of the Indiana Tniversity and President Stone of Purdue U'nirersity met here today and brought about a con-olidation of the Medical Schonl of Indiana and the state College of Physicians. ending a war of rivalry of about two years duration. The new -chool will be under the direction of Indiana Vniversity. The Medical College of Indiana i- known as the Purdue sochool of Medicine. and the state college is affiliated with Indiana L'niversity.
"In this merger both schonls made concessions. A complete course in medicine-embracing four years-will be maintained in Indianapolis. Also there will be a two years" comrse at Bloomington. The first two years nar be taken either in Bloomington or Indianapolis. It was upon this point that the break came between Indiana L'nirersity and the Medical school of Indiana truo years ago when an attempt was made to bring the medical school under the wing of Indiana E niversity.
"The text of the statement signed and given to the public to-night by President Bryan and l're-ident Stone follows:
-The efforts of Indiana University and Purdue Eniversity to promote medical edrcation in this -tate throngh co-operation with the members of the profession and with cxisting proprietary medical schools have been undertaken in good faith and with the one aim of establishing this important branch of professional training upon a sound educational basis. Indiana Unirersity has sought for many years to establish and derelop such a department, in which efforts it has encountered many obstacles, but has made continноия progres.

- Purdue Unirersity entered this field only when convinced that service could be rendered to the profession and to the state by the tender of its offices in consolidating existing courses and
aiding in the erolution of a single strong medical school at Indianapoli= under the auspices of the state and with the co-operation of other cducational interests. a task which was undertaken only after it seemed that other efforts in this direction liad failed.
- Out of these efforts by the two institutions had grown an unfortunate controrersy which operated to confuse the situation and becloud. in the minds of the public. the true relations of the universities. In the belief that the present conditions are delaring the educational progress and interfering with the highest functions of the tro unirersities. the logical conclusion follows that the two medical schools now in operation in Indianapolis under the direction of the two unirersities should be united in one school and that this should be under the exclusire control of one or other of these universities.
'The trustees of the two universities have thus mutnally agreed to the following conditions, to which the faculties of their respective medical schools assent. namely:
'To a union of the two medical schools under the direction of the Indiana University.
'To a selection of the faculty of the new school with due regard to the members of the present faculties.
'And to the maintenance of a complete medical course in Indianapolis as well as the two-year comrse in medicine at Bloomington.
- Only in this way does it seem feasible to accomplish the ultimate purpose of developing for the state a sound system of medical education, which has been the aim of both parties in their efforts in the field as well as to promote the harmonious and friendly relations so essential to the proper discharge of the functions of both universities
'It is hoped, therefore. that the citizens of the state, whether remotely or intimately interested in this question. will accept the abore decision as cridence of the disinterested motires of these institutions. and their desire to serre the state with undiminished energies.

'IT. L. Bricis.<br>'President Indiana Tniversity.<br>TI. E. Store.<br>-President Purdue Lnirersity:

-The final plans and details of the consolidation have not been worked out yet, but the officials say the change will be made as soon as possible. It has not been decided which of the college buildings the school will occup: in Indianapolis or what its name shall be. Neither is it known what arrangements will be made for the transfer of students, but it was said to-day that
the students would all be assured of full credit for work done in either school."

There is no one. whether he be a member of the medical profession or a layman, but will be in learty sympathy with this minion on this broad lasis, provided he has at heart the best interests of education in lndiana. The dctails of the organization remain to be accomplished. This will take time. We should not grow impatient. We want a medical school in Indiana that will stand well, in comparison with the best, and the making of a school of this kind will require time, encrgy, thought and money. Council with those who have had experience in similar work will be needed. Some individual interests may suffer, but this must be borne if the best interests of education require it. We fecl that the corner stone of a great medical school has been laid, and in order that the superstructure when completed slall compel the admiration of all, the profession and the people of Indiana should unite in helping Dr. Bryan in the completion of the great work.

Speaking on the subject of medicine and the mniversity at the convocation exercises of the University of Chicago last December, Dr. William H. Welch of Johns Hopkins I'niversity said:
"The public is vitally interested in the supply. of good physicians, never so much as to-day when their power to serve the welfare of the community has been so vastly increased and is rapidly growing, and if it wants good doctors it must help to make them.
"I have been able, within the limits of this: address, to indicate only a relatively small part of the increased strength gained by both medical school and unirersity by the combination of their forces, but I hope that I may have conveyed some impression of the rich fields of discoverr, of the benefiectht servier to the commmety, of the important edncational work opened to the university by close union with a strong department of medicine, and of the inestimable value to medicine of intimate contact with the fructifying influences and ritalizing ideals of the university."

All honor to Dr. Stone, to Dr. Bryan and to the many others whose labors have made it possible for Indiana to have a strong medical school. an integral department of a university.

Miles F. Porter.
MEDICAL ORGANIZATION IN INDIANA.
We are pleased to announce that the Council, at a recent meeting, has entered into an agreement with the American Medical Association by which systematic co-operative organization work
will be taken up in Indiana. The plan, which was fully explained in the January number of The Jourail when conmenting mpon the work in Illinois, is as follows:

The Memberslip Department of the American Medical Association has selected the best and most competent men from among its representatives for organization work. These men have had much experience along this line and are thoroughly familiar with all the details of organization work. The work is taken up by counties and councilor districts. Before an organizer is sent into a district, correct proof of the names of the physicians of cach county, indicating the members and non-members of the county medical society, is sent to the county secretary, who is asked to revise it and return it to the general office of the American Medical Association. This is done for two reasons: first, that the membership list for that county may be complete and up to date; second, to cnable the sccretary to designate on the proof those physicians in the county who are not members of their county society, but who are eligible and who would be acceptable to the count! society. From this returned proof a list of eligible and desirable non-members is made up, which list is given to the organizer when he starts into the district. At the same time he is given a letter of introduction to the councilor, on whom lie calls before taking up the work in the district, and with whom he carefully discusses the work in that particular district. The councilor gives him such advice and instructions as lie thinks best, and also gives him a letter of introduction to each county secretary in the district. The organizer then takes mp each county in turn, calling first on the county sccretary and presenting his eredentials. The organizer and the county secretary then go orer the list of non-members of the county in detail, the secretary giving the organizer such advice in the way of suggestions regarding local conditions, individuals, etc., as he may think advisable. The organizer then calls personally on each desirable non-member in the comnty, presenting the canse of medical organization and endearoring to secure the application of the physician for the county society. Applicalions are taken on a triplicate blank, one copy of Whicll is turned in to the county secretary, the second is scnt to the state secretary, and the third to the gencral secretary of the American Medical Association. The organizer, at the time of taking the application, collects one year's dues for the county society, which, of course, includes the state society per capita assessment. As soon as the county is completed the organizer reports to the sccretary of the county society as to the re-
sults obtained. When an entire distriet is completed a report is made to the councilor of the district. In this way it is anticipated that within the next few months every physician in Indiana who is a non-member of his county society can be personally intervicwed and wherever possible induced to become a member of his countr and state organizations.

The adrantages of this kind of organization are many, and as there is room for extended organization work in Indiana it is hoped that the officers of county societies will give every possible aid and assistance to the organizers sent into this state. There is no reason why at least 500 or 600 new members for the state association can not be secured during the next few months. As a matter of interest, we may say that the American Medical Association does not take up this ystematie organization work in any state where there is no journal published by the state association. It has been conclusively proren that the organization work is carried on more effectually and with far better results in those states where association journals can assist in the work. It is, therefore, expected that The Jourvat will be of particular service in producing results in Indiana.

## PUERPERAL SERSIN.

Recently the attention of the State Board of Health was directed by a larman to a fatal case of puerperal sepsis which, from the history and circumstances, could be pretty definitely traced to the obstetrician as the carrier of infection. Briefly, the facts are these: The physician was caring for a case of septicemia a few hours prerious to the time he was ealled to attend the labor case. Forty-eight hours after a normal delivery the puerpura suffeced a chill, followed by fever and sepsis, which proved fatal in nine days. It is ruestionable if the physician even used the ordinary precautions in sterilizing his hands.

While it must be admitted that even the most careful obstetricians do oceasionally lose a case by sepsis, yet that is not an excuse for so flagrant an abuse of our present-day conception of the practice of ohstetries as this would seen to be. In the first place, there are doctors enough nowadays so that it seldom becomes a real necessity for a physician to attend a woman in confinement if he is engaged in caring for an acute infectious disease at the same time, and the most conscientious man will not do it. Next, if the emergency does arise where it is impossible to sceure the services of some other doctor, then the physician owes it first to the patient, next her family, and
finally to himself to take every possible precaution for the prevention of carrying the infection: just as rigid precautions as though he had been risiting a smallpox patient. Then his asepsis about his patient who is about to be confined should be just as perfect as that of the surgeon who is preparing to open a belly. for there is just as much risk for the parturient woman as there is for the patient who is being subjected to a major surgical operation.
like tubercnlosis, so with puerperal sepsis, the most effective treatment is the proplylactic one. Nature's own remedy. Hence our plain duty lies in the adoption of every possible measure to avoid carrying infection up the raginal tract which has been naturally protected by its acidlorming flora. Tlat the vast majority of cases of puerperal infection are produced by vaginal examinations has been proven repeatedly. Semmelweiss, in 1846, was the first to demonstrate this fact when he reduced the percentage of deaths due to puerperal sepsis in the maternity department of the Vienna General Hospital from 11.4 to $1.2 \%$ per eent. simply by compelling all students fresh from the postinortem table to wash their hands in chlorin water before making raginal examinations. To-day the best statistics from the large maternity services come from those that climinate the raginal examination in $\therefore$ far as it is possible; and the most effective way of stamping out an epidemic of such infection in their service remains the abolition of this practice. That it can be dispensed with altogether is, of course, out of the question, but that the rast majority of such examinations that are made are needless there is no denying. And when occasion locs arise for the vaginal examination the greatest aseptic precautions should be observed, for even the well-boiled glore in a field rendered as clean as we are able to make it docs not preclude the possibility of carrying in infection. The main diffieulty lies in our desire cither to hurry matters along or to determine the possible chances of another call or two before the consummation of the task at hand. Then, too. it might be suggested that if other methods of determining the position and presentation of the fetus, such as external palpation, auseultation. determination of areas of greatest motion, ete.. were cultivated to a greater degree, the oceasion for the raginal examination for such purpose woukd become inore limited.

But above all, let us be clean, a thing that any doctor can and ought to be if he attempts any obstetrics or surgery, and whatever else our sins may be there will be one virtue that will in the end surely produce results of which we need not
be ashamed: there will be fewer wifeless hushands and motherless children, as well as less chronie invalidism and consequent suffering to the patient who is fortunate enough to survive her early infection; fewer gray hairs for the doctor and harsh things said about him.

## PATENT MEDICINE AND QUACK DOCTOR ADVERTISING.

We have reeeived a eopy of the Morning World, a daily paper published in New Orleans, in whieh there is not to be found an advertisement of a patent medicine or a quaek doetor. The editor says that he is publishing a paper in the interests of the people, and in doing so he ean not conseientiously earry the advertising of patent medieine manufacturers or quack doetors, as by doing so he would make himself a party to deception. fraud and positive danger to the lives of the people.

In an editorial on "Quacks and Their Agents," he has the following to say: "If you had a wart on your nose and your surgeon began to remove it by soaking your feet you would suspeet him. A saloon-keeper who sold you half the villainy eontained in the bad whiskey many of the marvelous cures of quaekery the moral-wave papers take pay for aiding and selling, would be jailed for poisoning. Yet these papers are shrieking prohibition and high lieense in one column and selling the rilest, most fraudulent bad whiskey in another eolumn. The only difference is that their bad whiskey is not labeled whiskey but goes under some high-sounding name and purports to eure every ill on the face of the earth.
"The quack" and the faker must go at the next session of the legislature. Not only must they go, but the highway print jobbers who promote them for pay must be made to stop it. Poliee laws prevent the selling of stale fish, and no proposition eould be fishier than this class of swindle, and no means of money-getting baser than promoting sueh fraud. In the matter of publie health the state is vitally interested. Health is humanity's highest asset. Steadily eivilized government has suppressed encroachments of fakers on human ignoranee and credulity and stupidity. The quack is the blatant faker who professes to be able to do more than the sad experience and exhaustive seientifie study of generations has realized. A bill should be framed to the end of putting a stop to it, and that the people may know exaetly what it means and express what ther, as a self-governing body, think of it, this bill should be put before the people and their roice heard in the matter. Let's have no more
fooling about this. The whole abuse spells fraud, dangerous fraud, and it should not be tolerated. The point of view of the publie should not be muzzled by a few thousand dollars' worth of adrertising patronage placed with the job printers who are supposed to voice publie sentiment."

We need a few more daily papers like the Morning World of New Orleans that will plaee prineiple above finaneial gain. Some of the daily papers that regularly publish the advertising of patent medieines whieh are the rankest frauds, and quack doctors who are the worst of knaves and fools, are edited and owned by men who profess to be Christians, some of them being deaeons in churches and, sitting under the artificial halo of sanctity, they pose as honest, humanity-loving citizens.

Some of the religious papers are worse offenders of deeeney and morals than the seeular press. While they preaeh the gospel in one column, in another eolumn they print the advertising of individuals and firms who make a business of taking unfair and dishonest adrantage of the sins and ailments of humanity. If the Lord ever takes these editors into Heaven, some of us who believe in the "eternal fitness of things" have no desire to join them.

Some men will sell their souls for a mess of pottage, and the newspaper editor who aeeepts money for patent medieine and quaek doetor advertising belongs to this elass. The only way in which the praetiee can be stopped is by edueation of the people. The average newspaper owner, whether he be deaeon in a ehureh or not, has an clastic conscienee and saerifices prineiple for finaneial gain. If he did not do so we would not see so many frauds glaringly advertised in nearly all the newspapers in the eountry. Most intelligent people recognize the frauds, but the ignorant and the poor do not, and they, the ones who can least afford to be swindled, are the real sufferers. Force the editor to understand that when he loses his sclf-respeet and honor for the sake of seeuring a ferw dollars from fraudulent advertising he at the same time loses subseribers and readers, and he will soon mend his ways if for no other reason than to proteet his purse.

The medieal profession ean do mueh toward edueating the public by waging a vigorous eampaign among the people against patent medieine and quaek doetor advertising. The distribution of the Collicr artieles on "The Great Ameriean Fraud" will assist materially in effeeting results, and the eo-operation of every intelligent, conseientious and publie-spirited minister of the gospel should also be secured. Let the editors
once feel that their poeket-books are being touched and they will at onee see the foree of the argument we make and begin ehampioning the cause for which we eontend.

## MORE NEITSPAPER RUBBISH.

Apropos of the eril that may be wrought by the desire for mere finaneial gain in the management of newspapers, the following editorial is quoted from Collier's Weckily for Mareh 14, 190s, on "Viviscetion":
"Every one must sympathize with those whose hearts are stirred about animal suffering, but the world ought to know that the present outbreak against vivisection has been worked up by a newspaper, hungry for sensation, by an absolute misrepresentation of facts. To restriet further the practiee of rivisection means untold eruelty to the human race all over the world. It means that the inrestigations by which thousands of lives have been sared, and the most dreadful sufferings abolished, must be stopped, and the humane progress of medieine and surgery arrested. The consequences, if an ignorant. sentimentality should have its way, are too painful to describe. When any progress in medieine, whether by new methods of treatment or new drugs, is accomplished, tests must be made either on animals or men. All our knowledge of physiologieal funetions, on which all rational treatment must be based, must he learned by obserration of some living thing. For this vast gain we pay in animal suffering not one-millionth part of what the hideous pictures and artieles in such papers as the New Yorli Iterald imply. Those pictures could be equaled by descriptions and photographs of every clinie, simply by learing out the explanation, as the IIerald does, that the rietim, whether a man or an animal, is almost always uneonseious, and that the eutting and tearing in operations and experiments are, therefore, in the rast majority of cases, painless. By this bold and money-making misrepresentation. therefore, if applied to clinics where human beings are operated upon, still greater horrors of medieal progress might be worked up, with still greater and more harmful execration of scienee and its immeasurable bencfits to the human race."

Probably some sueh offieious organ will next be demanding the abolition of the disseetion of dead bodies or the prevention of animal inoculation, without whieh Koeh's postulates eould never have been established nor antitoxin nor vaecine given to suffering humanity.

## THE ALTOMOBILE FOOR 'THE DOCTOR.

The Journal of the American Medical Association for March $\%, 1908$, very properly devotes a number of pages to the subject of the automobile as a conveyance for physicians. As might be expected, not all of the contributors to the pages deroted to opinions from physicians are of the same mind as to the value of the automobile for the doctor, but the general verdict is favorable. As a vchiele for use the rear around the use of the automobile is confined principally to eities having well pared strects. For ordinary eountry roads the automobile is adapted to summer months only. But eren for limited use the automobile, on aecount of the saving in time, is a praetical conveyance for the doctor to own. Very dependable cars are now made which cost less than $\$ 1,000$, and several well-known makes eost $\$ 500$ or less. The trouble and expense arising from the use of a ear depends rery largely upon the operator, though to some extent upon the eonditions under which the car is operated. "However, two men owning cars of the same make and pattern and operating them over the same roads and for the same length of time may have entirely different results as to trouble and expense, all depending upon the manner in which the cars are used. In automobile is in many respects like a horse: it must have some kind of eare and be driven judieiously. If so handled it will give the user general satisfaction by proving eeonomical, time saving, and a source of pleasure. Any well known nake of car will do this now.

## THE NEED FOR ENFORCMENT OF ANTISPITTING ORDENANCES.

The continued laxity in the enforcement of the anti-spitting ordinanee in Fort Wayne, despite the frequent protestations of her eapable board of health, is the occasion for a recent resolution passed by the Fort Wayne Medieal Soeiety appealing to the board of publie safety for the rifforcencent of such ordinance. And this menaee to public health probably flourishes to a similar degree in other cities and towns of our state.

Were it only a question of the insult to the esthetie scuse that is wronght by this disgusting picture of filthy sidewalks over which our women are foreed to travel, then eeonomy in politics might have a slight semblance of legitimaey for a lack of proper enforcement of the law; but when the health of our poople is at stake the most eeonomie measure is that whieh will eonserve the integrity of society to the greatest degree.

It has been reckoned by Heller that a single pellet of a consumptive's sputum contains 300 ,000,000 tubercle baeilli, or, in other words, if the patient expectorates only once an hour he will liberate $7.200,000,000$ of the germs in one day. This sputum deposited upon the dry sidewalks or floors of public places is quiekly dried and mingled with the dust of travel, to be inhaled by all who come into the vicinity. or deposited upon edibles or utensils exhibited by grocerymen or other merehants in front of tleeir respective stores. True it is that if these germs could lie undisturbed and exposed to direct sunlight they would die in a few hours. But with the continued traffic on the sidewalks, shaded by high buildings, they are very soon ground up in the dust or carried off on the pedestrian's shoes. to be redeposited and inhaled by new hosts. Just how long the tubercle baeillus will retain its virulence in this dried state has been the subject of many investigations. Zoma found dried sputum virulent up to ten months, while Sawitzki found it lifeless under ordinary conditions after two and one-half months, and various other observers present different data. Probably Cornet reaches the average when he says that one may assune that after about thrce months dried sputum loses its rirulence, but under extraordinary cireumstanecs retains it as long as six or cight months. So that il one pictures a city with lax health regulation. whose population is 60,000 or more, one-seventh of whom are tubereulous and a great share of these in the ambulatory and spitting stage, emitting each day orer $8,000,000,000$ bacteria of six months riability, any one of which is capable of setting up a new focus where resistance is lowered, the real danger to society becomes apparent to the merest trro. And besides the germs of consumption, those of other infectious diseases, as la grippe, pneumonia, diphtheria, pertussis, etce, may be disseminated ly this vicious hahit and add their jeopardizing influence to that of the tuberele bacillus.

The imroads wrought mon the resources of the state by tubercular infections are so rarious that it is difficult to conceive of any possible hesitancy on the part of the state and municipality in establishing methods of curtailment. In the first place, the rictims are selected from the most productive age of the individual's life, viz. : carly adult and middle life, the time when families are being created and homes established. Then. too, it is not alone a question of the withdrawal of the wage earner's capacity for support, but the drain nceessary for his eare throughout the usually long-continued illness is a factor of no mean importance, for not infrequently, his resources ex-
hausted, the poor victim is foreed baek, a charge upon the county or munieipality in which he is stricken. And publie responsibility does not end even here, for the widowed mother of a family of small children may easily find herself utterly unable to provide for the little ones robbed in early life of a father through the lethargy of narrow-minded politicians.

In communities which have had little or no opportunity for enlightenment along the lines of sanitary science, ignorance might be offered as a possible excuse for neglected prophylaxis, but the existence of an ordinance for the control of such a public nuisance is proof that the public has realized the necessity for such regulation and has a right to expect the proper enforeement of its laws.

It is more than possible that a few prosecutions, indiscriminately yet conscientiously condincted. would serve to impress upon the public that those having jurisdiction mean business in the discharge of their duty.

## SCIENTIFIC EDITORIALS

## SCHOOL S.NNTATION.

We all recognize the necessity of forming the minds of our children by beginning the process early in life. It took many years for the reformcrs to impress this primary fact upon the publie mind. and not yet has it been possible to make clear to the same mind that youth is also the time to form the body. Both the mind and body are plastic in youth and may be casily bent in all directions. The child who is made to occupy a seat and desk which does not fit its body is being twisted out of shape. and nervous derangements are sime to follow. It does not seem wise to force an imnocent child into positions which viill destroy its body and tear down its nerrous system. of course we are impractical and foolish to do such a thing, but it is being done all orer the Stat State of Indiana. and has been done ever since fin present school tritem began. All lower grade schoolrooms should be provided with adjustable seats and the greatest care should be taken to adjust the seats to each pupil. If this one little sanitary requirement were met there would be an enormous saring of strength and increasing of etficiency.

In our ignorance and in our false economy we frequently insist upon not giving the school children the full quota of air which Xature says they must have in order to be strong and well. Air is free, it ean not be taxed and the trust= can not
corner it, and there is no reason except ignoranee and false economy why the children should be denicel the amount required by Sature. To give them less than this amount means to maltreat them and to foree upon them ineffieiency, ill health and disease. The old log schoolhouse witl its big open fireplace was well ventilated, whatever else may be said about it. If children are giren an abundance of pure air, which is the most important of all foods, and the full quota of oxygen in the blood, they are in a measure provided a protection against the ill conditions named.

The lighting of a schoolroom is a very important matter. This fact lias been overlooked, although it is as plain as day when one s attention is called to it. We all know that to look into the sunlight is blinding, and it is also blinding, in a degree, to be compelled to sit, as school children frequently are, and look into the light. Yet there are schools in Indiana where children are eompelled to sit all day looking directly into the light. Parents who force such conditions upon their clildren are foolish. indeed, and they must expect to buy glasses and to spend much money in treating eye affeetions of their children afterward. Schoolrooms should all be lighted from one side and the light should fall over the left shoulder of the pupil. Neither teaeher nor pupil should be compelled to look into the light. The glass area should not be less than one-sixth of the Hoor area. Less than this will not admit sufficient light except on bright, sunshiny days.

If the light falls over the right shoulder of the children then sladows appear when the writing lessons are given. and the child is certain to lean forward and distort its body in order to avoid said shadows. I hare seen sehool children twisted into rery curious positions in order to aroid the shadors which appear upon book and writing paper when the light falls over the right shoulder or from behind. In one of the Terre Haute schools I saw a one-legged, tall boy actually get ont of his seat and kneel on the floor in order to secure the proper light for his work.

The medical inspection of school children is of more importance than all of the commercial interests of any comnunity. We live exelusively and entirely for our childien. That is all we are good for and all we are interded for. The imperfect school ehild should be searched out and the imperfections corrected. It is now well known that not less than 30 per cent. of school children are physically imperfect. Their eyes may be imperfect, their hearing imperfeet, or their respiratory apparatus imperfect. To allow these imperfections to eontinue and not remove
them is wickedness itself. The mouth-breathing child should be operated upon as early as possible and the obstructions which cause the mouthbreathing removed. To allow the ill condition to continue almost always means the death of the ehilel.

It wonld scem umecessary to make any argument in faror of the construction of school buildings so they would not be fire traps, but inspeetion in erery city and town and hanlet in the state shows that impractical, extravagant and unreasoning men hare been at work, seemingly doing all they can to make escape of school elildren impossible if fire should occur. This is the condition in the Bloomingdale and Harmer sehoolhouses at Fort Wayne. The architects and school authorities who built these two bnildings were actually stupid; at least so far as constructing stairways and exits and entrances to bilildings are eoncerned. These buildings are flimsily constructed. They are not strong, because it was possible for one person standing in the middle of the room, by simply jumping up and down, to shake the windows, the floors giving very pereeptibly. It may be it will require the sight of several score of charred children's bodics to arouse the school authorities and some of the citizens of Fort Wayne to recognize the fact that some of their school buildings are fire traps into whieh they hare been forcing their children for so many years. God forbid that this sliould be, but it does seem impossible for some people to learn exeept through disaster, suffering and death. Precept and example seem not to impress them.

One of the prominent forees which prevents progress in this world is the desire of cheap politicians to make reputations as economists. 'This cheap and pitiable class do not know that good works are economy and are the way to suceess. They think that money not spent for good things is money saved. They, of course, do not know the meaning of the word "economy" and are entirely unfitted for public office. Some day the people of Indiana will understand that it is a disgrace to be compelled to purchase a short cottin, and I think that every death under 40 jears of age should be the subject of careful, medicolegal investigation. In Indiana 1,333 children in the school age of $\tilde{\imath}$ to 14 years died in 190\%. 'This is a disgrace to our state and a comment upon our intelligence. It is certainly true that 90 per cent. of these deaths were prerentable, and perhaps all of them. These children were killed. Truly ignorance and stupidity are the only sins.
J. N. Hurty.

Indianapolis.

## THE PROPHYLANIS OF OPHTHALMIA NEONATORUMI.

IThen we consider that of the number of children admitted into the asylums and schools for the blind last year one-quarter had lost their sight from ophthalmia neonatorum, and that in some of these institutions the number runs as high as 30 to 3.5 per cent. of the whole, it becomes evident that there is great need of more effective measures to prevent such unnecessary sacrifice.

Prevention of ophthalmia neonatorum can only come through education. The man who contracts gonorrhea should know that he has a disease of unlimited possibilities for harm to an innocent wife and any children that she may bear. The wife has a right to know that the disease which her husband gives her is a serious menace to her and to future offspring. There is no excuse for practicing deception concerning this subject, or in permitting ignorance to prerail until irreparable injury has been done.

The parents and in particular the mother of crery new-born babe should know that the first discorerable symptoms of abnormality in the babe's eyes. such as redness, swelling or slight disclarge, is a warning note which should be heeded and skilled advice sought and appropriate treatment adopted at once. The possible penalty attached to delay should be clearly understood. Doctors and midwives should also be impressed with the importance of these facts, and legal penalties should be attached to failure to adopt not only proper precautions to prevent the development of ophthalmia nconatorum, but the recognized treatment to check the disease if it shows indications of developing. In other words, the parents and the attendants upon mother and child should know what ophthalmia neonatorum is, how it is acquired and how it is a voided.

This campaign of education can be carried on most efficiently by departments of public health. Circulars of advice should be distributed to moihers, physicians, nurses and midrrives. The danger to the new-born child should be clearly pointed out, as also the immediate necessity of adopting appropriate treatment if the child's eyes become at all inflamed. The instructions should in particular point out the necessity for cleanliness and the most approved manner of securing it. It is not enough to say that the child's cyes should be washed out or that certain prophylactie measures concerning the care of the mother before the child is born should be adopted, but the exact way in which this should be accomplished should be plainly described. Nothing should be taken for granted.

In a suspected or developing case of ophthalmia neonatorum the practice of Credés method has proven of unquestioned efficiency, and we believe that any board of health is warranted in recommending the method as a routine practice in all suspicious cases. But here again the instructions should be explicit, and it is even questionable if it would not be adrisable for the board of health to furnish a properly prepared 2 per cent. solution of the pure silver nitrate, together with detailed instructions as to just how and when the solution should be used. It should be made perfectly clear that a single drop of such a solution, carried on a small glass rod and carefully applied in the eye of the new-born babe, will produce no harm. It is an excess of the solution which may excite undue reaction.

Much may be expected from a systematic campaign of edueation carried on by boards of health, but to be most efficient some legal liability should be attached to failure on the part of physicians and midrives to follow the advice and instructions given. There is no logieal reason why recognized prophylactic measures should not be legally enforced in an attempt to prevent such a record of blindness from ophthalmia neonatorum as our statisties now show. The results which may be accomplished justify the means proposed.

Albert E. Bulmon, Tr.
Fort IVayne.

## EDITORIAL NOTES

SEXD the title of your paper for the French Lick meeting of the state association to Dr. F. C. Heath, Newton Claypool Building. Indianapolis.
Mechavically speaking, it might be said that the material difference between Hughes and Fairbanks is that while the one is "hand-forged," the other is "machine-made." Then Cannon's serenty odd years must have served only to "mould" him.
One of the quack doctors of Fort Wayne adrertises that he will cure all cases of appendicitis without an operation. He also advertises to treat the incurable blind. Is there any reason why the license to practice medicine should not be taken from this medical pretender who is constantly victimizing innocent pcople?

We belifite that Mrs. Cota B. Miller, of Kokomo, should be prosecuted for practicing medicine without a license. She is prescribing for any women who are foolish enough to write her
concerning their ailments, and we can find no record of a lieense granted for the practice of the lealing art.

ONLY two days for the state association meeting at French Lick, but the committee on scienlific work will arrange the program so that plenty of time will be deroted to discussion of papers. We hope that the program will contain few papers, but those few of superior quality. Thus will we have more and better diseussion, which is really the most raluable feature of any medieal meeting.

Dr. Abbott and his satellites who comprise the Abbott Alkaloidal Company have successfully "worked" a portion of the medical profession for financial gain. but we are inclined to lelieve that their operations in this direction will have a sethack now that The Jowrmal of the American Medieal Association and the daily papers of Chicago have publicly exposed the deception and fraud through which gain was obtained.

All fhings being equal, we trade with the dry goods merchant, the grocer and the butcher who is onr regular patron. That is reeiproeity.

The members of the Indiana State Mcdieal Association own Tire Jourval. A certain number of reputable firms adicrtise in The Joursal and thus are our patrons. All things being equal, we owe them onr patronage in return. Reciprocity is the hasis of all trade.

If you hear any doctor say that he has not receiser this number of THe Joursal it is fairly safe for you to assume that the doetor inaking the complaint has not paid his state association dues, which include a subscription to The JourNal. The name of erery doctor who has paid dues is on our mailing list, and barring an occasional miscarriage in the mails The Journal should be received by erery doctor whose name appears on our list.

The Huntington C'oment Medical Society has succected in indueing the Huntington city council to pass an ordinance imposing a license fee of $\$ 50$ per day upon all itinerant doctors. The ordinance is heing rigidly enfored, with the result that all traseling quack doctors are canceling Huntington from their itincraries.

The plan is worthy of adoption by all cities, and if generally adopted and enforeed would soon result in driving the traveling quack doctor out of business.

SELDOut do the physicians of Indiana have sulch an opportumity to attend a meeting of the

Ameriean Medical Xssociation at such a small sacrifice of time and money as is otlered them this year with Chicago as the meeting place. It has been several years since the association has leeld a mecting nearer than a thousand miles or more away, and to have it this year right on the border of Indiana is a rare opportunity for benefit at small sacrifice of which cerery progressive physician of the state should take adrantage.

Thre people are begiming to find out that the best doctors are those doctors who regularly attend medical societies. It is the busiest doetor who always finds time to attend medical society meetings and to read medical journals and books. The doctor who regularly fails to attend the meeting of his local medical society and gives as his excuse that "he is too busy," or that he learns nothing by attending the meetings of his local society, is gencrally the man who has the least practice, is the least respeeted in the community, and is in most need of the benefits to be secured from medieal societies. The pcople are beginning to find this out.

IIE: WINT a list of the names and addresses of all the doctors in Indiana who are not at present members of any county medical socicty but who are chigible to membership. We hope that the secretaries of county societics will take the hint and help us to secure such a list. Our intention is to send sample copies of 'The Joursil to every doctor whose name appears on the list, together with a letter soliciting applieation for membership in the county society of the countr in which the doctor resides. If county sceretaries will assist us in this organization work it will not be long before the number of members in the state aswectation will be doubled.

Medicil fees are altogether too small, but it is a question if many doctors are not paid much more than they are worth, no matter how small the fees. The man who charges 25 cents or 50 cells for a preseription for headache tablets for the relief of a headache, the canse of which he does not know. is charging more than his services are worth. But the man who examines the patient carefully and determines to a certainty or to his orm satisfaction that the headache is due to certain pathological conditions and then prescribes for the relief of those pathological conditions, is worthy of a fee in keeping with the skill and good judgment excreised. and we believe that the average patient is willing to pay accordingly.

The Collinwond schonl fire was a terrible disaster, but when it is considered in all its phases we wonder that there have been no more similar catastrophies, for the conditions are favorable to such a slaughter of children in hundreds of sehool buildings throughout the country. Ignorant and penurious school boards fail or refuse to place around our school children the proper safcguards, and parents are too often unacquainted with or indifferent to the existing conditions. The hope that competent judges will condemn every schoolhonse in Indiana which is unsafe on account of danger from fire, or unhealthy on account of bad rentilation and lighting. Better tear down 500 buildings than have such an experience as Collinwood has passed through.

Wilmot H. W'ieeler, Chicago. "General Secretary of the School of Accuracy and College of Prevention," say". in a circular letter sent broadcast. that he is going to jail for helping sick folk. The Illinois state Board of Health is responsible for this sad state of affairs, and all because Mr. Whecler pretended to cure the sick without going through with the formality of securing a license to practice medicine. The circular letter is an appeal for help-financial and political-so that influence can be brought to bear upou the governor in an effort to secure an exereise of the executive's pardoning power. Mr. Wheeler's eareer as a "healer" has been cut short, and we hope that a term in jail will make him fully appreciate the error of his way.

Do rou know the doctor who is always borrowing medical books and instruments and generally forgets to return them; who regularly writes for "sample copies" of rarious medical journals in order to get medical reading without paying for it; who is always asking for your advice concerning the proper treatment for his cases but never invites you in consultation; who asks you to render gratnitous professional services for himself, his immediate family and all his relatives without as much as thanking you for the courtesy : and who will be the first to kick you if you happen to be down, and considers it fair to "knife you" when you are not looking? Do you know him? W'ell, there are a few such medical shrimps rumning lonse, and they should be branded for the protection of the young and inexperienced as well as the old who are unsuspecting.

To coaclusifely prove the unreliability of the claims of the Abbott Alkaloidal Company with reference to H-M-C anesthesia (a form of ancs-
thesia considered positively dangerons by many recognized authorities) was an effort on the part of The Journal of the American Medical Association which deserves appreciation at the hands of the medical profession. But to prove that the Abbott Alkaloidal Company and its resourceful president, Dr. Abbott, are guilty of "working" the medical profession and even the public in mary other questionable ways for financial gain is throwing light into dark corners at a rapid rate. How could the association journal be so cruel, so heartless? Supposing the Abbott Alkaloidal Company has a family of helpless dependents. Think what it means to deprive these unfortunates of the sustenance wrung from the gullible medical men!

The field of surgery is an attractive one, but there is not enougli surgery to go around. If the romig graduate would devote his time to the study of internal medicine and forget his surgical ambitions it would be better for the public. The enthnsiasm of the untrained surgeon who is suecessful in an uncomplicated case of appendectomy is rery amusing, but I would feel more like congratulating the patient upon his or her escape. Cod liclp the next case as the same man plunges into a mass of pus and adhesions. Abdominal *urgery should only be done by trained men and trained assistants.

Internal medicine is sadly neglected. Osler has well said: "In the fight against ignorance and quackery, diagnosis, and not drugging, is our chief weapon of offense." The undergraduate is taught principles based upon scientific facts. This is all the college can do for him. As to whether he is a good physician depends upon the man himself.-A. H. Lippincott in The Journal of the Medical Society of New Jersey.
"The Medical History of Delaware County" is the title of a reprint which we have just received from the author, Dr. G. IV. H. Kemper of Muncie. The article gives a listory of the medical affairs of Delaware County from $182 \%$ to the present date and concludes with an alphabetical list of plyysicians who have at one time or another lived in Delaware County during the time mentioned. It may be surprising to many to know that during the time covered by the history 436 physicians lave practiced in Delaware Countr: Concerning the record of these physicians, Dr. Kemper says: "The record of the physicians of Delaware County has been a creditable one; a few moral delinquencics have existed. They have been industrious, as shown by
the numerons contribntions to medical literature contributed by our citizen physicians. Our death rate lias not been excessive; our health officers have been competent, and our surgeons have successfully performed nearly all the operations known to surgery."

The pamplilet is of increased value because of a splendid likeness of Dr. Kemper which appears as a preface.

Collier's Weckly deserves praise for many editorial utterances in condemnation of actions and policies which are detrimenial to the best interests of the public. But physicians in particular will be interested in the rigorous warfare which this ontspoken weokly paper is waging against the Intivivisectionists.

Numerons editorials have of late been published in Collier's in defense of the practice of rivisection done in the interest of scientific adrancement and with the ultimate result of prerenting suffering and loss of life. These editorials have been so logical, truthfnl and forceful that they must of necessity liave had great weight with the thinking public, and to judge by the enormons circmlation of Collier's Weekly the thinking public has probably read the editorials. The fight which this leading weekly paper is making will have more weight and far greater effect than the work of a dozen scientific journals and an equal number of societies composed of scientifie men, for the reason that Collier's Weekly goes to the reading and thinking public whereas the scientific periodicals go to scientific men, and scientific men are usually thought to be working for self-interest.

We wish that more journals on the order of Collier's Weekly and many newspapers haring a keen conception of what is right and just, and less regard for pecuniary considerations, would take up the fight for vivisection and many other humanitarian projects for which the medical prof'ession stands lesponsible.

Tine Kiccley Institute, of Marion, Ind., IV. T. Daniels. M.D.. manager, is sending letters to physicians soliciting liquor or drug habit cases for treatment on a commission basis. With reference the fee paid the physician for referring the case the letter contains this significant statement: "It may be as well to let the fact that you receive something for your time and trouble lemain a seeret between us."

This is another instance where the doctor is asked to sell his self-respect for money. If the
doctor is entitled to a fee for referring a liquor or drug labit case to a sanitarium why should he not honestly and openly charge the fee to the patient? 'Ihere is no excuse for such tratlic in the misfortunes of others as is contemplated by the offer of the Kreeley Institute of Marion. There is no more reason why a sanitarium for the treatment of liquor or drug habit cases should pay for eases referred than a sanitarium for the treatment of tubereulosis or any other disease should pay for cases referred. There is room in every populous community for one or more sanitaria for the treatment of liquor or drug habit cases along scientific lines. Such sanitaria, if conducted in an ethical manner and by physicians of "recognized professional standing, would soon receive the endorsement and support of the medical profession and would deserve such consideration. But the Lord forgive the medical men who traffic in liquor or drug habit cases for the benefit of themselres and any of the Keeley institutions.

For the benefit of prospective contributors to Tife JourNil the editor desires to say that it is taken for granted that when a paper is submitted to The Jocrial it is for the exclusive publication in Thes Joursisl and is not to appear elsewhere. The editor has, in the twelve years' experience in editorial work, learned that some medical men have an itching for publicity, and with a view to greater adrertising in the medical profession do not hesitate to submit duplicate copies of an article to numerous medical journals with the request that it be published in an early issue. Of course these men do not often fool the cditors a second time, for the "repeaters" are rery" well known to most editors.

It is well enough to remember that every editor solicits, and is pleased to receive, material snitable for publication, but he does not want to publish second-hand articles, though the articles may be ever so good, and he feels that he has been imposed upon when an essayist takes such adrantage of him. Therefore, if any of our prospective contributors submit articles for publication let them remember that no editor wants an article that has appeared or is to appear elseWhere, as he prefers to publish an abstract if he can not have the exclusive right to the original. We call attention to this matter because we have recently refused to accept for publication the carbon copy of a paper which we had reason to beliere, and have since learned, was offered to other journals, and have also felt called upon to refuse to publish the typewritten copy of a paper which
we know has already been published in a journal issued in a different state.
"Asic rour doctor all about Ayer"s non-alcoholie sarsaparilla. Then you will know whether you want it or not."

Such is the heading of an advertisement in large type whieh greets the reader in many of the daily papers to-day. Of course there are a few good-for-nothing doctors who might, perhaps, reeommend Ayer's sarsaparilla, but a very large proportion of the medical men of the country would not think of recommending any patent medicine and certainly not one of barn-roof fame, and the J. C. Ayer Company knows this as well as we do. But, nevertheless, the advertising will pay, for the reason that the class of people who can be induced to buy a patent medicine-and the number runs into the millions-will never take the trouble to ask any physician concerning the merits of Ayer"s sarsaparilla, but take it for granted that the remedy has the endorsement of the medical profession, and the Ayer Company knows that such will be the assumption.

We wonder what the effect would be if the medical profession as a whole publicly through newspaper advertising put itself on record as depreeating the use of patent medieines in gencral and Ayer's sarsaparilla in particular in answer to the misleading advertising to whicl we refer. Isn't it time for the medical profession to give the public a little wholesome education? We might take lessons from the Christian Scientists, who have a "publication committee" in every populous comurnity. Whenever anything derogatory to Christian science is published in any newspaper or periodical, immediately the "publication committee" gets busy and the publie hears the Christian Science side of the story. But the medical profession, wrapped in a wet blanket of professional dignity, permits everything to go unehallenged, no matter how untrue it may be or how detrimental to the interests of the medical profession and public.

Edward Вок, editor of The Ladies' Home Journal, said, at a meeting of the Philadelphia branch of the American Plarmaceutieal Association, that a large number of physicians preseribe nostrums. In eonsequence he lias been aceused, in print and in seores of letters, of making an attack on the medieal profession. He answers his critics in an article which appears in The Journal of the American Medical Association, March 21. 1908, and reiterates his accusations in an emphatic manner.

In our judgment, the charge preferred by Mr. Bok is true, and while the truth in this particular instance hurts, there is no reason why we should permit the sting to incite us to anything more than an effort to purge the medical profession of the disteputable and degrading practice of which we are accused. It is the rankest kind of nonsense for us to deny that a large proportion of merlical men (probably more than a majority) are guilty of preseribing nostrums. The reeords of the pharmacists and the shelves of the dispensing physician bear testimony to this fact. Mr. Bok is, therefore, warranted in making his so-called "attacks" on doctors, and in asking the question, "What business has the physician to prescribe these nostrums at all"?

There is no logical reason why any doctor should prescribe any drug or remedy the ingredients and action of which he is unacquainted with. He is under moral obligation to prescribe only sucle preparations of which he knows the exact ingredients. To do anything else places him in the position of jeopardizing the patient's interests and perlaps his life to ignorance. Ind how illogical it is for us to ask the public to abandon the practice of taking patent medicines of unknown composition and action when we are guilty of prescribing nostrums the exact composition and aetion of which is unknown to us. While we are asking others to clean house isn't it good policy for us to clean house ourselves? It is a little humiliating to have Mr. Bok publicly brand us as he has, but let us frankly admit that we deserved the seoring we received and profit ly it.

Ocr rery efficient and capable secretary of the state Board of Health, Dr. J. N. Hurty, has incurred the displeasure of the school board of the city of Fort Wayne, and all because he found occasion to state publicly that two of the school buildings in the eity of Fort Wayne are atrociously unliealthy on account of inadequate sanitary arrangements, and unsafe because of the danger from fire. The local city board of health of Fort Wayne has also come in for the displeasure of the same seliool officers beeause it has found occasion and reason to sustain Dr. Hurty in his contention.

In a burst of indignation the members of the school board and the superintendent of schools assert in newspaper interviews that Dr. Hurty is sensational in his statements and that the facts do not warrant any such charges as lhave been made. They even go so far as to intimate that no such catastrophe as occurred at Collinwood eould possibly happen in the city of Fort IVayne,
for they claim that the buildings are models of sccurity from fire, and from a sanitary standpoint are all that conld be desired.

The action of the school authoritics in opposing the opimions of such men as Secretary IIurty, whose reputation as one of the leading health officers and sanitarians extends from the Atlantic to the Pacific, and of the local board of health of Fort Wayne, containing as it does two of the city's most efficient and competent physicians, is, to say the least, a display of poor judgment and little diplomacy. The people are not quite so stupid but that they will aceept the opinions of authorities and those competent to judge rather than the opinions of those who are attempting to eover up their own lack of efficiency by the display of antagonism which of neeessity must react to their diseredit.

The school buildings under consideration have been pronounced by numerous competent judges as unsafe on account of the danger from fire, and they are sliamefully unsanitary. The members of the school boards have been told this before Dr. Hurty pronounced his verdict, and had they displayed even a little tact and good judgment they would have at once acknowledged that such a condition of affairs existed and taken some measures to correct the evils. But, like most school boards, elected as a result of polities and not because of fitness for the position, it required what they term "sensational charges" in order to stir them to action because of the indignant demands of an outraged publie.

We have no sympathy for the school board, and can only say that we hope that Seeretary Hurty will use the prerogative of the law, as is his privilege, by demanding, that the conditions about which he has eomplained be corrected at once. The lives and the health of our children are too valuable to be sacrificed to the ignorance and stubbornness of a school board or the false sense of economy of any political party which seeks to save money by the avoidance of the expense of building schoolhouses which are modern as to sanitation and safety.

And this reminds ns that the laws of Indiana make provision for the condemnation of publie buildings which are unsafe from any standpoint, and it is high time that the laws are enforced. Of course, some ignorant school boards and a few taxpayers will howl themselves black in the face when some fire-trap and disease-breeding schoolhouse is condemned, but human life is worth too much to be sacrificed because of the wails of this class of people.

Representatives from two well-known firms dealing in instruments and physicians' supplies
are now calling npon Indiana physicians soliciting orders. Neither of these firms has ever advertised to any extent and neither firm is represented in The Journal. One of the firms, when asked to advertise in Tife Jourail replied that it was not necessary to advertise, and that a large business in Indiana had been built up without patronizing the advertising pages of any medical periodical. We sinecrely hope that onr readers. who are the owners of The Jountil and interested in its success, will make it quite plain to these firms that it does pay to advertise, and that patronage from Indiana physicians will be preferably given to those firms that advertise in THe Jourcil. In this connection we desire to call attention to the fact that six of our advertisers, all having established reputations for honorable dealing and excellent quality of goods sold, are able to supply any physician with instruments, electrical apparatus, office furniture or. in fact, equipment of any description. From the income derived from the advertising of these firms we are able to publish a larger and better journal than otherwise would be possible. These firms are deserving of and should have the patronage of every member of the Indiana State Medical Association, and we urge that they be given the prefrrence whenever cquipment of any description is purchased. This is not meant to convey the idea that other firms may not be as responsible in every way, but that no other firms are better, and consequently it is good business policy, all things being cqual, to patronize those who patronize us.

Our child-bed deaths are altogether too many and puerperal fever exists to too great an extent. and all because some medical men have not learned, or if they have learned they do not put into practice, even the ordinary rules of surgical cleanliness. When a doctor is called to attend a case of confinement he is called to attend a surgical case and surgical cleanliness should be a part of his preparation to care for the patient. Puerperal fever is a septic fever due to inoculation, and in nine eases out of ten in private practice the attending physician does the inoculating. Oliver Wendell Holmes was a pioneer in the movement that has done much to prevent the slaughter of innocent women and the wrecking of lappy homes by puerperal fever, but there are many doctors who fail to put into practice the lessons which Holmes and every teacher following him has taught; consequently child-bed deaths continue to occur directly as a result of the doctor's unclean hands, instruments, clothing and the like which are brought in contact, during or after labor, with the genitals of the female. No phrsician ean attend erysipelas, scarlet fever,
diphtheria or any infectious disease and at the same time safely pursue his obstetric practice unless he takes the precaution to go through a process of thorough disinfection and sterilization of person and clotling before engaging in childbed work. The prevailing idea among many physicians that a free use of corrosive sublimate and carbolic acid on the hands and instruments is all that is necessary is entirely wrong, as the infection may be carried on the clothing or in the beard or hair. Then, again, some men who are clean as to clothes and person from an esthetic point of view are not surgically clean, though they imagine themsclves to be so. The truth is they either do not know what constitutes surgical cleanliness, or, knowing, are too lazy or indifferent to practice it. In either case it is a criminal liability assumed.

Puerperal fever occurs sufficiently often to warrant us in believing that some law should be enacted to safeguard the parturient woman. There is no reason why innocent women should be sacrificed as a direct result of the criminal carelessness of doctors.

For a long time it has been known by some physicians that the Abbott Alkaloidal Company and its journal. The Imerican Journal of Clinical Medicine, have shamefully prostituted the medical profession to commercial ends, but it remained for the Journal of the American Medical Association (Narch 14, 1908), to publicly expose some of the disreputable practices adopted to exploit the medical profession. Prefacing its remarks on the subject, the Journal of the American Medical Association says:
"We have heretofore called attention to the wildness and unreliability of the claims made by the Abbott Alkaloidal Company for some of its products. This week we shall dischss some of the methods this company has adopted in building up and conducting its business. What follows, in brief, indicates:
"That the president of the Abbott Alkaloidal Company has used and is now using lis position as a member of the medical profession as a commercial asset.
"That the company is publishing what purports to be a medical journal devoted to the medical sciences and to the interests of medical practitioners, but which, to all intents and purposes, is a house organ devoted to the interests of the company and to the advertising of its products.
"That the president and vice-president of the company, though engaged in commercial lines, are members of medical societies and use this membership in medical meetings to advance the interests of their firm.
"That the same officers. for the same reasons. flood the reading pages of medical journals with so-called original articles which are but thinly veiled advertisements.
"That by glowing promises the company ha: induced physicians to berome financially interested in its business and thms users and promotcrs of its products."

The article, which is quite long and contains ample evidence to support the charges made, concludes with a statement as to why the Journal of the American Medical Association publishes the exposé, and is as follows:
"Why do we devote so much space to this concern? What is the motive? The same that has prompted us to expose fraud in connection with the nostrmm lousiness; that has led us to enlighten the medical profession regarding the rarious ways in which it is being exploited: and that has caused us to give publicity to facts which physicians ought to know, and which they can not know maless they are enlightened by the journals that irpresent them. The Journal is performing the function of one representing a profession ; that is, it is enlightening the members of the profession it represents regarding matters of rital interest to the individual and to the profession as a whole."

We congratulate the medical profession upon haring an organ like the Journal of the American Mectical Association which fearlessly exposes the fuestionable methods and practices of such concerns as the Abbott Alkaloidal Company and others who exploit the medical profession. Medical men are too frequently victimized outside the ranks of the profession without having to suffer at the hands of those within our ranks who pose as our benefactors while at the same time they are deluding and defranding us for their own financial gain. It is eminently proper for the journals owned and published in the interest of the medical profession to give publicity to facts which physicians ought to know, and The Journal of the American Medical Association has performed a duty, for which it deserves great praise, in exposing the frauds in connection with the Albbott Alkaloidal Company as well as the nostruin business. It is hoped that medical men in general will profit by the information thus furnished, as they should also approve of the efforts of the Journal of the Imerican Medical I ssociation to safeguard their interests.

The danger of severe electric shocks to operator and patient while using various electricallylighted instruments has recently been pointed out by Dr. E. Fletcher Ingals (Jour. A. M. A., March
$\therefore$ 190s). The subjeet is worthy of serious consideration. for "short circuits" are liable to occur when least expected, and if the eurrent is taken from the ordinary commercial circuit it is pos--ible to secure a shoek that might prove fatal. To lessen the danger's Dr. Ingals, while using - lectric instruments, wears rubber glores antl rubber overshoes, and places his stool on a rubber sheet. 'To guard the patient there are rubber. castors on the table. He thinks that the question arises whether some of the hitherto inexplicable leaths during bronchoscopy may not have been due to galranization of the ragus nerves. Danger from galranization of the ragus br instruments introduced for electrolysis of esophageal strictures is well known to laryngologists. In hronchoscopy the metal tube is quite as close to these nerves as the electrodes would be in the operation just referred to, and in unexpected ways the current may be passed through them.
"Doc" Sloccir has some practiee because he is the only physician in a town of several hundred inhabitants and the nearest confrèe lives eight miles away. When not "seeing patients" he can nsually be found at the livery stable, where much time is spent in playing pedro, with a greasy pack of cards, in the company of a congenial crowd of umeouth and illiterate stable hands. Ilis clothes are spotted with mud and numerous traces of tobacco juice, and aside from being worn and out of shape they also show signs of the depravity of the owner by presenting a rip here and there and an absence of the requisite number of buttons. The shirt, supposedly once white, is liberally splashed with spots of tobaceo juice and in place of regulation collar and neckiis a large well-worn brass collar button ornaments the frayed collar hand. The hair and stumpy heard show no evidence of having lately come under the influence of comb or brush. and the dirty hands. with long finger nails, under which ean be seen a rather unusual quantity of dirt, indicate an arersion to soap and water. "Doc," as he is familiarly known in lis home 10wn, is said to be "a fust rate doctor," even hough. as one old woman informed ns, "he is not rery tidy." When not slecping or eating he works his jaws constantly in an effort to extract the juiee from a good-sized "chaw" of fine cut. and whenerer he expectorates, which is about once erery minute on an arerage, a stream of hrown fluid comes out like a geyser and threat(1hs to inundate ererything within range. Usually some of the chocolate-colored fluid dribbles wer chin and onto shirt bosom and clothes, but this does not seem to be a matter of the slightest concern to the expecterator. It was a pleasant
day and not wet under foot when we met "Doc" in consultation, but this did not deter "Doc" from wearing his felt boots and heary rubbers, for, as he told us, he was afraid of "ketching cold" if he wore shoes. In the clean and wellfurnished home of the farmer patient "Doc" contimned to wear his well-worn felt hat (also beeanse he was probably afraid of "ketching coll" if he removed it) and to work his jaws orertime on his quid of finecut, only pausing now and then to squirt a shower of the brown juice into a convenient stove, where it sizzled and steamed as it struck the burning wood. A bright, clean and neatly dressed girl of 12. daughter of our patient. complained of feeling ill, and "Doc" prepared some medicine for her from his antiquated looking medicine case. The dirty finger, with the long finger nails covering a quantity of filth all too plainly visible, was used to mix in a spoon a dose of the medicine which was offered and rather hesitatingly taken by the girl. Upon learing the housc "Doc" volunteered the remark, "Them's one of my" best families and I want you to treat them white."

Except for the name of the physician, the abore is a recital of facts based upon an actual experience and observation in connection therewith. Fortunately there are few such doctors as the one described, but there are a great many medical men who are altogether ton carcless of personal appearance and too indifferent to the rules of ordinary cleanliness. Clothes may be ever so cheap and plain or well worn, but there is no reason why they should not be clean, and the doctor who does not keep face, hands and finger nails clean descres to have his license taken from him. Chewing tobaceo is a filthy habit at any time, but is particularly so when practiced by a physieian. Sick persons are oftentimes more observing and are generally more easily offended than those who are well, and it eertainly is more or less disgusting for them to be attended by a tobacco chewing, dirty and generally unkempt appearing doctor. If they tolerate attendance of such a man it usually is through foree of necessitr: or as a result of recognition of unusual traits of character or ability which secmingly outweigh the repugnance proruced by the punishment of the estlictic sense. But true ability and high character are incompatible with filth and unkempt personal appearance of the physician, and no physician desiring to carn the respect. confidence and patronage of a desirable class of people can afford to ignore the ordinary rules of cleanliness and tidiness in personal appearance any more than he can afford to ignore the neeessity for being progressive in the practice of his seience and art.

If "Doc" Slouch sees this artiele, and no doubt he would writhe at the mercy of the brilliant he will. we hope he will take the hint and at once undergo a process of refurnishing, fumigation and strrilization from head to font (not omitting either feet or head). for he needs sueh an overhauling. Incidentally it may be added that the hint could with profit be taken by some other doctors of our aequaintance who need a little soap and water treatment, a clean shirt, collar and euffs, a shine, a little pressing and renovating of the clothes, and correction of some disgusting personal habits.

## CORRESPONDENCE

## NOTICE TO SECRETARTES AND AUTHORS OF PAPERS FOR THE NEEST MEETING OF THE STATE AssOClation.

In order that we may publish in the May issue of The Jourial as complete a preliminary list as possible of the papers to be read at French Lick, all titles of papers should be in the hands of the committee on scientifie work before May 1, 1908. To avoid mistakes from overlooking or misplaeing of titles already sent in. we would request that all anthors send in titles of papers whether such titles have been sent in before or not.

> T. C. Kenaedy, Jospir R. Easmia, F. C. Meath, Com. on Scientifie Work.

## TIIE POSTGRADEATE COLRSE OF

 STCDY A BOON TO THE GENERIL PRACTITIONER. Terre Ihute. Ind.. March 20, 190s.Editor The Journal:- Inder the old regime of monthly meetings and long formal papers there was perhaps forced upon different county seeretarics the unwelcome knowledge that the general practitioner had lost faith in the divine ordinance of the county medical society and for the following reasons:

1. Meetings were held too far apart to maintain enthusiasm at the proper working temperature.
2. He rarely knew what the topie for discussion would be, he made no preparation and there was no incentive to go except primordial euriosity.
3. His ears would finally droop while listening to the seeond thirty minutes of a paper, copicd out of Sajou's "Internal Secretions," or
young surgeon who had just completed his second remal decapsulation.
4. The papers often concerned matters which rarely streteh the pia mater of the general praetitioner: hence he was but a "wall flower" in the open discussion-a condition not eonducire to further attendance.
5. Surgieal topics hare almost monopolized the county society as ther have already done the state meeting and the medieal journals, and the general practitioner has felt the innuendo that he and his interests were being regarded as inconsequential. Not that the internalist ean know too much surgery, for the crying need is for the g. p. (meaning here both general practitioner and general public) to recognize when a condition is strictly a surgical disease, but they must know how to fight out a case of typhoid ferer, be crer resoureeful and hopefil, and never capitulating.

The arerage physician, among whom I proudly (lass myself, has looked for a Moses to free him from the bondage of the overzealous surgeon and specialist, and has found a deliverer in this carefully planned course of postgraduate study which re-enthrones the internalist and gives to medical diseases attention commensurate with the broad field which they oceupy.

The much villified Medical lirief, although its pages are dedicated to mediocrity and unreason, is commendable (the which is attested by its myriad readers) because it treats of the common every-day diseases. Discuss the same topic of pheumonia, pucrperal eelampsia, miscarriage, retc., sanely and helpfully in society meetings, in reputable journals, and these same readers will give you their attention. They do not want to know less of Nemo's technie in gastrojejunostomy, hut tney do want to know more of wher and how to use strychnia in treating pueumonia.

The postgraduate course of study meets the abore mentioned objections (1) by neeessitating weekly meetings: (?) by supplying a systematir four years' program instead of a haphazard one made out the first of the year and marked "subinets to be announced later;" (3) by insuring a well-balanced program, boxing the compass of the specialties, giving each its dues, but never magnifying one at the expense of the other; (t) br adding the impetus of providing something for eaeh member to do each week in studying the lesson, and after that he will take pride in being at the meeting because he is well informed: (5) by ritalizing the county society through more lirect support and supervision of the great American Merlieal Association.

En passant it might be noted that the old rule requiring the previous reading at the connty society before papers conld properly appear before the state association must of necessity be abrogatec. This does not mean that written papers should be declared obsolete, for in no other way can medical knowledge be collected for present use and for future reference. The district societies and the state mecting, however, furnish sufficient opportunity for all such essars.

The master minds in the medical profession see in this movement a solution to the immense problem of the continuous education of the gencral practitioner. While the advance work of some of the comnty societies is putting Indiana at the front in this campaign, yet at present barely one-fiftll of the county societies in the state have adopted the postgraduate course of study. From this progressive fraction comes a message to the remaining four-fiftlis who are still undecided: this plan eliminates the dry, tedious paper, the horn-blowing, self-exploiting paper, the paper on an irrelevant and uninteresting subject, and substitutes systematic study, short rerbal lectures on topics of daily imporrance, laboratory demonstrations, and is to be commended as more nearly approaching the ideal scheme for small groups of closely associated men such as constitute the county societies.

Cifarles N. Combs.

## THE OPTOMETRY LAW.

Indinnapolis, April 1, 1908.
Editor The Journal: - 'The article in the Narch number of The Jouraill by Dr. F. C. Heath upon "Eye-strain and Who Should Treat It" will bear careful reading. We have in this -tate, as a by-product of recent legislative action, an absurd law placing opticians in the same class as regularly educated physicians and confering upon them all the privileges in certain lines of practice secured by the medical profession only after a four years' course supplemented by a state examination. 'The law provides for a socalled "Board of Optometry," which shall examine opticians and issue a license, in the name of the state, to those deemed worthy to practice ophthalmology in so far as it concerns the employment of glasses to relieve ocular symptoms. Nothing in the law refers in any manner to what has heretofore been regarded as peculiarly within the province of the optician, namely, the proper grinding and adjusting of lenses, but the whole trend is to encourage and legalize the praetice of one of the most important and difficult departments of ophthalmology by those who are
totally ignorant of the first principles of medicine. This is clearly in conflict with the intent of the aet governing the practiee of medicine and should be taken up by the profession with a riew to securing its complete repeal at the next session of the legislature.

The passage of the optometry bill was due to the fact that the profession was not aware of the introduction of such a bill in the House (where it was watched over by a paid attorney) until too late to make an organized effort for its defeat. and furnishes an added reason for the appointment of a committee by the state soeiety to keep watch during sessions of the legislature for bills inimicable to medical education. The arguments which were convincing to members of the legisłature were as follows:

First, glasses are solely used for the purpose of improving failing rision, and no possible harm could come from permitting persons possessing sufficient knowledge and dexterity to so adjust glasses as to make vision clear and distinct from prescribing and selling such lenses. Second, by forcing each optician to have a permanent localion the state would be rid of the traveling optirians and the worth and dignity of the "profession" would be raised.

It is casy to see how this at once appealed to the lay mind. It did not occur to the unprofessional mind that many if not most cases coming under the care of the ophthalmologists for the relief of errors of refraction come not because of failing vision but because of some discomfort or disease. Now what has been the result? It is true that a few trateling opticians and dealers in glasses in the smaller villages have been deprived of their means of support and their trade diverted elsewhere, but has the publie been benefited? Most assmredly "no." It is a rule of constant application that when one must depend upon his own knowledge for his personal security he is alert, but with the multiplication of supposed safeguards this alcrtness gives way to a feeling of false security with the most disastrous results. As long as the optician, jeweler and peddler sold glasses they were taken at their proper ralue, and each patron knowing the limitation of their knowledge acted accordingly, and using his better judgment in ease of doubt sought the proper skilled medical advice. But now the state proclaims officially by the grant of a lieense that the skill and knowledge possessed by the optician represents the highest skill and knowledge obtainable in the state in that branch of ophthalmology devoted to the treatment of disease by glasses. To the mind of the writer this is the most dangerous phase of the whole matter,
and the license to "practice" hung upon the walls of shops will eventually be productive of more harm than the justly dreaded ophthalmia neonatorum.
The layman may well inquire where, indeed, is there a "doctor" so trusted by the state that she feels warranted in giving a specifie license to practice ophthalmology? To those of us who know how completely the public aceepts the government stamp certifying to the purity of foods it will be easy to predict the result of this official misbranding. That this is not a fanciful conception of the matter is borne out by the subjoined account of a few rery recent experiences of the writer, who in each instance was assured by the rictim that he had not been treated by "a common doctor" but by a skilled "oculist" as attested by the "diploma" in his store. A recital of a few cases will illustrate the point. One case of glaucoma and two of optie neuritis passing into complete blindness, and two more of chorioiditis with seriously damaged vision, all treated with a promise of cure by "optometrieal experts" with glasses. It may be of interest to know that one of the most ardent adrocates of the optometrical law had for months a display of nostrums for the treatment of eyes in his show window. Within the last twenty-four hours the writer has had the following instructive and at the same time amusing cxperience: A lady from a neighboring town brought her little daughter for consultation. The child was wearing glasses fitted, according to the statement of the mother, by a most skilled "oculist" of her town. She was quite alarmed at one statement of the "oculist." however, to the effect that the left cye was the seat of a "spot" which was rapidly approaching the pupil and would cover it in time if not arrested, but, thanks to Providence, she had sought consultation in time and the glasses prescribed would prove the salvation of the child.

No trace of a spot could be found, but the mother insisted she had seen a white triangular spot orer the pupil but a few days since. While debating the matter the child suddenly pointed to my ophthalmometer and exclaimed, "There is an instrument exactly like the one the doctor used on me." Further inquiry showed the child to have been placed in front of the instrument while the "oculist" and the mother looking down the barrel discovered the white spot on the cornea, which, it is needless to say, was the reflection of one of the mires of the apparatus.

Since the passage of the "optometrical law" even the language of the "optometrical expert" has changed. Ite no longer has "customers" but "patients." Yesterday I received a polite note
from one of these "experts" to the effect that I had some months previously fitted a "patient" of his and that the said "patient" was again complaining and that he (the "expert") had discovered I had made a mistake and suggested I give my consent to having the glasses changed to meet his measurements.

As a startling example of the operation of the law in elerating the tone of the "profession" I quote the following literally as giren me by one of the leading practitioners of the state referring to a licensed "expert" in one of the large county seats. "T- C- pauper. drunkard and vagabond of the town of S-. inmate of the county infirmary, peddles speetacles at times."

At present "Doctors of Optics" are multiplying with startling rapidity, and Chicago seem: to be the center from which the supply is being sent orer the country. It is becoming a diffieult matter for a young man to spend a week in the "Windy City" without returning as a "Bachelor of Tonsorial Art" or a "Doctor of Optics."

It certainly is time for the profession to take up a vigorous and systematic fight for the repeal of this ricious law. especially as a circular has recently been issued by the Optical Society of the State of Indiana, calling attention to the work of the committee of the A. M. A., headed by Dr. Lucien Howe, and urging its members to unite not only to prevent the repeal. but to strengthen the law which is now being menaced by the medical profession. In my judgment, the fight for repeal should not be left to a general committee of the state society, but should be taken up by the oculists themselres, as they are the ones best fitted to furnish data necessary to educate the lay members of the legislature. By concerted and sustained action on the part of the oculists of the Statc. contributing necessary funds for legitimate expenses, keeping careful reeords of cases treated by these "experts," together with the results, and holding to a campaign of education. I feel there will be little doubt of the outcome.

Frank A. Morrison.

## DEATHS

Dr, J. N. Dexiy died Saturday morning, March 28, at his home in Ligonier, aged i3 years.

Jimes S. Alsord, M.D., a graduate of Rush Medical College, Chicago, $18 \div 8$, died at his home in Zionsville, Ind.. February 26, aged 60.

Dr. Amos C. J.Ackson, one of the oldest pioneer physicians in Elkhart ('ounty. died at his home in Coshen. Mareh 1! aftel an illness of one week-s duratic

Johs M. Nickles, M.I., died at his home in Sellersburg, March 12. from eancer of the stomacll, aged 60. He graduated from the University of Louisville. Medical Department, in $18 i 6$.

Henderson D. Davenport, M.D., a veteran of the Civil War, died at his home in Sheridan, March 12, from intestinal paralysis, aged 62. He graduated from Indiana Medical College, Indianapolis, in 18:2.

James S. McMurray, M.D., a graduate of Medical College of Indiana. Indianapolis. 18:0, 25, from acute nephritis, following an attack of died at his home in Frankfort, Ind.. February erysipelas.

Jelies E. Burbour, M.D., died at his home in Bristol. Ind., February 1,7, from pneumonia, after an illness of three dars, aged 61. He gradmated from the Cleveland (Ohio) University of Medicine and Surgery in 1878.

Williaif Asbury Horrall, an eeleetic practitioner of Washington, Ind., a reteran of the Civil War, and for cight years postmaster, died at the home of his daughter in Indianapolis, March 9 , from influenza, after an illness of seventeen days, aged 89 .

Dr. Hevry A. Mumatw. one of Elkhart's oldest physicians, died at his home Wednesday morning, April 1. of Briglat's discase. at the age of is years. He graduated from the Hahnemamn Medical College, Chicago. in February, 1sic.

Dr. Thomas J. Adias, of Danrille. died Friday morning, March 13. aged i0 years. He received an academie education at Thorntown, Ind.. and began the study of medicine with Dr. Lockheart, of Danville. He served as hospital steward and assistant surgcon in his regiment in the Civil War. After the war he attended Rush Medical College. graduating in $18: 0$.

Arter an illness of several years, incident to old age, Dr. Vermon Gould died at the home of his son, Dr. Charles Gould. of Rochester. Tuesday, March 1\%. Early in life he adopted medicine as his profession. graduating from Rush Medical College in $185 \%$. The remainder of his life was spent in active practice. excepting three years spent in the service of his country as as-
sistant surgeon of the Eiglity-erenth Regiment.
Dr. Joinn FitzGibbos, one of the last physicians of the old school, died at his home in Waslıington, March 30 , from an attack of heart failure which was aggravated by an aeute attack of erysipelas. He came to this country from Ireland when a young man and opened an office in Lonisville, where he practiced medicine until May, 1865, when he eame to Washington. While in Louisville he was a surgeon in one of the union hospitals.

## PERSONALS

Dr. Josephi Sacxders, of Anderson, is very ill with paralysis.

Dr. S. B. Elrod, of Raglesrille, has remored to Henryville, Clark County.

Dr. FrasteliN W. Hays, of Indianapolis, is reported to be eritically ill in Los Angeles.

Dr. II. R. Alles, of Indianapolis, spent the month of March in a eruise to South America.

Dr. M. W. Rothrock. formerly of Tell City, is now located at Howell, Tanderburgh County.

Dr. A. B. KNapp, of Washington, has returned home after spending the winter in Texas.

Dr. Theodore F. Seymour has been appointed seeretary of the Mishawaka Board of Health.

Professor H. Sinelles, the world-renowned ophthalmic surgeon, died at Utrecht, January 18, aged is.

Dr. II. T. Litwson, secretary of the Hendrieks County Medieal Society, has been on the siek list for screral weeks.

Dr. A. F. Tully and wife, of Brazil, Ind., are spending a few weeks visiting at Hot Springs and other points in the South.

Dr. M. J. Comptos, of Evanstille, was appointed by Dr. H. C. Sharp, of Jeffersonville, on the auxiliary legislation committee.

Dr. II. S. Shaffer, of Rochester, has been confined to his bed for several weeks with gastric uleer and an hypertrophied heart. He contemplates, as soon as he is able, to spend the summer in travel.

Dh. Bertox D). Myers and Ur. J. H. Ford addressed the Prutnam County Medical Society at Greencastle the latter part of February.

Dr. L. C. Cline and wife, of Indianapolis, are making a tonr of the world. Dr. Cline expects to be back some time in the early summer.

Dr. J. F. Bexhatr, former professor of materia medica in the Central College of Physicians and surgeons, is now located at Hardesty. Okla.
1)r. P. Y. McCor, of Eransrille, who has been suffering for sereral weeks with influenza, spent the month of February in Point Christian. Miss.

Mrs, Emal E. Drter, wife of Dr. D. IV. Dryer, of LaGrange, died at her home Thursday, March j. Through error the March Jourval gave the date of her death as March 6 .

Dr. C. H. Winite, president of the Owen Countr Medical Society; and formerly of Cataract. has located at Danville, where he has entered into partnership with Dr. Charles A. White.

Dr. Chas. J. Wrigit, secretary of the Huntington County Board of Health, who has recently undergone an operation for gallstones in Chicago. has so far recovered that he is again able to take up his practice.

Dr. Nelson D. Braytor, one of the government phrsicians at Ancon Hospital, Panama, who has becn visiting his parents, Dr. and Mrs. A. Wr. Brayton, of Indianapolis, during his vacation, returned to the Isthmus early in April for a short period, after which he will again practice his profession in Indianapolis.

Dr. U. H. Holder, of Washington, who lost his sight last winter as the result of an attack of la grippe, was nominated for coroner at the Republican county convention held on Wednesday. March 25. He is assured of election, as the Democrats previously decided to have no candidate in case of his nomination.

Dr. J. II. Bates, of Broad Ripple, celebrated the twenty-fifth anniversary of his entrance into the practice of medicine Thursday evening, April 2,1908 , with a "Doctors' Dinner," attended by Drs. M. V. B. Newcomer of Tipton, J. V. Bower of Millersville, K. C. Hershey and F. C. Hershey of Carmel, T. N. Bennett of Broad Ripple, G. V. Woolen, O. G. Pfaff, T. W. DeHass, G. H. F. House, J. F. Barnhill, S. P. Scherer and F. C.

Heath of Indianapolis, and a few other personal friends. A beautiful silver candelabra was presented to the Doctor by Mr. H. E. Ziminer, of Indianapolis, on behalf of the guests.

## NEWS, NOTES AND COMMENTS

Fifty thousand dollars has been subscribed for a tuberculosis hospital at Seattle.

Mrs. Lilfin Egolf, wife of Dr. H. M. Egolf, of Liberty, Ind., died at her home Feb. 21, 1908.

The Thirteenth District Medical Society will hold its next meeting at Knox, Ind.. on May ib.

Mirried, on Friday, March $2 \%$, at Shelbvville, Dr. David E. Johnston and Miss Clara B. Bigney, both of Moores Hill.

Tire next meeting of the Twelfth Councilor District Medical Society will be held in Fort Wayne on Tuesday: April 21, 1908.

Tire next meeting of the Eleventh Councilor District Medical Society will be held in Logansport on Wednesday. April 29, 1908.

Ture doctors of Wells County have resolved not to permit their names to go into the newspapers in comnection with any cases they may be treating.

T'ine Canadian government has been asked that the grant for the maintenance of consumptive patients be increased from $\$ 1.50$ to $\$ 5.00$ per week.

Chicigo plysicians are investigating affairs as pertain to the administration of state institutions, with the idea of offering recommendations for improvement.

The Rochester Postgraduate Medical School. after a few weeks of rest owing to the busy season, has renewed its regular weekly meetings with a full membership and doubly increased interest.

The Goverior of Maryland, on March 26, signed the bill abolishing the practice of "Christian Science" in Maryland. By the provisions of this bill it is made illegal for Eddyites to treat the sick by their methods if they make a charge for their services. - Journal of the American Medical Association.

A proposition is before the New York Legislature for the establishment of another home for crippled children. The state has a home for crippled children which already has more applicants than it can accommodate.

Xiw York City has opened a day school for deaf-mintes with accommodations for 250 pupils. There are elasses for erippled children and 50 clases for mentally defective children. but as yet nothing hase been done for the blind.

Trie commission of Portuguese residents of Rio Janciro, which has been eollecting funds for the reception of King Carlos of Portugal, has determined to appropriate this money for the crection of a tubereulosis sanitarium to be called after Quern Amelia.

Tegro cocain sellers are being prosecuted in the city of Baltimore. It has been discovered that quite a traffic is being earried on among members of the colored race, and the authorities are attempting to put a stop to the practice.

Ir Boston sellers of catarrh eures containing cocain are also being prosecuted and a number of conrictions have been effeeted.

The physicians of Evansville, Ind., have been invited to address the grade and grammar schools of the city on "The Laws of Health." It is loped by the school board that a number of local physicians will volunteer enough of their time and talent to give the pupils valuable information. The board realizes that through the scholars the homes ean be reached. - The LancetClinic.

Tine city board of health of Fort Wayne has marle the amomeement that in future all plans and sperifications for school buildings to be erected within the city must first have the approral of the board of health hefore any work can be done toward their construction. This is for the purpose of determining that the building will be fireproof, sanitary in every partieular, and perfeetly lighted, heated and ventilated.

Is September. 1908, a cancer exhibition is to be held in Brussels in connection with the Seeond International Surgical Congress. The exposition is to eomprise exhibits of all sorts relative to the nature. occurrence, investigation and treatment of malignant new growths, and will be under the direction of the general secretary of the Surgical Congress. Professor Denage, of Brusels.-II Iedical Reriew of Reviews.

A bild has heen introduced in Congress authorizing the creation of a tuberculosis fund of *600.000 to be dishursed by the seeretary of the treasury for employing experts to inquire into the methods of treating tuberculosis and to investigate all questions relating to said methods and the developuent and improvement of said methods with a view to ascertaining and publishing the best arailable methods of treatment for the disease.

The professional man who shows no interest in the organized work of his profession is looked upou by every intelligent person as a man who cither regards himself as superior to his fellows or who is afraid to meet them and discuss professional subjects with them. We believe this to be a true and just estimate, and the burden of proof to the contrary falls npon the man who always stays away from such meetings.-Tour. Winn. State Med. Assoc.

We are professional men in every sense of the word; we have the mental labor of lawyers, the moral standing of ministers, the technical knowlcdge of organized artisans, and the business qnalifications of school children. The average man will give a lawyer $\$ 300$ to $\$ 500$, together with a lifctine's praise to keep him out of the penitentiary for from two to ten years, and at the same time he will raise a phosplorescent glow and a kick that can be heard around the world if a doctor charges him $\$ 50$ to $\$ 100$ to keep him out of hell for a lifetime.-Texas State Journal.

This Semi-annual Convention of the Indiana State Nurses' Association was held in the assembly room of the courthouse at Fort Wayne March $2 i$ and 28. The program for Friday afternoon was as follows: Invocation, Rer. Rowand; address of welcome by Dr. M. F. Porter. In response Miss Edith Farorite presented a paper on the subject "Hospital Nursing;" Dr. Otto Gross followed with a paper on "The Prescriptionist" and "What Work Shall the State Societies Do After Registration Is Secured" was discussed by Miss Isabel McIsaac. Saturday forenoon a medical clinic, conducted by Dr. Charles Beall, was held at the Indiana School for Feeble-minded Youth. Luneheon was served by the Hope Hospital Alumni at $12: 30$. The afternoon session was taken up with papers by O. E. Mohler on "Associated Charity Work"; "What Some Women Are Doing," by Miss Johnson; "Alumne Work," Miss L. Garrard; "Suggestions from a Private Nurse," Miss Elizabeth Bell, and Question Drawer, conducted by Mrs. E. G. Fournier.
"Freitola," a fake remedy for gallstones, received attention in the Department of Pharmacology of The Journal of the A. M. A. of Mareh 1.t. The remedy is a patent medicine whieh is alleged to have the wonderful power of relieving appendicitis or any intestinal inflammation without an operation. It is also said to be a system cleanser, to remove gallstones, and to eure all stomach trouble. It has been diseovered that identically the same results are secured with large doses ( 2 oz. ) of olive oil. When olive oil was suggested for the treatment of gallstone colie it was noticed repeatedly that after its administration the patient passed a considerable number of small lumps which were supposed to be gallstones. but chemical examination of these concretions showed that they mainly eonsisted of soap which had been produced by the digestion of the oil. This obscrvation has sinee been made use of by nostrum manufaeturers to eonvinee physieians and their patients of the efficieney of their preparations in seeuring the expulsion of gallstones. A simple examination will usually show the true nature of these bodies since they disintegrate readily when stirred in water. They consist of feeal matter mixed with the mass of soap.

The Journal of the Indidia Sthte MediCil Associlition very properly answers the question, "Shall we charge clergymen?" in the affirmative. The pernicious habit of giving gratuitous service to members of the cloth is robling the medical profession of its just dues, and, in addition. robs the former of their self-respect. Even should the clergyman charge the physician no fee for inarriage serviees or for baptismal ceremonies, etc.. whieh fee he is always extremely eareful to accept, there is something particularly humiliating in the idea that the elergyman expects and ought to receise our best attentions gratuitously. He usually reeeives a large salary, pars no rent, is entertained at dinners innumerable, and yet has the consummate self-assurance of expeeting medieal services free. "It is to be hoped that a clergyman will soon be treated in this respect no differently from persons in other walks of life. He is no pauper, although if he is in needy eircumstances a reduetion in the fee may be made. We ought to exact a fair remuneration from ererrone who is the reeipient of our ministrations. It is fair, it is honorable, it is just. And if the clergymen really desire to increase the respect accorded them, which in this day and generation is not as marked as in the times of our grandfathers. then they will hasten to roluntarily offer to pay for value reeeived. -The Lanert-CTinic.

## SOCIETY PROCEEDINGS

## THE COUNCIL.

A special meeting of the Couneil of the Indiana State Nedical Association was held in Indianapolis Mareh 23, 1908. Councilors Davidson, Leach, Stemm, Weinstein, Stevenson, Wishard, Kemper, MeCully. Bulson and Daugherty were present.

Frederick R. Green, assistant secretary of the American Merlical M-wociaton, was present by special invitation, to offer for aeceptance by the Couneil a plan for medical organization work in Indiana whereby the state will be canvassed by specially trained organizers from the A. M. A., who are given authority to solicit members for the county, state and national medical organizations. Dr. Green stated that it was the purpowe of the organization committee of the A. M. A. to more thoroughly organize the medieal profession in all the states, and it was thought advisable to have the organizers for the national association work in conjunction and under the direction of the various state organizations, thereby aecomplishing result.s for county and state societies, while at the same time accomplishing results for the A. M. A. The eanvassers are to interview all doctors who are pronounced by county societien as eligible to membership in the county so cieties, with a view to semering application for membership and explaining the benefits to be derived by affiliation in medical societios. Applications for memhership in connty societies are not to be solicited from physicians who have not been declared eligible and worthy of membership in the county organizations. The salaries and expenses of the canvassers are to be paid by the A. M. A., but for all new members secured ly the canvassers, and whose applieations have been favorally voted upon by the comity societies, compensation is to be paid to the canvassers by the state asmociation.

Following an extended discuswion of the proposition as offered, the Council, by a unanimous vote, depided to aceept the offer of the A. II. A., it being understood that the canvassers while working in Indiana are to work under the adviee of the Couneil officers of the various rounty organizations, and that no finaneial obligation be assumed other than required in the payment of $\$ 1$ for eaeh new member secured for the state association, and that such compensation be not paid until after the new member has been duly credited with membership and his dues paid into the state association treasury.

Dr. Green advised the Council that several eanvaseers would be placed in Indiana within a few weeks and that prior to starting the canvassers to work it would be necessary for county soeiety officers to assist in the preparation of complete lists of the physicians in the several counties, designating those physieians who are members of county soeicties, those who are not member: but eligible, and those who are not members and not eligible.

Following a rather general diseussion of the organization work in Indiana and a report of comeilors as to what has been accomplished sinee the last meeting, the merting adjourned.

Albert E. Butlsox: Jr., Sec.

## ADAMS COUNTY.

The recgular meeting of the Adams Countr Vedical Cociot! Wa, held Nareh 13, at the ofliee of Dr. P. 13. Thomas of Decatur. Meeting was called to order by Presichent Costello, with a good attendance. Minutes of Febluary meeting read and approverl. The mame of Dr. (. (. Rayl of Monroe was presented for member. thip, and as the board of censors reported favorably he was manimously elected to membership. Dr. C. T. Ramier. a retired practitioner living in Deeatur, was present by invitation, and was make an honorary mom. ber of the societs.

The paper of the evening was by Dr. M. F. Parrish. of Momoe. on the subject, "General Pathology'" and was greatly appreciated by the members who tendered him a vote of thanks.

The next meeting of the socicts will be held in April at the offiee of Dr. Keller, when Dr. P. B. Thomas will read a paper on "The Anatomy of the Abdomen." and Dr. Mc.Millen will present the subject, "Disea=es of the Abdomen."

Arjourmed.
Marie L. Holloway, Sec.

## ALLEN COUNTY.

## FORT WAYYE MEDICAL SOCILTY.

## (Meeting of Feb. 18, 1908.)

Socicty called to order by President Calrin. with eighteen mombers and guests present. Minutes of previous meeting read and approved. The regular postgraduate program was taken up.

Probability of Recurrence in Carcinoma and Sarcoma was the title of a paper by Dr. B. P. Weaver, in which he summarized as follows:

First.-The present chaotic state of nur knowledge concerning the etiology of malignant disease greatly militates agamet aceurate prognosis.

Second.-The only eriterion of eure lies in the autopsy.

Third.-The three year limit is entirely inadequate to the proper atimation of the frequency of recurrence, from $\because$ to 20 per cent. of recurrent carcinomata recurving after this time.

Fourtli.- The prognosiz as to life and as to recmrrence depends won certain well-established factors, among which are the duration of the disease. the character or relative malignancy of the tumor, or. as .Jacob. son sys. "the viruleuen of the infertions, the location and extent of the existing involvement, the periot of life at which the disease appears and the completenese of the operation as well as the cantion with whel it $\mathrm{i}=$ executed."

Grose and microseopie specimens of curcinomat and sareoma were exhibited. Among these was a ease of secondary carrinoma of the heart: specimens showing regionary recurrence following the second and third operations in eancer of the breast: specimens showing a repurrence in a liver twenty months after operation for melanosareoma of the ehorioid. (It autopsy the liver weighed 19 pomusk.)

Dr. Fhamy opened the disenssion by saying that we must not lose sight of the fact that some of these supposed recurrences. after rears, are probably new eancers. Tle thinks that ix years is the extreme limit that should he regarded as for recurrence to happen in.

Dr. Porter said that it sometimes seems that it is more probable that these manifestations oecurring eight to ten year = after operation for eaneer are cancers that these patient would have had anyway. In
this connection le reported a ease of eaneer of the left lung with death six years after an operation on the right breast for cancer. There was no local recurrence at all. He said that if the growth occme in the scar or in the lymphatios tributary to the space in which the operation is marle, then we may regard the tumor as one of recurrence. In cases where the growth occurs in organs having a capsule, and the organ and the eapsule is removed antire there is less likelihood of recurrence. Fvery now and then eases undergo spontancous eure. Then are rare but they do oceur. There is always a question a- to what constitutes an early operation for areomat. (ienerally speaking. an early operation may be considered as one that results in a cure. In the upper inmer hemisplere of the breast a malignant growth is more likely to recur. With reference to late operations, Dr. Porter said that they are wortn doing from the humane stanchpoint. He said that he ladd seen catoss bedridden from sep-is get sympIomatically well for a period a m much as two yeare following operation. ano when these patient = do finally die they die a very much less unpleasant death than if allowed to go on without palliative operation. The late operation alware give hope to the patient, and to put some hope into a hopeless case is doing something.

Dr. C. E. Barnett said that prostatotomy rather than prostatectomy slould be the operation in ease of cancer of the prostate.

Dr. Weaver, in closing, said that recurrence may be a true recurrence, as rells which have laid dormant for years. under some stimulus may suddenly become active. Apparently liopelese cases sometimes get well. and they should be given tle benefit of an operation. In operating for malignancy the incision should be wire of the involved area, and the surgcon sliould aroid manipulation.

The applieation of Dr. K. C. Evans was reart and referred to the board of censors. -tljourned.
J. C. Wallace, Sce.

## HORT USAYVE MEDICLL SOCIETY <br> (Meeting of March 3, 1908.)

The Fort Wayme Xedical Society met in regular sesion in the assembly room, with thirty-one members present. The president and vice-president being absent. the meeting was ealled to order by the sccretary. On motion, Dr. S. H. Havice was called on to preside. Minutes of previous meeting read and approved. President Dr. W. D. Calvin then arrived and assumed his regular place.
Carcinoma Caused by Gallstones.-Dr. MeOsear reported two cases of careinoma of the gall bladder which had probably originated from gallstones. One was known to lave had gallstones eight rears and the other ten years. He said that gallstones shouk not be left to treatment. but should be removed by surgical means as early as possible.

Partial Motor and Sensory Paralysis.-Dr. W. D. Calvin reported case and exhibited patient before -ociety. Patient. Mr. L. E. L., aged 3t. Family histnry: Father living. aged $6 t$, general health good. Mother died at the age of $4 \%$ of pulmonary tuberculosis. She had previously been affected with heart tromble. One brother died of diphtheria at the age of 3 years. One brother and one sister living and in good health. Previous lealth: Patient had typhoid fever at the age of 1.5 and recovery was umeventful. Has had la grippe several times, but without eomplications. Wia injured when 4 years of age hy an axe cut
above right temple. Present condition: In the fall of 1906 patient had light attarks of dizziness on bending over. It such times had frontal and right ocripital headaches. Ife did not suller from these attacks during the following winter, but they recurred during the spring, sumumer and fall of 1907 . In September and October had swelling one and one-half inches back of right ear, two inches long and one-half inch wide. which was comparativels hard but could be indented. This swelling disappeared of its own aceord. Patient's hearing is normal. A pterygium on each eye causes headache on rather moderate use of the eyes. but he detects colors and objects well. Has small goiter. About Novemher 1 harl pain in lumbar region, worse at night and upon lifting, at which time he suffered frequent urination hoth day and night. Seemed to pass a superabundance of dark and cloudy urine, sottling a reddish deposit having no special odor. lowels and stomach have been and are normal. as also are the heart and lungs. About Jamuary 20 patient notieed for the first time a numhmess of index finger and thumb of riglit hand, and in about two weeks noticed a tickling sensation in both feet and ealves of legs, also a stiffuess and elumsiness in such parts. followed in a few weeks with general stiffness of body. Later the left hand also became numb, contractures in both forearms following. which prevented sleeping for more than one or two lours at a time. At the same time contractures hegan in neck. drawing. head backward, which lasted twelve days. bemor worse at night.

All reflexes are present, but patient suffers from in-co-ordination of the extremities. Has partial motor paralysis and partial taetile paralysis of extremities. The sensation of pin prick is still present, but diminished, and heat sense is present. Can not walk in the dark or with eyes elosed. Palms of hands and wrist: do not respond to electrieal stimułi. Dr. Bulson examined eves and reported negative findings. Patient was first seen last Firiday. His family are of the nonnerrous type. He gives no specifie history of either famils or himself. He feck like he is walking on cotton.

In the discussion 1)r. Porter suggested therapentic test of 100 grs. potassium iodid three times per day. Dr. Drayer snggested that the case be put in hospital for further study and observation. Dr. Beall said the lesion is in the region that takes eare of eo-ordination.

The Anatomy of the Brain was the title of a very extended lecture hy 1)r. E. M. Van Buskirk, in whieh lae used a model to demonstrate various parts of the brain.

In the discussion Dr. Porter spoke on paralysis of the facial nerve following operation for remoral of fifth nerve. There are only two such eases on recorl. He mentioned the Kranse operation in particular. It is an operation which rould by no means touch the seventh nerve after it= exit from the stylo-mastoid foramen. He said that one explanation might be that the seventh nerve had an unnatural eourse. There might also be a eonnection between the two, or the condition of paralysis might he produced by traction on nerve trunks, as the traction usually made is quite sceve with a view to getting well up before dividing. Paralysis of the facial nerve might also be prodneed through the chorda tympani. It might be that traction severe enough to produce trauma would be sufficient to produce paraly-is of the facial nerve, but if it were in the center paralysic would be on the other side. The chorda tympani route is most plausible, and

Dr. Porter says he owns this explanation to Dr. Mouser.

Board of cencors reported favorably on application of Dr. K. ('. Evalls, and motion was made and carried that the by-laws be suspended and the secretary cast the ballot of the society for Dr. Evans.

Motion was nade and carried that the chair appoint a committee to report on the advisability of merlical irspection of schools.

Motion was made and carried that it is the sense of this society that the commissioners give the use of the lower floor of the court house in the evenings to the publie.

Adjourned.

> J. C. Wallace, Nec.

## (Meeting of March 10, 1908.)

Fort Wayne Medical Society met in regular secsion in the assmbly room Tuesday evening. March 10 , with twenty-three members present. Mesting called to order by President Calvin. Minutes of previous meeting read and approved.

Typical Hereditary Syphilis.-Clinieal ease report hy Dr. Havice. He had been eonsulted some years ago by lady for supposed malignant eoudition of nose. Put her on KI, 40 grs. and inereased to 60 grs.. when she intuoved rapidly and the lesion healed up. This week she brought two of her chikron. one being perfectly healthr, the other having a growth under the. tongue which oceupied the entire floor of mouth. The growth, an enlarged rannla. was opened and eauterized with nitrate of silver. He thinks that perhaps it would have been better to dissect it out.
1)r. Mcoscar, in opening the discussion, said that the treatment followed by Dr. Havice was the proper conrse to pursue.

Inr. C. E. Barnett said that unless the secreting surface in these secreting cyst. is destroyed they will roturn. He suggests injecting these eysts with paraffin after aspirating and when the paraffin is hard remove them. Thus you will be sure of removing all the secreting surface.

Physiology of the Brain was the title of a paper by Dr. W. D. Calvin. He quoted authority that son eould not count radial pulse with tip of tongue. Different members of the society, after attempting the experiment. concluded that this statement was incorrect.

In the di*eussion. Dr. Porter. speaking on the sensibility of the abdominal contents, said that if the peritoneum is exposed to the alr for a few moments it becomes insensitive. $A s$ soon as traction on the mesentery is made pain is produced. In spaking on cerebral cortieal motor eenters he said that in experiments on pigeons, after the eerebrum has been removed the pigeon has not sense enough to get away and ret looks very wide awake. If the phrenic nerve is destroyed only on one side a person ean live. The first. second and third frontal lobes have only to do with higher eerobral functions. Given a man with all the symptoms of brain tumor, mints paralysis such as follows involvement of motor areas, who is gradually losing his mind, and it is more than likely that the lesion is in the front of the ascending convolutions.

Dr. Van Buskirk said the higher you go in the animal kingdom the more the cerebral function is developed. He referred to an experiment on a dog in which the cerebrum was removed, the dog living for more than a year.

Dr. Buehman said the study of this question of the nervous system eomes down to a study of the nerve
rell and nerve fiber. If the sense of smell is lost enttirely rul pepper will taste like and. Te referred to the peruliar condition of a patient of his who had a diabetic eondition fonr or five years ago, and three years after had paresis; finally developing an aphasia and hegan to get better without treatment. Now he ean write a letter, but cant read it after it is written.

Dr. Melocar said he knew of two eases in whiels there was an entire absence of smell, one of which is congenital, but in both cases the sense of taste is all right.

Dr. C. F. Burnett refered to removal of eerebellum in operation for tumor.

Dr. Weaver said he believed that there is a metabolie function of the brain.

Dr. Nierman said some smells are educated and some are present naturally.

Fractures of Vault of Cranium was the title of a paper bes Dr. D. C. Wrbourn.

Dr. Bruggeman opened the diseussion by saying that the only safe way of differentiating depressed fracture of sknll from a hematoma is an incision.

Dr. Porter said that where there is a question the rule should be that exploration be made to determine whether there is an intraeranial lesion that needs at tention. He spoke on hematoma and depressed fracture.

Dr. Morgan referred to one of his cases in which a young man fell from a height and sustained a fracture of the base of skull about five years ago, from which he recovered. When seen a few weeks ago he complained of great physieal weakness and continuous mild headache. He asked whether this condition of physical weakness could be attributed to fracture five years ago.

Dr-. Nierman, Jfoocar and C. E. Barnett also dis-cu-sed papers.

Motion was made and earried to refer Dr. Nierman's paper on Embryology to the state society.

Motion to refer Dr. Van Buskirk's paper to state society was lost. Opinion was that his and similar papers from post-graduate course would not prove attractive enough for the state society.

Dr. E. J. MeOscar brought up the que-tion of enforcing the anti-spitting ordinance.

Dr. M. F. Porter made motion that the secretary be instructed to inform the Board of Publie Safety that it is the earnest wish of the members of the Fort Wayne Medical Society that the ordinance referred to be enforced, as we con-ider it an important ordinance.

Idjourned.
.T. C. Wallace, See.

## (Meeting of March 17 , 1908. )

The regular meeting of the Fort Wayne Medical Society was held in the aswembly room, with nineteen members present. Society was ealled to order by President Calvin. Mimutes of previous mecting read and approved.

Ruptured Tubal Pregnancy. - (linical case report lyy Dr. B. Yan Sweringen. Patient, Woman, aged 32 , in good liealth. was suldenly seized with pain in the abdomen at $6: 30$ a. wh. When first seen by Jor. Dancer there was pain and tenderness in the right lower abdomen. Slie had had two rhildren at full term and three miscarriages. the last one fear ago in January. Pulse rose rapidly until 4 p. in.. when it was 120 . Temperature was normal and skin and mueons membrane hlanched. Abdomen was opened and tube taken out. Fetus could not be found. She had menstruated the
-ame as usual February 16 . There was no di-charge of decilua. The drainage tube was removed Saturday evening.

Dr. Daneer in opening the discus-ion, said that there was extreme general tenderness of the abdomen, with total absenee of rigidity.

Dr. Calvin sad that he had seen forn cases of ruptured tubal pregnancy, in one of whieh there was muscular rigidity, due to hemorrhage.

Dr. S. V. Wilking reported ease of misearriage at seven and one-half montlis. Postmortem on fetus howed prolapee of third lobe of liver into cord, produring suffocation. Water broke ten days before delivery. He also reported al eave of extreme phimosis in a man aged 41 years, and exhibited foreskin whieh had been removed.
Dr. Calvin gave a further report on nerrous ease reported some time before. The man $i=$ taking $I 00$ grs. KI thre times per day, and is not amproved. Since then there is a coling of the hands and papular eruption aeross the shonlders. He has lad these symptoms before. The examination of the eyes was negrative.

Dr. 13. Van Sweringen said this is a rery interesting ease, as the rapidity of the paralysis is unusual.

Fractures of Base of Cranium was the title of a paper read by Dr. K. K. Wheelock. The paper was discrsed by $\mathrm{D} \uparrow$ s. Harvice and Niemman.

Adjomrned.
J. C. Wallace, Sec.

## Meeting of March 24, 1908.

lferting ealled to order by President Calvin. with twentr-seven members present. Minutes of previons meeting read and approved.

Gunshot Injuries of the Head, by Dr. H. I. Dnemlisg. Dr. Duemling said he was mable to get skill= to show exact effects of gemshot injuries so lie ured (ans of baked heans, which he had shot with different kind- of bullets. He said that the soft no-ed ball will calree greater destruction. The womend of entrance in the bone is seen by eoneentrie fractures around the point of entrance, and radial fractures due to the reaticity of the skitll. The womnd of exit is larger than the wound of entrance and is made by ball and pieces of bone carricd with it. The ball passes along, taking piece of bone with it, and bursts the other side out, a - it were. The wound on the inner table of the -kull i- largr at the point of entrance thatn at the point of exit. He then took up the various points as given in postgraduate program.

Intracranial Hemorrhage was the title of a paper by Dr. L. E. Jrown in which he gave in detail the symptoms and inanifestationc of hemorrhage in virious parts of the brain.
Traumatic Meningitis. This subject was takon up by Jr. J. S. Boyers. who gave some of the symptoms

In the discu-wion Dr. Buchnan said that the nearer you are to the gun the smaller is the point of entrance. The reason that the point of exit is larger is that the -peed of the hall is lackened and it therefore makes a larger wonnd. Meningeal ery iv almost a pathognomonic sign of meningitis.

Dr. Porter aid that in a cone of meningitis at first there i- an over activity of physiologie action of brain function. He said he had never seen a case of traumatie meningitis from contu-ion of the scalp without the fracture of the skill. He said that the cavities of the nose and ear should be cleansed and kept clean, and precautions taken to explude the air.

The paper was also discussed by Drs. Yan Buskirk, Weaver. Smith, Havice, Dancer and Calvin.

In closing the discussion Dr. Duemling said that the rifling in a gun is to increase the penetrating power. He also said that hydrodynamic force is a living, moving force.

Motion was made and carried that the chair appoint a committee of three to investigate the school buildings in the city of Fort Wayne and report to the society. Drs. Porter, Bulson and Gilpin were appointed.

Adjourned.
J. C. Wallace, Sec.

## CLAY COUNTY.

The Clay County Medical Society met in regular session March 19.

Ophthalmia Neonatorum.- Clinical case report by Dr. W. H. Orr of Brazil. Dr. Orr said that the three cases under discussion were successfully treated by him.

Laminectomy.-Case report by Dr. G. WV. Finley of Brazil. Paticnt suffered from traumatic paraplegia for seven years, finally completely reeovering.

At the weekly Thursday evening meetings, in addition to following the post-graduate studies, it is planned to give all the members present practical drill in physical diagnosis with the ophthalmoscope, laryngoscope, phonendoscope, sphygmomanometer. cte. It is a source of regret that a larger number of the membership can not attend these weekly study club meetings regularly.
Adjourned.
G. IV. Finley, Arc.

## CLINTON COUNTY.

The regular mecting of the Clinton County Medical Society was held at the office of Dr. MeCarty, Frankfort, on February 6. 'The papers of the evening were "Treatment of Pneumonia," by Dr. W. T. S. Dodds, and "Spondylitis," by Dr. David Ross, both of Indianapolis. The papers were freely discussed, particularly the former, since Dr. Dodds advocated the placing of the patient in an unheated room. Dr. M. S. Canfield spoke with refcrence to the placing of a high license on all "traveling doctors." The local society is trying to get such a license passed by the council.

Adjourned.

1. G. Chittick, Aeting Sec.

## DELAWARE COUNTY.

The regular meeting of the Delaware County Medical Society was held March 6, with twenty-three members present. An interesting paper was presented by Dr. C. M. Mix on "Modern Surgical Technic," in which the practical application anu listory of the microscope, asepsis and antiseptic methods, hemostasis and anesthesia were presented as factors in the attainment of the present high standard of surgery.
The following conclusions were drawn:
That ether is the safest and best anesthetic.
That local anesthesia is advisable when feasible.
That hyoscin-morphin-cactin anesthesia is unsafe.
That asepsis should be as rigid in infected as in clean cases.
Dr. Austin of Anderson, opened the discussion by stating that only relative asepsis can be obtained and is all that is necessary; that infection sometimes occurs from the use of too highly sterilized cat-gut. In cleansing the hands, preparatory for operating, thorough scrubbing with soap and water for fifteen minutes suffices. In the preparation of abdominal
cases excessive scrubbing is to be deprecated. He has used hyoscin-morphin-cactin anesthesia and only with good results. Has never used more than two tablets in one case, and follows the same by the administration of some chloroform, of which he has never used more than $2 \frac{1}{2}$ drams, and usually much less.

Adjourned.
H. S. Bowles, Sec.

## ELKHART COUNTY.

The Elkhart County Medical Societs met in regular session March 5 with a good attendance. Minutes of previous meeting were read and approved. Dr. Frank Randolph presented a paper on the "Accessory Sinuses of the Nose," giving a revien of the history of the frontal, ethmoid and maxillary sinuses, and showing a number of specimens. The second paper of the evening was by Dr. A. A. Norris on "Arteriosclerosis." In reviewing the subject he recommended iodin as a medicine especially beneficial in the treatment.
The society held its special annual meeting in Goshen, March 26. A banquet was tendered to all the visiting physicians.
Adjourned.
George W. Spohn, Sec.

## FIFTH DISTRICT MEDICAL SOCIETY.

Fifty members of the county medical societies in the Fifth District (Vigo, Parke. Vermilion. Clay and Putnam), met at Terre Haute March 11, 1908, and organized the Fifth Councilor District Medical Society. The meeting was called to order at 1:30 p. m. by Temporary Chairman Dr. Joseph H. Weinstein. Dr. F. II. Jeet acted as temporary secretary. A constitution and by-laws were adopted and the following officers elceted: President, F. C. Dilles, Brazil; first vice president, Eugene Harrkins, Greencastle; second vicepresident, C. MI. White, Clinton; treasurer, M. A. Boor, Terre Haute; secretary, J. R. Gillum, Terre Haute; committee on scientific work, Drs. Mattox, Combs and Gillum; committee on public policy, Drs. Keves. Findley and King.

Adjourned.
J. R. Gillum, Sec.

## FRANKLIN COUNTY.

At a recent meeting the Franklin County Medical Society was reorganized and the following officers elected: President, E. L. Patterson, Brookville, vicepresident, C. W. Carter, Brookville; secretarytreasurer, C. H. Mayfield, Brookrille: censors. Phillip L. Mull, Oldenburg; J. F. West, Brookville and Henry Gregory, Laurel. In addition to the officers named the membership is made up of the following: Chas. W. Stolzer, A. IV. Vogt, I. D. Garrigues, A. L. Preston, G. II. Warne and J. C. Claussen. The councilor for the district, Dr. David IT. Stevenson, of Richmond, was preient at the reorganization.
C. H. Mayfield, Sec.

## GIBSON COUNTY.

The regular meeting of the Gibson County Medical Society was held at Princeton, Friday, March 27. The papers of the evening were as follows: "Anatomy and Physiology of the Ear," by Dr. F. Mr. Payne, Princeton; "Acute Otitis Media, Symptoms, Diagnosis and Treatment," by Dr. T. Wertz, Princeton; "Concussion of the Brain; Differential Diagnosis and Surgical Treatment," by Dr. R. S. Anderson, Princeton; "Meningitis,"
by Dr. If. G. Hopkins. Fort Branclı. It the elose of the meeting a Innch was enjoyed.

Adjourned.

1. J. Ziliak, Sec.

## GRANT COUNTY.

It the meeting of the Cirant Country Medical Societs. held March 24 , the committee on public health and legislation were instructed to investigate all who scemed to be practicing medicine unlawfully. If every oociety would wage war on these pretenders they could 14 driven from the state. The society is beginning a rrusade against tuberculosis. The records of the city of Xarion show that tuberculosis in the last ten vears has eaused more deaths than sinallpox, scarlet fever, diphtheria, cancer and typhoid fever combined.

Dr. D. A. Holliday read a paper on preumonia which brought out a pirited discus-ion. Erery one present who had had the diseasp were strong advocates of fresli, cold air.

Idjourned.
O. IV. MCQuOws, Sere.

## GREENE COUNTY.

The Greene County Medieal Society met in regular session at Swit\% City March l2. Dr. W. H. Beatty presented an interesting and instructive paper on "Epidemie Cerebrospinal Meningitis." Dr. Bruce Fleetwood, of Linton, wa- expelled from the society for making examinations for old line insurance companies for less than $\$ 5.00$, which is contrary to a rule of the society.

Adjourned.
F. A. VaN Sandt Sce.

## HUNTINGTON COUNTY.

The regular meeting of the Huntington County Medical Society was held at Huntington. Nareh 10. Dr. F. B. Morgan rear a very interesting and instructive paper on "Pulse and Tongue as Factors in Diagnosis and Treatment of Disease." Dr. Olive O. Nelson read a paper on "Postpartum lemorrhage." Both papers merited and reecived extended diseussion.

Dr. S. V. Wilking reported the death of an infant at hirth. the antopsy slowing the eentral lobe of the liver within the umbilical cord, thua obstructing free eirenlation. This explanation was offered as the cause of death. Dr. Wilking presented the specimen for inspection.

At the last meeting of the common council of Huntington, an ordinance was passed imposing a lieensing fee of $\$ 50$ per day upon all itinerant phrsicians visiting Huntington. It is thought that the proper enforcement of this ordinance will effectually drive ont the traveling quacks and medieal fakers who regularly. come here for the purpose of lumhugging the credulous sick. One Fort Wayne doctor, who lad been in the habit of coming to Hnntington every month, without any fear of molestation, has paid the license once and not retmmed since, neither have his advertisements appeared lately in the local papers. If like action were taken by the various eounty seeretaries to influence proper legislation in this direction the days of the traveling quack would be numbered.

Adjournerl.
M. H. Krebs, Sec.

## LAKE COUNTY.

The regular meeting of the Lake Countr Medical Society wat held at Hammond on March $\overline{\text { on }}$, 1908, with
twenty-one member and guests present. Dr. Heman spaulding. seretary of the lioard of IFealth of Chicago. gave all addres on "The Relation of the Physician to the Jocal Ifealth Officers." He said that the object of the health office is to put into practice measmion to prevent disease and lessen the death rate. For a health officer to be successful in his work lie must have the hearty co-operation of the medical profession and the publie. To enlist the enoperation of the publir requires an educational eampaign conducted through the merlium of the public press, women' = organizations. ve. The publie, will appreciate the work of the medical profesion to a greater extent if medical men are alway- accurate in statements made to patients and the public, and if ther do not diseredit the work of each ather. The phrsician should direct and advise while the health officer must enfore the earrying out of proper suggestions of the medieal profession. It is the duty of plysician- to promptly report contagious aud infertious diseases. With reference to time of raising quarantine the speaker gave the following information: For searlet fever, four weeks, if the premises are fumigated; incasles. three weeks, if the premises are fumigated: diphtheria, two weeks, if the premises are fumigated and two eultnres from the patient prove negative: whooping eough, eight weeks. For fumigation the sheet plan is the most practieal. Eight ounes of formalin should be used to each 1000 culie feet of spare. For disinfecting excreta 71 grains of bichlorid of mercury to one pint of water is sufficient, or the ehlorid of lime. if 25 per eent. of ehlorin is present. may be mixed with the exereta in order to thoroughly disinfect it. Physicians, when visiting contagious and infections diseases, should take precantions to prevent the carrying of the disease. Aside from the wearing of a gown, which should be disinfected after leaving the ease, the face, hands, hair. beard and nostrils should be wiped with a bichlorid solution. 1 to 5000 .

In disenssing the address Mayor Becker of Hammond said that new legislation is necessary to more elearly define the powers and duties of health officers. We should al=o have legislation providing for appropriations for maintaining health offices and enforcing loalth laws in a suitable manner. The county should do more for the public health and should provide funds for the proper carrying out of health measures. It is eary to -uggest what should be done hut it is difficult to conduct the work of an efficient health board withont snitable funds.

Idjourned.
W. D. Weis, See.

## MADISON COUNTY.

The Madion Countr Medical Society met in regular se-vion at the Public Library, Elwood. Ind., on March 24. witlı a good attendance. The first paper of the erening was presented hy Dr. Dorris Meister on "The Voung Practitioner." Dr. C. P. Ruņon also read a paper on "The Doctor and the Society:" and Dr. M. A. Alstin presented the subject, "The Economics of a Doctor's Charges." All the papers were well prepared aul received extended discussion. The next meeting of the societ will be held at Anderson.

At the Anderson-Pendleton section of the post-gradwate course. which meets regularly every Tuesday evening. interest is rapidly increasing as a result of the many scientific discussions.

Alj journed.
Bext. H. Cook, See.

## MARION COUNTY.

THE NDIAN゙APOLIS WEDICAL SOCIETY.

## (Meeting of Feb. 25, 1908.)

The society was called to order by the president, Dr. Wym. The minutes of the last meeting were read and approvect.

The program was a symposium on Exophthalmic Goviter. Dr. J. A. Me.Donald reviewed the pathology of the disease. Dr. F. Q. Dorsey reviewed the symptomatology and medieal treatment of the disease. Dr. J. $r$. lieed reviewed the surgical treatment of the disease.

The Pathology of Exophthalmic Goiter.-(Synopsis of paper by 1)r. T. A. AcDonald.) At present the final meeting point of the rast majority of investigators is at the thyroid gland, where are found definite and fairly constant changes whicll are capable of pretty reasonable interpretation. The reason for these changes and the mode of their production are at present unkuown, the principal theories being that it is an idiopathic hypertrophy of the gland. or that the change in gland activity is due to an affection of the central nervous system.

Clinically, it is unimportant whether the syndrome is due to alteration in quantity or quality of the gland secretion, or where this alteration takes place. It is true in the rast majority of cases, that operative remoral of the gland dispels the symptoms, and failure to remove the gland is followed by failure in treatment.

Exophthalmic goiter is clinically, pathologically and therapeutically the opposite of myxedema, and the symptom-complex of exophthalnie goiter can be produced by the aaministration of large doses of thyroid gland or its preparations. The investigations, more particularly of Dean Lewis, Heineck and McCallum, record the following changes in the thyroid:

There is a primary form of the disease in which the goiter and some of the clinical features begin coincidently, and a scoondary form in which an enlargement of the thyroid has already existed, due to simple crstic, adenomatous, interstitial or malignant change, and on any of these may be engrafted the clinical picture of hyperthyroidism.

The gross enange mar le diffuse, involving the entire gland, or merely in scattered patches; but in either form seems to be fairly constant. The gland is usually, though not always, enlarged; the veins are large and there is hyperemia, though on section the tissue tends to be palc, liard and inelastic, grayish and opaque. It has lost its reddish translucence and is dry and granular rather than glairy and gelatinous, depending upon the amount of colloid remaining.

Mieroscopically, the change is indistinguishable from the compensatory hypertrophy produced experimentally by means of partial thyroidectomy by Halstead and by Horsley: There is increase of fibrous stroma; the alveoli are no longer rounded and full of colloid, but are very irregular in size and form, and in the central part of each lobule there are large, irregular alveoli sending out diverticuli in every direction, and ercroached upon by epithelial projections. The epithelium loses its low. cuboidal form and becomes columnar, so that very little lumen is left, with little colloid. Mitoses are frequent, and in serere cases there is desquamation of epitlelium with great swelling and altered staining reaction. The colloid is greatly diminished in severe cases and the amount of colloid is said to bear a fairly constant ratio to the severity of the case.

Other theories of the cause of this disease have had their majority of supporters. The thymus gland has leen believed to be the seat of the trouble, as has the sympathetic nervous system, the peripheral nerves and central nervous system, the restiform bodies, the parathyroid gland-, the heart. and it has been believed by some that compression at the superior thoracic outlet inay cause the symptom complex. Sajous believes the adrenal, thyroid and pituitary glands to be a system whose disturbance may cause the disease

The ultimate cause of the stimulation of the thyroid gland to liypertrophy in these cases is unknown; there is a frequent history of infectious disease. Case showing evidence of hypertrophy without elinical symitoms. should be given thyroid gland or iodothyrin in small doses, which may demonstrate a latent hyperthyroidism.
S. P. Beebe has contributed much valuable work in thyroid physiology and chemistry. He believes the thyroid function to be a detoxicating one, and with Rogers has obtained some very significant results with certain sera.

Exophthalmic Goiter: Symptomatology and Medical Treatment.-(Synopsis of paper by Dr. F. A. Dorser.) There are three classical cardinal symptoms of exoplthalmic goiter-enlargement of the thyroid, the exophthalmos and the tachycardia. Marie adds a fourth, the muscular tremor, and Richardson a fifth, the genaral nerrousness.

Tachycardia is the most constant symptom. Rarely. however, it may be absent. The pulse is usually 110 to 1.50 per minute. There are many disturbances of the circulatory erstem. The heart varies in size in most cases, and is dilated in 30 per cent. The right rentricle is especially affected. There may be heart murmurs due even to the excited and accelerated action of the heart. There is increased pulsation of chest, epigastrium and larger ressels. The pulse is small and quick. Edema is present in severe cases

The thyroid gland is enlarged, though not greatly. in most cases. There is always structural change in the gland. The tumor is rascular and has a palpable systolic expansion. 1 thrill is often present. All varieties of goiter from eystic to malignant may be associated with Ba-edow's disease.

The exophthalmos present in most marked cases is absent in one-third of the eases. It is a real protrusion forward of the eyeballs, as distinguished from a widening of the palpebral fiscure. It is increased by emotion and excitement. Pupils are usually normal, react to light. but mar be dilated or unequal. The exophthalmos may be unilateral.

From the standpoint of diagnosis, the muscular tremor, a rapid rhythmical motion with eight or nine vibrations to the minute, ranks in importance with the rapid lieart action and the struma-usually limited to muscles of extremities it may involve the trunk and the whole body tremble. It is increased by excitement. Murray noticed it in 111 out of 120 cases.

The unstableness of the nervous srstem is very marked. Patients are restless, excitable and easily agitated, rapidly passing from one mood to another. Insomnia is frequent and they may have hallucinations or ideas of persecution. The psychic symptoms become more pronounced and may pass over into actual insanity which is likely to be a depressive mania or paranoiac in type.

Loss of weight is usually marked, and disturbances of digestion common. Vomiting and diarrhea are
present singly or combined, in 50 per cent. of eases. Rarely the appetite may remain good and the patient continue well nourished and even gain in weight. With loss of weight chere is atrophy of the muscles and loss of strength.

The skin is smooth and moist, and in 90 per cent. of cases there is marked sweating, accompanied by hot flashes, withont any inerease in body temperature. Various erythemas and pigmentations of the skin oceur ill many cases.

There may be dyspnea-usually late, due to cardiac disturbance or anemia. A short, deep nervous cough may be troublesome. The urine shows nothing constant except the total nitrogen content is increased, due to the increased metabolism. Menstrmation is nsually decreased. The following signs are sometimes an aid to diagnosis: Failure of the upper eyelid to follow the eveball normally in looking downward (V) Graefe) ; retraction of the upper lid on straiglit forward vision, revealing some sclera above the cornea ( $V$. Stellwag, Dalrymple) ; infrequent and incomplete involuntary winking (T. Stellwag) ; difficulty of evert ing the upper lids (Gifford); pigmentation of the upper lids (Jellinek-Rosen) ; failure of forchead to wrinkle on looking up (Joffroy) ; epiphora or overflow of tears; tremor of eyeballs; subjective fecling of pressure behind the eyes; abnormal dryness of eye.

The prognosis is uneertain. Some pases run a rapid course, but the general tendency is to a chronic course with periorls of temporary improvement. In a few cases the disease subsides gradually of its own accord, but with some symptoms partially remaining and eventually relapsing.

The medical treatment of exophthalmic goiter is not altogether satisfactory. The vast majority of cases improve with rest, which must be both physical and mental. The rest treatment should be given a thorough trial in all cases. Patients should be put to bed in a large, well ventilated cheerful room, with an icebag intermittently applied to the precordia and the goiter. The enviromment must be restful and the diet nourishing, and pushed to the full digestive and assimilative power of the individual. Galvanism through the goiter is sometimes used and cold salt glows and massage are often beneficial. The neurotic state of each patient must be studied as in neurasthenia.

Many drugs lave been used in the treatment of the condition. Arsenie, quinin, strychnia, digitalis, strophanthus, iron, ergot and belladonna arc all deseribed as improving the condition. Orthophosphate of soda or potash and phosphoric acid in full doses have given satisfaction. Wm. II. Thompson advises dictetic treat ment, rest and intestinal antiseptics on the theory that the disease is a toxemia.

Reeently some very favorable reports have been given of success with x-ray treatment. The gland was reduced in size, the nervous symptoms lessened and the patients gained in weight. Climatic change is sometimes of great benefit. Organotherapy in most hands has given no results, and thyroid extract has proven distinctly harmful. Iodin (internally). potassium iodid and iodothyrin are all harmful and should not be used. Intraglandular injections have cured. but should not be used because dangerous. Some new preparations have been used which are supposed to have an antitoxic effect. First, those produced from animals from which the thyroid gland has been removed, and, second, those from animals to which normal or pathologic glands have been administered. These in-
clude the milk, sither natural or desiceated from thy roideetomized animals; the antithyroirlin of Mocbius, the hood serum of thyroidectomized sheep, the thy roidedin, the desiccated blood of thyroidectomized theep, and the recent serum made by Rogers and Beebe by the use of the mucleo-proteid and theroglobin from normal and pathologie glands. White the reports of these preparations are farorable, it is too early to even estimate their value, but they are full of promise.

Many cases must be turned over to surgery, but perhaps the greatest number should continue to be treated by the internist, as the general tendency of the disease is toward reeovery.

The Surgical Treatment of Exophthalmic Goiter. Dr. Reed quoted Dr. Barker as saying that surgery could cure almost 100 per cent. of the early cases and 75 per cent. of the adranced cases of exophthalmic goiter. These results are far superior to those obtained by medical treatment. This does not mean, howerer, that every case should be operated upon as soon as a diagnosis is made, for many cases, especially in foung women, do improve or even get well under medical treatment. If after about three months of rest and medical treatment improvement is not marked, operation should be advised. In those seeondary forms of Graves' disease, that is in those eases arising from a pre-existing thyroid tumor, operation should always he done, the results in these cases being especially satisfactory. In all cases, before an operation is undertaken, great care should be given to the preparation of the patient by giving her one to two weeks of absolute rest in bed. When this rest and medical treatment is insisted upon the operation is less dangerous and the after results much better.

The choice of an anesthetic is still an open question. Halsted and Kocher use local cocain anesthesia, while the Maros use ether. With the use of Schleich's sol., a I to 2000 eocain, the greater part of the pain can be abolished, there is less troublesome mueus in the throat, the trachea is less easily compressed, and the reeurrent laryngeal nerve is more easily avoided.

The operation of choice at the present time is the partial recection of one tobe of the thyroid gland. atlempting at the same time to leave an amount of gland equal to the normal. The ligation of the thyroid arteries is only justified as a preliminary procedure in those cases where the symptoms are too severe to warrant resection. In the operation of partial thyroidectomy, the incision most commonly used is the collar incision of Kocher. The gland is exposed by incising its external capsule. and the dissection made between this and the internal eapsule. Great care should be taken to keep the wound perfectly free from blood, as it stains the tissues and makes dissection more difficult. As a serious form of tetany follows the removal of the parathyroids, it is important that these structures be sared, and not be removed with the thyroid lobe. In order to do this, the thyroid arteries are ligated, whenever possible, distal to the parathyroid arteries, and the parathyroid bodies dissected from off the gland. Great eare should be taken in separating the gland from the treaehea not to injure the reeurrent laryngeal nerve. It can readily be detected by a change in the patient's voiee when it is approached ton closely. In closing the wound, drainage is im portant in order to carry away any thyroid sceretion that may flow from the cut surface of the gland. Retention of the secretion leads to acute thyroidism which may be very dangerous at times. In all cases.
both mild and severe, operation offers a cure in from 75 to 80 per cent. The death rate varies from 2 to 5 per cent. with different operators, deaths being due to the anesthetie, hemorrhage, tetany, acute hyperthyroidism, influenza and pneumonia. The cases that survive operation and are not completely cured, are in the main greatly improved.

Discesslon.-Dr. F. F. Hutelins said that the study of this disease is elosely related to the study of those other so-called trophic diseases, myxedema, Reynaud's discase, aeromegaly, ete. He reviewed the history of the use of thyroid extract and the wonderful effeet which it produeed in eertain forms of insanity on whien it was first tried. The most interesting eases of Basedow's disease to him are not the well-marked ones but those that show many of the evidenees of hyperthyroidism, but not the typical exophthalmos and glandular enlargement. These individuals show great extremes of aetivity ; some are vigorous and exceedingly active, with marked physieal growth; others are dull, apathetie, or just fall short of the normal. Our treatment now is purely empirical because we know so little of the real underlying eause of the glandular hypertrophy and hyperactivity. Not until we have learned more of the true nature of the disease will we develop a more satisfactory treatment. One of the greatest difficulties of the operation on the thyroid is to know just how much of the gland to remove so that the symptoms will be relieved and no harm from lack of seeretion follow. He believes that the essential eondition is a toxemia and the one greatest object in any line of therapy is elimination.

Dr. R. H. Ritter ealled attention to the faet that we must distinguish between a hypertrophy and a hyperaetivity of the thyroid as the cause of the symptoms in Basedow's disease. It is evidently not simply a hypertrophy since the symptoms develop when there is no palpable enlargement of the gland, and again there may be enormous enlargement of the gland with no symptoms. Another question is as to whether there is a new proauet thrown into the system by the gland or whether there is simply the increase in the normal seeretion. This question seems to be definitely settled by the fact that all the typieal symptoms of Basedow's disease may be eroked in some individuals by the administraton of thyroid extract made from the normal glands. The disease possesses physiologie as well as elinical interest; one of the interesting facts being that while the rate of the pulse is often greatly increased, the blood pressure is not raised. Cardiae hypertrophy, often present, is most marked in the right rentricle and pulmonary congestion is not infrequent. That many cases in the past have been overlooked is evident to all, and that many eases are even now not recognized can hardly be disputed. This will always be true if the grosser and more glaring lesions such as the exophthalmos and thyroid enlargement are depended upon for a diagnosis. The explanation for lack of palpable or visible hypertrophy of the gland is probably that there takes place the socalled soft enlargement in whieh the organ is so soft as to make its distinction from the other tissues of the neck difficult, especially if there is mueh adipose tissue about the neck. There is no one constant or pathognomonic symptom or sign. The speaker has reeently seen a ease in whieh he eonsiders the diagnosis positive in which there was neither enlargement of the gland nor protrusion of the eyes. There was, however, tachyeardia, extreme nerrousness and irritability, transient
eapillary congestion of the face and neek, loss of weight, and a history of recent gastrointestinal disorder. The speaker could not agree with the frequently heard diseussion of this disease as a toxemia. While it ean not be absolutely disproven that a toxemia may have been the original eause of the glandular hyperactivity, still if the symptoms are produeed by an inerease in the normal thyroid secretion thrown into the eirculation, as they seem to be, and this seeretion is meither a toxin nor a leueomain, there is no basis for calling the condition a toxemia.
Dr. J. W. Sluss called attention to the inereasing amount of attention this disease is attracting and the prospect of even more interest in the future. He believes that the disease is increasing in frequeney, although it may be that with a greater knowledge of the symptoms more eases are now recognized than formerly. Surgical treatment is to-day as purely empirieal as medieal, but in the future there is reason to believe that the true nature of the condition will be revealed and a physiologie antidote will be discovered and surgieal procedures will be abolished. While there is still some question as to the relative value of medical and surgical treatment, when there are eysts and other anatomical changes in the gland, operation is the ouly method of treatment to be eonsidered. He emphasized the importance of the parathyroids and the necessity of great care in not injuring nor remoring them in an operation. Complete ligation of the thyroid arteries is not justifiable, since it also shuts off the blood supply of the parathyroids. With eare during the operation the parathyroid arteries can be left uninjured.

Dr. F. B. Wymm spoke of the treatment of these eases with the $x$-ray. One case with extreme symptoms preparing to undergo an operation was given five exposures, with complete disappearance of symptoms and perfect health for the past four vears. Other cases have shown some improvement, but none have shown so remarkable results as this one. In one other case, after a few exposures, the patient grew rapidly worse, an abseess developed in the gland, and the patient died in almost the condition of aeute mania.

Dr. J. R. Eastman spoke of the frequeney of goiter in Switzerland and the fact that this enlargement of the gland often disappears when the individual removes to another region. All the ssmptoms of the disease are aggravated by high altitudes. It is believed by the natives that there are eertain springs whose waters produce the condition when drunk and there are others whose waters are curative. He has operated on one case of Basedow's disease and two cases of ordinary goiter. He has seen Kocher and others do these operations under local anesthesia, but believes that this is not usually practicable, at least in this country, since the social eonditions and the tractability of patients is not the same. He exhibited Kocher's clamp for seizing the gland and drawing it out during the operation without making much pressure on the organ, and also the grooved director for aid in ligating the many small ressels. The greatest eare is taken by Koeher to ligate each ressel as he reaches it in order to make the operation as completely bloodless as possible. There is now almost complete unanimity of opinion as to the relative value of medieal and surgieal treatment. The palliative operations, such as the ligation of the main arteries, while not often done, are done on speeial indications.

Dr. A. E. Sterne is still meonvinced that the hyper-
actirity of the thyoid $i$ the caluse of the srmptom: in Basedow - diseare. He is meonvinced that the theroid in not an exerotory rather than a secretory wgan. The mumber of canes without any special thyroid pathology raisen thi $=$ question. He believes that the -ympathetic nervous sremem is at the base of the condition. and if this be true, then surgery is wholly illogical and its frequent failure is explained. There can be no doubt that a very respectable number of cases are entirely relieved by medical treatment. There are two chicf points to be considered in the treatment. 1. Absolute rest: 2. inaintenance of normal gastric and introtinal action. Forced feeding is often advisable. He has had good results from the exposure of the enlarged gland to a low tension tubc. His experience with this plan of treatment has been very satisfactory, and if operation is adrisable later on. the patient has been much improved and the prospects of the operation are much brighter.

Dr. A. C. Kimberlin spoke of the diversity of opinions and the meagerness of real knowledge concerning this disease and the consequent difficulty in settling on any mniform line of treatment. Hrgienic, psychologic and medical treatment are of undisputed ralue and should always be employed even if surgery is also resorted to. The condition of the mind is often a matter of deep concern and shonld receive the most careful attention.

Dr. C. F. Neu insisted that a carfeul distinction should always be made hetween Basedow's disease and simple hypertroplys, and the two conditions should not be discussed together as $i=\operatorname{ton}$ often done. There is a marked lack of characteristic listologic changes in the thrroid gland in trut exophthalmic goiter. Recently an attempt has been made to establish a connection hetween the thyroid, the suprarenals and the pituitary body in function and control of rarious activities of the bodry and on far the relation is purely speculative.

Dr. MeDonald, in closing. suggested hrperthyroidism as a most sati-fiactory name for the syndrome. He still believes from all the information at hand that hrpersecretion of the thyroid is the real basis of the srmptoms. The histolosic changes mar be patchr and in this way orerlonked in the examination of the gland. Again the enlargement may he backward or down behind the ternum or clavicles and so escape discovers by the examiner.

Dr. Dorser. in closing. alvo defended the hrperse cretion theory $a=$ the real explanation of the srmptoms.

Dr. Feed, in closing. said that it is possible that the changes in the gland are really secondary to some metabolic disturbance, and the rital cause of the trouble mas be reated in some far distant region.

The society adjourned.
R. H. Ritter, Nee.

## (Meeting of March 3, Igo8.)

The society was called to order by the president, Dr. Wrmn. The minutes of the previous mecting were read and approved. The applications of Jacob Buehler and Frecman H. Ilibben were read the fir-t time and ordered posted. The application of Charles D. Humes was read the second time and referred to the Council. The Council reported favorably upon the applications of Frank D. Dowd. Raymond H. Stinger. George L. Chapman. Harry G. Gaylord and David F. Lee. Thi report was adopted and the men declared memberThe seccetary ammounced the receipt of a check for s.j0 from Mr. J. K. Lilly to he applied to the subscrip-
tion for magrazines for the medical department of the City Library.

The program was made up of ease reports and ex. hibition of specimens.

Myelogenous Leukemia.-Dr. Wyonn preacnted a Ghilt, aged 14. with an enormously enlarged spleen and all the other trpical sigus of mrelogenous leukemia. After one week's treatment there has taken place a distinct reduction in the size of the spleen, the child las sained two pounds in weirht, and is improved in otlicr ways. He also presented a man who has now been umler treatment for three years, and whom he had previously shown to the society. The spleen is now barely palpable there are now no characteristic leukemic changes in the blood, and the man's general condition is very good. In the last year he has not lost a single day irom his work as a shoe clerk. Dr. Wynn also reported a ca-e of myelogenous leukemia in a man aged 63. who first noticerl the anlargement of the glands aud spleen in October. 190-. Since then be has lost thirty pounds in weight. has developed a cough with free expectoration. in which no tubercle bacilli can be found, and has become very anemic. After three x-ray exposures in the course of one week. there developed marked evidences of an extreme toxemia with a temperature reaching 102 . The glands and spleen rapidly diminished in size, but the cough became excessive and the expectoration profuse. In the sputum was a considerable quantity of connective tissue. His explanation for the condition is that the rapid aboorp. tion of the enlarged glands has produced the extreme toxemia, and the bronchial glands have undergone softening and disintegration. He believes the ontlook in this case to be bad.

Gastric Ulcer.-Dr. O. Gr. Pfaff reported the case of a. woman who had pain in the stomach and the right inguiual region for several years. Finally a cystic ovary was removel from the right side. The pain in the pelvis was relieved, but the pain in the stomach enntinned and became much worse. She then began to have riolent attack $=$ of romiting which would alwars give temporary relief. There was an excess of HCl in the gastric secretion. The diagnosis of gastric ulcer with dilatation was made and the abdomen opened. The prloric end of the stomach was found to be the seat of several indurating ulcers ohstructing the outflow. A posterior gastrojejunal anastomosis was done and the patient returnet to her home in eighteen days. apparently perfectly well.

Tubercular Cerebrospinal Meningitis.-Dr. W. T. S. Dodds reported a case of tubercular cerebrospinal meningiti in a midget 19 rears old. The patient was arized with an attack of acute influenza which sub--ided in three or four days. She was left weak and tired and with no appetite. Shortly after this illnes there was evidence of tubereular infiltration of the apex of the right lung. and this spread with great rapidity until the whole upper lobe was affected. The patient went down quickly and was coon confined to her bed. Two week belore her death she began to show evidences of involvement of the cerebral meninges. violent headache. difficults in deglutition and phonation. The pulse ranged from 85 to 95 and the temperature from 97 to 90 . In about fire days there was loss of motor power, altered sensation in the limbs, and impaiment of control of the bladder and bowel. Convulsions developed five dar: before death. He believed the case to be one of miliary tuberculosis; the affection either having been latent in the body and only
called into activit? when the system was depressed by the influenza, or the latter condition made infection possible. Ile mentioned the frequent development of tuberculosis after an attack of influenza, or the increased activity of the disease after sueh an attack.
Recurrent Chorea Following Acute Infectious Dis-eases.-(Alstraet from Dr. Earp's Paper.) The author *poke of the hereditary neurotic condition and the over taxation of the nerrous system of the individual, and in all cases the neurotie element predominates. Anemia is an esential factor.

The first case report is a- follows:
Nellie M., previous to 8 years of age. had shown no signs of ill health, with the exception that there was slight evidence of anemia. In Julp, 1899, during her ninth year, an attack of whooping cough followed scarlatina and then came chorea, at which time it necessitated her removal from school, in November. Between the attacks of whooping-cough and chorea she had hay fever, which has been present during July and August each year since that date until 1907. During May and June of each year from 1899 until 190 S she has chorea, and each time it has been preeeded by acute articular themmatiom. In October, 1907, whe had an attack of hay fever following rheumatiom, but there was no evidence of chorea. In January, 1908 , rhemmatism again made its appearance and a week later chorea. Felsuary 21. 190s, the pationt gave every evidence of being well.

The treatment consisted of salicylate of sodium, salicylate of iron and Fowler's solution. Instructions in reference to absolute rest were not followed. and at diflerent times such agent- as elixir of valerianate or ammonia, lromid of sodimm and ehloralamid as restorative agents were used to overcome malnutrition.

The essayist thought the patient would permanently recover from these diseases if she were divoreed from lier home surroundigg.

Two other eases were reported; one associated with measles and the other with rheumatism.

The treatment did not differ materially from that of the first cave. One observation in the last ease seemed to be of some importance. It was necessary to operate for adenoids, believing that it is a predisposing eause to chorea. Previou- to the childs illness she was rude, nerrous and impudent, and had failed to make her grade in school. Since her recovery she has been a leader in sehool work, has an amiable disposition and is especially bright in mathematies.

Dr. T. 13. Eastman exhibited the clamp or towel holder which Mornihan has recently devised for holding a towel in clowe contact with the edges of the incision so that the hands and instruments of the operator do not come in contact with the patient's skin during the operation.
Atrophic Cirrhosis of the Liver.-Dr. C. J. Cook presented a man, aged 47 . with a typical case of this disease. He diwcussed the pathology and course of the divease.
Colostomy with Continence. Ca-e report by Dr. II. H. Wheeler. Female, aged 42. History of rectal troulbe for thirtern years. Five years ago it began to grow worse and for ten months she has not been able to follow her vocation, which is that of a seamstress. There were fremuent bloody stonls, accompanied ly pus, with no relief from pain. She lost 40 pounds in weight and was probably losing ground. There were papillomatous manses about the anus and three fistulous openings. The rectum was narrowed and the
mucosa ulcerated as far up as could be felt and seem. No improvement reaulting from the ordinary treatment, a colostomy was done in the left inguinal region. The intermuscular incision was used. The bowel was opened on the seventh day. After five or six weeks of incontinence se gradually gained control and at the present time she has two natural movements a day with slight sphincteric control. She las gained to pound in weight and has resumed her former roeation. The speaker reviewed the indications for this operation.
Spindle-Cell Sarcoma.-Dr. William Shimer exhilited muder the microsope a section of a spindle-celled sarcoma removed from the finger of a man aged 35. Two years ago two small nodules appeared. one on the palmar and one on the dorsal surface of the second phalans of the semol finger. These had grown to the size of a pixeor* egg. cansing no trouble except interference with flexion of the joint. The patient was given one tablet of the scopolamin-morphin-cactin mixture and the site of operation infiltrated with a 1 per cont. cocain solution. No untoward symptoms were noted. The thmors were round. eneapoulated and hatd produced an erosion of the bone by pressure. there bering no evidence of involvement of the bony ti-sur. This is the tumor formerly called reeurrent fibroing, lut now recognized as a true sarcoma. They fregumely recur when removed, hut rarely form metastaces.
Rupture of the Heart.-Dr. John Kolmer read the following antopsy report: Man. aged 65, found dead in his bed. In 1890 he had received an injury on the head from the handle of a pick in a coal mine: in 100t ho had received a second injury and in 1907 a thisd one. Since the lant injury he had frequent at tacks of the most intense pain in the rertex. and great weakness. Since the first injury he has had epileptiform seimures. The calvarimm was removed with dificulty because of firm adhewions of the dura. On the immer side of the dura was a piece of bone the size of a lima bean. around which was a cy-tie area of brain tisule three inches fong and two inches wide. Around this blood vesisels were decidedly hardened. The whole lwain looked somewhat bleached. The lungs were very dark, almost black, and quite firm. as if consolidated. The pericardium was full of clotted blood and sorme. The right auricle showed a ruptnre along the auriculoventricnlar septum, and the left auricle showed as small rent ju*t bencath the appendage. -thl the valses were calcareons. The wall- of the mptured auricles seemed no thicker than ordinary paper. The right kidner was granular on the surface and contained pu*. The spleen was somew hat enlarged.

Dr. F. B. Wrmm demontrated the intereating features of the heart prewented by Dr. Kolmer. He called attention to the mitral stenosis, the consequent dilatation of the left auricle and the dilatation of the right heart with relative incompetence of the trieu-pid valve. The eondition of the lungs was evidently due to a chronic pa-ive hyperemia.
Dr. Guido Bell, in referring to the rmpture of the heart, mentioned a case in his own experience of a woman who had given abolutely no symptome of cardiac trouble, who had gone meventfully through labor the day before, and who suddenty stretched ont her arms and died. The heart was found mptured.
Dr. R. H. Ritter called attention to the shape of the auriculo-ventricular orifice in stenonis. It is ahmost invariably crescentic, forming the so-called lout-
ton-hole orifice. It is aid to be a fact in physics that sluid will flow more rapidly through a slit than throngh a remed hole. the two being of equal area. If this be so. it is fortunate that in the heart the stemosed orifice assumes the shape.

Dr. 1. W. Brayton. referring to the oeremrence of the sareomata, recalled the cases of xeroderma pigmentosa which le had reported on a number of times. It theee ca-cs there were great mmbers of small sarcomatous tumors formed on the limbs.

Dr. E. C. Thompson. referring to Dr. Earp's re-mark- concerning chorea cansmb by the acute infectious diseases, reported four cases of chorea. three of them in one family. In three of these cases there was a history of rheumatism.

The society adjourned.
R. II. Ritter, See.

## (Meeting of March 10, 1go8.)

The society was called to order by the president, Dr. Wymm. The minutes of the last meeting were read and approved. The application of Dr. Frank E. Abbett was read the first time and ordered posted. Dr. A. M. Cole moved that a committee be appointed to take step to have plysicians' velicles exempted from the present city ordinance regulating the speed of vehicles. This committee as appointed by the president, consists of Dra. Cole, Potter and Dorser.
The Modern View of the Etiology and Treatment of Acne Vulgaris and Acne Rosacea was the title of a paper read by Dr. A. M. Cole. After discussing the patholegr the author expressed the following eonchsions:

1. Acne vulgaris is usually a progenic infection implanted on skin whose functions are perverted by the influence of age, reflex disturbances or seborrhea.
2. Acne roncea is an acne implanted on a chronic hyperemia or rosacea which arines almost invariably from rellex influences from the gastrointestinal tract or pelvis.
3. Internal treatment in both varieties of acne is exceedingly important. Reflex disorders must be sought for and corrected, if possible, before the best results can be obtained.
4. External drug treatment in both diveases is menal. ly di-appointing. Sulfur, in the form of lotio alba properly made, is the best external preparation and should vary in strengtlo suitable to the condition of the disease.
5. Nechanical treatment, such as the use of lont water, soap, masige and the dermal curette, is exceedingly valuable.
6. The opsonic method in acne vulgaris is promising.
-. The Roentgen treatment in both acne rulgaris and acne rosarea is the most valuable. In its ecrtainty of cure and infrequency of relapse it almost approaches a -pecific.
s. The technic of using the x -ray in acne is of paramont importance. If the ray is properly applied there should be few if any failures and no undesirable results.

Gonorrheal Ophthalmia was the title of a paper read ly. Dr. IV. N. Sharp. The points brought out by the writer were:

1. A- it is known loy so many different names which are liable to confuse the practitioner it should be deignated by the term gonorrheal.
2. A- death has occurred in the infant from joint and other affections caused by the gonococcus, it is pos-
sible that surf infection oceurs through the circulation intrautero.
3. As the state law of lndiana prolibits the marriage of perans laving "renereal disease" the guilty parent of the infant laring gonorrheal ophthalmia should be punished by fine or imprisomment or both.
4. Is so many cases of purulent ophthalmia resemble the gonorrheal type. for protection in case of medienlegal involvement, smear examinations should be made in every case.
i. Is cleanliness is nest to godliness it should be the most important part of the treatment.
5. Iroyrol has been a suflicient antiseptic in the hands of the writer in combating virulent cases when frequently applied in full strength.
6. Properly trained and intelligent nursing is absolutely neces-ary to success.
7. The conscience of the physician should be alert in the management of every case.

Discessios.-Dr. F. B. Wyun, in discussing Dr. Cole's paper. said that the etiology of acne is a broad subject in itself and inrolves a wide discussion. He is inclined to lay very little stress on the relation of acne vulgaris to constitutional disorders; in four-fifths of all cases it is a purely local condition. While occasionally found in the anemic and cachetic, it is most often found in vigorous, healthy bors and girls. In acne rosacea, on the other hand, reflexes, gastro-intestinal disorders and faulty habits are of prime importance. In the treatment of acne vulgaris, then, the treatment is purely local except in the occasional case of anemia. He believes that the anemia may be secondary to a s-vere pustular acne as the result of prolonged absorption. In this condition he uses the sulfur ointment more than the lotion. In acne rosacea he has had the best results from the use of resorcin, so far as local applieations are coneerned. Permanganate of potassimm in solutions strong enough to cause tingling of the skin has in some instances of aene vulgaris given him good results. If used in solution strong enough to discolor the skin, it may be decolorized with oxalic acid. This drug is most effective in cases with marked soborrhea. General treatment is of the greatest importance and slould never be neglected. The induetion of pa-ive hyperemia by the use of small cups is effective in some cases. He is impressed with the thcoretical vialne of the lirohmeier drill, although he has never u-ed it: it sems to be preferable to the curette. He is hopeful that the opsonic method may become of great help in the treatment but at present it is not yet established. In using the $x$-ray the different types of arne should be kept clearly in mind. The efliciency of this procedure can not be doubted, but it is not always necessary or adrisable to use it. Aene papillosa and superficial pmstular acone may be in almost every instance cured by the use of sulfur, and the x-ray, while always curative, is not alwars essential. In acne indnrata. with large masses of pus and sebaceous material deep in the skin and subcutaneous tissue, he has -een a latent or passive process fired up into great activity by the use of the $x$-ray and deplorable scarring and atrophy follow. The x-ray should always be used witl the greatest care and while, generally speaking, no larm should be done with this agent, there are still mavoidahle eases encountered in which harm will inevitably be done. Often atroply takes place long after its use when the acne is gone and all seems well. This atrophy seems to prefer the usual location of wrinkles, and thus the face is aged and disfigured. He now is
extremely careful to protect every bit of skin which it is not intended to affect, and especially the comers of the month and other locations in which wrinkles are prone to develop. With all these remedies, and no matter how complete the cure may seem, relapses are rommon even after the lapse of considerable time. In such eases, if treatment is begun at once again, the disease may usually be arrested and cure again speedily affected. While he agrees with the essayist that the $x$-ray is the most effective agent in the treatment of this disease, he can not fully agree with him in his assurance as to it- complete harmbessness even when u-ed with the greatest care.

Dr. F. C. Jeath, ill dincussing Dr. Sharp's paper. said that out of the many term-s suggested and used to denote an inflammation of the eye eaused by the gonococrus, he prefers the simple term gonorrheal conjunctivitis. He does not acrept the riew of some that if the discase does not develop within one week after birth it is not due to infection from the raginal canal, but belieres that it is quite possible for an infection to oceur during the passage of the fetal head and the arute inflammation to le postponed for some time. One of the most elaracteristie features of this inflammation is the swelling of the comeal conjumetiva and this is the greatest source of danger so far as rision is concerned. Doctors should adopt every prophylactic measure in treating eases of gonorrhea and warn patients of the danger to others and to their own cyes. He believes firmly in the efficacy of argyrol: in his mind its efficaey lias been abundantly demonstrated. One of of its greatest advantages is its painlessness. In adults it is not as effective as in children. It is oceasionally necesary to incise the outer canthus and use the stronger salt of silver, the nitrate.

Dr. A. W. Brayton, in discussing Dr. Cole's paper. said he is not distracted ly the newer methods of treatment nor inclined to underestimate the great value of the older and fully tried methods. The x-ray is full of hope, but is not yet established nor its province fully defined. He sees no hope from the vaccine therapr. He emphasized the necessity of taking up these eases of acne which mean so much in the happiness and even suceess of young women, esperially, scriously and exerting every effort to relieve the patients.

Dr. II. H. Weer called attention to Bulkley's opposi tion to the nse of arsenic in acne, which had been adrocated by the essayist. The former gives most frequently litter tonics combined with an alkali. This discussion on Dr. Cole's paper illustrated rery well the quite general confusion as to the use of the x-ray in this disease.

Dr. A. S. Jaeger insisted that education and not legislation is the proper way to get at the evil of renereal disease and prevent the disantrons effects of which blindness is one.

Dr. Cole and Dr. Slarp closed the discussion with an emphasis of some of the points made in their papers, and the soriety adjourned.

## R. II Ritter, Sec.

## MIAMI COUNTY.

The Miami County Medieal Society met in regular session in Commereial Club room, Peru, on Friday, Mareh 6, with twelve members and one visitor present. Society was called to order by President E. H. Griswold. Minutes of previous meeting were read and ap-
proved. 1)r. J. C. Fretz read a paper on "Etiology of Carcinoma." Dr. C. E. Goodrick presented a patient for a clinic, with an affection of the akin. Dr. E. H. Griswokd gave a talk on "Benign Tumors of the lireast; Diagnosis and Treatment." Discussions followed.

Adjourned.
D. C. Ridenour, Sec.

## PUTNAM COUNTY.

The Putnam County Merlical Society met March 5, with Dr. W. W: Tucker of Greeneastle. Dr. Walter MeGaughey ly the exhibition of speeimens and illustration by drawings, gave the minute anatony of articular structures: Dr. Chas, Sudranski discossed the subject, "The Orifices and Valves of the Heart and the Anatomy of the Endocardium;" Dr. Chas. F. Hope read a paper on "The Etiology of Acute Rheumatism" and discussed the theories of causation by diplococei and other micro-organisms, and called attention to the predisposing causes. Dr. J. V. Bastin, in an exhaustive paper discussed the pathology and clinical history of acute articular rheumatism. Dr. Hutcheson closed the meeting by discussing the "Complications and Treatment of Acute Rheumatism."

Since the introduction of the post-graduate work into this society meetings have been held every two weeks. The enthnsiasm has been unbounded and the "heart to heart" talk- have been of frequent oecurrence among the members. A mutual good fellowship is being rapidly developed, and the valuable papers and tiriendly discussions presented at the meetings are wiping the "colswels" from the minds of the physicians. who are ahready serambling to get out of the "ruts."

## Adjourned.

## J. V. Bastin, Sec.

On March 19 the Putnam County Medical Soeiety met with 1r. Joseph Gillespie. Dr. Eugene Hawkins, on the suljeect of "Rheumatism of Children," said that unlese we dismiss the summary of symptoms as manifested by the disease in the adult we will be umable to properly appreciate and diagnose the disease in childhood. He regarded heredity as a cause in the majority of mase. He said that a dyscrasia was rapidly devel oped in those having a primary attack. The frequent oceurrene of and the dangers attending eardiac com-plication-. in chidren. he thought was being underestimated by the average physician. He believed that the proper hygienie eare during and after the attacks woukd lesuen the complieations. erarlicate the discase itelif, and prevent recurrence better than all therapy:

Dr. Joseph L. Preston discussed the subject of "Gont" and said that the disease is due to nutritional disturbances. He reviewed the disease from the days of Ilippocrates, congratulated the brothers that they had no local manifestations and advanced the theory that this immunity was due to pecuniary conditions which prevented high living by the members of the medical profession.

Dr. Clint Zaring discusted "Myalgias" and recommended acupuncture with three of four inch needles and the injection of sterile water and anodynes.

Dr. Joseph Gillespie presented clinical cases of "Arthritis Deforman-" and diseussed at length the etiology, symptoms and diagnosis of the disease. but said that as to treatment he had exhausted the Pharmacopecia and gotten no beneficial results.

At the conclusion of the meeting a smoker was emjoyed.

Idjourned.
J. I. Jiastin, Nec.

## SPENCER COUNTY.

The Marel meeting of the Spencer County Medical society was beld in the oflice of Dr. H. G. Weiss, of Pockport. As Dr. C. H. Adye, a member of the board of centors, had moved away, Dr. H. G. Weiss was elected in his place. The applieations of Drs. S. ( Lang, W. II. Williams, L. O. Walters, Seot Cook, D. V. Metlary, C. S. Baker and Geo. B. DeTar were ace cepted by the board of eensors and they were admitied to membership in the soeiety. The members on the program being aboent a social time was enjoyed. A motion was made and seconded that the society have special meetings in the month- of April and May. The April meeting will be held at Chrisney, April 21, 1908.

Adjourned.

> Era Buxtos, sce.

## TWELFTH DISTRICT MEDICAL SOCIETY.

The next meeting of the Twelfth Councilor District Medical Society will be hed in Fort Wayne April 21, 1908. Papers will be presented by Drs. J. Clarence Webater of Chicago, A. W. Brayton and John F. Bamhill of Indianapolis.

## VANDERBURGH COUNTY.

It a recent meeting of the Vanderburgh County Mcdical society the following officers were eleeted to scre one year: President, Dr. Ludson Worsham, Evansville: vicepresident, Dr. G. C. Johnson, Evansville; and secertary-trea-mrer, Dr. W. R. Datidson, Eransville.

Adjourned.
II. R. Dambsox, Soce

## BOOK REVIEW

Diseases of the: Meart. By Prof. Th. von Jurgemeph, of Tubingen; P'rof. Dr. L. Kichl. of Greifswatd: and Prof. Dr. L. ron Schrotter, of Viema. Edited, with additions, ly George Dock, M.D., Professor of Med icine, Univervity of Michigan, Amn Arbor. Octavo of 845 pages, illu-trated. Philadelphia and London: IV. B. Faunders Company. 190s. Cloth, \$5.00, net; half moroceo, sti.00, net.
This excellont work fill: a long-felt want in the library of the English opeaking physician. And with the eareful elaboration of it editor, Dr. Dock, it becomes a veritable masterpiece upon a subject upon which reliable information is eagerly sought by every practitioner of medicine and particularly the internist. Like all the other rolumes of the series, the book is excellently constructed from the printer's and binder's standpoints. and is carcfully and minutety indexed.

The editor prefaces his work by calling attention to the need of such a work in the English language, in which there has been a woeful paucity, despite the fact that many important contributions have been made by the English-spaking profonion concerning the normal and pathological anatomy of the heart. its physiology and the circulation, diagnostic methods, pharmacology of eardiac remedies and the application of non-medicinal measures to the treatment of patients
with hart disease. Few changes from the original have been made save in wording and in making the medieinal preparations conform to the U. s. Pharmacopeial. Such matter as has been brought out since the publication of the original, has been added by the editor.

Many points of interest are brought out by the authors which merit consideration, such as the broader conception of the pathology of a chronically insufli(ient heart which Prof. von Jugensen would describe as: a pancarditis rather than attempt to limit the nomenclature so as to apply to one part of the heart only, for in such a condition all parts are functionally deficient, particularly the leart muscle.

One of the most satisfactory elements of the work is the detailed way in wheh the subject of treatment is taken up, little being taken for granted. The editor has certainly shaken our views upon the superiority of the infusion of digitalis over the tincture, and accounts for the lack of definite results from the latter preparation by explaining that the real equivalent of the ordinary dose of the infusion is seldom made use of when the tincture is employed, viz., about 4.5 minims.
The work is well illustrated by case histories, charts, plates and tracings, and is in erely way worthy of the name of its experienced authors and collaborators.

## ABSTRACTS FROM CURRENT MEDICAL LITERATURE

('hicago has resumed enforcement of the anti-spitting ordinance. February 24 twenty-one men, who had been arrested in the down-town distriets for spitting on sidewalks and platform- were found guilty and fined sl and costs each.-The Chicago Medical Recorder.

Enough attention is not paid in some of the northwestern town to the practice patent medicine distributors have of sowing samples broadcast on the doorsteps of the people. In some eities ordinances exist against this practice, but elsewhere the publie sentiment has not been suffieiently stirred to enaet local legisation against it. Pills, powders and herbs are frequently scattered over the porches and doorstepe, and lecaluse of the brightness of the preparations and their aromatic flawor children regard them as eandy and do themselves great injury by eating them. Such drugs as acetanilid, morphin, cocain and stryehnin, are contaned in many of these preparations, deftly concealed beneath the sugar coating. Perhaps if we had women in our city comels they would take more intrest in preventing this evil than is now taken ly the men, who presumally, have things of greater moment to discuss and consider.-Medical sentinel.

Tine llarm of Coxtract Practice.-The question is of special interest to the young practitioner who knows nothing of the triak about to confront him and who thinks that the perplexities of diagnosis and treatment constitute his real difficulties. Notwithstanding eareful preparation, the young practitioner finds the nmmber of his patients in inverse ratio to his expectations. On investigation he learns that various fellow practitioners are under contract with corporations, lodges and fratemal societies, to treat the employes or members, or ern the whole families of members, at a ridiculonsly low price.-IVisconsin Medical Journal.

# THE JOURNAL <br> OF THE <br> Indiana State Medical Association 

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## ORIGINAL ARTICLES

THE HISTORY. CAUSES AND PREVENTION OF TUBERCULOSIS:*

> M. Raydin, M.D.
> Eranstille, ind.
"Look up and not down. Look forward and not back, Look out and not in, and lend a hand." -Rev. Dr. Edward Everett Iale.

In the distant past, in the days of our ancestors, when the science of medieine was pure empiricism and hygiene in its early infancy, the lot of the consumptive was, indeed, a wretched and hopeless one. Very little if anything was known in those early days of the cause of tuberculosis or of its various effects upon the system. All efforts to cure or relieve the conditions were, in the light of our present knowledge, imperfect and barren of satisfactory results. The consumptive saw before him naught but misery. The death warrant was signed and it remained only for "Father Time" to execute it. As we advanced in knowledge, step by step, slowly but surcly, the great searchlight of modern methods of research and laboratory investigation has broken through the clouds of superstition, ignorance and uncertainty, The last remnant of obscurity, so far as the real cause of consumption was concerned, melted away when Prof. Robert Koch discovered in 1882 the baeillus named after him and proved it, to the satisfaction of the scientific world, to be the only real eause of tubereulosis.

Professor Koch's epoch-making discovery brought hope and a new lease on life for the pulmonary invalids. This faint ray of hope has continued to grow brighter, wider and stronger as modern medieal research has advanced upon

[^13]its triumphal march. The cause once known, the disciples of Hippocrates have set to work to find effective weapons with which to fight it successfully. Hundreds, nay thousands, of the noblest and brainiest of our profession have enlisted in this volunteer army against the white plague, and many illustrious names from all civilized nations have covered themselves with glory on the silent battlefield. Great, indeed, were the discoveries in the field of pathology, bacteriology, and chemistry, and we now have effective weapons with which to stay the deadly march of the white plague, and if not absolutely to cure but control tuberculosis.

Science has spoken. It remains now for our national, state and municipal governments to provide the means for the execution and application of the remedy. It becomes the duty of organized society to demand the enactment of proper legislation and its proper enforcement. While the majority of tubereulous patients will only too gladly carry out all necessary precautions, the minority will eontinue to perpetuate the disease through poverty and ignorance, and for these few we must have laws and regulations, hospitals and sanitariums, where they can be under official control for their own welfare and for the good of the community.

The necessity for state and municipal institutions for consumptives becomes at once apparent when we remember that hundreds of human lives are daily sacrificed to this moloch in our own dear country. This grim reaper selects the majority of its victims from among those in the prime of youth and early maturity, those whom the world needs most. those who have everything to live for and to whom life means most. Think of the numberless lomes broken up, the widowed young wives, the motherless children, the homeless orphans, left to shift for themselves as best they can, with probably the seeds of consumption
planted in their lungs．Think of the army of such children growing up without the tender care of a loving mother，without wholesome home in－ fluences．But it seems to me that the world has become accustomed to the presence of tuberch－ losis．for society does not respond as it should to the appeal for aid with which to fight this grim reaper．But for all this，sanitary and medical sciences will win the battle．The time will come when tuberculosis will be not only preventable but curable also．The seeds are planted and by the end of the twentieth century the white plague will，bell nigh，be eradieated．Two centuries hence tuberculosis will only be known in history， as are now the great plagues of the middle ages． To speed the day of this milleminm we all must work together，we mist look forward and not back，and lend a hand．

## HISTORY．

The ancicnt physicians had no knowledge of tuberculosis in its present sense．although the discase must hate existed since man became a social being and lived in close communities．＇The ancient physicians were familiar with only the outward phenomena of the disease which mani－ fest themselves in the later stages，such as pro－ gressive emaciation，expectoration of pus，etc．

Hippocrates．（ $\mathrm{f}_{\mathrm{l}} \mathrm{O}$ B．（．）taught that the dis－ ease was dhe to suppuration and uleeration of the lungs．Some of the Greek physicians recognized phthisis．as they called the disease to be infec－ tious．（＇elsus（so A．D．）held that phthisis was due to lack of proper nutrition．porerty and chronic diseases，conditions which we now recor－ nize as being predisposing factors only．Aritacus． the Cappadocian（ 50 1．1）．）．left a description of the consumptive．which can hardly be im－ proved upon in the present day．His treatment was mainly hygenic and dietetic．Some of his recommendations，says Whittaker．read as though written yesterday：For instance，he ordered per－ fect rest．amointing the body with oil，ontdoor life，sea rovages．cgess in plenty，and milk． Galen（ $1.50 \mathrm{\Lambda} .1$ ．）remgized the value of fresh． pure and dry mometain air for the phthisical pa－ tient，and sent his patients to dry climates and to Mount Vesurins．For fourteen hundred year： after Galen we may diseover nothing new adderd to the knowledge of phthisis．The teachings of the ancient Grecian fathers were accepted by all physicians during the middle ages．Thus we find that the most learned Arahian physician，Aricena （103i），white he had＂definite ideas regarding

[^14]the infectivity of tuberculosis．＂added little to the knowledge of its calls：nor did the learned Jewish physician Moses ben Maimon or Mamo－ nide．：（ 1135 A ．D．），with all the adrantages he posiessel in the postmortem inspection of the bodies of animals killed for food，according to the rablinical code．
l．et us panse for a few moments to inquire into the calse for the stagnation of medical adrance in the dark ages．Says Huber：＂During the dark ages Europe was essentially dominated by a theology which required absolute sulmission and adherence to the teaching that plagues and epi－ drmics were risitations of an angry God．and that the tendency of this theology was to suppress a rational investigation of the causes of disease． such investigation being held to be a sort of sacrilege，as if．indeed，a just and merciful Cod would eruelly torture and destroy his own erea－ tions．Which must appear to an Omnipotent （＇reator so pathetically helpless：as if reason and the ascertainment of knowledge were not states of the human mind，as eseentially God given as any other，to be employed as conscientionsly as any other：as if the use of these wholesome facul－ tise were in any way incompatible with the pos－ resion and exerrise of the deepest religinus sense． Thus：it was that many millions of lives were de－ stoved which might otherwise have been saved．＂

Difter the lienaissance eouditions changed to the better．The study of anatomy beeame possi－ be and dissections were permitted．In the mid－ dle of the serententh century tubercles or nowlules were fonnd in the lungs and first de－ aribed．Sytrius（1680）was the first to disenter What these tubercles break down，soften in．their renter，and form pus．but he believed the tuber－ （ les to be glands in the lungs which undergo dis－ easert processes．Morton（1689）taught that phthisis was due to hardening or induration of the lung tissue and tubercles．Mangetus（1：00） first disotered a case of general tuberculozis． with dissemination of the minute nodules in the lungs，liver，spleen．kidneys．mesenteric glands， etc．Time will not permit me to review the tabor of Willis，Bomett．Dessault，Sydenham， Boertave．and his pupil Arembregger．the dis－ （overer of percussion of the chest．nor of the illustrious Italian anatomists，Talsalva and Mor－ gagni．In 1i85．Stark and Reed recognized the true value and significance of the minute tubercle and showed that cilvius erred in assuming that the tubereles were glands in the lungs．The first half of the nineteenth eentury furnishes an interesting chapter in the history of tuberenlosis． Among the many investigators of that period we find two．Bayle and Laennee standing in the
foreground and illuminating with floods of light the yet obscure horizon of pathology.

Bayle (1803-1810), finding the tubercle deposits in almost every organ of the body, ineluding the larynx, considered them not as aceidents or curiosities, but as real deposits of the same disease. He was the first to name the small nodules "miliary tubercles" and was the first to demonstrate that the tuberculous deposit is not the result of other diseases, but that it is a distinct pathologic entity, a distinct disease. Bayle then described, as Whittaker puts it, "the dead faets of the disease," but he knew of no signs by which the presence of the tubercle deposit in the lung of a living person could be detected before pus expectoration began, and fever set in, and it remained for the great clinician, Laennee, in 1819, by his diseovery of auscultation of the lungs, to enable the recognition of the disease in its earlier stages. From that time on tubereulosis became the battle ground for pathologists, some affirming, others denying the observations of Bayle and Laennec and their pupils. It is remarkable that such prominent men as Rokitansky, Jebert. lieinhardt, Iddison, and the illustrious pathologist, Virchow, stood opposed to the truth as tauglit by Bayle and Laemnec.

In 186.) Villemin appeared on the arena. Villemin discovered that tubereulosis mar be transmitted from men to animals by inoculation. His experiments were made on rabbits, guinea-pigs. and cats. The animal inoculated recovered from the local wound quickly, but when killed a montlı or so later tubercles were found in the lungs, pleura, peritomeum, and intestines. (control experiments of inorulation with pus from alhscesses and uleers showed no trace of tuberenlous deposits. Hence, Villemin rightly concluded "that tubereulosis is a specific disease: that it is inoculable; that it may be snccessfully transmitted from man to animals." Therefore, "the disease arises either by accidental inoculation, by direet contagion, or, finally, by gems suspended in the air or contained in the tubrerolous matter." The last statement, says Whittaker. Villemin made "as if illuminated by a flash of inspiration." The eommittee appointerl by the Paris Aeademy of Medicine to investigate the claims of Villemin and his methods confirmed all his conclusions. Nevertheless the battle with pen and ink, in the laboratory, at the bedside, and lecture hall continued mabated until Tappeiner and Conheim (18:8-1880), after years of experiments and arduous labor, again confirmed Villemin's observations and eonelusions.

In the meantime other investigators began the search for the specifie cause of the genesis of the
tubercles, for the specific animal or regetable germ, and in 1882 Prof. Robert Koch startled the whole world by his brilliant and epoch-making discorery of the slender bacillus of tuberculosis (1. "baeillus Kochiii." Professor Koch presented the results of his memorable work before the Physiological Society in Berlin on March 2t, 1882 , under the title of "The Aetiology of Tuberculosis." The communication ras published April 10 of the same year in the Bertiner Kinische Wochenschrift. April 26, 1882, Prof. Koch delivered a lecture before the Congress of Internal Medieme at Wiesbaden. In this lecture, Foch dwelt at length on the points which led up to his final discovery of the real and only cause of tuberculosis. Koeh won for himself a golden memorial tablet in the hall of fame of medical history. In the ages to come the memory of him and his work will stand out as an indestructible monument and will be an incentive to the aspiring bacteriologist.
('ILSES OF TUBERCULOSIS.
The factors involved in the production of tuberenlosis are the same as in most infectious dis"ases, namely, predisposing, faroring or indirect and exciting, direct and specific. The predisposing factors are those which lower our vitality or resisting power, make us more or less rulnerable and thus faror the action of the specific factor. Among the predisposing tactors we may mention aga, ses, race, heredity, previous diseases, vicions habits, porerty, unhygienic surroundings, elimate and soil. We will discuss them in order of their importance.

Ige.- It the extremes of human life. old age and childhood. there is a greater predisposition to disease. In both instances the resistance is low. Children suffer more than adults from tubereulosis of the lymph glands (scrofula), bones and joints, the spine (Pott's disease), peritoneum, and the covering membranes of the brain. while pulmonary and laryngeal tuberculosis is seen more often in the adult. But children who contract tubereulosis of the lung suceumb to it more readily than adults. Old people rery seldom contract pulmonary consumption.

Sex.-Certain periods and conditions in a woman's life make her more rulnerable, hence more prone to infection, but under favorable eonditions of life and surroundings, no women are more liable to contract the disease than men. In crowded tenement districts witli their everpresent filth, women are more exposed to the disease, because they are more elosely eonfined at home.

Race.-People in a primitive state of life when brought under the influence of civilization are rery prone to tuberculosis, a fact observed among the Imerican Indians, negroes, and Eskimos. According to Harris and Millard, cited by Huber, tuberculosis does not occur on the west coast of Africa nor in the African interior, except when brought there by white people. The American Indian was ahmost free from tuberculosis as long as he spent most of his life in the open hunting ground, ate his corn and renison and drank only pure fresh water. As soon as he became accustomed to "fire water," introduced to him by the white trader or trapper, as soon as he learned the bad habits, not the good, of the pale face, in short, as soon as he became only semicivilized, the red man began to furnish rictims to the "white plague."

Before the Civil War, tuberculosis was rare among the negroes; notr they furnish a large number of consumptives. Professor Osler found among $42 \%$ cases of pulmonary tuberculosis at the Johns Hopkins Hospital, for the two years ending June 1, 1891, 41 cases among the colored. while Rodman, as cited by Anders, states that tuberculosis is twice as common in the colored as in the white race.

The effect of tuberculosis on white people can best be studied in the large American cities, because of the cosmopolitan character of the population, as well as on account of the overerowded tenement districts. In studying the statistical data of American observers in the large eastern cities, I find that the highest mortality from consumption is among the Irish and Bohemians; that Americans of native parentage furnish a comparatively sinall percentage, and that the lowest death rate from consumption is among the Jews. In the statistical data of European observers, we again find the lowest death rate from consumption among the Jews. How can we account for this phenomenon? What factors are there in the life or in the racial make-up of the Jew that protect him from the "white plague"? To say that the poor Jews in the crowded tenement districts of the large eastern cities, especially the lower cast side of New York, live in better hygienic surroundings and are more sanitary than other people would be unfair, indeed. The personal liygiene of the rery poor Jews in New York, Philadelphia, etc., is certainly not to be commended. I had occasion to observe this in the various dispensaries and out-patient departments of the large hospitals in New York and Philadelphia. The air they breathe in the tenements and workshops, to say the least, is ritiated and full of dust; in the streets the air is
not much better; they work very hard and so do their young children to help keep the wolf from the door of the family; "their lungs expand rery poorly," says Huber; "they have no chests." Their invalids and old people do not return to the old country home to live and to die as do people of other nationalities; they come to live and to die in this land of freedom and liberty. Persecuted in Russia and Roumania, they come here for a permanent home, as my worthy friend, liev. Dr. Merrit, said. What, then, is the cause of the low mortality from consumption among the Jews? We may explain this phenomenon in the term, "soberness of life." The Jewish people, while not exponents of the temperance propaganda, are nevertheless temperate. They have no drink problems to solve; they consume alcoholic beverages in strict moderation, and this is an important factor, indeed, for the preservation of health. With very rare exceptions they obey to the letter the dietary laws of Moses. The meat they eat must be "Kosher," which term signifies "fit and clean." Meat is "Kosler" only" when derived from a healthy animal of the order of ruminants-they that both "divide the hoof and chew the cud." The animal is slaughtered for food purposes in the manner prescribed by the rabbinical code and a postmortem examination is made by an experienced official, who rejects as "trepha" or unfit such meat as is likely to be discased. Animals killed in the chase and which have, therefore, undergone fatigue and suffering are also excluded. "That fatigue and suffering produce toxins or poisons in the meat of such an animal is a well-established fact of modern medicine." The Jews cook the meats well and rery seldom eat pork, which is likely to be tuberculous. Those of you who read Sinclair's "Jungle" will admit that but very few people are so well protected from diseased meat as are the Jerrs. The milk they drink is mostly boiled, and, last but not least, they must have acquired an immunity from tuberculosis during the forty centuries of their continued existence as a race.

Heredity.-In looking over the literature regarding the influence of heredity upon the development of tuberculosis, we cone upon a variation of opinion. Thus evidence of the direct transmission of the disease from parent to offspring is brought forth by some, while others claim that the parent may confer a total immunity to the disease upon the offspring. Howcver, the majority of observers agree that what the child does inherit is a weakened constitution and the tendency to the disease. Huber describes certain signs by which this hereditary tendency to tuberculosis may be manifested. He groups them
collectively under the term "scrofulous temperament." "The scrofulous child," says he, "lhas a pallid skin and flabby flesh; there is often chronic blepharitis (lid disease) ; phlectenulæ (a disease of the eye) are frequent; there are nasopharyngeal adenoids and enlarged tonsils, so that these children are mouth-breathers, starred for oxygen. There are tedious inflammations of the mucous membranes-coryza-congested and unhealthy throats and bronchitis rebellious to treatment; there are persistent adenitis, the lymph glands become large and remain so; there is a sluggish turbid metabolism. All together there is evidence of a radical nutritive disturbance. Besides struma, we find thoracic malformation, narrow chests, laeking in depth. projecting shoulder blades. and small respiratory muscles."

Huber gives here a true picture of the mouthbreathing child, which we often see in our consulting rooms, and, while these manifestations may be due to hereditary influences of some sort, I must disagree with him on the kind. I have had under my professional care just such children, Those parents and grandparents, on both sides, where free from tubereulosis, lues, or any other functional, pathologic, or anatomic stigmata. The fact is that nasopharyngeal adenoids interfere materially with normal respiration through the nose, which organ filters, moistens and warms the air as it passes through it on its way to the lungs. Mouth-breathers inhale, therefore, cold, dry, dust and germ-laden air, and thus the tissues of the deeper respiratory passages become more vulnerable. The delicate, membranous walls of the air vesieles in the lung become thickened. duc to constant irritation and perfeet oxygenation of the blood is interfered with. The child starres for the want of oxygen, and in time the other signs described by Huber manifest themselres, due directly to the lack of the bloodpurifying, tissue-animating, and life-giving oxygen. By timely remoral of the growth and proper systemic treatment the majority of such children recover perfect health.

As to adenoids and enlarged tonsils bcing a manifestation of some sort of a dyscrasia we all agree, of course, but as to their always being an cridence of hereditary transmission of tuberculo. sis or lucs I must emphatically protest. Howcrer, it must be borne in mind that such children are certainly rery susceptible to tuberculosis and infections in general.

Aente diseases. as typhoid ferer, pneumonia, pleurisy, whooping cough, influenza, measles, and some of the chronic diseases, especially diabetes. greatly predispose the afflicted to tuberculosis. The tissues of the organs of respiration are pre-
pared by the prerious disease for the reception and implantation of the tubercle bacilli; especially is this true of la grippe.

Occupation.--The influence of occupation as a predisposing factor in the causation of tuberculosis is very great, indeed, but I must refrain from a thorough discussion of the subject for lack of time and space. Stated in general terms, I will say that persons who work in dust-laden atmospheres, in cromded, badly lighted and illy rentilated rooms, who are exposed to irritating ehemical gases, tobacco and marble dust, and those whose occupations require a stooping constrained position are greatly predisposed to the diseasc. People who spend their leisure time in the worship of Bacchus and Tenus also show very little tesistance to tuberculosis.

Climate and Soil.-Humidity of the soil and abundant atmospheric moisture increase the prevalence of tuberculosis. It is especially met with in regions where protracted cold and dampncas prevail. Osler says that this "increased incidence is most probably associated with a heightcned rulnerability due to an increased tendency to catarrhal affections of all kinds." Dry and mountainous regions are noterorthy for freedom from the disease. We need not discuss porerty and unhygienie surroundings. Most of us are familiar from our daily professional and charitable work with these two reakening factors.

## THE SPECIFIC CALSE OF TUBERCCLOSIS.

The Germ.-.The bacillus of tuberculosis is a slender, rod-shaped, slightly curved, non-motile, regetable micro-organism, about $1 / 10,000$ of an ineh long. and $1 / 25,000$ of an inch mide. It is an "acid fast" organism, beeause when stained it resists the decolorizing action of acids. It reproduces itself very rapidly by fission; it is best cultivated in the laboratory in sterilized blood serum at the temperature of the human body; it is destrored in boiling trater in four minutes, but it is not affected by drying or freezing.

The tubercle bacilli usually enter the human system through the mucous membranes of the respiratory or alimentary tract, resulting in localized or general tuberculosis. Infection through a local skin wound may also occur, resulting mostly in local skin tuberculosis or lupus, but the infeetion may be carried from the local skin wound by the lymphaties to neighboring lymph glands and thence be disseminated through the system.

No tissue or organ of the animal body is exempt from tubereulosis, but the lungs seem to be more often the site of this disease. In maturity and old age the lungs usually become involved when tnbereulosis is present anywhere in the
body：This fact is known as＂Louis＂law．＂The germs reach the lungs in tarions ways by direct inhalation of dust－laden air containing tubercle bacilli，by way of the bronchial glands to the thoracie duct，the right lymphatic duct，the right heart and．finally，the lung：by way of the stom－ ach，intestines，lacteals，thoracie duct，right heart and．finally，the lung：by primary infection of one or both tonsils；the germs are then carried through the cervical lymphatics，and by connect－ ing branches direet to the lung，as recently dem－ onstrated by Dr．Robertson，of Chicago，whose paper on this sulject is rery interesting and in－ structive，indeed．

In this manner most probally a large per cent． of pulmonary tuberculosis is brought about．

The tuberele bacillus is ubiquitous and very tenacious to life；it is found chicfly in the spu－ tum of consumptives and more or less in all tu－ berculous lesions；it is also found sometimes in the mouth，pharynx，nose and accessory sinuses of apparently healthy individuals，who are daily closely associated with consumptives．

The sputum of tuberculous patients is harmless as long as it is moist，but as soon as it becomes dry it flies in the air in the form of dust，teeming with myriads of bacilli and ultimately settles upon furniture，floors，walls，draperies，bric－a－ brac of the rooms occupied by the consumptive， and from these places it is conveyed back to the air by the broom，the wall brush and feather duster．In the streets dry sputum is rapidly distributed far and wide，and may settle upon non－protected foodstuffs，as milk，meat，veget－ ables，fruit，etc．

On entering the perfeetly healthy animal body the germs have to contend against a group of natural protective agencies，as the circulating fluids，certain wandering and certain fixed cells which possess germ－destroying properties．The battle for supremacy begins and the germs are destroyed before they have time to multiply and exert their pernicions activity．These natural defences are collectively termed＂rital foree or vital resistance．＂If the animal or human body is in a state of lowered resistance beeause of fatigue，previous diseases varions excesses，bad hygienic surroundings，ete．．the germs are the victors and man，the pimnacle of creation，falls a prey to the subtle regetable micro－organism．

## PREVENTION OF TUIBERCULOSIS．

The lattle argainst tubereulosis is a fight against social misery and the tuberele bacillus．－Prof．Caille．

In attempting to solve the ever－present prob－ lem．＂How to prevent and cradicate tubereulo－ sis，＂one must bear in mind the modes of propa－
gation of the disease，the factors which help to perpetuate it，and the source of the germs，the consmmptive．Logically，then，we may ask what can we do or what shall we do for the consump－ tive to cure him，if possible，and，if not，how can we make his presence harmless to the community and how can we protect healthy individuals from contracting the disease．

The most effective single reform for the pre－ rention of this disease is unquestionably the pro－ rision of well－lighted and rentilated dwellings for the poor of the great cities and，to some ex－ tent，in our own city．＂As long as the poor of the great cities，＂says Wainwright，＂will live huddled together like animals，in insanitary， hadly ventilated dwellings，just so long will the disease originate and spread．＂Hence，the phil－ anthropist who will provide dwellings that per－ mit the ingress to every room，hallway and cellar． of plenty of fresh air and sunlight，dwellings provided with a good water supply，and drainage． will have half solved the problem of precention of tuberculosis．The home or the house has been named＂the granary of the tubercle bacillus ont－ side its host．＂Flick said：＂Were it not for the honse，this germ would soon have to perish．＂ Overerowding，bad light，and vitiated air are its friends；sunlight，fresh air，and water its natural enemics．Exposed to the open air the bacilli will live，but lose its virulence；exposed to the sun－ light they live but a short time；but protected from both in the house，covered up by dust and dirt the bacilli live on for a considerable length of time．How long，I do not know，but certainly long enough to find new victims．

Next in importance is the personal hygiene of the terants．The shocking condition which we too often see among the very poor need not be de－ seribed．It is ton dark a picture．Most of you are familiar with these conditions from your charitable work．The utter negleet and violation of the rudimentary principles of personal hygiene are due in some families to real poverty，in others to real laziness，indifference and ignorance，and occasionally to prolonged sickness of the wife and mother：＇To better these conditions we need not only well directed charity but we need also a campaign of education．We must patiently and kindly teads the poor people，enlighten them， and when they will learn to apply the prineiples of hygiene to their homes and themselves the benefit will som be apparent to the entire com－ munity in the lessened mortality from tubereulo－ sis．

There are other preventable conditions to at－ tract our attention．The sins of commission and omission are mauifold，and child labor is one of
them. Alcoholism is another potent, preventable factor in the propagation of tubereulosis. Some of the French physicians claim that it is the most potent factor, but, to be mild and perhaps just, we will say, with Dr. Wainwright, that "aleoholism is a fruitful factor of consumption by lowering the vitality of its vietims who usually drink because they are poor and are poor because they drink:" But I do not refer to the ordinate, oceasional use of mild alcoholic beverages, which to some people seem to be distinctly benefieial, but I refer to the inordinate, excessive consumption of strong alcololie beverages, which eonvert man into an animal and which bring poverty. misery, and so many family disruptions.

To remove this fruitful cause of consumption, we must apply educational methods, not repressive legislation. The pulpit and the press, assisted by the medical profession and by judicious municipal legislation, which we now have, will do more toward the eradication of this enervating, degrading, tuberculosis-predisposing factor than will all blue laws. The Young Men's Christian Association is doing excellent work in this direction by proriding innocent games, healthy recreation, popular lectures upon all phases of human life and conduct, intermixed with free concerts, where young and old can spend their leisure hours in wholesome and uplifting surroundings. The same is done by the Jewish Educational Alliance in the large cities and the sarious branches of the Loung Men's Hebrew Issociation.

## THE PCBLIC SCHIOOIS.

Tuberculosis in the public schools of the smaller cities does not exist to any great extent. But 1 have reason to believe that it does exist to some extent. 'The state owes to our children more than a mere mental education; it must be thecir guardian and physical protector during school hours. When we consider that the rising gencration, the future citizenship, is our country's hope and defense, it is clear that not only mist their mental and moral training be wisely conducted, but great care must be exereised to guard them from contracting disease in school. Hence, when a tuberculous child is discovered he slonld be removed from school immediately for two reasons: first, becanse the healthy children and teachers must be protected from the dis(ase, and, second, because the tubereulous child must be placed muder favorable conditions for a cure. I tuberculous child attending school will not only infect other children, but it must ultimately forfeit its own life for an elucation.

Consumptives should not be employed or relained as school teachers, but to be fair and just we must demand that teachers who have contracted tuberculosis in the publie service should be pensioned and thus enabled to live under conditions favorable for a cure or at least spend the balance of their lives in moderate comfort. The drinking water in the public schools should be dear and wholesome, and the common drinking cups should be discouraged. The sale of nondisinfected, second-hand school books should be discouraged. The germ of tubereulosis and other disease-producing bacteria may be found on the dusty pages of a sccond-hand book.
Smoking for young boys is a pernicious habit, especially the use of the cigarette. It predisposes to tubereulosis by lowering the vitality of the borly and by irritating the respiratory mucous membrancs. Children having nasopharyngeal adenoids and enlarged tonsils should have them removed and thus be enabled to breathe properly through the nose. whiel is essential to good health. The prineiples of modern sanitation should be rigorously enforced in public buildingz, schools, theaters, hotels, railway stations, etc. The janitors of such buildings should be instructed in a class by the sanitary offiecer in the proper methods of rentilation. sweeping, and dusting of ile rooms in their charge. Dry dusting and *weeping should be discouraged. The dry sputum becones thereby mixed with the dust and forms an active source of infection. The feather duster should be banished. All furniture. pietures, brie-a-brac. ate., should be wiped clean with a moist eloth.

The anti-spitting ordinance has benefited many communities and it will benefit us also. The public should demand that sleeping cars, steamboat and steamship cabins and staterooms should be frequently disinfected, and the bed linen changed every time the berth has been oceupied loy a passenger. The existing state laws regarding sanitation in factorics and workshops should be enforced. Many are the victims of the white plague that contracted the disease while rorking at dust-producing occupations, in badly lightecl, ill-ventilated factories and workshops.

Consumptives should not be employed in any a apacity where the handling of foodstuffs is required. Consumptives should be properly instructed how to dispose of their expectoration aecording to sanitary methods. A consumptive need not be shumed: his mere breath is not infectious, but children should be kept away from ilhem, for the kiss of a loving consumptive parent may be the death warrant of the child.

There should be a strict superrision of the milk supply of the cities. The cows from which the milk comes must be lealthy and certainly free from tuberculosis. Thtil we are assured of this the only safeguard is the use of pasteurized or sterilized milk. If you will take the trouble to consult the reports issued from time to time by the Bureau of Animal Industry of the U. S. Department of Agriculture, you will see that the danger is not overestimated. Notwithstanding the announcement of Professor Koch in 1901, that in his opinion human and borine or cattle tuberculosis are two different diseases, the consensus of opition among scientists and investigators in rarious countries is that people, especially children, may become infected with tuberculosis from cattle. Cows having advanced tuberculosis will secrete milk containing myriads of tubercle bacilli.

It is, therefore, evident that milk is an important medium for the transmission of tuberculosis. Then, again, milk may become contaminated with the germs in various other ways, by particles of dirt, manure, from dust in the air or from infective particles on the hands of the milker or other dairy attendants. It is self-evident that butter, cream, cheese and ice cream may contain and convey the germs to the consumer, the same as the original milk, plus those that may gain access into the milk products through unclean manipulation.
Only certified milk and meat should be bought and the same should be well cooked.

A superficial sterilization of fruit and regetables which are to be eatea uncooked may be effected by dipping them in boiling water for five or ten seconds.

## THE PREVENTION OF TUBERCULOSIS.

No problem before our nation at present compares in gravity and magnitude to the problem of the possible prevention of tuberculosis. Lawson's "system of frenzied finance": the trust question, the cyclic money market disturbances, the public service corporation question, are insignificant when compared to the question of how can we prevent tuberculosis and blot it from the face of the eartll. It is now twenty-five years since the scientific world learned to know the real cause of tuberculosis, the specific germ. Year by year have we studied its morplology and mode of entrance into the human body. Year by year have we discovered and recommended new weapons with which to fight it successfully, and still it exists.

In the year 1899, seven years after the disenvery of the tubercle hacillus, 246,000 human be-
ings died from pulmonary tuberculosis in the United States. After cightecn more years of constant investigation and application of preventive measures, we succeeded in reducing the mortality from this disease to 150,000 , a fairly good showing. The European countries did no better, Russia hardly as well. But we, the grandest nation on the carth, ought to do better. Is it the fault of the medical profession? No, indced. The average Anerican physician is just as progressive and self-sacrificing as any of his brethren anywhere in the world. America has been the cradle of many important medical discoveries. The American plysician does not only heal the sick, but he teaches people how to be well and stay well, and while teaching preventive medicine he reduces his revenue from the practice of his profession: nevertheless, he continues in this noble work for the welfare of humanity. Medical men, with few exceptions, always stood ready by precept and example, by word and deed, to help humanity rid itself of preventable diseases. Many a well-trained, well-informed and ambitious young medical man gave his life to this noble cause. The same may be said of the allied profession of nursing. When I see young women. after years of study and toil in a general hospital, dedicate their lives to the nursing of con:umptives, I can not but admire their self-sacrificing devation to the victims of the "white plague." No, indced, it is not the fault of the medical profession that tuberculosis still consumes annually the lives of 150,000 human beings which God made in his own image. It is the fault of our national and state legislators and the public in general. who are in a sort of lethargy in regard to tuberculosis.

As I said before. we have become accustomed to the presence of tuberculosis. It has been with mankind so long that its presence is looked upon as a matter of course. The need an universal awakening to the dangers of the presence and pernicious activity of this subtle germ. We need a National Board of Health, the head of which should be a cabinet officer, clothed with ample power and provided with plenty of moner to carry on an active campaign against preventive diseases. The need more funds for our state boards of health. We need national and state sanitariums. situated in suitable localities for curable consumptives and retreats for incurable ones. We need this far more than monumental national. state and municipal buildings, and while we worship God in monumental cathedrals. churches and synagngues thousands of His children die from consumption. a preventable disease, for lack of funds with which to fight this
grim reaper. No, the medical profession does its duty and does it well. It is man's indifference to man that keeps the germ of tuberculosis alire. It is the nation, the state and society that must do its duty now. Here is a problem that philanthropically inclined millionaires can best help solve. Here is an opportunity for them to immortalize themselves on the pages of human history. Here they have the opportunity to erect for themselves far more lasting monuments than libraries and university buildings.

Happily the awakening has begun. State hospitals and sanitariums are springing up all over the country. Our own state is alout to erect a hospital for curable consmmptives, and the time may be near when the National Congress will take the matter in its own hands and solve the problem. And while waiting for better international, national and state laws for prevention of tuberculosis let us not be idle. Let us engage the attention and sympathy to this cause of the two greatest forces for good on earth, the two greatest molders of human character and public opinion, the pulpit and the press. Let us in this twentieth century forget racial and sectarian differences, let us as children of a common Father unite with bonds of a true brotherhood and sisterhood for a common cause: the extermination of the "white plague."

Let us all do our duty in our respective stations in life to rid the world of this terrible disense, and let us hope that a few generations of active work will bring a harvest of golden fruit of health and freedom from tubereulosis.

Let us look up and not down. Let us look forward and not baek, and lend a hand. Let us push forward toward the noble goal set up by Emerson:
"And each shall care for the other, And each to each shall bend, To the poor a noble brother,

To the good an equal friend."

## THE GENERAL MANAGEMENT OF TUBERCULOSIS.*

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The history of tuberculosis, beginning centuries back and extending through all the subsequent years of our reeorded knowledge, reveals to us a scourge which has been constantly consuming the lives of the hmman race, while the students of science have been studying and fighting

[^15]it under many misconceived conclusions. Hippocrates, four centuries B. C.., had logical eauses for tuherculosis and therefrom based his principles of treatment. Down the ages of time there have been other well-grounded theories, which lave met their fate after a few centuries or decades.

From all these researches many of our most important facts were gleaned, but now luring the last three decades progress has been so manifold, compared to former years, that it seems that most of them are absolute facts and are a permancut basis for future investigation. This gives the present gencration a grand opportunity to decrease the million and a half annual tubereulosis death rate of the world.

You have heard how physicians have heretofore considered this disease ultimately fatal, aml how many curative methods and medicines have bern lauded, mitil newer ones displaced them as failures: and that it was a fact that no cure could be made. such conelusions, while partially true, should no longer be entertained. I want to cmphatically say that with impressions of this character the afflicted are inclined to drift about. getting but poor treatment and less adrice about proper living.

There is goon in well-directed treatment, especially in carly cases of tuberculosis, and all patients should be receiving the care and advice of a physician. Medicine or antitoxin could be administered whenever indicated. In no instanee shonld this victim take of medicine without his physician's instructions, because thousands of cases have gone onward toward their doom while taking some "sure cure" for consumption, instead of living a life preseribed for such cases.

What is even more reprehensible is the advice of "Cluristian Scientists" and "faith curists," who would lave the tuberculous patient to disregard his discase and eonsider it a product of the imagination. These imposters go unpunished by justice for much suffering, loss of life, and family berearement as the result of their teaching that disease may be overcome by the mind.

Now, before leaving the subject, let me again admonish you that to follow a prescribed course of treatment is a part of a systematized living and will save hundreds of people.

The present-day management is naturally dirided into two classes, the climatic and the home treatment. Sinee the days of Hippocrates the former has been in rogue: people the world around have gone from one locality to another, seeking better health. The good results of this time-worn resonrce will never be contradicter.

The clange of climate brings new conditions which are generally an improvement upon the patient's original enviromments, and as a result this indiridual improves or may become eured. Experience teaches us that most any change of surroundings. food and habit or duty tends to inrigorate healthy or sickly people. It is for this reasen that short risits or clanges within the same locality are aecompanied by improrement.

In changing climate much depends upon the altitude, the air conditions and the general surroundings, for some places are suitable to one class of patients and deleterious to others. An example of this would be a case of tuberculosis who has heart trouble, which is made worse in ligh altitudes.

Financial distress is the chief barrier to climatic changes, it being utterly impossible for most people to stand such expense. Most of such patients can not even pay the transportation expense, while others have enough to keep them a short time and later have to suffer for want and lack of attention in a strange community. It is distressingly true that many such patients become subjects of abject porerty:

I wish to include in this class of treatment public and private sanatoria, because most of them are situated in the mountains or some suitable climate. These institutions are so managed as to produee improvement in most all eases. Here patients get better medical treatment than they can usually get at their homes. They are constantly under the physicians obserration. for directing medicine and watching results, for dieting or forced fecding, for gauging exercise, and for all other incidentals which are an integral part of routine treatment.

Proper feeding, when scientifically conducted, is much different from stuffing. While the most casily digested and most nourishing food is the pramount idea, raricties of food are necessary beeause of their different chemical composition.

Exercise or pliysical labor are taken with great precision, and with the idea of nourishing and building up tissues of the body, rather than tearing them down. Patients with fever should take none. and after febrile states hare passed, exer(ise is begun, gradually increasing the amount each day. Orer-exertion, producing exhaustion, may be deleterious in cffect for a week or ten days.

The sleeping apartments are so arranged as to give perfect sunlight rentilation by day and outside air by night. Heat is only used for extreme cold or to obriate dampness. Zero weather does not prevent complete rentilation
and at such times practically one-half to one side wall of a room is open.

Excesses or oulissions of any nature are not tolerated and all noxious habits are discouraged. Sports and pastime pleasures come under the strict surveillance of the rules governing exercise.

Hygienic and sanitary measures are inculcated as effectually as such studies are taught in unirersities. The riolation of anti-spitting rules is sufficient cause for serere chastisement, and when repeated it often results in the expulsion of that patient from the institution.

The gencral training obtained at these institutions is scarcely to be lad at any other place. some one suggests that if tubereulous patients could spend two or three months in some sauitarium ther could then return home and live as consumptires should lire.

The discussion of home treatment is of the greatest importance, and here exists the principles of our duties in an educational campaign against the disease. This must necessarily be done: 1 , by promulgating the doctrine that tuberculosis is a communieable, prerentable and curable disease; 2, by disseminating the knowledge concerning the means of prevention and cure of the disease.

As a result of such teaehings the public will be aroused to establishing home, state and national hospitals for the aflicted, and the time is near at hand when every state will have such hospitals. Our state has made its first step by the purchase of a site for a tuberculosis hospital. Our next legislative body must appropriate funds with which to build and conduct the institution.

The first step in home treatment, when we lave no public or private institution, is to establish and maintain methods of preventing the discase. The best protection against this great white plague is to observe all ciric and moral sanitary laws, and to keep the body healthy and strength abore par. This necessitates living properly, aroiding noxious habits or habits of excess, and to have plenty of good food and fresh air. Check all sources of spreading the tubercular liacilli; spitting is the chief source, and all people should be tanght to aroid this habit of expectorating in public places. Tubercular patients must destroy their sputum by antiseptics or by leat. They must be taught and compelled to carry on streets and in public places some container in which to expectorate. Cups and small rubber bags are now made for that purpose. Expectorating in kerchieves is a compromise and should be discouraged. Spreading germs about the homes is
the cause of the majority of cases. We must make every one realize that as much care should be taken in these cases as is practiced by the individuals of the home when they are confronted by scarlet fever or smallpox. Kissing. using the same kerchief, towels and drinking cups tend to spread the disease, and such habits must be discarded when suspicious cases are in the house.

It would not be superfluots for every family to fumigate their homes at housecleaning time, and in case there are infected members of the family it should be a routine procelure as often as once or twice a month. Formalin fumigation is of the best and is easily accomplished by any one. In antiseptic solution of chlorinated lime, six ounces to one gatlon of water, is the best known disinfectant about the home. This is to be used in cuspidors, the toilet, and for washing anything which has been contaminated. This solution destroys all germs in less than an hour.

The most successful treatment is in earlier cases of tuberculosis, consequently an early diagnosis is a necessity. In all cases when people have some continucd symptoms, if not in robust health, a thorough examination is demanded. It is here we see the physicians duty of giving thorough examinations, because this disease in its ineipiency is not easily detected. It is also his duty to tell this patient of the existing tuberculosis rather than to encourage him or her by calling it bronchitis or slight catarrh. With few exceptions people must know when they have this disease, so they can at once begin cerery possille effort to obtain a cure. 'T'o be sure, tact must be med in telling this person of his dreaded sickness, lest it distress lim unnecessarily. In turn, the patient's duty to the physician is important. He should be obedient and persistent in every cletail. This, I am sorry to say, is too frequently not the case. No set of rules can be laid down for all patients, because cach has its exceptions.

Fresh air is good for all, and the more of it the better; a case of tulereulosis should have ten hours of outside life during the day. This means out of doors, on porches, rerandas or house-tops, when riding or walking is not possible. In zero weather one is as comfortable well wrapped up on the porch as he is indoors. Even on damp or rainy days the closed room should not be sought. Persons who are bedfast can be moved about for the same treatment. I remember when visiting the Liberty Sanitarium in the Catskill Mountains the temperature was 10 below zero, and I saw a young lady lying on a cot on a veranda. reading a book. Inquiring, I found her to be perfectly eomfortable. She was well wrapped up,
had a hot water bottle to her feet, wore a hood and mittens, and enjoyed her reading very mueh. She told me that when she contracted the disease she was living luxuriously in a furnace-heated home. The change was severe to her at first, but now she was recorering and aroided indoor air. This case is only one of thousands. We had a patient dying of the disease in the sanitarium a few years ago; he begged for fresh air and that he be put on the porch where he could die with ease. When put out in the open he got better. recovered, and is still living and is strong and robust.
Sumny air is the best, but in the city the night air is the purest of all. Don't be afraid of it: one window lowered is not sufficient, one wall of the room should be removed, virtually putting the slecper sut of doors. 'The very fact that the tent colonies at prirate sanatoria give the most cures is proof positive of the benefit of open-air sleeping. All sorts of tents can be placed in yards. They can be placed on flat-roofed houses, Many make a platform on the slanting roof and pitch their tent. If you have large porches rery little work is required to produce ideal open-air sleeping quarters; the yard, howerer, is preferable when convenient. Next best is sectioning rooms indoors at windows, which is really opening that portion of the room. Why hesitate to breath pure air when it costs you nothing? You pay for unfiltered and infected muddy river water, then rcfuse to breath pure air which is free of charge. The day has passed when people raise a window about one inch and complaisantly think they have slept in a well-ventilated room.

Nourishment is very important; we all hear that patients must stuff themselves. The idea is to take plenty of food. What applies to sanatoria diet is effectual and proper at home. The importance of the very best nourishment is paramount. It is shockingly true, as has been lately demonstrated in New York, that many hard-working people are poorly nourished, not always because of the lack of food but of the very inferior manner of its preparation by the poor houserife. I want to commend the good work of the Salvation Army in New lork City. They have, in a number of instances, established rooms in some poor tenement district and one or two of the Salvation Army girls have devoted their time to teaching these poorer elasses how to eook. In our mercenary work we should ever have this in mind, teaching proper cookery. There really is no excuse for ignorance of proper eooking.

In a general conchsion of our subject let me again insist that the work against pulmonary tuberculosis should be systematic and unrelent－ ing，and that it shomld be incorporated into state laws and eity ordinances．

（げリITlS IJ THE FEMALE，IT心 MEDIC AL，TREATMENT．＊<br>E．R．Beird，M．D．． LIBERTY，IND．

Pacterial infection of the urinary bladder is so 1 reguent and of such common oecurrence that all practitioners are interested in the subject．I have chosen the female bladder for discussion be－ canse crstitis occurs in the female bladder more firerpently than in the male，and on aceount of the anatomy of the former and its urinary outlet it admits of more thorough and more satisfactory local treatment than the same organ in the male．
＇There is no disease in the whole rôle of gyne－ cological medicine which ean prove more agoniz－ ing and more debilitating than a severe case of chronie cystitis．Jeute cystitis may be eured by remedies carly applied，or even emre itself，but this is not true of the chronic type．The longer the duration of the disease，particularly the more the structural integrity of the mucous lining of the bladder is affected，the more tedious will be the recovery under any form of treatment．and， incleed，in some cases nothing but an operation， hereafter to be referred to，will succeed in af－ fording relief．

When it comes to aetual experience in the treatment of this common condition in women， the practical physician is taxed often to his ut－ most to devise the proper plan for the cure of each case．And when we take into consideration the fact that a severe form of this disease is apt to spread by continuity along the ureters and in－ wolve the kidners．callsing an inflammation of these important organs with its serious and often fatal results．we are more anxious to learn all we can of the treatment virected to such eases． and often the opinion of the specialist on the subject is songht with the lope that in some way he may be able to suggest a means of relief to our suffering patient．

The theoretical adrice of the text－book is in－ adeduate and often misleading，and the results of experience in one case may be of no value in another．We are told that cystitis is always the result of infection，and howerer true this may

[^16]he，nearly all cases are benefited by the use of bichlorid of mercury．

Our success in the treatment of cystitis de－ pends upon our finding out the particular cause and applying the proper medication，and any weatment which gives any hope of a large arer－ age of recoreries，or even improvements，is to be weleomed．In considering the treatment of this intractable disease it is well to divide it into constitutional and local and to remember that each of these will vary according to the cause and characteristic of the inflammation．

We must at the outset so regulate the charac－ ter of the urine that it will cease to be an irri－ tant to the bladder．The whole body should re－ ceire attention and the excretory functions should be stimulated and kept in an active con－ dition．saline laxatives should be given often to prevent constipation and straining，and any de－ rangement of the nervous system which tends to produce an irritating urine should be investi－ gated and treated．Pain varies in degree of in－ tensity，from slight distress to the most intol－ erable anguish，and associated with pain is the desire to pass urine every few minutes，although the quantity passed is but a small amount anil with the most intense efforts．These two symp－ toms first brings the patient to our office，and to relieve them is her most earnest plea．

What shall we give to relieve pain？Opium in the form of Dover＇s powders，or even morpha hypodermically，may be giren in order to insme our patient a few hours rest，but these remedies should be given by the physician only．Codein is a safe drug to use，and one quite as efficient，and there is less danger of deranging the digestive organs and kidneys and forming a habit throngh its continued nse．Often it becomes necessary to reliere pain for months and eren a year or more． If there is frequent urination and severe tenes－ mus ten to fifteen grains of bromid of potash and bromid of ammonia，equal parts，repeated as often as necessary，is of much value and often acts as well as opium．Benzoic acid is perhaps cne of the most useful drugs to be used in these perplexing cases．

But when the internal administration of med－ icines fails we must resort to local treatment．I refer to the washing out of the bladder．This method of treatment is very important，and its proner and frequent use rery necessary if we ex－ pect to handle these eases successfully．It is well to bear in mind that any fluid whose specific gravity is below that of urine will cause pain when injected into the bladder，hence plain water should never be used unless it holds some salt in solution．

The teehnic of washing the bladder in the female is simple, one point of especial importance being to avoid too rapid distension. A fountain syringe with a recurrent eatheter may be used. yet I much prefer the ordinary soft-rubber male catheter, to which is attached a small glass funnel; with suelı a simple derice the flow can be readily controlled by raising or lowering the funnel above the patient's abdomen. It is readily cleaned and kept sterile. This operation should never be attempted under cover, not even the introduction of the catheter into the bladder, no matter how dextrous one may become in the use of this simple device. Bubbles of air should not be permitted to enter the bladder, and we must be careful that our solution is at a comfortable temperature, too cold an injection being as harmful as one too hot.

Our efforts to successfully perform this inportant office for our suffering patient at first may prove futile, but we can usually coax both the patient and her miserable bladder to a degree of tolerance. Some member of the family or a nurse should be taught to carry out this procedure, as it is often necessary to have these bladders washed out two or three times a day.

Having prepared ourselves and our patient for washing, what shall we use? Some text-books adrise a solution of coeain, but this can not be used with safety more than two or three times except at long intervals. Astringents and alteratives are most commonly used. When the urine is alkaline and has been retained for some time, carbolie acid is of use, two minims to the ounce, but in using it it should be freely incorporated with glycerin for the reason that it is apt to float in water as an upper laser and thus coming in eontact with the mucous surfaces cause a destruction of the tissues. Nearly all astringent injections should be followed by an injection of a normal saline solution. I favorite remedy, and one which has given me the best results in these chronic types, is the silver nitrate solution, commencing with a $1 / 2$ per cent. solution and increasing it $1 / 2$ per eent. each time until a 3 or 4 per cent. solution is reached, following it each time with a normal saline injection and insisting that the patient remain in the recumbent position for at least an hour afterward. This has served me well, and I find that under such treatment it is not necessary to wash out the bladder oftener than twice a week. While recovery may be slow, yet I am inclined to think that it is pretty sure to follow. This treatment has proven so efficient in my lands that I resort to it in preference to all others.

I have not mentioned those cases of cystitis resulting from stone, because of the infrequency of stone in the female bladder. Of course the treatment of this class is obrious to all, remoral of the calcuhus.

If all our efforts after patient and persistent use fail to achiere lasting results, it is becanse the bladder has not had sufficient rest, and there remains but one course at our command and that is to remove the constant irritation of the hypersensitive bladder by making an opening in the vesico-vaginal septum through which the urine can flow without interruption and the bladder have an opportunity to rest and regain its normal condition. The technic of this operation falls naturally to the surgeon, hence I will not enter into a description or discussion of it.

In conclusion I would say that in handling these cases we must not forget that the great maģority are due to some pre-existing cause. and our success in treating these will naturally depend upon finding out the cause and applying the proper medication. And however obstinate and intractable they may be, persererance and patience should be mixed ad infinitum with all onr menstrums, for "What wound did ceer heal but by degrees"?

## (LINICAL LECTURES ON SUPPURATION゙ OF THE ACCESSORY NASAL SINUSES.

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I.

The woman whom we are about to examine is 22 years old and has, previous to her present trouble, been well and strong. The present illness consists in pain over the right side of the face, in the right eye and over the frontal region, chiefly of the right side. She states that for two months she has been unable to breathe through the right nostril. and that for a long time there has been a profuse discharge of pus from this nostril. She also has diplopia. Her physician states that she has had no fever, that her appetite has been only partially impaired. and that, although physically unable, she has been doing much of her house work. We will first examine the physical condition of the affected parts. With the patient's face toward the strong light you can easily detect a marked protrusion of the right eye. You will note that this protrusion is so great that the normal depression beneath the
orbital ridge is obliterated, and that this, when compared with the opposite cye, causes the two to look quite asymmetrical. This bulging of the eye probably explains the tlouble vision of which she has told us.

We should at this point consider all the diseases that may cause exophthalinos. These are: (1) The presence of any tumor in the orbit behind the eyeball, the continued growth of which presses the eye forward; (2) a fulness of the blood ressels supplying the cye, as in exophthalmic goiter; (3) the presence of pus or other fluid in one of the nasal accessory sinuses which lie above, inwardly and below the orbit.

As will be more fully explained later on, it is quite probable that the last of these causes is the one present in this case, for, as stated by the patient, there is a copious flow of pus from the corresponding side of the nose, and until some other reason for the bulging is found we will at least bear the possible simus suppuration in mind.

In conuection with the exophthalmos another interesting point arises. Your knowledge of the anatomy of the sinuses which lie immediately adjacent to the eye will teaeh you that should pus or other fluid be retained in considerable quantity in the frontal sinus, while the neighboring ethmoid cells and the antrum of Highmore remain unaffected, the pressure of this fluid in the frontal sinus would cause the eye to protrude in an outward direction, but the axis would be turned in a downward direction. If the ethmoid cells are alone involved, and there is much pressure from pus retention, the axis would look dccidcdly outward, whereas if the maxillary antrum is filled with pus to the extent of causing exophthalnos the axis of the eyeball would point upward. Now if you will examine this protruding eveball carefully you will be unable to detect any upward, outward or downward pointing of the axis, whieh fact would indicate that if the protrusion is due to sinus disease the pressure must be one that is equalized, and, therefore, all the above named simuses, which practically'surround the orbit, must be filled with pus, and eaeh must. thereforc, contribute to the pressure which causes the protrusion. We are of the opinion that such is the ease in this instance, but we must make no positive assertion concerning it until we have made an intranasal examination, and have by that means thoroughly investigated each of the sinuses in question.

In most cases where sinus disease is present to an extent that would cause an exophthalmos there is considerable external tenderness over the sites of the affeeted arcas. We will first make pressure over the seat of the right frontal sinus.

In doing this it is necessary to bear in mind that the size of this cavity varies in nearly every case; that it may be entirely absent, or that it may extend over a considerable portion of the forehead (Fig. 1). When present at all it is always to be found just under the supra-orbital ridge near fronto-nasal articulation (Fig. 1). The ball of the forefinger, when pressel firmly against the tissue in this location, gives rise, as you may observe, to very acute pain. But we also find that there is tenderness on pressure in this casc over a very considerable portion of the foreliead, and we should, therefore, strongly suspect a large, diseased frontal sinus.

The next step in a systematic examination is to ascertain the condition of the nose and the adjacent accessory sinuses. The patient is, therefore, placed in a darkened room by a good artificial light, which latter is reflected into the nostril. The lower turbinate is swollen and bathed


Figure 1.
Fig. 1.-Showing the most constant site of the frontal sinus (designated by the circle at the inner end of the evebrow), and also the height and width to which the sinus extended in an individual case-shown by dotted lines.

Fig. 2.-Line of primary incision of soft tissues.
in creamy pus, which flows down from the middle meatus. The middle turbinate is crowded tightly against the nasal septum and the adjoining ethmoid cells bulge against the turbinate, showing that there is pressure within. When the pus is mopped from the middle meatus it reappears inmediately. There is no doult an empyema of one or more sinuses, and the practical questions which must be settled are, is more than one sinus involved, or is only one diseased? If but one, which one? It is impossible to decide from the mere presence or appearance of pus in the middle meatus as to which aceessory sinus is affected, for the reason that all the accessory spaces, with the cxeeption of the posterior ethmoidal cells and the sphenoidal cavity, empty into the middle meatus near the same place. The patient states that the pus always flows from the
anterior naris, and this fact, taken in eonneetion with what can be seen as to the point of exit of the pus, enables us to deeide that the sphenoid and posterior ethmoid eells are probably not involved. As previously stated, the bulging of the anterior ethmoid cells indicates that these are diseased. We will now pass a Myles' exploratory troear and canula into the antrum of Highmore, as near as possible through the ostiun maxillaire, and by injecting a sterile solution into the antrum througl the canula will be able to wash out any accumulated secretion whieh may be there. You may now note that the return flow from the eanula contains a large quantity of pus, and you who will come close enough can detect that it las a foul odor. Adding these positive symptoms to those previously studied, there remains no doubt concerning the diagnosis; there is also empyema of the maxillary sinus.

Owing to the blocked state of the attie of the nose we shall be unable to employ means just now which will enable us to be so positive coneerning the condition of the frontal sinus, for, as you have been previously taught, it is not always an easy matter to irrigate the frontal sinus through the natural chamel-the infundibulum -and in the present condition of this nostril it would, in my opinion, be impossible until a portion of the middle turbinate is first removed. However, the swelling which we have observed over the external walls of the simus, together with the local tenderness of the reqion to pressure, leads us to the rather positive conclusion that the cavity is diseased. We will, moreorer, transilluminate all the sinuses and perhaps secure a skiagraph of the same in order to make a complete record and a more certain diagnosis. From our present examination of the case we are, however, entirely justified in making a diagnosis of chronie empyema of the frontal, ethmoidal and maxillary accessory nasal sinuses.

Concerming the treatment, this case could undoubtedly be improved by removing the anterior half of the middle turbinate, biting away the anterior ethmoidal eells with foreeps, and thus providing a better drainage for the affected sinuses. The condition is, howerer, such an extensive one, and the amount of pathologic change within the cavities so great, that cure by any intranasal method would probably not be possible, even after prolonged treatment. To cure this disease would require radical measures, and the best operation yet devised is that known as Killian's. We will, therefore, send the patient into the hospital, and as soon as she can be properly prepared for it we will perform the Killian frontal sinus operation, which in this instance will also necessitate
opening the maxillary antrum at the same time and dealing with its disease in a thoroughly radical manner.

## II. THE KILLIAN OPERATION.

This is the patient you had opportunity of examining in the dispensary two days ago. At that time te made a diagnosis of empyema of the frontal and maxillary sinuses and the anterior ethmoidal cells of the right side.

The purpose of this operation is to rid the patient of all suppurating or other pathologic foci, and hence it will be necessary to remove from the various cells and sinuses involved all diseased mucous membrane, to break down and remove every bony septa diriding the sinus, to hone smooth erery area of osseous necrosis, and finally to leare all the cavities smooth and free from pockets, to the end that healthy granulation tissue may spring up and the sinuses may be healed by the approximation of non-suppurative structures. This will necessitate a wide opening into each cavity, sinee otherwise we should be unable to see into every nook and corner that is diseased, and should we fail to propcrly attend to every diseased area, failure is certain to follow our operative effort.

The field of operation has been sterilized in the usual way. Killian advises that the eyebrow be not shaved, but to do so seems more surgieal. The first incision is made from the external end of the orbital ridge, through the center of the eyebrow to the fronto-maxillary articulation, and thence along the side of the nose to the lower part of the base of the nasal bone (Fig. 2). This incision goes only through the skin. The next stroke of the knife follows the first and penetrates to, but not through, the periosteum. With a sharp periosteotome the structures are slightly reflected above and below the line of incision, laying bare the periosteum. A third incision is now made parallel with the supra-orbital ridge from its outer angle, to the naso-frontal artieulation, and one-fourth inch above the line of the skin in(ision (line A B, Fig. 3). The periosteum is now reflected upward from the entire area of bone over the usual site of the frontal sinns, but that lying below the periosteal incision toward the orbital margin is left attached to the bone for the reason that, as will shortly be seen, a narrow bridge of bone above the supra-orbital ridge is to be left intact in order to prevent sinking-in of the soft tissues and consequent deformity subsequent to the operation.

The nasal portion of the track of the periosteal incision begins at a point just under the supra-
orbital ridge, and slightly internal to the supraorbital notch, and is continued toward the skin ineision, which line it joins, and is carried downward to the same distance (Line C D, Fig. 3).

The periostemm is now reflected on either side of this incision. exposing the floor of the frontal


Fig. 3.-A B. line of incision through periosteum abore bridge. $C D$, line of incision through periosteum under bridge. The dark area at C shows opening into the frontal sinus through its floor.
sinus and the outer wall of the anterior ethmoidal cells. To be more exact, the lacrimal bone, the nasal bone and the nasal process of the superior maxillary are laid bare. In reflecting the periosteum great care is necessary to be observed not to disturt) the tendon of the superior oblique muscle at its point of attachment just under the supra-orbital notch and not to rupture or otherwise injure the lacrimal sac in reflecting it from its position in the laerimal groore.

We will now proceed to open the frontal sinns. You will remember the statement made at our dispensary clinic that the most certain point at which this may be done is just below the supraorbital ridge. at its superior internal angle (Figs. ? and 3). The first stroke of the gouge penetrates the thin plate of bone here, and you can note the black, thiek-looking mucous lining of the interior of the carity. We now incise this membrane. and you see welling up, as if under considerable pressure yellow creamy pus in great quantity. I insert a probe in order to determine the extent of the sinus, and thus demonstrate that this one extends far in every direction. We will, therefore, remove the external osseous wall of the whole sinus above the supra-orbital margin. With the exeeption of the bridge of bone which I have already mentioned. and
upon which the periosteum has been left intact (Fig. 4). We use first a Killian 1 -hhaped chisel (Fig. i) with which it is easy to cut a deep furrow above the bridge of bone, from the inner to the outer limitations of the simus. With stout bone forceps the entire outer corering is now quickly ablated, and with a flat, sharp chisel the osseous margins are carefully smoothed and bereled. We next fiush out the remaining contents of the sinus with hot saline solution and inspect the walls of the cavity most thoroughly. You will notiee several bony septa whieh partially divide the interior of the cavity into several compartments, and these we must remove to their bases and hone away every roughened edge and diseased portion of the mucous lining. The outer angle of this sinus is yuite irregular and forms a pocket which. if orerlooked, would retain subsequent secretions and present a good result from the operation; hence it must be given special attention, he thoroughly curetted, and be left in a perfectly smooth and aseptic state. We will next examine the infundibulum, the natural channel comnecting the


Fig. 4.-A B, lower edge of opening into frontal sinus. C. bridge of bone with periosteal covering which is left intact above the orbit. C D E, boundary lines cut with curved chisel, of nasal process which must be resected.
frontal sinus with the nose, beeause the most perfect operation that can be done on the sinus will fail unless this natural drainage traet be left widely open and free from disease. A polypoid mass fills this ehannel in this ease, and this we will remore by means of the curette, but will
leave the final eulargement of the duct until a subsequent step of the operation.

Before leaving the froutal sims we must not fail to inspect the osseous septmm which separates the operated cavity from its fellow of the opposite side. In this instance the septum is


Fig. 5.-Killian's straight $\nabla$-shaped chisel.
partly broken down. and henee the opposite sinus is undoubtedly diseased and will likewise need the radical operation. We will, therefore, repeat the incisions on the left side. following exactly the plan already executed upon the right. On remoring the entire outer wall we find that the left sinus is almost as badly diseased as the right, and hence we will clean it out in the same thorough manner as the right, and will drain it chiefly through the infundibulum, which we will shortly enlarge very much for that purpose. We will at this point pack both frontal sinuses with


Fig. 6.-Shows the amount of resection of bone necessary in lillian operation. W, cavity of frontal sinus, the anterior wall of which has been removed. Y shows the window into nasal cavity resulting from the removal of the nasal process and lacrimal bones. $X$ shows bridge of bone above orbit, left intact to prevent deformity.
sterile gauze, and will proceed to the next step of the operation, namely, the resection of the frontal process of the superior maxillary bone, the lacrimal bone, anid orbital plate of the frontal bone, in so far as the latter forms the floor of the diseased frontal simus (see Fig. 6).

You will observe that in reflecting the periosteum and superimposed soft structures from the inner segment of the orbit that the eyeball is necessarily displaced outward, and that injury may be done to this organ unless some provision is made for its protection. Killian has devised a protector for this purpose (Fig, \%) and this should now be used to draw the orbital structures outward and away from the field of the proposed resection of bone. while at the same time it forms a shield against possible violence from the neeessary manipulations in chiseling the bone away: The first step of the osseous ablation consists in incisions through the bone suel as will partially: bound the field to be resected. These are best made by means of a bent Killian $Y$-shaped chisel (Fig. 8). The first incision is begun by placing the chisel at a point near the lower end of the naso-maxillary suture and then driving it upward along this suture to near the naso-frontal junction, at which point the instrument is directed outward to a point midway between the supraorbital notch and the attachment of the superior oblique muscle. This gronve should penetrate entirely through the thickness of the bons. and will.


Fig. i.-Killian's curved protector.


Fig. 8.-Killian's $v$-shaped bent chisel.
therefore, expme the underlying minous membrane throughout its entire extent. From the lower end of this osseons groove we will construct a second one as far outward as the laerimal groovc. Iou will note, therefore, that the part to be resected has been pretty completely surrounded (see Fig. t, line C I) E), that it becomes an easy matter to remore the desired portion of bone with the bone forceps, and thus to construct an ample window through which easy access is gained for dealing with the middle turbinated body and the ethmoidal cells. The nasal mucous membrane which underlies the lower portion of this resected portion of bone should, when possible, be saved for the purpose of constructing a flap from the same, which flap can be made useful by its reflection and application to the adjoining denuded orbital tissues. This membrane is in this case. howerer, so badly diseased that no attempt will be made to preserve it, and we. therefore, lite it away with forceps and expose the anterior region of the ethmoidal structures
on this side. all of which it is desirable to remore. Several different sizes of the Criunwald-alligatorjawed biting forceps are necessary and useful for this purpose. and you will obscere how rapidly these diseased structures are by this means ablated. The bleeding from the parts thus attacked has become so free that it beeomes necessary at this point to pack the cavity with adrenalin gauze tape for a minute or two, during which time we may with adrantage clean up the field of operation and prepare to use reflected light for the illumination of the rather deep cavity we have already made into the ethmoid. A common head mirror may be used for this purpose, and by means of reflected light, now that the gauze is removed from the wound and the hemorrhage has ceased, it is casier to see the structures with which we must deal, and hence the remaining work may be finished more thoroughly and safely.

The diseased ethmoidal structures being now satisfactorily dealt with, the remaining portion of the floor of the frontal sinus must be removed, which, as you already see, as the plate of bone is chiseled away, provides a wide passage between the frontal sinus and the nasal carity (sce Fïg. 6).

The preceding step completes the Killian operation with the exception of the introduction of the sutures and the adjustment of the flaps, and upon the accuraey of the performance of these will depend whether or not much sear will result. Killian adrise the use of aluminum bronze wire sutures, but we shall nse small silkworm gut in this case as a matter of convenience. Before tying the sutures we will flush the entire wound with hot saline solution, will then dry the same with stcrile gauze and will dust the eavity with iodoform powder. Formerly it was thought adrisable to pack the frontal simus lightly with iodoform gauze and to bring the lower end of the gauze strip out from the nostril, remoring the same by traction on the second day. It has been found, howerer, that the simus does as well, if not better, in cases where such a gauze packing is omitted, and hence we will in this case insert the iodoform tape only as far as the greatly enlarged infundibulum and allow the end to protrude slightly from the nostril. We shall also tie all the sutures and thus completely close the external wound.

Jou will remember that the antrum of Highmore is, in this case, also diseased and should be dealt with radically. We therefore protect the wound already made by covering it with gauze, and will proceed to remore a large portion of the anterior wall of the maxillary antrum above the
alveolar process. Upon the incision of the soft parts above the tecth, and their reflection upward, it is found that the anterior osseous wall of the antrum is carious, and that the periosteal elerator has already penetrated into the antrum. It is only necessary, therefore, tc cut away the soft parts sufficiently to reach the healthy osseous margins and to give free access to the interior of the cavity. With a stout, sharp curcte we shall now remore the entire discased contents and then break down a passage of ample size for good drainage into the nasal cavity. This aceomplished, it remains only to pack the eavity


Fig. 9.-Shows result of Killian operation three weeks afterwards.
lightly with iodoform gauze. Since trivial injury or infection of the eye may have occurred we will complete the operation by dropping a drop of a 1 per cent. solution of atropin into cach ere before applying the bandage.

Exhibition of case two weeks after operation. - You will now note the result of the radical frontal sinus operation (Fig. 9). Union by first intention has cecrywhere oecurred, the diplopia has disappeared and the areas of external tenderness are gonc. The patient eats well, sleeps well, has normal temperature and is discharging but a slight amount of pus from the nose. The resulting deformity, as you may observe, is not marked.

# THE JOURNAL <br> OF THE <br> INDIANA STATE MEDICAL ASSOCIATION 

Devoted to the Interests of the Medical Profession of Indiana
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## EDITORIALS

## A PLEA FOR UNITED ACTION AGAINST QUACKERY.

Is it not about time that the profession of Indiana should arouse from the lethargic state into which it has lapsed in the campaign against quaekery and the nostrum evil? What has it beyond a few lukewarm resolutions scattered here and there throughout the state, to show that it is really in earnest in its desire to rid the public of these nuisances?

In the State of Kentucky there is not to be found a single quack practicing medicine. This ideal was not accomplished in a day or a year but by the active perseverence of a well-organized profession which left no stone unturned in the uprooting of the evil. There is not a single one of these advertising scounclrels who is not fully aware of the fact that he is publishing one or more lies every time his subsidized paper or journal goes to press. He knows that he is making many promises that he can not fulfill, guarantees that he can not execute, and instead of openly forfeiting the fce in case of failure to cure, as he promises, emnnives and schemes in every possible way to find a loophole of escape. Doubtless there are a few of thesc irregulars who have no little ability and could render considerable service to mankind, and for that reason an injustice might be wrought by revoking their licenses. But fortunately the general profession is broad enougl to open wide its doors and allow these men to enter on an equal plane with all, if only they are willing to give up their false claims and dishonest practices. Naturally there is a certain amount of instinctive aversion in every honcst man's breast to giving his hand in friendship and brotherly affection to one whose sense of modesty has been so lacking as to scatter broadcast his pictures and self-praises merely because of the greed for financial gain, but this must be buried. The results attained by the conscientious, hard-working physician are sufficient testimonials to his skill and will speak for themselves, but the grafter and the pretender
will ever have to buy his praises, and through the medium, too. of publications of about the same ealiber as himsclf. The newspaper which gives space (and always for a consideration) to a false guarantec is equally culpable with the guarantor and should be held equally guilty of obtaining money under false pretenses, the penalty for which is prescribed by the law.

It is earnestly to be hoped that the coming session of the Indiana State Medical Association will not pass without an earnest effort to inaugurate a eampaign against these abuses that shall never cease until they have been wiped from the face of our fair state and Indiana has taken her rightful place among the first of the nation in medieal cthics and practice. To accomplish this cud means that each and every onc of us must get out and work; work with one another, with our newspapers, with our legislators and with onr ministers. If only we can educatc the people to realize the cnormity of these frauds the public demand will be created and then victory will be casy. Let us no longer shirk a duty on to lay publications, such as Collier's Weekly and The Ladies' Ifome Journal, that should be fulfilled by the medical profession, a body more capable, and whose true function it should be to keep the public informed eoncerning and protected from such rank abuses.

## A MEDICAL BUREAU OF PUBLICITY.

If we adhere to the ethical traditions of our profession we are prevented from making the profession of medicine what in part it is intended to be. an educational agency for the disscmination of knowledge which shall tend to prevent disease. By our reticence we permit many misconceptions and misapprehensions to be a source of injustice to us as well as the public at large, and commercial interests, profiting by our reticence, assume to teach and form opinions for the public for private gain. The question arises, are we not doing the public, our profession and ourselves an injustice in being entirely governed by ethical principles which restrict our sphere of uscfulness as medical advisers? Concerning this question Dr. J. M. Taylor, in a paper presented before the Philadelphia County Medical Society at its meeting of Jan. 22, 1908 (Medieal Notes and Queries), has the following to say:
"Above all, we should aid in promulgating right conceptions of the advances in medical science. The agency we must use is the public press. Here, upon this recognized arena, with
the great body of thinking people as audience, must we stand to win or lose on truth as our in--piration, on ethical principles as rules of the competition, on our sincerity of purposes to bencfit our fellow-man as the banner of our cause. In my opinion it is necessary to meet modern conditions by adopting modern methods. Every form and kind of opponent to the purposes and effort- of the profession make use of the newspapers to reach the attention of the people. The whole crews of fakers, grafters. panderers to evil ammsements. vendors of disguised poisons, and all the disseminators of hurtful influences emplor rast sums of money through press agents of me kind or another. The one available means of combating these destructive agencies is for or ganized medical hodies to establish bureaus of publicity, safeguarded by competent committees, through which information, opinions, action whall be aceurately and systematieally supplied to the papers. The publie are made fully aware of every tempting method of doing themselves larm. We, as a profession, fail to exert the counter influences whieh ought to impress the consciousness of those who need our protection.
-I would propose the establishment of Medi(al Bureaus of Publicity in comnection with all countr medical soeieties. A reliahle press agent should be retained. Many and raried reasons can be adduced why these are absolutely essential to secure a correct presentation of facts bearing upon the integrity of medical science and the best interests served by the conserrators of public and private health. Among the most important of these is the well-known fact that all those interests which are diametrically opposed to medical ethics do employ press agents. With them it is a question of business. Good business methods demand that the publie shall be made acutcly aware of the more attractive phases of the propanition offered. These fakers have goods to sell, adrice, or whatever they wish to barter for money. The chief avenue of diffusion is the daily press, through the ordinary channels of advertisements or shrewdly placed news items. For example, as is well known, the great nostrum vendors expend many millions of dollars ammally, and through the intelligent co-operation of professional press agents. These constitute practical Bureaus of Publicity for Quackery.
"No organized medical body in the world spends one cent for popular education, to 'put the people wise' on questions it is their desire and duty to lave correctly understood. Yet a large and increasing group of irregulars do spend rast sums to mislead the unwary, thereby
cansing incalculable damage to morality amb health.
"'Teaching mankind systenatically and acechrately how to know good from evil, right interpretations of current faets, adraneements in cientifie knowledge of hygicne, correct living and acting, should be the undivided purpose of the profession of medicine. The first step is to get the real facts known, to teach the people enrrectly what we are doing for their welfare, to furnish information of a kind caleulated to advaluce the best interests of the race. The form and character of such bureaus of publicity should be carefully formulated. Rules to govern methods, however, should be revised promptly and repeatedly, until by intelligent evolution, consonant with experience, they shall become perfeceted."

## SKILL 1 N . INESTHESLA.

It a recent meeting of the Medicolegal Society in London the question of deaths under anestheties was discussed at some length and a resolution forwarded to the General Medical and Privy Councils recommending that instruction in the administration of anesthetics be among the requirements for professional training. The present metlood was declared to be antiquated and slipshod. as under it any person may administer an anesthetic, no matter whether he is qualified or not. Furthermore, if the anesthetizer performs liis function to the best of his ability and with no mulawful motive he is not liable to punislument or blame if the patient dies as a result.

Ordinarily it would be difficult to determine whether an anesthetist were acting to the best of his ability unless le were palpably guilty of some gross neglect or error, and this for many reasons. chief among which is the fact, oft stated, that crery subject for anestlesia is a law unto himself. Hence it is that the man of sound judgment and wider experience is bound to be more ready to mect the emergencies and variations as they arise.

The eareful surgeon is likewise careful in the choice of his anesthetist, for no operator can do his best work when his attention must needs be divided between his work and that of another, be it anesthetist, assistant or nurse.

In no line of medical work more than in anesthesia is the student or practitioner impressed with the total inadequaey of text-book descriptions for meeting the exigencies at hand. The amount of anesthetic or the time necessary to
induce nareosis in oue subject is no criterion as to the same factors in perhaps the next case: the various stages may vary very materially in two successive instances; the mental state, which, by the way, is no neglible quantity in anesthesia, may be altogether different in one individual about to undergo operation from that in the one to follow; the physical condition and previous habits of the subject at hand will not present in the next case. All these and many other subjects must of necessity be treated in text-books in a more or less generalized fashion and the anesthetist is left to work out his own salration and occasionally at the expense of the patient.

Commensurate with the more recent and broad strides made in surgery has been the progress in its right hand bower, anesthesia, so that he who may have been considered proficient twenty yeara ago would probably awake to find himself wocfully behind in present-day methods of inducing anesthesia.

So that nothing could be more conducive to the making of a skilled anesthetist than a thorough course in practical anesthesia in college, supplemented by actual training under the supervision of an experienced man before entering into this very important yet sadly abused field.

Were the same amount of training required of the anesthetist that is demanded of the surgeon, specialist or laboratory man, there would be fewer deaths from anesthesia to be recorded, more men making it a life work and less cause for complaint about the insignificance of the compensation for services rendered.

## A WORD TO COLNTY SOCIETY SECRETARIEs.

In the April number of Tile Jocraill we called attention to the action of the Council in co-operating with the American Medical Association in an effort to increase the membership in the county, state and national medical organizations. According to the plan decided upon Indiana is now being canvassed by trained and responsible men who eall upon all doctors in the state who are not at present members of any county medical society but eligible to membership, and solicit applications for membership. The canvassers are directed to first report to the councilors of the screral districts, and then to the county society secretaries, for suggestions and advice, and they are not expected to secure applications from any physicians who are not eligible to membership in any of our county
societies. The cantassers are requested to collect dues when applications. are taken, whenever possible, and to turn the same over to the county society secretary, who should also promptly remit the state association assessment to the secretary of the state medical association after the application has been favorably acted upon.
The canvassers should be given every possible encouragement and assistance with a view to securing the best possible results from their efforts to increase the membership in our county socicties. To make the work more effective a sample copy of The Jourcide and a letter soliciting application for membership in the county society is sent from this office to every eligible doctor upon whom some canvasser is to call. If county socicty officers will also assist in the work while the eanvassers are in this state we ought, by our combined efforts, to add at least six or seven hundred names to the membership list of our state association. We, therefore, urge the county society secretaries to join in the movement with earnestness and a determination to make the most of the opportunity offered for adrancing the cause of medical organization.

## EDITORIAL NOTES

Remember that the State Association meets at Erench Lick, June 18 and 19.

The next number of The Jourval will be in the hands of the members a week before the French Lick meeting.

Excepting Illinois, the largest state representation at the Chicago session of the A. M. A. should be from Indiana.

Spectile music written and dedicated to the American Medical Association. That is on the progran for the Chicago session of the A. M. A.

Tue preliminary program for the French Lick meeting is published in this number of The Jocrinil in the department devoted to society proceedings.
C. S. Roberts, M.D., of New York City, is again writing the doctors of Indiana asking them to send 15 cents to cover postage on a
"free $\$ 3$ sample" of "hydrocine" for use in treating tuberculosis. We hope that no suckers will be found in Indiana to bite at this nostrum bait.

The June number of The Jourval will be the French Lick number. It will contain mueh interesting and useful information concerning railroad rates and conneetions, hotel accommodations, entertainments and program for the annual session of the Indiana State Medical Association.

Trained and accredited canvassers are now soliciting applications for membership in our county medical societies. Every county society officer should assist these canrassers in this work. A letter here, a telephone message or personal intervicw there, may be the means of sccuring applications which otherwise would not be secured.

Several county society seeretaries in Indiana are dead. Cause of death, laziness or indifference, or both. Some have always been dead. They were corpses when eleeted and decomposition has set in. It is time to bury or burn them. some ought to be burned in effigy. Nothing ean be expected from resurrection, as we have tried it. Close up the line and fill the vacancy.

The Journal of the A. M. A., March 28, pricks the Burnham's Soluble Iodine bubble. Careful and painstaking analysis shows that the dains put forth by the manufacturers of Burnham's soluble lodine do not hold good. The preparation is very similar, if not inferior, to Lngol's solution (Liquor Lodi Compositus, U. S. P.), which is an inexpensive and perfectly available preparation.

Trie time will come when alcoholism and drug addiction will be considered as diseases worthy of some consideration on the part of the state. The segregated treatment of inebriates as diseased persons has already proven effective, and legislative bodics should favor the establishment of hospitals where the victims of alcohol and drugs from the poorer classes may be properly treated at state expense.

In unity there is strength. Doctors need to be impressed with that fact. If the doctors work together there is no commendable object which they can not obtain. Nothing tends to bring more harmony and unity of action among medi-
cal men than association in a live and progressive medical society, It is the duty and should be the pleasure of every reputable doctor in Indiana to give his active support to his county and state medical organizations.

The cure for the nostrum exil is the ineulcation by medical teachers of the maxims of Uippoerates and their own discontinuance of preseribing seeret preparations, the use of the Plarmacopeia as a text-book in medieal sehools, the immediate emptying of samples of secret nostrums into the sewers, a better education in therapeutics, and an insistence that the prescriber of secret nostrums is a dangerous quack. who commits an actual breach of trust.-Joln B. Roberts, M.D., Journal of the A. M. A., March 21, 1908.

Indinat will not go to ruin, no matter which of the leading politieal parties wins in the coming election, but it makes a great deal of difference to medical interests as to which Republican and which Demoeratie candidates for state offices are elected. Therefore, the recommendation of the Council of the Indiana State Medical Association, to the effeet that candidates for office shall be interviewed as to tlocir attitude on questions of special interest to the medieal profession, should be followed in every county and district in the state. The Journal will publish the results.

We wish to again remind contributors to The Jourval that copy should be typewritten. Onr printers very properly refuse to accept anything but corrected typewritten copy, and with typewriters so common in eren the smallest towns and villages it is unnecessary for any contributor to send us an original article or letter for publication the copy for which is not typewritten. The average doctor may think that it is easy to read his writing, but printers do not think so. Therefore, we respectfully ask that articles sent us for publication be typewritten and correeted before sending.

Have purely medical papers gone out of style? We hope not, and yet it would seem so if we can judge by the large number of surgical papers and the very small number of medical papers offered us for publieation in Tie Jourxal. It would seem that every man who does a little surgery as well as every man who does a good deal of surgery considers it his duty to write and discuss surgical subjects only. The time is coming when the internal medicine man is go-
ing to have his day, but we wish we could begin to see more evidence of it in the mannscripts sent us for publication.

Wifatever may be the shortcomings of our National Senate, their treatment of the bill providing a pension for the widows of Drs. Carroll and Lazear has proven that there still remains in that august body a humaritarian spirit that must be a source of no little satisfaetion to all to whom this story of patriotic self-sacrifice is familiar. And to the further glory of the Senate be it said that the bill was not only passed by them, but unanimously so. May the House of Representatives throttle their tyramical speaker for the once. at least, and follow the noble example of their fellow legislators.

Throvgh intention or ignorance, nsually the latter, many doctors fail to recognize smallpox, and as a result the disease spreads with great rapidity until great damage is done to publie health and commercial intercsts. Why not admit unfamiliarity with the diseasc and leave the diagnosis to experts, mcanwhile taking all the usual smallpox precautions until the diagnosis has been conclusively established. Some doctors are seemingly afraid to admit that there are any conditions under which a diagnosis can be in doubt, as they are also unwilling to admit that there is anything concerning the theory and practice of medicine which they do not know. All doctors should know that the public thinks none the less of a man for admitting the possibility of error and will always approve of frank honesty.

William J. Bryax's Commoner is guilty of accepting money for advertising medical frauds. Mr. Bryan probably numbers several thousand subscribers belonging to the meतlical profession, and if these subscribers will, each and every one, write Mr. Bryan to the effect that support of the Commoner will be withdrawn unless that paper eeases to advertise medical frauds it is quite likely that "the pecrlcss one" will take some notice and perhaps free himself of the odium attached to acceptanee of money from those who are using his paper to deceive and defraud. The letter from Dr. Hoover, printed in this number of The Journal, indicates that one man has taken the proper stand in this matter. and we hope that there will be many others among our readers who will follow the example, now that the question has been brought to their attention.

Sereral A. M. A. canvassers are working in Indiana now iu an cffort to secure new nembers for our county societies and the A. M. A. The work is being delayed and interrupted by the failure of some county society secretaries to aid the A. M. A. office in securing complete and reliable lists of physieians, with designation of those who are not members of county societies, but eligille. It is of the utmost importance that the canvas-ers have accurate lists, and the easiest and the most satisfactory way to secure such list. is through the county society secretaries. We sincercly hope that the eooperation and assistance requested will be freely and promptly given. If every county society secretary will do his part the county societies of the state will add from five to six hundred new names to the membership list of the state association within a few weeks.

The time is rapidly approaching when the medical journals that now carry nostrum advertising will have to quit the practice or go out of business. Merlical men as a class are not going to tolerate much longer such prostitution of medical journalism as is evidenced by an inspection of the adrertising pages of many of the medical jomrnals of the country. When medical periodicals advertise such preparations as "Bromidia," "Antiphlogistine." "Tongaline," "Sammetto," "Glycotliymoline," "Tin Mariani," "Pepto-Mangan," "Listerine," "Hydrozone," "Intikamnia." "Syrup of Figs," "Anasarcin," "Glyco-Heroin," "Aletris Cordial," "Yapo Cresolinc," "Ectlaal," "Tongaline," "Cactina," "Peacock's Bromides," "Seng." and many other nostrums which might be ramed, it is time for the intelligent and eonscientious plysician to refuse to support, either directly or indirectly, such publications.

Tire quack doctor and the patent medieine manufacturer thrive because they are able to delude the public through skilful newspaper advertising. Take away the newspaper advertising and the quack doctor and the patent medicine manufacturer would go out of business. The newspaper editors and managers are satisfied to share in the graft derived from this imposition upon the public. The newspaper men excuse their action on the ground that they ean not be expeeted to discriminate between the gond and the bad, but this is pretense, for they know that all advertised remedies are either useless or positively harmful and that all blatant advertising doctors are frauds. It is a ease of sharing in the spoils which prompts newspaper men to
continue a business policy which they know is morally wrong. The practice will not cease until public sentiment demands it, and then the newspapers will be lond in denumetion of the evil.

Metschinkoff and Roux reommend a ealomel ointment composed of 33 grams of calomel, Gi grams of lanolin and 10 grams of raselin as a local application after coitus for the prevention of syphilis. Their conclusions are based upon experiments on man as well as animals. Injections of atoxyl are also said to prerent infection, thongh the remedy is not without danger to the optic nerve.

Perhaps calomel ointment will become one of the toilct accessories of residents of the red light districts in our large cities. It is difficult to predict what the effect will be upon morals, but if innocent wires are sared from inoculation with syphilis contracted by dissolute and unfaithful husbands, and the number of cases of congenital syphilis is lessened, we can afford to orerlook the effect upon morals. The discovery is also of value to physicians, dentists and nurses Who come into contact more or less frequently with syphilitie patients.

The Indiana Board of Medical Registration and Examination has been particularly liberal in some instances in not only granting temporary permits to practice medicine in the state, but in extending the permits far beyond the time which the holder of a temporary permit should have. It is strange that permits of any kind should be issued, as it is also strange that the men who have been allowed to practice for long periods of time on a temporary permit should be some of the notorions quacks of the state. All of which reminds us that the State Board of Medieal Fegistration and Examination is entrusted with the enforement of the Medical Practice Aet and insteard of helping the quacks the Board should go after them. In prosecuting and driving from the State the "Boy Phenomenon" they late shown what can be done. But something more than a spasmodie action of this kind once in a great while is required of the Board, and the medical profession would like to see the Board fulfill the requirements of oftice.

Some doctors are hmman vultures seeking whom they may derour among the siek and suffering. 'This was demonstrated during the recent terrible hotel fire in Fort Wayne. When a
majority of the physicians of the city were giving every possille assistance to the work of caring for the burned and otherwise injured victims of the fire, with no thought of anything but means and measures for affording relief, one or two doetors, with a view to personal advantage and gain, were assuming unwarranted authority and exercising undue control orer the sufferers with not the slightest sense of respect for the feelings of the victins or the numerous confrères who labored from a sense of duty and not for personal gain. The Lord may bestow pity upon such medical pirates, but we believe they merit the contempt of those who follow the teachings of Hippocrates. We take special pleasure in saying that a very large percentage of the doctors of Fort Wayne are heroic, self-sacrificing, charitable, capable and respectful of the rights, privileges and honor due others. It is to be regretted that there are any exceptions, but there are a few, and perhaps in that matter Fort Waync is no worse than any other city of similar size, for it is probably true that "there are black sheep in every flock."

Medical appointments to positions on our rarious state boards and in our penal and benevolent institutions should be dirorced from politics. The lighest efficiency can never be attained when medical appointments are dealt out as political favors and irrespective of fitness of the appointee for the position to which he is appointed. For the most part Indiana has been fortunate in having medical men of ability and unusual fitness appointed to the various medical positions under state control, but there is room for improvement and it is hoped that the next governor will be sufficiently impressed with the importance of this subject to warrant consultation with the medical profession regarding any and all medical appointments. There is no reason why appointments should not be made from a number of physicians having the recommendation and endorsement of the leading state medieal organizations. Had this plan been followed when the members of the present Board of Medical Examination and liegistration were appointed, the complexion of the Board would now be different and we believe the efficiency of the Board would have been greater. It matters not whether a man is a Democrat or a Republican when it comes to appointment to one of the medical positions under control of the state. The thing to be considered first and always is the qualifications of the man.

Betwees now and next November a fieree politieal battle will be fought in Indiana. As physieians we are partieularly interested in the charaeter of the men we are to send to the state legislature and the governor's offiee and the principles they represent. The politieal duty of crery physieian in Indiana is to use his influence for men who not only pledge themselves to favor the measures adrocated by the medieal profession, but whose general reputation for integrity is a guarantee that the pledge will be fulfilled. A eandidate who refuses to give an uneonditional endorsement of any measure approved by the medieal profession, having for its object the improvement of conditions pertaining to public health, sanitation, vital statistics, medieal education, restrietions for the praetice of medicine, prevention of sale of fraudulent nostrums, or anything else of a similar nature whieh is essentially for the benefit of the people, even though originating with the medieal profession, should not receive the support or the rote of the intelligent and progressive physicians of Indiana. The aetive influenee and vote of the medical profession of the state can defeat many unworthy candidates, and we owe it to our profession, to ourselves and to the publie at large to vote for men not because they represent parties, but because of their character and because they represent prineiples for which we contend.

The settlement of the medieal eollege question for Indiana is a great step in adrance for medieal edueation, and much credit is due the presidents of Purdue and Indiana Universities and the faculties of the two contending wellestablished medieal schools for the broadminded manner in whieh they put aside all selfish motires and agreed to many coneessions and saerifiees for the purpose of securing an amieable, just and satisfactory settlement of the contention for one seliool and one school only for the state and that school to be supported by the state and having the endorsement of the medical profession of the state. By the terms of the agreement the one school is to be the medical department of the Indiana University, and we have every reason to believe that President Bryan will put forth every effort to make the school one of the leading medieal institutions of the country. As an indication of his intentions to start right it may be said that he is at this writing piloting a committee of representative Indiana medical men around among noted eastern medieal sehools with a view to securing information whieh will be of ralue in determin-
ing the plans to be followed in establishing the new medical department for Indiana Unirersity. We believe that the idea which should take preeedence over every other is not how large a medical sehool we can have but how good. Quality should be the first consideration. and no doubt President Bryan and his advisers have that in mind.

Every ductor in Indiana who accepts an appointment as medical examiner for a life insurance company that pars but $\$ 3.00$ for a complete examination should hold up his hands when the roll is called for members of the clas: of medieal men who retard the progress of medical economics. If a doetor is conscientious in his work and makes a complete examination, including urinalysis, and aceuratcly fills out the insuranee blanks provided for use in all examinations, the serviee is worth $\$ 5.00$. If the examiner slights his work because of a small fee then he is dishonest and does both himself and the company an injustiec. No matter what the fee. the physician owes it to himself as well as to the eompany lee represents to do good work. and if he does good work he is entitled to a respectable fee. The only reason why respeetable fees are not paid by all insurance companies is that some men can always be found who are willing to sell their services for less than they are worth, and are willing to make almost any saerifices to seeure official positions with life insurance companies. Fortunately the better class of mectieal men refuse to beeome the cheap employćs of soulless life insuranee companies. and the day will eome when the company that selects its medieal examiners on aecount of priee and not on account of ability will have to go out of business or raise their rates to meet the unncessary losses brought on by such false economy.

Probably the poor misguided reercant who so recklessly swallowed the four hunitred cactin pellets without so mueh as the wink of an eve or an alteration in the beat of the pulse was sure he was not getting "an absolutely pure preparation," or else he was of the fire-eating variety, who could, with equal impunity, have devoured as many phosphorns tipped match heads and still retained an intaet mandible. And, lo, the much abused dog, the sudden protege of the spasmodic anti-riviscetionist, was likewise chosen from a brand of well-known immunes, whose blood pressure could not have been altered even with a stiek of dynamite. What a pity that
science should so besmirch her otherwise fair name as to make mse of such freaks of Nature merely to refute the claims of a single commercial concern that was seeking only to sell its wares! And then, too, to resort to the use of the poor, defenseless dog, when all this firm asked was that this drug be combined with another and more powerful one, hyoscin (the ouly pure form of which could be obtained from them alone) and with some morphin. be injected into the human victin once, twice or thrice, depending on his resistance thereto.

We would be the last to attempt to stifle the legitimate manufacture and sale of new remedies provided they were able to stand the fire of experimental tests conscientiously and thoronghly conducted. but when a concern, whether of doctors or laymen, attempts to force on the profession a proposition that has no moral excuse for existence then our stand is on the opposite side of the fence.

The Industrial Review Publishing Company, of Pliladelphia, has a unique scheme for "sandbagging" the medical profession. In a letter to Indiana plysicians this company, orer the signature of F. M. Jenkins as husiness manager, extends an invitation to doctors to become members of a "Bureau of Physicians" with a riew of possible selection as physicians for accident and health insurance companics. Accompanying the letter is a blank contract for signature requiring the payment of $\$ 2.00$ as a membership fee, upon payment of which the rictim sceures a rear's subscription to The Industrial Reciew and is enrolled as a member of the "Bureau of Physicians." A semi-annual list of the Bureau's physicians is to be published as a supplement to The Industrial Reviex, and this list is to be furnished to every accident and bealth insurance company. The contract also provides a scliedule of fees to be charged by members of the Bureau for services rendered the accident and health companics when any services are rendered. The fees are ridiculously low and the number of physicians to be taken into the Burean from each city and town is not mentioned, but these features of the contract are supposed to be overlooked. Of course nothing is said about the fact that all accident and health companies are quite capable of selecting their physicians and without the recommendation of any publishing company which gives the recommendation for a price, and would probably resent any suggestions from such a source as to fees to be paid for services reudered by medical men. The scheme is nothing more than
an attempt to increase the circulation of The Industrial Reriew for the profit of the publishers, and if there is anything more to it the doctor who signs one of the contracts offered him will find that he has agreed to render ten dollars worth of service for one dollar in mones. The doctors of Indiana should be too shrewd to be victimized by the acceptance of any such sandbagging proposition.

Medical men have no one to blame but themselves for the passage of the optometry law by the last state assembly. Without one single word of protest the optometry bill went through both houses and was finally signed by the gorernor. The bill looked imnocent enough, and without any knowledge of the dangers to the public which the passage of such a law makes possible, it was easy to secure for it favorable consideration at the hands of the legislators and governor. Now that the working of the law has shown up the brazen effrontery with which opticians pose as doctors and invite the public to consult them regarding all eye defects, and even in some instances assume to treat eye diseases, the medical profcssion is becoming aroused to the necessity of asking the next legislature to repeal or modify the law. The illogical feature of the law is the fact that the practice of optometry is defined as the measurement of the powers of vision and the adaptation of lenses for the aid thereof, all without the use of drugs. Thus the law gives authority to opticians to do the work, and at the same time prohibits the employment of the means necessary to do it. Furthermore, the law authorizes opticians to adapt lenses to eyes for defects of vision which may be due to diseases in other parts of the body, and to diseases which may be situated in the eyes themselves. The adaptation of lenses to eyes under such circumstances, while improving vision for the time, may be the cause of deferring proper treatment until blindness or even death may be the result. To determine when defects of rision are due to defects in the eves. or to diseases, requires the ability to make a distinctive diagnosis, and this knowledge can only be acquired, according to the laws of the State of Indiana, by four years' study in a medical college. The harm that has resulted from the work of itinerant spectacle venders has been great, but the perils to which the people are exposed by the practice of the opticians who under the present optometry law designate themselves as "eyesight specialists," "ophthalmologists," "doctors of refraction," "drugless doctors," etc.,
and who even delude the ignorant by their advertised clains to cure diseases by the adjustment of glasses, is incalculable.

There are good and suffieient reasons why the Indiana State Medieal Assoeiation should_hold its annual scssions in the fall instead of the early summer as at present. One of the chief reasons for the ehange is that it is a serious mistake to have a state association session so near the date of the anmual session of the A. M. A., as many physicians feel that they can not afford the saerifice of time and expense required to attend the sessions of both assoeiations within a period of two or three weeks, and in eonsequence the general attendance at neither of the sessions is what it would be if the dates of the sessions were fartlicr apart. Many of the Indiana physicians have already declared their intention of atteuding the Chieago session of the A. II. A. this coming June, but frankly admit that they can not afford the additional time and expense required to attend the State Assoeiation session at French Lick two weeks later. Other physicians say they can attend only one of the big sessions, and prefer to miss the Clicago session and go to Frenclı Lick. It is quite evident, therefore, that more physicians would be able to attend both sessions if the dates were further apart. Then, again, some of the best men in every state find it impossible to prepare papers for two associations that hold meetings close together, and they are very apt to show a preference for the national association, this depriving the state Association of valuable contributions, and perhaps even the attendance of such men who find it impossible to devote time to two important mcetings held so close together. Finally, there is no particular reason why we should eontinue to hold our sessious in May or June except to follow custom. There is no more favorable season of the year for holding a medieal mceting than the fall, preferably the last week in September or the first week in Uctober, and for the best interests of both the national and state assoeiations as well as the physicians of the state we ought to make the ehange suggested. The House of Delegates of the A. M. A. has three times recommended all state associations to hold annual sessions in the fall, and those states that have followed the recommendation report that the change lias proven beneficial from every standpoint. Indiana should fall in line and profit in a similar manner.

The Fort Wayne holoeaust, caused by the burning of the fire-trap Aveline Hotel at 4 oelock in the morning, with a loss of twelve or fifteen lives and serious injuries to twiee as many more, is a horror that should point a lesson. The eity has been criminally negligent in adopting and enforcing suitable building laws, in requiring adequate fire escapes on all buildings where large mumbers of people eongregate, and in securing modern apparatus for fighting fire and the saving of human lives during the progress of a fire. Events show that the Aveline Hotel was nothing but a tinder box whieh required but a spark to turn the entire structure into a mass of flames within a few minutes time. The fire escapes were wholly inadequate and were eut off from the reach of many of the inmates on account of smoke, heat and flames which precented the use of the lialls and corridors. The imprisoned people were thus forced to look to windows for escape, but no ladders, nets or any other lifesaving device was offered many of these unfortunates by the fire department, and in consequence the fire victims, driven by the flames, were forced to jump, some of them from a height of five and six stories, only to later be picked up dead or seriously injured. Some of those who attempted to reach the fire escapes by way of the halls were suffocated by sinoke or lost their way, and were later a prey to the flames. Others never got out of their rooms, but died like rats in a trap.

What a pity that such a terrible lesson shoukd be needed to impress upon any community a scnse of its responsibility for the care and protection of human life. The Areline horror could be duplicated in any hotel in the city of Fort Wayne and in screral of the public school buildings, offiee buildings and faetories, which are known to be fire-traps. No doubt some action will now be taken to prevent a repetition of the Aveline Hotel disaster, and it is hoped that every other city in the land will also take extra precautions, for Fort Wayne is no more negligent in this matter than hundreds of other cities and towns. It costs money to build modern fireproof buildings and to equip them with safety devices for the protection of human life, and it increases taxation to maintain a fire department adequately equipped for not only fighting fire but saving lives during the progress of a fire, but the money is well spent and there should be a general awakening to the neeessity for such enterprise. The memory of the crumbling and blaekencd walls of what was once the Aveline

Hotel. the clarred corpses in the morgues, and the burned and injured people now in the hospitals of Fort Warne should for many years stand as an evidence of what it costs to be criminally negligent.

## CORRESPONDENCE

## ANTITSPITTING ORDIANACE.

Mabizon. Txd.. May j, 1908.

To the Editor:-I desire to report for Tine Jocraist the result of our anti-spitting ordinance and how nicely it works. The have nice cement walks and for quite a time after ther were made the people seemed to act as if they were made on purpose to be spit upon. So after numerous complaints from the public, our city council passed a rery efficient anti-spitting ordinance, witl a fine of from $\$ 1.00$ to $\$ 20.00$ for its violation. Then the city board of health passed strong resolutions endorsing the ordinance and declaring spitting on the parements insanitary and a menace to good health, and then had a number of large cards printed warning and notifying the public of the penalty, which ther tacked up in all publie places. The results are all that could be desired, and we hare not had to prosecute a single case for its violation.

> J. Cooperider, M.D., Secretary Board of Health.

## NOSTRC』 ADVERTH心LNG.

Elkiart, Ixd., April 2., 1908.
To the Editor:- Yonr editorial in the April issue, "Patent Medicine and Quack Doctor Adrertising," should be productire of much good. The suggestion to "let the editors feel that their pocketbooks are being touched" should be acted on. One phrsician alone can not do much to make them feel that way: it requires united action of the profession. I have had some experience fighting the evil single-handed.
[n the Commoner, edited by William J. Bryan, appears from time to time an adrertisement informing the reader that "Dr. Miles AntiPain Pills will prevent and cure pain of every nature" and that ther are "perfectly harmless." About a year ago I wrote the publisher. calling his attention to the deceptive nature of the adrertisement, and received a reply stating that the matter would receive consideration. I wrote again, mentioning the fact that acetanilid, of which drug the pill in question contains 2
grains, was classed by the Pure Fond Act with morphin, cocain, chloral, etc., and referred the publisher to articles in the Journal of the $A$. II. .., volume 4 . page 1226 , and volume 46 , page 3.51 , dealing with acetanilid poisoning. The answer received was similar to the first. only it contained the soul-cheering assurance that "it is not onr intention to adrertise antithing in the medical line but what physicians of onr own acquaintance and of our own cities would be willing to prescribe for their patients." I have since written several times to botlo the publisher and the editor. but they are evidently too busy fighting the "special interests" to pay any further" attention to the matter. Finally I asked them to discontinue my subseription to the Commoner, which they did.

One man alone will be ignored, as I have been. If one hundred physicians orer the State of Indiana alone would write letters to Mr. Bryan asking him to purge the Commoner of its patentmedicine adrertisements lie would "sit up and take notice."

Lest any one think I am moved by political animosity, let him know that I hare twice roted for Mr. Bryan for President and have been a reader of the Commoner for several years.

Ter'y truly yours,
E. M. Hoover, M.D.

## THE OPTOMETRY LAII.

Hatitford City, Ind., April $24,1908$.
To the Editor:-Shall we have progression, or temporary retrogression in the adjustment of glasses to the human ere? This subject offers considerable food for thought.

Having been a general practitioner in an Indiana town of 6.000 inlabitants for six years, I am in a position to see the inroads which the present optometry law has brought upon the general practice of medieine as well as the practice of ophthalmology. At the present time the state of Indiana has a large number of opticians who adrertise both in the newspapers and by hand bills "to eure," by the adjnstment of glasses, such diseases as appendicitis, epilepsy, nerrous diseases of women and children, hemorrhoids, all the female disorders peculiar to women. stomach trouble and a number of other diseases. These are all cured, so the adrertisements say, by the wonderful so-called "Drugless science Practitioners," and I hare a communication from a physician of Indianapolis who limits his practice to diseases of the eve, saving that he has recently received a letter from a reputable
oculist from near Vincemes, testifying that one of these opticians, licensed under the present optometry law, who styles himself an "ophthalmologist," agress to cure diseases of the cyes by his "new method of applying glasses."

Now, Doctors. think what this means to the unfortunate patient who has an eve disease which will rapidly destroy rision umless ehecked by appropriate medical treatment administered under the adrice of a competent physician. Many a patient who thinks he needs only glasses has a deep-seated lesion, the disenvery of which requires more knowledge than the spectable vendor can ever hope to have. Even the proper determination of errors of refraction requires the use of drugs in the majority of cases, and this must of necessity he ilelegated to the medical man.

So to take a broad-minded view of the subject. "Eyestrain and Who Should Treat It." I can not resist the feeling that for the public welfare I must positively take the stand that absolutely no one but a medical man should attempt to refract the human eye.

I sincerely hope we can secure a new law or so modify the present law that cither the optician's present unwarranted assertions and claims can be prohibited, and prosecutions made possible when opticians step orer the line of what optometry really means. It occurs to me that if the matter is discussed by both the general physician as well as the specialist, a plan can be adopted which will result in a betterment of conditions and certainly more protection for the publie.
C. L. Bell.

## EYE-STRAN AND WHO SHOULD TREAT IT.

Muxcie, Ind., April $22,1908$.
To the Editor:--The articles written by Dr. Frank Morrison and Ihr. F. ('. Heath, which appeared in the March and April numbers of The Jocrixil should arouse our profession to the importance of agitating the subject of "Eye-strain and Who should Treat It." The discussion of this subject should be carried on systematically by every county society till a sentiment has been created that will bring about the repeal of the objectionable optometry law, which was no doubt enacted without carefully investigating the evils that would come from its enactment.
Those who pay special attention to ophthalmology (more than the general practitioner who does no refraction work) are confronted with the wrong that is perpetrated on the publie

The profession in general should receive more knowledge of the irregularitics that are being practiced since the enactment of this law. "The "ptometrical specialist" apparently enjors all the privileges and immunitics that are enjoyed by the regularly educated physician who has passed through all kinds of deprivations and hardship in order to properly prepare himself for his work. The optician spends only as many weecks as the oculist spends years in study, and the oculist after years spent in preparation discovers that in the practice of his specialty lie is in active competition with these incompetents, who are nothing more than spectacle vendors.
We all know that without a cyclopegic, refraction work is rery unsatisfactory, and in fact those who use a eydoplegic every day know that we can not give satisfactory results withont it in the majority of cases. The optician has not the license to practice medicine, therefore lie can not and docs not use this most indispensable adjunct to the practice of scientific refraction and his work is therefore very liable to be inaceurate if not injurious.
It is a common practice for the optician to dispense proprictary eye lotions and unguents. He tries to make good after he has been granted a license to decorate his store or office, which he points to with pride and which plainly says he is "doctor of optics." He assumes that if he is styled "doctor" he can prescribe for eye diseases.

It is an insult and an injustice heaped upon our grand profession to be constantly in competition with men who are ineompetent to do this very important subject the service that it so justly deserves. The law as passed by our last legislature intended to prevent the peddling of spectacles. The "optical specialist" has a very clever schente of having an office, as required by the optometry law, and then every day save one each week he goes from house to house or town to town representing himself as an "eyesight specialist."

Is this just and right for these men of four or six weeks' preparation to be allowed to endanger the rision of so many imnocent people? The laws governing the practice of medicine and surgery are right and just as far as they go, but they should be so amended as to include the practice of optics and to designate that the fitting of glasses is as much the practice of medicine as the reducing of a fracture or the administration of antitoxin. The present laws are grossly inadequate for the protection of the public, so let every physician and ophthalmologist use his influence to enlighten the coming legislature on
the reasons for the repeal of the optometry law and the need of an amendment to the medical law so that it will make the fitting of glasses a part of the practice of medicine.

Arther E. Tintox.

## prosectition of AN ILLEGAL PracTITIONER OF MEDICINE.

Hentington, Ind., April 5, 1908.
To the Editor:-It may interest you to note, if you have not already learned through the papers, that I, as secretary of the Huntington County Medical Society, have filed charges with the prosecuting attorner against one W. E. Nichols, of Andrews, for practicing medicine without the proper medical diploma and without a state license as required by the laws of Indiana.
IV. E. Nichols was elected to membership in the IIuntington County Medical Society in 1904. Through the State Board of Medical Registration we were adrised that this W. E. Nichols had no license to practice medicine in the State of Indiana. Investigation disclosed a doult as to the genuineness of this man's medical diploma. Charges were brought against IV. E. Nichols of having obtained membership in the county so(iety by misrepresentation and fraud. He was notified of these charges, and after considerable effort and delay he appeared before the society and made a general denial but offering no eridence to disprove the charges. He claimed to have graduated from Rush Medical College in the University of Chicago in 1894. There is a IV. E. Nichols who graduated from Rush in 1894 and his present location is at Terre Haute, Ind.

John M. Dodson, dean of Rush Medical College, in a communication writes that only one IV. E. Nichols ever graduated from Rush Medical College in 1894 and that this Dr. Nichols is at the present time resident and practicing at Terre Haute, Ind. Correspondence with Dr. IV. E. Nichols at Terre Haute, Ind., confirms the above. In a malpractice suit brought against IV. E. Nichols, of Anders, in Huntington about two years ago, II. E. Nichols on the stand testified and swore that he was a graduate of Keokuk Medical College, Iowa. In a communication from Dr. La Force, secretary of Keokuk Medical College, Keokuk. Iowa, he writes that IV. E. Nichols never attended there. W. E. Nichols, of Andrews, can not procure a diploma from either institution, but submitted a certificate issued to him by Rush Medical College, which certificate states that it has been issued to Dr. W. E. Nichols, graduate of Rush Medical College of 1904,
upon his affidavit that the original diploma was destroyed by fire and that this certificate is issued to him in lieu of such diploma. In other words, this IV. E. Nichols, of Andrews had represented himself as being the II. E. Nichols of Terre Haute and through fraud had obtained this certificate. Upon this certificate it seems that the Indiana State Board of Medieal Registration issued him a temporary permit, expecting him to appear for examination for permanent license. It was upon this temporary permit that IV. E. Nichols had been practicing medicine in the State of Indiana. Although notified by the state board a number of times he failed to present himself for examination until last October, with a negative result. Since then the state board has refused to permit him to come up for another examination owing to his uncertain credentials. Howerer, the man has been practicing medicine openly right along. He was expelled from the Huntington County Medical Society at a meeting held October S, 190\%.

This case has been set for trial some time during the next term of the Circuit Court, and from present information I have been given to understand that the defense will be the fact of his possessing a temporary permit from the state board and that the state board can not go behind or antedate its permit. Vours very truly,

Mlaurice H. Kilebs,
Secy. Huntington County Medical Society.

## DEATHS

Dr. Franklin IV. Hays, for many years connected with the Indiana Medical College and at one time its secretary, died in Los Angeles, Cal., March $25,1908$.

Dr. Willis B. Wilson, for more than fifty years a practitioner of Rolling Prairic, Ind., and a member of the Laporte County Pension Examining Board, died at his home, April 6, aged $i 9$.

Dr. Francis M. Dally died at his home in Millhousen, Ind., April 6, after an illness of several months, aged 6t. He graduated from the College of Physicians and Surgeons, Keokuk, Iowa, in 1878.

Db. Robert Q. Higgerty, a graduate of the Indiana Medical College in 1874 , and a member of the American Medical Association, died suddenly at his home in Elkhart, April 8, from heart disease, aged $5 t$.

Dr. Edward C. Prigg died at his home, four miles southwest of Middletorn, April 16, 1908, aged 82 ycars. Aside from a practicing physician, Dr. Prigg was a poet and song writer and acquired no little reputation in his day.

Dr. Jacob K. Zins, a graduate of the PhysioMedical College of Indianapolis, died at his residence in Covington, Ind., April 23,1908 , after an operation for appendicitis, aged 44 years. He was a member of the Fountain County Medical Society at the time of his death.

Dr. Joseph Wareinim Jay, a graduate of the Eclectic Medical Institute, Cincinnati, one of the most prominent dentists of Richmond, Ind., and at one time president of the State and Eastern Indiana Dental Associations, died at his home, Dec. 9, 1907, from debility following mastoid disease, after an illness of five and a half days, aged 70.

Arbices Cusminax, M.D., for 38 years an active practitioner at Graysville, dicd at his lome, April 8, after two months' illness from chronie malaria, aged 68 years. He graduated from Jefferson Medical College, Philadelphia, in 1869. He served throughout the Civil War in the Indiana Toluntecr Cavalry. At the time of his deatli he was a member of the American Medical Association, the Indiana State Medical Association, and Sultivan County Mcdical Society.

## (NOTICE IREJALED HV UR. I:OPER'T IIESSLER, LAG.ANSIORT.)

Dr. Joserif G. Rogers, of Logansport, Superintendent of the Northern Indiana Hospital for Insane since its foundation, died April 11, 1908, aged 67 . He lad been in ill health for about two years on account of a purulent renal affection, which terminated in acute peritonitis.

Dr. Rogers was born at Madison, Ind., Nov. $23,18+1$. Confined to his bed from his twelfth to his eighteenth year by Pott's disease of the spine, he pursued during this period a collegiate course of study. U pon lis recovery he read law for a year and then began the study of medicine. Entering Bellevue Hospital Medical College, he graduated thence M.D. in 186t, and in the same year entered upon practice in Madison, being until the close of the war an acting assistant surgeon, U. S. Tolunteer Ariny, in the Madison gencral hospital. In 1865-66 he traveled in Europe, and on returning to America he resumed practice at Madison. In 18\%5-\%6 he was
professor of materia medica and therapeutics in the Indiana College of Physicians and Surgeons. He married June 20, 18:2, Margaret, daughter of Dr. W. H. Watson, of Bedford, Pa. The bereared widow and five grown-up children now moum their loss.

From 1899 to 1883 Dr. Rogers was superintendent of the Indiana Hospital for Insane, at Indianapolis. He was Medical Engineer on the Board of Commissioners for Additional Hospitals for Insane from its organization in 1883 up to the completion of the new hospitals in 1858; at the same time he was Superintendent of Construction for the Torthern Hospital (Longcliff), and on its completion was appointed Medical Superintendent, a position he held continuously up to the time of his death. His knowledge of the Northern Hospital was complete; it began with its very foundation and all through its growth in successive years ; a constant discussion of affairs, in the daily " 1 o'clock conferences" with the heads of departments, kept him in touch with every detail. He was a very systematic man and as far as possible supervised every detail.

He was an upright, conscicntious and just man; cerybody who ever came in close contact with him recognized this fact. He was never harsh or unreasoning; he set high standards and his own example led others to live up to them. He was a close observer, a student and great reader and had a remarkable memory. It is said of him that he knew more about the construction of buildings than many an architect; more about electricity and the wiring of a building than many an clectrician; he knew more about gardening than many gardeners. (The writer recalls the interest Dr. Rogers took in the advent of a number of European weeds in a field of crimson clover, from seed which came from Europe, and the timely efforts made to prevent their spread.) Early each year the garden was replotted and allowances made for the different crops to be sown or planted. The garden had an irrigation system, and this was of constant interest to visitors. The institution was so economically managed that its annual per capita expenses were the lowest of any of the state insane hospitals.
"Longclif"" as it stands to-day is a monument to the man; to sce it is to appreciate what he las done for the state.

Dr. Rogers was a frequent contributor to medical societies and literary clubs and published an occasional paper. His published papers of interest to physieians may be divided into three groups as follows: (a) relating to general medi-
cine and insanity; (b) hospital construction and management; (c) relating to the chemistry of water.

Shortly after returning from college he derised a method of preventing the incrustation in boilers which became commercially successful. When a young man fresh from college. an old steamboat captain who knew him well one day tapped him on the shoulder and told him that with all his knowledge of chemistry he ought to make a study of Ohio river water and try to devise some method by which incrustation of boiler's might be prevented; it was a hint that was promptly taken up. In May, 18i4. he read a paper before the American Railmay Master Mechanics" Association on "steam Boiler Incrnstation, Its Causes, Consequences and Prevention." This paper is of special interest to engineers; it was published in the transactions of the above association for 18i4. '「annate of soda is the reagent used: the process became important commercially. One of the last things the Doctor did was to install a "water purifier" at Longcliff, which obviates the use of the tannate process, which up to then had been used. Dr. Rogers was the first to make a quantitative chemical examination of the sulphated saline waters of Orange County ; the determinations for gas were made at the springs. His paper appeared in the IVestern Journal of Medicine for December, 1869. He suggested the name "Pluto" Well." whose waters seem to play such an important rôle in Indiana politics.

While on the board for ardditional hospitals, he made a special study of lospital construction, and subsequently drew up nearly all the specifications for the new ones-the Northern. Eastern, and Southern-as shown by the reports of the commission at the time.
"The state and Its Insane" is the title of a paper presented before the Indiana Social Science Association, May, 1883; he traced the development of caring for the insane in Indiana and showed the need for additional hospitalsat that time there was only the hospital at Indianapolis. Fifteen rears later he again raised his roice before the State Conference of Charities and Corrections on the same subject-for the new hospitals were full to overflowing and more roon was needed. In 1900, as President of the American Medico-Psychological Association. his address was on ' $/$ I Century of Hospital Building for the Insane:" as a student of what had been accomplished in the United States and in the world generally, and from his intimate knowledge of the Indiana hospitals, he spoke with authority.

The ammal reports of the institution contain many raluable suggestions, as on the importance of pure water in preventing typhoid fever; the draining of wet places and prevention of the breeding of anopheles mosquito and thereby limiting the spread of malaria: of the importance of pure air in the wards and keeping down dust and thereby preventing air-borne affections.

Among early medical papers there are mentioned, in the Atkinson biography. "Carbolic Acid in Purulent Ophthalmia." "Treatment of W'ounds on Ereball," "Sayre's Splint in Hip Disease."
"Thyreoids in Catalepsy" was read before the American Medico-Psychological Association in 1896 , and appeared in its proceedings for the same Jear. It gives an account of thyroid medication carried on in the hospital in 1895-96; the results obtained by the use of desiceated thyroids were remarkable.
"First Aids for the Insane" was read before the Marion County Medical Society in 1898; the paper was intended for, and is of value to, the general practitioner; it was published in the Indiana Medical Journal for April, 1898.
"Cold as a Cure for Tetanus" appeared in the same journal for October, 1901 ; the treatment is based on the theory that cold prerents the growth or derelopment of bacterial life by chilling the injured part, as by iee bags, for several days continuously until the symptoms subside. The Doctor was especially interested in this treatment and induced a number of physicians to try it, with uniformly good results when instituted in time.
"Vocation in Parctic Dementia"-a brief note before the Imer. Med.-Psycho. Issn., in 1599, called attention to the comparative frequency of the affection among railway employés, notably engineers; mental stress and physical jar may be the factors.

The writer's acquaintance with Dr. Rogers goes back to the summer of 1894 , and for orer three years he lived under the same roof. The Doctor was one of the best informed men I ever met; he was at all times a student and a close observer, a clear thinker. In the practice of medicine there are constantly occurring knotty problems where one is in doubt of what is best to do, and all the young men who have been under him (many now adranced in years) can testify what a help and inspiration Dr. Rogers las been to them.

To the long life of a man who has devoted himsell to the welfare of his fellownen justice can not be done in a brief note; a volume could scarcely do him justice.

## PERSONALS

Dr. E. B. Mumford has removed from New Harmony to Indianapolis.

Mrs. E. T. Sisson. Wife of Dr. Sisson. of Greenfield. is ill with pleurisy.

Dr. Toble P. Howard, of Greenfield, is rery seriously ill with heart trouble.

Dr. Walker Scfell, of Terre Haute. has returned from a year's stud! in Tienna.

Dr. M. M. Ad.mis, of Creenfield, who fell and broke his right arm April j. 1908, is slowly improving.

Dr. E. D. Thistux, of Sullivan, has located in Terre Haute and oecupies an office with Dr. Stunkard.

Dr. Ralph Bolilan, of Fort Wayne, was operated at St. Joseph Hospital on April 11 for mastoiditis.
1)r. Henty L. Muscie, of Hoosierville, was received as a member of Clay County Medical Society in April.

Dr. Harri Elliott, of Poland. Ind., and Miss Maude Mendenlall, of Indianapolis, were married April 15.

Dr. George L. shomaker, of Ligonier. has been spending several weeks in Chicago doing postgraduate work.

1r. J. Clifford Willice and Miss Pearl Bond, both of Fort Wayne, were united in marriage on April 22, 190 s.

Dr. Harley Taylor, who in October moved to Thorntown, Ind., has retumed to Rochester and resumed his practice.

Dr. D. W. Sifeek, of Greenwood, was united in marriage, A pril 13, 1908, to Miss Anne Lewis Vivian, of Harrodsburg. Ky:
'fire house and office of Dr. Id. S. Wilson, Berne, Ind.. including all his office fixtures, were destroyed by fire Monday, April 20.

Drs. T. C. Cifford and A. F. Tellet have returned to their work in Brazil after a pleasant winter's sojourn in the Sunny South.

Dr. O. (i, McFarland, of Hamilton. Ind.. was operated on at the Lutheran Hospital. Fort Wayne, April 21, for an attaek of mastoiditis.

Dr. C. W. FiNley will represent the Clay County Medical Society at the Chieago meeting of the American Medieal Association in June.

Dr. Josepif Simonkwiler, of Rockhill, has gone to New York City to take a course at the New York Postgraduate Medical School and Hospital.

Dr. Engar F. Kiser, superintentent of the Indianapolis C'ity Dispensary, was united in-marriage at Muncie April 14, 1908, to Mis: Cleone Hene, of Muncie.

Irr. Augustus LaRue Marsifall, of Indianapolis, was united in marriage, April 21, to Miss Ethel Sahm, daughter of Albert Sahm, Auditor of Marion Comoty.

Dr. E. J. McOscar, Fort Tayne. sailed for Europe by the Mediterranean route on April 29. He goes for study in the elinies at Vienna and other medieal eenters.
I)r. M. R. Conibs, of Terre Haute, is convaleseing after an operation for emprema following a serere attack of pneumonia, and will soon be able to resume his practice.

Dr. J. II. Groff, of Cumberland, has recently purchased the home and office of Dr. IV. I. King, formerly of Greenfield, but now surgeon at the Soldiers' Home. Lafayette.
1)r. S. R. Cunntaghim, for several years surfeon at the State Soldier's Home. Lafayette. has resigned and will soon return to Indianapolis, where he will limit his praetice to surgery.

Dr. Frank Sommers, of Indianapolis, has located in Greenfield, occupring the offices racated br Dr. G. W. Lee, who is now with Dr. W. R. King as surgeon to the Soldiers' Home, Lafayette.

Dr. T. C. Keñedr, of Shelbrille, delivered an address before the Chicago Medical Society, on April 2?. by special inritation, his subject being "The Medical Treatment of Gallstone Disease."

Dr. S. A. Shomatiker, of Poneto, is spending the months of April and May in the rarions postgraduates schools and hospitals of Chicago. After the close of his clinical courses he will attend the Chicago session of the A. M. A.. after which he will return home and resume his general practice in Poneto.

Dr. R. O. McAlexisder, of Indianapolis, together with his wife and two children, left on April $1 \pm$ for Europe, where he will derote his time to the study of abdominal surgery and gynecology, most of the time being spent in Vienna and Berlin. They will risit points of interest in Italy first. They will return about the 1 st of October.

## NEWS, NOTES AND COMMENTS

D. Appleton $\mathbb{A}$ Compiny of New York announce their remoral to their new offices at 29-35 West Thirty-sccond Strcet, New York City.

At the annual meeting of the Twelfth District Medical Society, held at Fort Wayne, April 21,1908 , there were 154 members and guests present.

Dr. George B. Mcelellan, alias Dr. Diamond Dick, in the local courts of Marion, April 8 , was found guilty of practicing medicine without a license and was fined $\$ 25.00$ and costs.

ONe of the special features of the 1908 session of the American Medical Association is to be a series of ahmmi remnions of the different medical colleges in this country: Owing to the central location of Chicago and its mnusual opportunities, a larger attendance than usual is anticipated.

The commencement exercises of the combined medical schools of Indiana will be held in Bloomington Wednesday, May 20, at 10 a. m. Dr. W. N. Wishard will be the principal speaker upon this occasion. The diplomas will be presented by President II. L. Bryan. Following the exercises a dinner will be given.

Tire Indianapolis Medical Societry, which has been meeting in the Willoughby Building for about ten years, will change its quarters to the assembly room of the Commercial Building, May 1, 1908. This change is made necessary by the increase in membership and attendance, the present roons being too small.

The following physicians, headed by President IV. L. Bryan of Indiana University, are now in the east on a tour of inspection of the medical colleges and hospitals with a view to the acquisition of knowledge which will help in the improvement of the course of instruction to be giren by the new medical school born of the coalition of the three former medical colleges of Indiana: B. D. Myers, J. IV. Ford. Miles F. Porter, John F. Barnhill, A. B. Graham, F. F. Hutchins and E. D. Clark. They will risit Baltimore, Philadelphia, New York, Boston, Ithica and New Haven (Yale). A preliminary announcement will be issmed immediately after the return of this committee.

A conference was held at the Claypool Hotel, Indianapolis, Ipril 21, to consider the matter of enforcing the medical law. Dr. J. C. W'ebster of the State Board of Medical Registration and Examination presided. Talks were made by Drs. Spurgeon and Gott of the board, Attorney Gavin and Assistant Attorney General Carins, Dr. F. C. Meath, secretary of the Indiana State Medical Association; Dr. J. H. Weinstein of Terre Haute, councilor for Fifth District; Dr. R. H. Ritter, secretary of Indianapolis Medical Society; Dr. MI. T. Knowlton of Terre Mante, Dr. E. II. Haggard for the physio-medical organization. Dr. IV. P. Best for the eclectics and others. The concensus of opinion was that the county societies should aid the board by means of a committee on prosecution from each society, the committees from different schools to co-operate where possible.

The Association of American Teachers of the Diseases of Children will hold its annual meeting in Chicago at the Great Northern Hotel, corner of Jackson Boulevard and Dearborn Street,
on June 1. Requirements for membership in this association are somewhat unique. To be eligible one must be a regular physician resident in the United States, Canada or Mexico, who is in good professional standing and membership in his county or local medical society and actively engaged as professor or associate professor or clinical professor of pediatrics, or as adjunct to such a chair, or who holds the position of lecturer on this branch or an equivalent position in a recognized medical college, or who is a member of a properly organized hospital or dispensary staff actively engaged in the treatment of children. All such are invited to join the association, and all physicians and surgeons interested in children are invited to attend the meeting. Its objects are the study, the teaching and the practice of pediatrics.

## SOCIETY PROCEEDINGS

## PRELIMINARY PROGRAM FOR STATE ASSOCIATION MEETING AT FRENCH LICK, JUNE 18-19, 1908.

Disposal of Sewage in Small towns.
Geo. B. Lake, Wolcottville.
Epidemiology of Typhoid Fever.
H. O. Bruggeman, Fort Wayne.

Concerning Anesthesia; Hyosein, Morphine, Cactin

Anesthesia.
Dermoid Cysts.
Thos. MI. Jones, Anderson.
H. (r. Nierman, Fort Wayne. Six Hundred Cases of Labor in Private Practice.
H. A. Cowing, Muncie.

Anesthesia Considered as a specialty.
C. N. ('ombs, Terre Haute.

A Consideration of General Anestaeties.
W. R. Davidson, Eransville. Relation Between Heart and Kidney Affections.

Robert Hessler, Logansport.
Strangulated Hermia, Importance of Early Recognition and the Necessity of Its Radical Treatment.
T. B. Eastman, Indianapolis.

Scoliosis.
David Rose, Indianapolis.
The Technic of Harelip and Cleft Palate Operations.
J. R. Eastman, Indianapolis. Obstruction of the Bowels. E. D. Clark, Indianapolis. Obstruction of the Bowels Due to Traumatism.
J. H. Ford, Indianapolis.

Raynaud's Diseasc.
Joln Kolmer, Indianapolis.
Relation of Physicians and Druggists.
S. E. Earp, and J. R. Francis, Indianapolis. Some Considerations of Intra-Sigmoid Disease.
G. W. Combs, Indianaן.olis. The Diagnosis and Treatment of Sinus Thrombosis.
J. F. Barnhill, Indiana polis.

A Few Important Points in Regard to Nervous and
Mental Diseases.
C. F. Neu, Indianapolis.

Diabetes; Diagnosis, Treatment and Report of a
Case.
L. L. Mebley, Summitville. Etiology of Chorea and Rheumatism.
W. D. Hoskins, Indianapolis.

Some Ocular Manifestations in General Diseases.
W. F. Hughes, Indianapolis.

Tuberculin Therapy. W. T. S. Dodds, Indianapolis. Treatment of Diabetes. Geo. D. Kahla, French Lick. Symposium on Exophthalmic Goiter:
(a) Etiology and Pathology.
J. A. McDonald, Indianapolis.
(b) Symptom- and Medical Treatment.
F. O. Dorsey, Indianapolis.
(c) Surgical Treatment. J. V. Reed, Indianapolis.

The Mordern View of the Etiology and Treatment of Anne Tulgaris and Aene Rosacea.
A. M. Cole, Indianapolis.

Myocardial Failure from Other Causes than Valve Tesions. A. C. Kimberlin, Indianapolis. Myocarditis from a Purely Pathologic Standpoint.
R. H. Ritter, Indianapolis.

Atypical Pneumonia. C. R. Sowder, Indianapolis.
Sympoiium on Obstetrics:
(a) Normal Labor. Jane Ketcham, Indianapolis. (b) Toxemias of Pregnancy.

Louis Burckhardt, Indianapolis.
(c) Puerperal Infection.
G. B. Jackson, Indianapoli-.

A Plea for State Control of Inebricty and Drug Addic-
tions. A. L. Wilson. Indianapolis.
A Plea for the C'se of Pharmacopeal and National Formulary Preparations.
F. H. Carter, Indianapoli*.

The Early Clinical Diagnosis of Pulmonary Tuberculosis. T. Victor Keene, Indianapolis.
Gonorrheal Ophthalmia. IV. N. Sharp, Indianapolis. The Present Status of Syphilis.
A. W. Brayton, Indianapolis.

The Puerperal Perineum-Protection and Repair.
II. I. Rosenthal, Fort Wayne.

The Diagnosis and Treatment of Fluctuating Tumors of the Female Pelvis. George H. Grant, Richmond. Excuses in Surgical Cleanliness.
M. A. Austin, Anderson.

## ALLEN COUNTY.

FORT WAYME MEDICAL SOCIETY.

## (Meeting of March $3^{1}$, 1908.)

Society met in regular session at the Assembly Room, with 26 members present. President and rice-president heing absent, Dr. S. H. Havice was called on to preside. Minutes of preyious meeting read and approved.

Sponges Left in the Abdomen.-Clinical case report by Dr. MI. F. Porter. Patient, female, with personal and family history good. Had been married eight years. Had one child. Three years prior to her visit to Dr. Porter she had had hematuria, and for two years had had pain in the right side, which had been constant for two months. The bowels were regular. On examination tenderness was found at McBurney's point and in both ovarian regions. Diagnosis of chronic appendicitis with tubal involvement was made and operation performed, patient making an uneventful recovery. She was discharged from the hospital three weeks after her operation. A week or ten days following her discharge Dr. Porter received a message from her doctor saying tuat strips of gauze were coming away in rolls the size of a pencil. Dr. Porter then

Went to sce the case and in consultation with her doefor made an examination and found that there was some cloth protruding from the vagima. This was removed. The cloths were cleall sare that they were stained with urine. The ragina was perfectly heathy, there being no eridences of fistula. Dr. Porter cold her physieian that this material did not come through from the abdominal earity, but was introdueed into the vagina by the patient herself, and he suggested that they retire for a little, venturing the suggestion that on their return there would be more cloths eoming away. On their return they found more rags, as Dr. Porter said. He exhibited these rags for inspection They were mostly cotton goods and not surgical ganze. Dr. Porter said that he was inelined to question the adrisability of allowing comvalescent patients to assist in making sponges, as it might cause a surgeon quite a bit of annoyance to prove to the jury that this material really did not come from the abdomen and that the surgeon had not been negligent.

Abscess of the Brain was the title of a paper by 1)r. H. O. Bruggeman.

Tumors of the Brain, Varieties, Pathology and Symptoms.-This subjeet was presented by Dr. W. W. Carey.

In opening the discussion Dr. Porter said that in considering the etiology of abseess of the brain we are apt to overlook the etiologic importance of common infections such as typhoid. He said he had scen eases of multiple abscess from chronic otitis media, and has seen acute meningitis, and a phlebitis of the lateral simus and abseess in it. He has seen a ease of multiple abscesses where there were sinuses leading to the outer world and these could be followed into the calvarium. They were fust about to operate the case when the murse reported that the patient had ceased breathing. Artificial respiration was instituted and the patient was kept alise by this means for sixteen hours. She died and a postmortem showed multiple abscess in the occipital lobe. Ite said we know little of the real cause of death in these sudden deaths in abseess of the brain. He reported a ease of removal of a tumor between the corpus callosum and falx which proved to be a sareoma after examination by Dr. Rhamy. latient is still living and does fatm work. These cases of tumor often go blind if unattended. However, they need not be allowed to go blind.

Dr. Weaver said that Cushing says respiratory failure is a common oceurrence in cerebral abseess, and advises having apparatus handy for making artificial respiration when operating. He referred to a ease in which the heart beat twenty-three hours after failure and leueocyte eount in differentiating cerebral abscess from meningitis.

Dr: Rulson said he had seen two or three cases of frontal abseess with practically no symptoms, and has seen two cases of abseess in prefrontal region without any symptoms until about one week before death, and on autopsy they were found to have been of long standing. He has also seen quite a number of epidural absces-es and a few eases of simns abseesses and involvement of the brain substance in eonnection with his mastoid work.

Dr. Havice spoke on ocular manifestations of cerehral tumors and abscess. In a brain abseess you have the history of a septie condition. He said that very small growths may produce ehoked dise. Choked dise
is ome of the very best evidences we have of intra cranial growth.

Hotion wats made and earried to adjourn meeting of April $2 l$, and carry the prongan orer matil the following date.

Dr. Vim lhuskirk made a motion, whiel was carried, that a committee be appointed to arrange for entertainment of visitors April 21. Chair appointed Drs Kane. G. Van Sweringen and Van Buskirk. Aldourned.
J. C. Wallace, See.

## (Meeting of April 7, 1908.)

Soeiety met in regular session at the Assembly loom. Tuesday evening, April 7. with 18 members present. Mecting called to order by President Calvin.
Lupus in the Sacral Region. Clinieal case report by Dr. 13. Van Sweringen. He exhibited pietures showing the condition, which started eighteen monthis prior to the date of taking the pictures. The ease was treated by: a thorough curettement and then by actual cautery on the floor and edges. The patient is now being treated with tuberculin, with apparently good results, as the area is now about one-half the size it was two weeks ago.

Dr. Van Sweringen also reported a ease of Epithelioma of the Vulva with Secondary Involvement of the Inguinal Glands. The vulva and inguinal glands were removed two weeks ago and the ease is now progressing nieely.

Infection of the Eye with Influenza Bacillus.-Case report by Dr. A. E. Bulwon, Jr. Man presented himself with a suppuration of the cornea, and anterior ehamber of the eye was filled with pus. Dr. Bulson endeavored to evacuate the pus by incision in the cornea, but found that plastie iritis had set in and he was later compelled to remove the eyelall. A specimen of pus was given to Dr. Rhamy for examination and he reported nothing found save a few organisms that looked like pneumoeocei. Patient shortly after dereloped a pmoulent discharge from his good eye which was purulent in its mature. Following the removal of the eye the mucous membrane beeame corered with a thick purulent discharge. Ordinary antisepties were employed but without response. Another examination was made by Dr. Rhamy and he reported that the infection was probably due to influenza bacillus. Two applieations of pure tincture of iodin eured the ease.

Adjourned.
J. C. Wallace, See.

## CLARK COUNTY.

It the April meeting of the Clark County Medical Society the following officers were elected for one year: President, James H. Walker, Hemryville; viee-president, Claud C. Crum. Jeffersonville; seeretary-treasurer. David Cohen, Jeffersonville; censors, Drs. J. N. Ruddell, Jeffersonville, Wayne Crum, Sellersburg, and Cad Jones, Charlestown; delegate to state association, Dr. W. Marshall Varble, Jeffersonville.

Adjourned.
Dayid Cohen, See.

## DEARBORN COUNTY.

The regular meeting of the Dearborn County Medieal Society was held Mareh 31. The program consisted of a lecture ly. Dr. E. G. Zinke, Cincinnati, Ohio, on "The Siguificance of Some Abdominal Pains," and an ad-
dress by Dr. W. H. Stemm, of North Vernon, Councilor for the Fourth District, on "We Want, If Possible, to Injeet More Life Into the Dearbom Comnty Medieal Society." Twenty members were present to enjoy the program and the banquet which followed. As a result of the meeting it was roted to have regnlar monthly meetings instead of having them only every other month as heretofore.

Adjourned. O. S. Thquitir, See.

## DECATUR COUNTY.

Deeatur County Medical Society met April 3, all the members being present but Drs. Pentle and Sanders. Dr. Bland led the work on "The Lmngs: Gross and Microscopic Anatomy, blood Supply, Functional and Nutritional: Nerves ant Lymphatics," and Dr. R. M. Thomas eonducted the discussion of the subject, "Physiology of Respiration." Dr. White rearl a paper on "Normal Physical Diagnosis.'

Adjourned.
M. A. Tremain, See.

The society again met on April 10. with Dr. W. II. Stemm of Nortl Vernon, Councilor of the Fourth District, present, who took part in the disenssions and gave a talk on perfecting the comnty and state organization, and espeeially commending the methord of this society in conducting the postgraduate work. Drs. Wood, Kercheval and Bland conducted the discussion of the subject, "Bronchitis, Acute and Cluronic. Congestion of the Sungs, and Hemoptysis."

## Adjourned.

M. A. Tremans, See.

The society met April 17. and the subject. "Pnenmonia, Lobar and Lobular," was studied with Drs. Bird and Tremain as leaders. It was roted to meet the following Tuesday at $7: 30 \mathrm{p} . \mathrm{m}$. to consider the treatment of preumonia. Dr. Wood led in the discus sion, going over the different methods of treatment, showing the advantages and disadrantages of each.
Adjournẻd.
M. A. Tremain, Sce.

At the regular mecting of the society, held April 24 , Plenrisy, Emphysema, Gangrene of the Langs and Abseess of the Lungs" were discussed by Drs. Bentle, Sanders, Thomas and White.

Adjourned.
II. A. Tremain, See.

## DELAWARE COUNTY.

The regular mecting of the Delaware County Medical Society was held Ipril 3, at which time a committee of three was appointed to investigate the duty and right of the society to prosecute violators of the law in reference to the practice of medicine. An instructive paper was presented by 1)r. E. B. Mann on "Puerperal Eclampsia," in whieh the eause and treatment were the principal points diseussed. He said that renal insufficiency and toxemia were the chief eauses, the aceumulation of toxins in the blood acting cither by direct action of the nerrons system or by irritating action on the capillaries, thereby produeing anemia of the brain and conrulsions. Ile also said: "The onset of symptoms indicative of gestational toxemia indicate the use of a milk diet, laxatives, diureties, lot baths, flannel next to the skin, plenty of water, and with high arterial tension, piloearpin muriate, gr. I/6 b. i. d. or t . i , d., as indicated. Give chloroform at onset of ronvulsions and deliver if conditions permit. If not, continne active eliminative
treatment." The use of morphin was strongly eondemned.

In the general discussion which followed, the eliminative treatment was farored. Morphin was adrocated by one, who stated that the eliminative treatment was too slow when convulsions were oceurring.

The death of Dr. W. L. Snyder, of Urbana, Ohio, having oceurred in Muncie April 2, suitable action was taken by the soeiety and a committee appointed to forward resolutions and a floral offering to the family of the deceased.

Aljomrned.
II. S. Bowles, Sec.

## ELKHART COUNTY.

The Elkhart County Medien Society met in regular session Thursday evening, April 2, with twenty-three members present. Minutes of previous meeting read and approved. The first paper of the evening was by Dr: Kirby, subject. "Post-Partum Fever." and showed earefnl preparation. It was well discussed. The second paper was hy Dr. Lemon on "Carcinoma of the Breast." He gave the present progress in cancer cascs. the results of the radical operation and the $x$-ras. The discussion was opened by Dr. Fleming, followed by Dr. Beeknel and others.

Provision was made for the full attendance of the society at the funcral of Dr. Dumaw, who died April I. Dr. Stauit was anthorized to secure a proper floral piece in the name of the society.

Adjourned.
George IT. Spoins. Sce.

## GIBSON COUNTY.

The regular meeting of the Gibson County Medical Society was lield at Fort Branch April 24 . The program was as follows:
"Anatomy of the Bronchial Tubes," Dr. H. H. Alexander, Princeton; "Claronic Bronchitis." Dr. G. C. Kendle, Prineeton; "Adenoids," Dr. WV. WV. Blair, the discusion of this paper being led by Dr. F. II. Maxam, Princeton; and "Fracture of Superior and Inferior Maxillary," Dr. Chas. Miller. Princeton.

At the ammal election of officers, held March 27 . the following officers were elected to serve for one year: President. C. C. Kendle, Princeton; Vicc-president, Harry Gudgel. Ha\%leton; secretary-treasurer, A. J. Ziliak. Princeton; board of censors, Drs. W. 'I. Williamson, Fort Branch, Martin Montgomery, Owensville, and D. H. Swan. Francisco.

Adjourned.
A. L. Ziliak, Sec.

## GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held April 28. The paper of the evening was presented by Dr. Powell on "Vomiting of Pregnancy." Among other things she said that reflex romiting oceurs from stimulation of afferent nerves of the urogenital tract hy the stretching of the intermal os and malpositions. Correct malpositions by use of tampons and keep this up, if neeessary, until the uterus is out of the pelvis. While reflex vomiting is only present during the first fourteen weeks, the resourcefulness of a physician will be taxed many times. Every drug of a sedative character has been used, but potassimm bromid does more good to more eases than
any other one drug, given either per os or reetum. lis action is sedative to reflex action. Diet is very important. We now know that toxic conditions are some of the causes. Vomiting is one accompaniment of uremia when not due to pregnaney, so vomiting in this condition must we helped by elimination. Bouchard deprecates the use of sweating, because it lessens the amount of urine, and advises eopious cold drinks and eold bathing, but by whatever form, "elimination" is the word alwars before us. Metehnikoff demonstrates that when toxins are due to utero-hepatie origin, they are combated by ferments found in acid milks, as buttermilk, sour milk, ete. When patients can not take these the ferments may be taken by eapsules. If the momids are used in these conditions, use the sodium salts, as all salts of potassium are contraindieated in uremia. After all forms of treatment have failed, conserve the life of the patient by removing the cause of the abortion. Dr. V. V. Cameron said, "More than two physicians should be necessary to say when an abortion is to be performed." Dr. W. A. Fankboner reported many eases showing that the resourcefulness of a physician is needed. He also reported one ease of hydatid mole where there was intense romiting.

Adjourned.
O. W. MCQuown, See.

## GREENE COUNTY.

The Greene Connty Medieal soriety held its regular meeting at Switz City on April 16. Two very interesting papers were read on "Acute Mania." by Dr. J. W. Clifford and 1)r. W. R. Cravens. The main points in differential diagnosis between acute mania and delirium were emphasized as follows: In acute mania consciousness is not entirely lowt, and fever is ahnout always absent, while in delirimm conscionsness is abolished and ferer is usually present. The papers were diseussed by the members and highly complimented. The next meeting of the society will be replaced by the meeting of the Seeond Distriet Medieal Society at Bloomfield, May 14. 1908.

Adjourned.
F. A. Van Sandt, See.

## HANCOCK COUNTY.

The Hancock County Medieal Society met April 2, at Grenfield. The paper of the cwening was by Dr. E. R. Gibbs, on the subject, "The Bacteriology and Pathology of Gonorrlea." A general discussion followed, whieh added much interest to the meeting. The next meeting will be May 7 .

Adjourned. E. I. Gibbs, See.

## MARION COUNTY.

## THE INDIANAPOLAS MEDCAL sOCIETY.

## (Meeting of March $17,1908$.

The society was ealled to order in the clinical amphitheater of the City Hospital by the president, Dr. IVynn. The minutes of the last meeting were read and approved. The application of Dr. Charles F. Voyles was read the first time and ordered posted.

Peculiar Psychopathy.-Dr. A. E. Sterne presented the first case. This was a womm, aged 41. She came into the hospital several weeks ago in a confused condition, unable to give a conneeted history and unknown
to her relatives. For forty-eight hours after admission she was delirions, requiring restraint. This gradually subsided and she was able to give her history. Follow. ing an illieit coitus several months ago, she had a profuse menstruation with some irregularity later. She then developed a leucorrhea and beeame intensely worried with the belief that she was both pregnant and the rictim of venereal dicease. Without any history, the delirium was at first thought to be that of typhoid, especially as she had an irregular temperature. Later she told that she had been using large amounts of whiky seeretly for years. Dr. Sterne now believes that the delirium was due to the sudden and eomplete withdrawal of the alcohol. Examination reveals an aortic regurgitation, and a large mass to the left side of the uterus which is probably a fibroid tumor and is to be held responsible for the menstrual irregularity. There is no venereal disease present. The patient is now becoming much better in every way. The condition is probably one of pure psychopathy:
Internal Hydrocephalus.-Case presented by Dr. Sterne. Woman who was brought into the hospital unconseious, and so far no history has been obtained from her. She was supposed to have been thrown from a street car. She has had a slight rise of temperature, but for the most part the temperature has been subnormal. There las been projectile vomiting. The pulse has been rery irregular in its rate. running as low as 50 for several days. There is deviation of the eyes and the right eye shows very little movement. Pupil reflexes are normal. From the friends it has been learned that she has been subject to epileptiform attacks. The patient is greatly deformed; the head is large, measuring $261 / 2$ inehes in its greatest eircumference. The face is small and asymmetrical. There is an extreme degree of rotaro-lateral eurvature of the spinal column. Dr. Sterne believes that there has existed here for years an internal hydroeephalus with dilatation of all the ventrieles, probably including even the fourth. The aceident has simply exaggerated the old condition. The projectile vomiting and the slow pulse would indicate cerebral compression either from fluid or perhaps a brain tumor. Lumbar puneture would be of very little value here either for diagnosis or treatment.

Tubercular Tumor of the Cerebellum.-Case report by Dr. E. C. Reyer. A Hunyak, umable to speak Finglish, who has been in the hospital for one month. From his friends it was learned that following some injury to the head received in a fracas, he eomplained of headache, malaise and romiting for ten days before entering the lospital. Since entering the hospital he lias been in a semi-stupor from which he could be easily aroused. He has had a very irregular temperature, seldom going abore normal, usually subnormal. The pulse has ranged from 52 to 80 , but has not shown harmony with the respiration. The tongue is coated, there is an expression of pain on the face, he groans frequently, and has projectile vomiting, especially if turned to the left side. He is now markedly emaciated. The heart and lungs are negative, the abdomen is distended with tenderness in the right lower quadrant. There is some rigidity of the neek, the pupils contract slowly to light, the left being slower and somewhat dilated. The patellar reflex is diminished, there is no Babinski, Kernig's sign is present, and there is some ataxia of the right hand. The urinalysis is negative, but the ophthalmo-tubereulin test is positive. The diagnosis is between an injury to the cerebellum and
a tumor probably tubercular. He believes the latter to be the true condition and the right lobe of the cerebellum to be the one affected.

Peripheral Multiple Neuritis.-Case report by Dr. E. C. Reyer. Make, aged 51, now in the tubereulosis hospital. He exhibits the typical signs of a peripheral multiple neuritis of two year's standing. The case is of interest as to its etiology. There is no aleoholic nor diphtheritie history, and in the absence of these usual causes or any other toxemia, it is possible that the eause of the condition is the toxemia of tuberculosis.

Probable Thrombotic Lesions in the Cerebellum.Case report by Dr. E. C. Reyer. Man, aged 80, who had perfect health up to nine years ago, when he fell and injured his head. After that there was a tendency to fall to the right. Later he fell and was unconscious for some time. He regaineu consciousness, but dimness of vision and impaired hearing persisted. He came into the hospital with a paraplegia which developed in the eourse of four or five days. Now the patellar reflex is absent, there is some ataxia of the right leg, the gait is unsteady but not typically ataxic. Dr. Rever believes that there are thrombotie lesions in the cerebellum due probably to vaseular sclerosis.

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\begin{array}{ll}
\text { The society adjourned. } & \text { R. II. Ritter, Sce. }
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## TVIAYAPOLIS EYE, EAR, JONE AND THROAT SOCIETS.

The fourth regular meeting of the society was held at the office of 1)r. Thos. C. Hood on the evening of March 30, 1908. Dr. Wim. F. Clevenger demonstrated a case of adeno-fibroma of the nasopharynx in whiel the result of surgical procedure had been entirely suecessfin. Papers were read by Dr. Keiper of Lafayette or: "The Calmette Reaction for the Diagnosis of Tuberculosis," and Dr. John R. Neweomb on "The Value of Ophthalmoscopie Examination in the Diagnosis of Intracranial Complieations of Suppurative Disease of the Niddle Ear."

The question of adopting a code of ethies and a fee bill was discussed by the society, which resulted in the adoption of a code of ethics similar to that of the American Medieal Association. The question of a fee bill was discussed freely and left in the hands of a committee for further report and action.

The first annual meeting will be held at the University Club on the evening of May 26, 1908. Dr. Samuel A. Johnston will be the chairman for the evening and Dr. John J. Kyle viee chairman. Dr. Wim. L. Ballenger of Chicago will be the guest of honor.
Adjourned.
H. C. Parker, Sec.-Treas.

## MIAMI COUNTY.

The Mareh meeting of the Miami County Medieal Society was held in the Commercial Club Room, Peru. Meeting was called to order by President Griswold, with nine members present. Ninutes of previous meeting were read and approved. The paper of the evening was by Dr. John Spooner, on the subject "Techuic of Brain Surgery." A general discussion followed. The application of Dr. Spooner was received and he was eleeted to membership in the society.
Adjourned.
D. C. Ridenour, Sec.

The Miami County Medieal Society met in regular session April 24, with eleven members present. Society ealled to order by Presuent Griswold. Minutes of
previous meeting were read and approved. Dr. F. L. Resler of Amboy read a very interesting paper on "Therapeutic Action of the Salicylates," whieh was freely discussed. Dr. Andrews presented a patient suffering from a peculiar affection, with marked purpurie skin manifestation over the body, principally over the pelvie and lower extremities, which disease he thought to be purpura rheumatiea. In the discussion which followed the diagnosis was confirmed, because of the severe joint pains that accompanied the eruption and the early clearing of the rheumatic symptoms under rheumatie medieation. Dr. P. B. Carter of the Wabash Railways Employes' Hospital at Pern, presconted a patient for diagnosis suffering from a peculiar nervous affection. An interesting diseussion followed. It seemed to be a central lesion, though masked for positive diagnosis.
Adjourned.
D. C. Ridexour, See.

## MONROE COUNTY.

The Monroe County Medical Society met Thur-dar evening, April 30, at the home of Dr. Fred Batman. Blomington. Drs. Fleteher Gardner and Henry Alburger presented papers on "The Diagnosis and Operative Treatment of Ifypernephroma." Election of officers.

Adjourned.
C. A. Coleman, See.

## PIKE COUNTY.

The I'ike County Medical Society at its regular an mal meeting elected the following offieers for the ensuing year: President, T. R. Rice; vice-president, S. IR. Clark; secretary-treasurer, E. S. Imel; board of censors, Drs. Hunter, Kime and Basinger; delegate to state association meeting, Dr. C. Abbott, and alternate. Dr. J. W. Coleman. Dr. Basinger reported a case and read a paper on a very interesting case of polalic wersion done under morphin, hyoscin and cactin anesthesia, with good results.
Adjonned.
E. S. Imel. Sec.

## POSEY COUNTY.

The Posey County Medieal Society met in regular session at Cynthiana, Indiana, May 5, 190s. The papers of the evening were as follows: "Things of Interest to the Physician," Dr. U. C. Whiting, New Harmony; "Tramatie Iritis," Dr. C. J. Hall, Caborns; "Treatment of Aeute Diseases of Children." Dr. J. E. Doerr, Mt. Vernon; and "Chemical and Therapeutic Incompatilility:" Dr. N. W. Murplıy, Stewartsville.
Adjourned. - F. H. Stallivgs, Treas.

## PUTNAM COUNTY.

The Putnam County Medical Society met April 2 with Dr. Clint T. Baring, of Greeneastle, and in accordance with the ontline of the A. M. A., Dr. Walter MeGaughey presented the subject, "Anatomy of the Trachea and Bronchi," and Dr. Charles Sudranski followed with the nerve and blood supply, also demonstrating the physiology of respiration. Dr. Jerome M. King, by the use of self-constructed charts, gave the society a treat as to normal and physieal diagnosis of chest diseases.

The subjeret of "Acute and Chronie Bronehitis," was warmly disensed by jors. J. V. Bastin, King and Gille-pic.
1)r. Walter Ifutcheson presented a very valuable paper upon "Lung Congetions and Hemoptr-is," aml the discussions which followed were cut short for want of time.
The society met $\lambda_{\text {pril }} 16$ at the offiee of Dr. J. II. King. Captain Eugene Hawkins presented the first number on the program. discussing at length the causes of pneumonia and giving a tabulated aecount of the pathological conditions eaused by the different micrococei. The subject was also diseussed by many of the members. 1)r. C. T. Zaring presented a very interesting paper on the "Pathology of Pncumonia." Dr. W. W. Tueker differentiated eroupous from eatarhal pmeumonia, and Dr. Joscph Gillespic read a paper upon "Abseesses and Gaugrene of the Lungs." Dr. Joseph L. Preston was physically mable to be present to discuss the subject of "Plemisy." This is only. the second time when the members of the society have been unable to take part when heir names were on the program, sinee the adoption of the postgraduate course -a good reeord.
Adjourned.
J. V. Bastin, Sec.

## RIPLEY COUNTY.

It the April meeting of the Ripley County Medieal society Dr. Bine Whitlach reported a case of "Typieal Myxedema," which was followed by a general discussion. Dr. John N. Hess was chosen delegate to attend the ammal meeting of the State Medical Association at Fremch Lick. Drs. Lolten, Beckett and Hess will read papers and report cases at the May meeting. The meeting was thoroughly enjoyerl.

Adjourned.
M. J. Comaes, Sec.

## SPENCER COUNTY.

The Spencer Comnty Medieal Society met in special ses-ion Tpril 21, J90s. with 1)r. (. S. Baker of Chrisney. Ind. The first paper of the evening was "Early Experiences of a Thysician." by Dr. G. F. Alye, who related a case of labor with honr-glass contraction of the uterus. Ile also reported a case of using a pair of scisoors as eraniotomy instruments to effect delivery. He gate an instance of a ease of rupture of the uterus and deliyery of child through rupture and ragina in place of performing a Cesarean section; all of which was rery interesting. The second paper was on "Treatment of Pheumonia." by Jr. C. S. laker. Pneumonir bering a self-limited disease he advised supporting the vital forces mutil crisis. Dr. J. G. Weiss of Rockport was lected to represent the socicty at the meeting of the Indiana State Nedical Association to be heled at French Lick, Indiana, June 18 and 19.
The next meeting of the society will be held at Chrisney, May 19, J908.
Adjourned.
H. (2. Winte, Sec.

## UNION COUNTY.

The Union County Medical Society met in regular -(waion at Liberty April 1. Dr. Mr. F. Vereker read a paper on "Obstetrics." Dr. E. R. Beard read a paper on "'ratitis in the Female." Joth papers were freely
discused by all members present. The next meeting of the society will be held Junc 3, 1908.

Aljommed.
そ. P. Weist, Sce.

## VIGO COUNTY.

The Vigo County Meelical Society met in regular session in the Commercial (lub rooms at Terre Haute, April 7 . The lectures of the evening were by Jr. Fink on "The Anatomy of the Blood," and by Dr. Domelly on "The Physiology of the Blood." A letter was read inviting the Vigo County Medieal Society Jibrary to join the Medical Library Association. Action deferred. Drs. Knowlton and Gillum were sent to represent the soeiety at the meeting of the State Board of Medical hegistration.

## Adjourned.

Charles N. Combs, Sec.
The regular meeting of the Soeiety was held at the usual place April 14. The papers of the evening were lyy. Jr. Jett on "Secondary Anemia," J. H. Weinstein on "Chlorosis," and E, L. Mattox on "Pernicious Anemia." Dr. Beruhemer showed a case of aneurysm of the innominate artery, involving the right subclavian and earotid for a short distance. The patient was a young student given to athletics. Dr. Knowlton made a bloorl count of Jr. Nattox to demonstrate the teehnie of enumerating the red and white cells.
Adjourned.
Charles N. Combs, See.
The society met in regular seswion at the usual place, April 28. Dr. C. N. Combs gave a lecture on "Addison"s Disease," showing lantern slides of the suprarenal capsule of man and of a cat, and of tubereuiosis of the adrenals, and also a fresh dissection of the suprarenal gland in the sheep. He also gave a short talk on blood examination. showing the simplieity of making a differential count and urging its more frequent use. Dr. Blomerer aloo lectured on "Hodgkin"s Disease."
In the discussion Dr. Knowlton spoke of grafting the gland from the lower animals in the eure of Addion-: disease. Dr. Sehell said the diagnosis of Hodgkin:disease is not yet worked out. The tendeney now is to eliminate Hodgkin's disease as a disease per se since it eavers a number of other conditions. He mentioned Stemberg's hypothesis but most investigators reject this "sarcoma of the blood" theory as absurd. During the past year he had seen as many as a dozen sudden deaths while taking x-ray treatment for this disease. and he eautioned the greatest eare in applying the Roentgen stream. Dr. Gilhum described a postmortem made on a young man whose case could not be diagnosed. The symptoms of Addison's disease were entircly absent, yet he found both adrenals enormon-ly enlarged, assoeiated with a tumor of the liver. The microscope revealed tubereulosis of both loealities. He also said that the differential blood eount saves many canes of typhoid ferer from being ealled pmeumonia and enables us to diagnose perforation of the bowel in time. as we are rarely able to do by the ordinary signs. Dr. Jett related the findings in a postmortem which he made in an atypical ease of Addivon's disease. A large retroperitoneal sarcoma enclosed the entire kidney and suprarenal gland and prevented them from properly performing their functions. Dr. C. N. Combs presented three children in the same family with the elassieal symptoms of hereditary syphilis, including successise crops of blels on pahms and soles, macular eruption,
interstitial keratitis, notehed teeth, onychia, enlarged spleen and eularged epitrochlear and post-eervical glands.

Adjourned.
Charles N. Combs, See.

## WABASH COUNTY.

The Wabash County Medical Society niet April 15 at North Manehester, for the first time in its history This was done in honor of Dr. M.. O. Lower, for more than thirty years a member, but who, owing to confinement due to illness, had bern mable to attend soeiety meetings for several vears. An claborate dinner was served at the Young IIotel, Dr. F. S. Kitson of North Manchester being the host. After dinner the society repaired to the residence of Dr. Lower where the formal program was followed. The paper presented for discussion was "Treatment of Puerperal Fever," by Dr. F. S. Kitson, which was discussed at length by most members present. The following applieations for membership were received: Drs. Geo. D. Balsbaugh, North Manchester; Joln B. Shipley, Laketon; Geo. L. Shoemaker, North Manehester; and Anna Wilson, Wabash. The regular date of mecting was changed from the third to the fourth Wednesday of eaeh month.

Adjourned.
L. E. Jewett, See.

## ELEVENTH COUNCILOR DISTRICT.

The first meeting of the Eleventh Councilor District Medical Society was held at the Barnett Hotel, Logansport, April 29, 1908. The first number of the afternoon program was the president's adtress, by Dr. Chas. H. MeCully, of Logansport. "The County Medical Organization: How to Make it Interesting and Profitable," was the title of a paper by Dr. C. M. Kennedy of Camden. The discussion of this paper was opened by Dr. R. F. Frost, Huntington. Dr. Grant Goodwin, Montieello, read a paper on "Discases of the Rectum," which was diseussed by Dr. Glenn Henley, Fairmount. "A Plea for Early Diagnosis of Pyothorax and for Early Operation, with Report of Case of Resection of Chest," was made by Dr. E. II. Griswold, Peru, and the diseus. sion was opened by Dr. Chas. L. Wright, Huntington. Dr. James Wilson of Wabash read a paper on "Etiology and Treatment of the Stomach Troubles We See Every 1)ay," which was discussed by Dr. W. A. Fankboner of Marion. The meeting was followed by a banquet, which Was highly enjoyed by every one present.

Adjournefl.
Matrice I. Krebs, Sec.

## TWELFTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The second annual meeting of this society was held at Fort Wayne, April 2l, 1908. Mecting was called to order by President S. H. Harice. The election of officers was the first order of business and resulted as follows: President, A. P. Buchman, Fort Wayne; first vice-president, J. L. Gilbert, Kendallville; second vicepresident, H. F. Costello, Deeatur; seeretary, E. M. Van Buskirk, Fort Wayne; treasurer, D. C. Wybourn, Sheldon.
Pseudo-hypertrophic Paralysis.-Case report and exhibition of patient by Dr. G. Wr. MeCaskey.

Patient, a boy of 15 years of age. The first thing noticed was a weakness of one ankle when the boy negan to walk, followed by clumsiness of the lower
extremities and a tendency to fall whieh has gradually grown worse. The exeessive development of the ealf muscles had always been noticeable and was the oeeasion of frequent remarks while wearing short trous ers. This in itself shonld create a suspicion of the disease, especially when assoeiated with awkwardness. At the present time he walks with considerable difficulty, falls on the slightest provocation, and stands with his feet widely separated. There is marked tallipes equinus owing to the shortening of the gastroenemius through the retraction of the eonnective tissue which, together with adipose tissue, constitutes the bulk of the museles effective. When he stands there is marked lordosis, which disappears when lying down. The ease belongs to the group of progressive musenlar dystrophy and is dependent upon the embryonic defeet. It is for the most part typieal of an interesting and unusial feature, is a distinct tendency of Raynand disease. This has been noticed for about two years. At times one or two fingers on each liand become perfeetly white and pain him severely, the attack soon passing away if warmth is applied. This is of eourse due to a morbid condition of the vaso motor centers and adds a distinct neural to the muscular elements of the case. It suggests a possibility of complicating disease of the nerve center whieh is fully sustained by the elcetrieal reaction of degeneration which is distinctly manifested in one leg, contrary to the general rule.

Dr. MeCaskey also presented a ease of hemiplegia, the result of eerebral hemorrhage oceurring during the progress of typhoid fever. The attack came with elaracteristic suddenness seven years ago, four or five days after the onset of the fever, while the temperature was $104^{\circ} \mathrm{F}$. The lesion was probably loeated in the lenticular region. The ease is of particular interest. as the canse of the oceurrence of eerebral hemorrhage was an unusual case of typhoid ferer. A number of such eases are on record. Hemiplegia may occur during the progress of an acute attack, or thrombosis resulting from the loealized focus of infection in artery, or from hemorrhage usually the result of endarteritis. The mode of onset in this ease shows that it was un doubtedly hemorrhage.

Medical Inspection of Schools was the title of a prper presented by Dr. J. N. Hurty, seeretary of the Indiana State Board of Health. ITe said that there was a growing publie sentiment in favor of the medieal inspection of schools, and that the medical profession should no longer be silent on such a matter, but bluntly tell the people the facts with reference to preventable diseases. Fully so per cent, of the 1,339 school children of Indiana who died during 1907 died from preventable diseases; (i0 per cent. of school children are more or less physically disabled and need medieal and surgieal attention. Dr. Hurty said that in the examination of some of the publie schools of Indiana he had found a deplorable condition of affairs. Many sehool buildings are inadequately lighted, poorly rentilated, and but little attention given to sanitary arrangements. In most instances this is due to a sense of false economy on the part of school boards. This is a state of affairs that is the result of the selection of incompetent and impractical men as members of school boards. Everywhere in the state we hear it. confessed that it is imposible to tear down the old and insanitary fire-traps of school houses and build those that are safe and
sanitary, because there is not enough moner: This is certainly a confession of incompeteney to properly manage nur sehools, and it is time that the people be awakened to the dangers of snch a condition. The management of our schools should be changed. Above everything else, our school boards should be taken from politics, and it would be a good idea if the sehool teach-er- themselves could be on onr school boards, or, better still. if our sehool boards were largely made up of women.
The discussion of this paper was opened by Dr. liruggeman of Fort Warne. who said that the state was to be congratulated upon having such an earnest advocate of improved sanitary and public health conditions in our schools as Dr. Hurty has always been. He offered the following resolution:

Whereas, Not less than 50 per cent. of all school ehildren at the present time are more or less physically defective or sick and in need of surgieal or medical attention; and,
Whereas, Not less than 70 per eent. of the school hou-es in Indiana are wrongly lighted, badly ventilated. nnevenly warmed, and in other ways insanitary, and henee reduces the efficiency of the pupits and causes sickness; therefore, be it
Resolved, By the Twelfth Councilor District Medical Society, in session at Fort Wayne, Indiana, April 21. 1908, that it is the sense of such society that it would be an act of public economy and humanity to remove the conditions which so greatly retard the progress of the sehool children, and which bring so much suffering and not a little death. And to this end it is recommended to the people that they demand a law which will command under heary penalty the construction of sanitary and fire safe school houses, and which will command that all primary school children shall be medically inspected before they are admitted to the schools, and shall have such medical and sanitary in--pection thereafter as may seen wise.

This resolution was unanimously adopted by the society, and the secretary directed to give copies of it to the public press.

Dr. McCaskey of Fort Wayne, in discussing Dr. Hutys- paper, said that he was in favor of the medical in-pection of schools, and this should inchade infirm. itics, eyestrains, etc., but should take into consideration the sanitary conditions of buildinge. The results of meelical inspection of sehools will be shown in the next generation and fully justify the efforts and funds weed in that direction.

Dr. Lake of Woleotrille said that some provision -hould be made for the proper treatment of children requiring atteution when parents are unable to par feen to medical men for the services. He believes that there are physicians in every town who will be willing to domate their services for the good of the eause.
1)r. Shoemaker of Butler said that it was the duty uf pinysicians to protect the public as much as possible aud that they shonkd urge upon the people the question oi medical inspection of schools and demand a law re. quiring such inspection.
Dr. Drayer of Fort Wayne said that it is a shame that intelligent families who realize the importance of this subject find it necessary to call upon the State loard of Health for facts regarding children's health. The people should be educated by the medical profession to dew und shch reasonable laws from leginlative boolies as are required to protect the health and lives of
achool children. Our strooks are at present overrrowded and our children are being for the most part kept in an insanitary, and therefore munealthful, atmosphere several hours each day: We are laying the foundation for future deterioration of the race.

Dr. Hurty, in closing. said that the duty of the doctor is to agitate. Medical men see the conditions, but the parents do not. The people shoukd deal with this question of the killing of children as it deals with other murder questions. I change in conditions can only come throngh a change in the manner of electing our orhool boards and in the kind of men chosen to serve.

Erythematous Eruption was the title of a paper by 1)r. A. W. Brayton of Indianapolis. who thoroughly dis(ansed the physiology and nerve supply of the skin and demonstrated the causes of many erythematous eruptions. He showed that many eruptions are due to a disturbanee of the nervons system. The paper was diseussed by Drs. Drayer, Shommaker and Fowler.

Sinus Thrombosis was the title of a paper by Dr. John F. Barnhill of Indianapolis, who gave a demonstration of the anatomy of the sinuses of the skull and devoted special attention to a description of the sigmoid sinus and its collateral venous tributaries. Thrombus of the lateral sinus is a very serious condition and is not as infrequent as generally supposed. Early diagnosis is of the utmost importance. As a rule the disease oecurs as the result of extension of an infectious process from the middle ear or mastoid. If a patient giving a history of an acute infectious disease, followed by suppurative otitis media or mastoiditis is found running a septic temperature ranging from normal to 103 and 104, and then back to normal or even subnormal, and then up again, we are safe in suspecting a sinus thrombosis. Sndden remissions in temperature in comection with an acute infective process of the middle ear or mastoid, particularly when these remissions are preceded or followed by chills or (hilly sensations, should be considered ahmost as pathognomonie of inflammation of the lateral sinus. Every suspected case should have a competent nurse and the temperature should be taken frequently. Plysicians should not depend upon tateir daily observations of temperature in such cases. There may or may not be any tenderness behind the ear. for an entire mastoid may he involved without tenderness, and, on the other hand: a sinus thrombosis may exist without a miastoid inflammation. All treatment is easentially surgical. and consists in laying bare the sinus, and if thrombns is detected the sinus should be widely opened, the thrombus removed, and the sinus dressed in the usual way. Puncture of the simus with aspirating needles to determine whether a thrombus is present or mot is of but little diagnostic value, and is apt to introduce infection directly into the sinus when it previously did not exint.
Dr. Wheelock of Fort Wayne opened the discussion by saying that simus thrombosis comes on more insidiously than is generally supposed. Many of the patients giving a history of discharging ears.and suddenly developing meningeal symptoms lose their lives as result of an unrecognized sinus thrombosis and extension of the infection to the brain substance. The steeple chart temperature is the safest diagnostic point, and should be considered significant even if there are no signs of mastoid involvement. In opening the mas-
toid operators are warranted in at least uncovering the sinus and critically examining it in suspicious eases, and in all eases where the bone overlying the sinus is unhealthy.

Dr. Bulson of Fort Wayne said that the important point to the general practitioner is the prevention of the disease, and one of the best ways to avoid sinus thrombosis is to take eare of the middle ear diseases which every physician is frequently called upon to treat. It is the neglected infectious processes in the middle ear erying for drainage which result, through extension of the infectious process, in mastoid troubles and perhaps later sinus thrombosis. It should be remembered that infection will travel in the direetion of least resistance, and every earache, particularly in connection with any of the exanthematous diseases, has in it the potential possibilities of great liarm. If these earaches do not promptly subside under the local application of heat and other simple measures, free drainage should be established by making an ineision in the drum membrane. This measure will prevent, in a very large pereentage of eases, the development of mastoid eomplications and sinus involvement. Dr. Bulson said that he had never seen a mastoid involvement or a sinus thrombosis which he did not believe was due to neglect in properly caring for the original disease which was a suppurative otitis media. Mastoid cases, both before and after operation, require careful observation. The temperature should be taken frequently or otherwise sudden romissions may be overlooked. Whenever, during a mastoid operation, the bone over the sinus appears even to the slightest extent abnormal, it should be removed and the simm thoroughly exposed. If the sinus does not look healthy the surgeon is warranted in opening it after first ligating or exsecting the jugular below. It should be rememlered that a sinus thrombosis can come from a periphlebitis, and for this reason the technic of our mastoid operations should be as nearly perfect as possible.

Dr. Havice of Fort Wayne reported an interesting case of sinus thrombosis. The patient had two operations, but death resunted from extension of the infectious process to the brain.

Dr. Porter of Fort Wayne said that he had been present several times when cases of sinus thrombosis had been operated. In one of the cases he had tied the jugular before the aural surgeon opened the lateral sinus. He did not believe that there was any good reason for either tying or exsecting the jugular. It perhaps shut out some extension of infection from above, but infection can extend by the collateral reins, and therefore the advantages derived by the ligation or exsection of the jugukar are offset by the possibility of extension of the trouble through other channels. Furthermore, the infection travels upward from the simus. He thought if the sinus was thrombosed it slould be opened and drained, but that it was bad policy to stir up the infection by curetting, and nothing wats to be gained by ligation of the jugular. In other words ordinary surgical principles should be followed in the operation of a sinus thrombosis.
1)r. Barnhill, in concluding the discussion, said that it was impossible to shut off all the emissary reins, but that the most likely avenue for the extension of in-
fection was elosed when we ligate or exsect the jugular. It should be our aim to shut off extension of infection as much as posible. It is as yet a disputed point as to whether the jugnlar should be ligated or exsected. The opening of the sinus should always be done with the fiek of operation as clean as it is possible to make it. The simus should not be opened unless it is thoroughly exposed, and hemorrhage can be readily controlled by packing.

The Relation of Bovine to Human Tuberculosis was the title of a paper by Dr. A. W. Bitting of the United States Department of Agrieulture. Dr. Bitting gave an interesting talk on this subjeet in which he described the methorl of locating certain tuberculous areas in animals, and the methods of slaughter houses in remoring these diseased portions from meat which the department permits to be sold. Hogs contract tubereulosis by drinking milk from tubereulous cows. They can also contract the disease by drinking milk which has been inoculated with the human tubercle bacillus. Human and bovine tubereulosis are unquestionably the same, and this being the case it is the duty of the govermment and state officials to proteet the people by forbidding the sale of milk from tuberculous eows and forbidding the sale of meat that is known to be tuberculous.

Dr. T. I1. Gilpin of Fort Wayne reported an experiment where hogs were fed on anthrax-inoculated food and the hogs all developed general anthrax infection. slowing that the infection can travel from the intestines thronghout the body. There is ample evidence to prove that tubercle bacilli are taken into the system in the same way, by ingestion.

Dr. Weaver of Fort Wayne said that it is a settled fact that human and bovine tuberculosis are caused by the same inferion, and he reported experiments which have conclusively proven this fact. Primary intestinal tuberculosis is not so rare in children as generally supposed, and it is due to ingestion of tubercle bacilli. Brvine tuberculosis is pathologie for humans by direct inoculation. Monkeys injected with tubercle bacilli from both sources have developed the same results.

Dr. Bruggeman gave a history of the fight against hovine tubermbosis in the city of Fort Wayne. One dairy sent seventeen cows to the slaughter honse and nine of these were eondemned. He said that tuberrulosis is transmitted by fecal matter, and as all milk has manure in it the danger of infection from this -onrer is great. No matter where the entry of infece tion may be the cattle develop pulmonary tuberculosis, It is evelu so with human beings. If the infection eviters throngh the intestinal tract they are quite sure to devolop pulmonary tubereulosis.
l)r. Bitting, in closing, said that it is a hopeful sign When so miny states have taken decided aetion on the question of inspocting dairies and slaughter houses for the discovery of borine tubereulosis. This means that eventually the development of human tubereulosis from bevine tubereulosis will be essentially an impossibility.

A Plea for the Earth Closet was the title of a papor by Dr. George 13. Lake of Wolcottville. Dr. Lake illnstrated his paper by several drawings and showed that the earth closet is a rery sanitary way of disposing of feeal matter in rural districts.

Dr. Hurty, in discussing the paper, said that this question of the disposal of fecal matter is of vital importance to the people if siekness and death from typhoid fever are to be prevented. Ife said if we could only impress upon the people the one fact that typhoid fever means that the patient has been drinking or eating feeal matter, we perhaps would be able to secure more attention to this question of sanitary elosets. Doctors ean do mueh to prevent typhoid fever in the country distriets if they will teach the people to properly dispose of their own filth so that it does not contaminate the water supply by drainage into wells, or does not eontaminate the food through the medium of lies. Properly constructed and properly operated the earth eloset is entirely satisfactory.

The evening session was held in the parlors of the Fort Wayne Club.

Perineal Rupture was the title of the first paper by Dr. M. I. Rosenthal, in whieh the physician was urged to use extreme care in the second stage of labor with a view to preventing perineal tears. These tears will oceur even when the utmost eare is exereised, but the laceration need not necessarily be so extensive. In cases of lacerated perineum Dr. Rosenthal reeommends subeutaneous sutures deep in the museles of the perineum, using for suture some non-absorluable material such as silver wire.

Dr. Hamilton of Fort Wayne, in diseussing the paper, said that in the prevention of perineal tears the obstetrician should not be hindered in his work. The patient should be placed on a hard table and a skilled anesthetist should render assistance by placing the patient under complete anesthesia. Delivery ean then be aecomplished without the expulsive efforts whieh so frequently lacerate and the surgeon is unhampered in his eflorts to preserve the perineum.

Dr. English of Fort Wayne said that ruptured perinei are more frequent than generally supposed. Therefore the perinem should be earefully inspected immediately ather every delivery. Repair of the perineum should also oceur immediately following the delivery of the placenta.

Dr. Porter of Fort Wayne said that in the repair of a lacerated perineum the essential thing to be consid ered is to secure perfect apposition of the lips of the wound and a non-absorbent stiteh beneath the skin should be used for closing the opening.

Dr. B. Van Sweringen of Fort Wayne said that extensive laceration of the perincum can oftentimes be prerented by support of the perincum during the passage of the head. The head should not be foreed. In repair of the perinemm it is essential that there should be perfect apposition of the parts.

In concluding the disenssion 1)r. Rosenthal said that we should always go to an obstetrical ease properly prepared for surgical work, and we shonld always be prepared to repair a ruptured perineum.

Certain Traumatisms Resulting from Labor was the title of a paper by Dr. J. Clarence Webster. In repair of the perineum we shonld not negleet the pelvie fascia. The levator ani musele is a rudimentary muscle in man, attached to the white line of the pelvis. In the lower animals having tails this musele plays an important part in the movement of the tail. It is attached higher in the pelvis. As we find animals assuming more of an erect posture we find this muscle
heomming smaller and attached lower down. This is true of the higher apes. In man we find it most marked. This muscle, as it meets the fellow on the opposite side in man, is very weak, only finding few digitations of musele at places. The fascia is the stronger support of the pelvic viscera and should never be negleeted in repair of the perineum.

The pelvic floor and parictes of the abdomen support the abdominal and pelvie viseera. In frozen sections ligaments (including those supporting the liver) are found folded on themselves. The mesentery and various ligaments' purposes seem to be to earry blood vessels and nerves to the organs. It has been computed that they may support about one-eighth of the weight of the organ attaehed to them.
ln weak or distended ablomen we find their ligaments very much elongated and being drawn out by the weight of the organ not supported. During pregnancy the abdomen is greatly distended and at times much injured. We find three kinds of weak abdomens: (1) Weak reeti muscles without their separation; (2) When the recti are separated; (3) When the recti are torn themselves. The umbilieal region is the weakest part of the abdomen. By separation of the recti we find a spindle-shaped area at this plaee. Child-bearing is an antecedent history in a great majority of the eases. Many times the reeti tend to eome together without surgieal help, as has been demonstrated in a few eases. Surgical aid and abdominal supports applied rightly are the only things to be adrocated. Considering the cost of buying many abdominal supporters and their annoyance, surgieal treatment is the one to be advised.

In discussion Dr. Porter, Fort Wayne, said that a person with either a "pot gut" belly or the one with a large belly with a depression in the center is very sure to have a hernia if he does any physieal labor and lives long enough. The belly is weakened by distension of food, and eating much food requiring enormous quantity for nourishment. He then referred to feeding horses and eattle in such a manner that they become "pot gutted," and this was cone away with on giving more concentrated food. A certain per cent. of children's bellies are distended by food fermentation.

Dr. JI. A. Duemling, Fort Wayne, condenned the use of a tight-fitting luandage to support the abdomen.

Dr. II. D. Wood of Angola called attention to injuries to the raginal wall during labor.
1)r. G. W. MeCaskey of Fort Wayne thought that it would take a great many frozen seetions to arrive at the conclusions that the parietal walls and pelvie fascia were main supports to their viscera.
1)rs. B. Van Sweringen, Rosenthal and Drayer commended Dr. Webster's paper.

Dr. Mary Whery asked regarding bandaging the belly after labor.

In conelusion Dr. Webster said that we have for many years paid great attention to lacerations of the cervix and perineum, but that it was the invisible traumatisms that we had neglected.

A smoker was given by the Allen County Medieal Society to those present.

One hundred and fifty-four members and guests were registered at the meeting.

Adjonned.
E. \I. Vanl U'skirk, See.

## THE JOURNAL

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## ORIGINAL ARTICLES

## THE PRACTICAL APPLICATION OF OPSONIC THERAPY.

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H. S. Thurstox, M.D.
indianapolis.
While the whole subject of raccine therapr is still largely in the experimental stage, enough good has already been accomplished with it to make one feel that it will lead to great practical results, especially in chronic infections of all kinds. It can not be claimed that bacterial vaccines alone effect a cure, for in many cases they must be combined with other forms of treatment. such as medical, surgical and hygienic measures. Their chief ralue lies in hastening the period of treatment in many chronic infections. and also in making operative treatment less radical in other instances.

## PRINCIPLES OF OPSONIC TREATMENT.

The whole trend of modern therapeutics rerolves largely about the fact that in many discased conditions there is a tendency on the part of the body itself to effect a cure. Many of the cells and tissues possess reserve powers that are only called into action when our bodies are injured or threatened with harmful agents, the most common of which are micro-organisms and chemical poisons. As these reactions on the part of the body are becoming better understood many processes heretofore considered pathological are now being considered as physiological. The splendid results following the use of Bier's hyperemia treatment of infections go far to show that inflammation is a conserrative reaction, a true physiological process, and in most cases should
be encouraged insteal of combated. The immunity possessed by individuals who liave recorcred from acute infectious diseases is in reality a body-state where the cells and fluids lave become more powerful in their ability to destroy the germs of that disease. In other words, the body having recovered from one fight with the micro-organisms, increases its standing army of antibodies in numbers to efficiency. This immunity following the recovery from infectious diseases differs from the immunity produced by bacterial raccine in degree only. In the former the tissues acquire their training in real warfare, while in the latter the fight takes on the nature of a skirmish.

Opsonins are substances existing in the blood of all persons, but rary in amount according to conditions. It has been found that bacterial raccines give the best results in chronic infections where the opsonic contents of the blood are relatively low. In these chronic infections there is present almost incariably a connective tissue or scar tissue capsule surrounding focus of bacteria. The normal opsonins of the blood are reduced in an attempt to combat the infection, and the incased bacteria are unable to come in contact with the blood stream sufficiently to stimulate the formation of new opsonins, hence the persistently low opsonic index. Our aim, therefore, is to attempt to raise this index by injecting a vaccine made from bacteria taken from the patient's own lesions. In order to do this we inject the dead bacteria into a region of the body where ther can come in contact with the general blood stream, and thus incite a formation of new opsonins. The bacterial raccinc, or suspension of dead organisms, do not act upon the living bacteria causing the infection directly, as in the case of administering antitoxin, but simply serve to stimulate the formation of opsonins and perhaps other
antibodies, which in their turn act upon the bacteria causing the infertion.

The ralue of the raccine treatment is increased by improving the patient: gencral condition as much as possible by aroiding antiscpties, both internal and local, by the use of the hyperemia treatment.

Anemia. malnutrition and fatigue tend to lower the opsonie index for all bacteria. Eren in normal individuals the index is lowered by fatigue. This is often more marked in patients with chronic infections, especially tuberculosis. It is necessary, therefore, to put the patient in the best general condition possible, by the proper diet. tonics, etc., and also by aroiding the oceurrence of fatigue.

The use of antiseptics in wounds is beeoming more and more restricted. It is a well-known fact that an antiseptic will destroy the body cells quicker and much more easily than bacteria. If all the bacteria in a wound are not destroyed by the antiseptic they will later have a most aboudant field of dead tissue cells in which to grow. The sermm exuled into the wound contains opsonins and other bactericidal substances, which are immediately destroyed on coming in contact with antiseptics. 'Thus by applying antiseptic dressings to wounds we replace the natural bactericidal substances by an artificial one that is probably less efficient. Substanees like creosote. lactic acid, chloroform and other antisepties that are sometimes given internally, tend to reduce the opsonins of the blood and to reduee its fighting powers. It seems rational to suppose, therefore, that (reosote taken intermally in tuberculosis might do more harm than goorl.

The Bier method of hyperemia furnishes one of the most important aids to raceine therapy of localized infections. By this procedure, either by the we of eups or by the aid of a constricting bandage about the part, we produce a local venous stasis and also an extrarasation of lymph and leucocytes into the tissue. The blood taken from a hyperemic area shows a decidedly higher opsonic index than that taken from other regions. Thus the Bier treatment consists simply in concentrating opsonins in the locality where they are most needed.

THE PRACTICAL ADMINISTRATION OF BACTERIAL VICCLNE.
Chronic infections due to the staphylocoecus albus, aureus and citreus, the colon bacillus, peumococcus and tubereular baeiltus offer the best results with raceine treatment. Gonorreal infection of joints and of the posterior urethra respond farorably to the raceine treatment in many
cases, but the improrement is not so constant as in the abore-mentioned infections. Pulnonary tuboreulosis, pucumonia and acute streptococcus infections hare improved in many cases following the nes of vacemes, but in these cases it is a question as to whether or not the raccines really play an important part in the cure. In these acute conditions, where there is no commective tissue capsule about the focms of bacteria, it would seem that opsonic formation would be stimulated by the organisms causing disease, and that on giving a vaccine containing bacteria we would simply be adding fuel to the flames.

## ACNE,

Ache responds most farorably to vaccine treatment. The majority of cases, both mild and serere, are cured; the skin becomes soft and the thick, greasy look disappears. If much scarring and pitting has taken place this will not be affected by the treatment. Most of the acne cases that are not cured are greatly improved. There are a few cases, however, that seem to be entirely matfected, for which we find no explanation. The whole subject is too new to predict the duration of the cure. Onr first case has remained well for one rear without recurrence.

The first step in the treatment of acme is 10 obtain a culture of the offending organs. Slant agar eultures are made from two or three pimples. selecting those that are just begimning to soften, as the growthe from these are more lixuriant than when taken from a well-formed pustule. The pimples should be washed sereral times with alcolol and allowed to dry; and the sorum, or pms. squeezed out, is transferred to the rulture tubes. After twenty-four hours of incubation the culture will have grown so that the trpe of orgamism dan be determined, and this same growth can be often used in making the raccine (see below). The opsonic index in acme is invariably low, ranging from 4 to. .6. In our early cases we followed the index persistently throughout the course of the treatment, taking it every three or four days. We found that a positive phase, or increased opsonic index, lasted in almost all eases from sixteen to twenty-two days. This time corresponds closely with that obtained by other workers, which led us to abandon the index in acne cases. and also in other staphylococeus infections, except when unusual features presented themselves, that we were mable to understand. We administer the raccine at intervals of two or three weeks. depending upon the clinical features of the case without the index as a guide. and our results seem to warrant this omission. The raccine is given hypodermically.
in the left arm, under the strictest aseptic precautions, and the dose of raccine employed varies from $200,000,000$ to $400,000,000$ cocci. The patient must be warned that the acne may appear slightly worse two or three days following the injection, due to the negative phase, or lowered immunity, which invariably oceurs immediately after giving the injection. From one to two weeks tollowing the injection, improvement will often be noted, not so much in the existing pustules. but fewer new ones will form. If the improvement has been slight, or has not occurred. a second dose of raccine should be given in two weeks; if the improtement has been marked. three weeks should elapse hefore a second dose is given.

A few of our cases have been cured by one or two injections, while others have required as many as five or six. While the vaccine treatment is being carried out special attention should be paid to the general condition of the patient, and lotions containing antiseptics should be prohilbitecl.

## BOILS IND FURUNCLES.

When these cases present themselves the evacuation of the pus is of most immediate importance, the raccine treatment being secondary. We have followed Biers methods of dealing with these infections with the most satisfactory results. The aper of the swellings is cleaned with lysol and aleohol and is punctured with a bistoury, making an incision not larger than an cighth of an incl. A slant agar culture is immediately made from the pus. A glass cup is then placed over the boil, of such a size that the rim will be well outside of the line of induration. Gentle suction is then made by means of an aspirator attached to the stem of the cup, and the pus is slowly drawn out. This is a much more comfortable procedure than sulueezing out the contents of the boil; in fact. it diminishes the pain in the majority of cases, and at the same time it produces an acute hyperemia in the surrounding tissue. If the central slough is too large to be removed through the miginal opening, this may have to be enlarged, through which the neurotic tissue can be removed with a fine pair of foreeps. The carity should not be euretted or irrigated with antiseptie solution. The cup should remain on about ten minutes, when an extensive hyperemia and edema will have been produced. No packing is used, and the whole is covered with a sterile gauze. The cupping should be repeated in the same way after twenty-four hours, and the skin wound, which will have become plastered together, will open with gentle
suction. This procedure, carried out daily for four or five days, will cure the most severe boil, with a minimun amount of scarring and discomfort to the patient.

If there is no tendency for other boils to appear, it will be useless to give raccine; but if other red or indurated spots are seen, an injection should be given, made from nriginal culture, in the same dose as for ache. In all of our cases of furuneulosis one injection was all that was required to effect a cure. In many cases, before suppuration has occurred. dry cupping orer the indurated area will cause it to resolve without pus formation.

## ACUTE INFECTIONS FOLLOWING TRACMATLC Wouxds.

Acute infections following trammatic wounds seldom refuire vaccine treatment, unless they become chronic: but in this class of cases we derive considerable benefit by concentrating the normal opsonins of the blood about the focus of the infection ly means of the hyperemia treatment. If the infection is definitely localized the treatment will be similar to that used in the case of boils. When the infection attacks a limb, causing a difluse edena or cellulitis, with or without pus formation, the constricting bandage is indicated. This consists of an elastic bandage, either an Esuarch bandage or the rulber of a wide suspender, which serves equally well. phaced about the limb several inches above the upper limit of the inflammatory area. The suceese of this procedure depends very largely upon the tension given to the bandage in putting it on. This should be just tight enough to restrict the renous return to such a degree as to produce an edema of the part below, but should not be so tight as to intertere with the arterial supply to the limb. If pain. numbness or paresthesia is complained of the bandage is too tight. 1 properly fitting bandage causes the limb to swell and to appear cranotic, and in the majority of cases there is a decrease of pain in the part. In these acute infections the bandage should be allowed to remain in place from twenty to twenty-two hours out of twenty-four; or better. five out of every six hours. The adrantage of this treatment is that the patient suffers less pain; there are fewer constitutional symptoms from the alsorption of toxins: the infection subsides carlier; and if surgical procedures have to be resorted to, more good can be accomplished with a less radical opcration. In this class of cases, as in boils, antiseptics should be aroided: and if a moist dressing is indicated, sterile salt solution is all that is required.

If this infection becomes chronie or leads to persistent ulcers or simuses the healing will be greatly hastened by the use of bacterial raceines． One dose of the autogenous raccine is all that is required．

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CIIRONIC SINCBES LEADING TO OLD ABSCESS carities．
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In case of chronic sinuses leading to an in－ fected gall hladder．kidney or to appendix ab－ scess，when there is a sluggish granulation tissue formation．the process can be greatly accelerated by the use of raccines．In these sinuses the colon bacillus is the most common organism found，and it is from this that the raccine should be made． Wright explains the persistencr of these sinuses in the following way：The opsonins of the blood can not reach the bacteria on the walls of the sinuses on account of the dried．coagulated fibrin， whith forms orer the granulation tissue，and which also furnishes a medium for the growth of the bacteria．Before fresh serum containing op－ sonins can reach these bacteria the fibrin films must be destroycd．It is a well－known fact that curetting these sinuses will often hasten their clo－ure．but Wright has devised a more refined method．He fills the sinuses with an aducous onlution of ． 5 per cent．citrate of soda and 5 per cent．of sodiun chlorid．I few hours later a clear serum will be seen to flow from the pre－ viously choked．dry sinus because the citrate of soda will present coagulation of the lymph by de－ calcifying it：and the salt solution，being of a much higher osmotic tension than that of the body fluids．will cause the flow toward the sinus cavity：When this simple procedure does not bring about a closure of the sinus an autogenous raccine should be giren．

## goxorrileal infection．

Gonorrheal arthritis and tenosrnoritis respond in the majority of cases to gonococcus raccine， especially when combined with a restricting band－ age applied abore the part for fire out of six hours．Several workers have claimed good re－ sults from the raccine treatment in chronic gon－ orrheal infections of the genitourinary apparatus．

We have had no experience with this class of cases so far，but in making cultures from cases of chronic posterior urethritis we have obtained in the inajority of them a pure culture of staphy－ lococcus albus，and have seen a marked benefit following the administration of the autogenous raccine．

## sTREPTOCOCCLS INFECTION．

Infections with the streptocoecus progenes are generally acute，but in some cases they resemble the chronic infections by being separated from the general blood stream．not by a scar－tissue capsule，but by a coagulation of lymph in all the capillaries and lymphatics surrounding the focus of bacteria．This gires rise to the hard，diffuse swellings so often seen in streptocoecus infections known as brawny indurations．In these condi－ tions streptococeus raccine often appears to do considerable good，especially when combined with treatment that will prevent the coagulation of lymph in its surrounding ressels，and thus allow the opsonins of the blood to reach the collection of bacteria．Is a rule the coagulability of the blood in this class of infection is greatly in－ creased．Wright reduces this tendener to coagu－ lation by giving citric acid by mouth，in doses of from 15 to 60 grains every threc or four hours， depending upon the severity of the case．Often on cutting into a brawny swelling the wound will be almost dre，but shortty after giring the citric acid，serum will be seen to well up in the wound， thus showing that a capillary circulation has been established．Wright claims excellent results with the streptococcus raccine in these cases when com－ bined with simple incision and the administra－ tion of citric acid．

## INFECTIONS OF THE MLCOLS MEMBR－NE AN゙D THEIR（iLaNDE．

We have had a limited expcrience along this line，but according to Wright this is a favorable field for raccine therapr＂．He says：＂I hare ob－ tained or had successful results in many different infections of the mucous lining of the ear．an－ trum，nose，nasal sinuses，dental alreoli，salivary glands，also in bacillus coli．infections of the in－ testinal mucous membrane and gall bladder．and in many different infections of the uterus．urinary bladder and ureter．

## TLBERCLLAR INFECTION．

Surgical tuberculosis forms a class of cases that respond most farorably to raceine therapy： Not only our own work but that of others point to the fact that tuberculin properly administered is the first indication in treating ehronic tuber－ culosis．In many cases operation may be neces－ sary，but by the use of the raccine a much less radical procedure may be sufficient：and in those cases where operation has been performed and a healing has failed to take place，the raceine will often bring about a closure of the wound．Our work along this line comprises cases of tubercu－ losis of bones，joints．lymphatic glands．skin，
mucous membranes, urinary bladder. kidney and epididrmis. A few of our patients feel that they are jerfectly well. but it is impossible for us. howerer, to claim a definite curc. In all cases there has been improvement in local conditions. a gain in weight and strength, a reduction of the fever. an improved appetite, and in the ability to digest food. Good hygienie conditions. together with the aroidance of fatigue, is an essential part of the treatment.

In tuberculosis of the boncs and joints of the extremities the compression bandage should be nsed to supplement the raccine treatment. but should be left on a shorter time than in acute infections. An application of the bandage for two hours, might and morming, is sufficient. When caseation or necrosis of bone has occurred its remoral is indicated. When the tubercular process is far adranced, and the indications for operation are unmistakable, we refuse to give the racdine. for little good can be accomplished in these rase by raccine alone; and, moreover, the patient may cherish the liope of esaping operation altogether if tuberculin is given. and thus waste valualle time.

As mentioned above, we do not feel that it is necessary to take the opsonic index in progenic infections unless unusual features present themselves. In tulbercular infection it is an entirely different matter: Each patient seems to respond differently. and the immunity derised from the injection of raccine varies in degree and duration. We feel that it is absolutely essential to take the tubercular opsonic index in all patients before the first raceination. and after that at intervals of four or five days for at least three or four weeks, until we have learned the degree and duration of his individual response.

The tubercular raceine, like other forms. is a suspension of the dead bacilli, in normal salt solution. and is generally called the "New Tuberculin" (T. R.). We employ dose varying from $1 / 1000$ to $1 / 500 \mathrm{mg}$. starting with the smaller and gradually working up to the larger dose. Injections are given at intervals of from one to thrce weeks, depending upon the way the patient responds. With us the larger doses have frequently produced local and general reaction, and the patient has had a decided setback. Some adrise that tuberculin should not be given during a febrile period. This is probably true with pulmonary tuberculosis. but we have found that small doses will often reduce the ferer in surgical tuberculosis.

In many tubercular infections, especially of the mucous menbrane and in sinus and uleers, we
have a secondary infection with one or more of the progenic hacteria. In these cases it will be nccessary to give with the tuberculin a raccine made from these scondary invaders.

In regard to the ralue of tuberculin in pulmonary tuberculosis, nothing of positive ralue can be said. Our own experience is so small. and the experience of others so contradictory, that it is impossible to come to a definite conclusion.

## STOCK AND ACTOGENOCS RACCLNE.

The question of a stock raccine, compared with that of an autogenous one. is very impertant from a practical standpoint. If the stock rac(ine will give the same results as one made from the patient's own infecting germ. the whole subject of raccine theraps. will be placed upon a much more practical basis than it is at present. With the staphylococcus albus and aurens stock raccines we have in many cases obtained as good results as when the autogenous were used. In other cases we have obtained absolutely no results with the stock raccine, while a cure or improvement resulted on using its autogenous vaccinc. In using the stock raccine a culture from its lesion must always be made in order to determine its exact kind of organism producing its lesion. In albus raccine will do absolutely no gool in an aureous infection. and vice versa. stock vaccines of the colon bacilli have failed entirely: while we have obtained good results with autogenous raccines. The difficulty of obtaining cultures from gonorrheal and tnbercular infections forces us to nse stock raccines in these cases. lut we would probably obtain better and more constant results if the production of autogenous raccines with these bacteria mere practical. We feel that use of stock raccines is justified in mans cases provided the offending organism has been presiously determined by cultural and microscopic methods. A stock raceine containing staplylococcus albus. aureus and citreus, together. is put up for the treatment of abscess and progenic infections, and as this raccine contains all three of the pus-producing organisms a culture might seem unneccesary. This "shotgun" dose should be strietly aroided, as it is decidedly unscientific and will do more harm than good. Another stock vaccine is on the market at the presont time, labeled simply "Staphylococcus Vaccine." or "Staphylo-bacterin," without any reference being made as to germ. This should be universally condemned and absolutely aroided the same as a patent medicine put up without the formula upon the label.

The doses of the rarious raceines are as fol－ lows：
Staphylococcu－albus，aureu－．
and citrens
Colon bacillua
Streptococcus
Pnennoococrit
Gonococerls
Tubercular（T．R．）
$.200 .000 .000-.500 .000 .000$ $.50,000,000-100,000,000$ $20,000,000-50,000,000$ $2(0,000,000-50,000,000$ － $5.0100 .000-20.000 .000$ $1 / 1000$ to $1 / 500 \mathrm{mg}$ ．

## OHSONJC INDEX．

He lear from many sources a statement that the opsonic index is inaceurate and roid of any practical value．It would seem，hoverer，that those who have done serious work along this line， and who have developed a reliable techinic by making great numbers of indices，lay great stress upon the ralue of the opsonic index in vaceine therapy．Many errors may erep in and the per－ sonal equation is considerable，but when the index is carefully made the error should be less than 10 per cent．It not only serves as an indi－ cation for the time to give the raceme，but may also aid in determining the form of an infection when it is impossible to obtain a culture．A com－ stantly low index to an organism，while that for all other organisms remains normal，points to the fact that this is the offending lacteria，whether it is tubercular bacilli or other bacteria．A tuber－ （cular opsonic index that fluetuates every there or four days from a low to a ligh points strongly to a pulnonary or acute form of tubereulosis．As mentioned above，the determination of the op－ somic index for most bacterial infections is gen－ crally unnecossary except for tuberculosis；in this it should be frequently taken，especially dur－ ing the first few weeks of the treatment．

TECHNLC OF ESTLMLTING TIE OPSONIC INDEX．
The object of determining the opsonic index is to compare the opsonie strength of the patients： serum to a certain bacteria with the serum of a normal or healthy person．In order to do this three things are necessary：（1）The patient＇s s．rum，and also the serum of one or more healthy persons：（\％）ann emulsion of the baeteria eans－ ing the intection；（3）an emulsion of serum－free or wasted leucoertes．

The serum is obtained by first collecting ten or twelve drops of blood from the lobe of the ear in the glass capsule（Fig．1）．The blood is allowed to run into the eurved end of the eapsule by capil－ lary attraction．The lower end of the tube is sealed and the blood shaken to the lower end and allowed to clot．The blood from one or more healthy persons is taken at the same time，to furnish serum for comparison．The indivilual rariation is diminished by using several normal
serums as a control，and this mixture is called in ＂pool．＂These capsules containing blood should be kept in the dark．as light tends to destroy the opsomins．The index should be made if possible on the same day that the blood is taken，beeause the strength gradually decreases with age．How－ ever，if all scrums are taken at the same time the degree in strengtl will deerease proportionately in all of them．Leeurate results can be obtained within tweuty－four hours after taking the blood． These eapsules containing the elotted blood are put into a eentrituge for a few minutes，and the clear serum will separate above the clot．

The baeterial emulsion is made from a tweuty－ four－hour slant agar growth（in all eases except tubercular bacilli）by shaking up the cnlture with 2 or 3 e．e．of normal salt solution and then （hurning the fiuid by forcing it in and out of a fine capillary pipet（Fig．2）for about a minute to break up clumps of bacteria．This milky fluid constitutes the lianterial emulsion．

rig．1．－Capsule for collecting blood，after being centri－ fuged．a．The clear serum above the clot $b$ ．

Fig．2．－Glass tube for washing leucocytes．a．The mix－ ture of blood and citrate－salt solution before being centri－ fuged．

Fig．3．－The same as Fig．2，after being centrifuged．a， The serum and salt solution：$b$ ，the film of leucocstes lying on the surface of red cells，$c$ ．

The leucoeytes are obtained as follows：A so－ lution of 8.5 per cent．sodium chlorid and 1 per cent．sodium citrate is prepared．A small tube （Fig．3）is filled about two－thirds full of this so－ lution．The remainder of the tube is filled with fresh blood drawn from the finger or ear．This is thoroughly mixed together and centrifuged． The solution eontaining the blood serum will be in the upper part of the tube；the red blood eells will be in the bottom．On top of this there will be a tiny gray film containing leucoeytes．The clear fluid is drawn off with a eapillary pipet， taking eare not to disturb the films of white cells． This little tube is again refilled with an ．85 per cent．salt solution and mixed with the red and
white cells by gently everting the tube two or three times to remove the remainder of blood serum and also the sodium eitrate. This tube is again centrifuged, when the three layers will again separate (Fig. 4). The upper clear solution is removed as before. leaving film of white cells undisturbed, which is called the "eream." We now have the serum of the patient, and also of the normal persons, in the capsule, the bacterial emalsion in the culture tubes, and the leucoertes. or "eream," in the small glass tube. We now prepare two capillary pipets by drawing out a one-fourth-inch glass tube and draw a fine line about half an inch from their tip (Fig. 5). By means of a rubber bulb on the ends of these
portions of serum, which contains the opsonin, bacterial emulsion and washed leucocytes or "ercann."

These are now labeled and incubated for fifteen minutes at a temperature of about 38 degrees C . At the end of this time the tubes are taken out, the ends broken off, and the contents of rach tube smearod over the surface of a elcan glass slide by means of the glass rod (Fig. 8). These -mears are allowed to dry and are then dipped in wood alcohol in order to fix them. We have fried many stains, but the following is the simplest and seems to give universally good results. Corer the film for about a minute within an aqueous solution of methylene blue, wash in


Fig. 4.-Capillary pipet.
pipets we are able to draw up the different fluids. In one pipet we draw in enough of the patient's serwn to reaeh the mark on the tube, then let in a bubble of air. next the same quantity of cream, then the same quantity of bacterial
water, then eover the slide for about half a minute in a solution of picric aeid (coneentrated solution of acid, 1 part. in water $\hat{i}$ parts). The filns are then dried with filter paper and are ready to be examined under oil-immersion lens.


Fig. 5.- - Method of drawing out pipets.
emulsion (Fig. 6). All of these are now drawn up to the wide part of the tube, where they are churned back and forth gently in order to insure perfect mixing. They are next foreed down the eapillary portion of the tube (Fig. i), the end of which is sealed in a bunson flame. In the other capillary pipets a similar mixture is made, except that the patient's serum is replaeed by the "pool." When the "pool" is taken from two persons the eapillary tube can be filled half way up the mark with the first, and the rest of the distauee. with the second. Thes eontents are then mixed and the ends scaled as before. We now have two capillary pipets, each eontaining equal

We now have the two slides, one containing the misture of lencocytes, bacteria and patients: serum, the other lencocytes, bacteria and normal sermm. On examining one of these under the mieroseope we see that most of the leneocytes contain bacteria in a fairly constant number. We now eount the total number of bacteria in 50 leueneytes. This is done for each slide: the average number of baeteria per leucocyte eonstitutes the phagocytie indes. The ratio of the phagocytic indices equals the opsonic index. For example, ifs the slide containing normal serum or "pool" gave a count of 400 bacteria to 50 leucocytes the phagocytic index would be 8 : that is.
an average of $s$ bacteria per lencocyte. If on the slide containing the patient's sermm 20 lencocytes contained in 200 bacteria the phagolytic index would be 4. The ratio of these phagolytic indices would be $8: 4$ or $1: .5$. The phagolitic index of the normal serum being taken as one, the opsonic index of the patient's serum would. therefore be .5. This method applies practically to all forms of bacteria except the tuberculosis bacilli. In taking the tubercular opsonic index the only difference is in the preparation of the emulsion of bacteria, which is sometimes very difficult.

Wo have used the dead bacilli whieh were the residue from the "old tuberculin." kindly furnished tus hyarke. Davis \& Co. A small por-
placed in a bulb, which is sealed and sterilized. in order to kill any foreign germ. 'This is used as a stock emulsion and small quantities are drawn off under aseptic precaution whenerer indices are to be made, and the bulb re-sealed. In making the index this emulsion is used the same as with other forms of baeteria, except that in staining the slides the carbol fuchsin, alkaline methylene blue method is used in the same way as in staining sputum. The count and extimation is made as above described.

In making capsules and glass pipets ordinary glass tubing is used. one-eighth inch tuhing for the former and one-fourth inds for the latter,


Fig. G.-I'ipet filled, a, bacterial emulsion, b, washedleucocytes, c, blood serum.
tion of these bacteria are washed on a filter paper -everal tines with water to free them from glyeerin: they are then ground in an agate mortar for at least ten minutes, to break up the clumps. Formerly we ground these for an hour and a half, but since we have devised a shaking machine we have been able to break up the clumps with much less work (see Fig. 9). A cork is per-
and these are drawn out in an ordinary bunson flame. In making pipets a piece of tubing about fire inches long is taken. heated in the middle until thoroughly softened, and then drawn out until the required caliber is reached (Fig. 5). All bending and drawing out of glass tubing should be done after the tube has been taken ont of the flame.


Fig. 7.--Pipet containing mixture ready to incubate.
forated and placed tightly on the revolving rod of the centrifuge. I heary needle is stuck into the cork about one-fourth of an incle from the renter. I tape is tied about a small thin glass rial that is to contain the emulsion. One end of the tape is thrust orer the needle, the other end is fastencd to a rubber band, one end of which is attached to the wall. The revolving cork, with its cecentric needle. will give an extremely rapid. vibration to the contents of the bottle.

The ground emulsion is placed in a small stoppered vial. with three or four glass beads, and shaken for half an hour. and then allowed to settle. The supernatant flnid is drawn off and

## PREPARATION OF THE BACTERIAL VACCINE.

Taccine for staphylococcus, streptococcus, colon bacilli, gonococcus and pneumococeus are all prepared in the same way. One or two slant ager tubes are planted with fresh culture of the bacteria from which the raecine is to be made. After these are grown for twenty-four hours 2 to 3 c.e. of sterile normal salt solution is put into the test-tube; the tube is then shaken from side to side, which will eause the bacteria to leave the agar and float in the salt solution. A rery fine capillary pipet with a rubber bulb at the top is now used to churn this emulsion back and forth
by alternating pressure and suction on the bulb. to break up the clumps of bacteria. This will produce a milky fluid, which is allowed to stand for ten or fifteen minutes to allow the clumps and sediment to settle. The upper layers of the emmesion are drawn off and placed in a small sterile bottle.


Fig. S.-Glass rod for spreading the incubated mixture on the slide.

The next step is to standardize the raceine. In order to do this the strength of the solution just prepared must be estimated. In order to do this we take a capillary pipet, mark it a short distanee from the end and draw up fresh blood from the puncture in the finger to the mark, and


Fig. 9.-Shaker for breaking up clumps of tubercle bacteria.
equal quantity of bacterial emulsion is drawn up in the same tube. The eontents of the tube are then blown upon a pertectly clean glass slide and thoroughly mixed up, drawing it backward and forward into the tuhe several times. The mixture is then smeared orenly over the glase slide,
fixed and stained with gentian violet. The slide is now examined under the oil immersion lens. The erepiece of the microscope is replaced by one having a square diaphragm, or one containing


Fig. 10.-Ocular diaphragm used in estlmating the number of bacteria in raccine.
four cross-hairs, marking the field with a central -quare (Fig. 10). The slide is now examined and a number of red cells and bacteria are counted in about twenty successive fields. The ratio between the total number of red cells counted. and bacteria, will equal the ratio between $5,000,000$ and the number of bacteria in a cubic mon. By multiplying these figures by a thousand it will give the uumber of bacteria per culbic cm . of the original emulsion. This is then dilated so that 1 c.e. of bacterial emulsion will equal the maximum dose for the particular or-

$b$

c

d

lig. 11.- a. b. and c. The three stages in making the raccine bulbs. d. The bulb filled with raccine and the end sealed.
ganism being prepared. This dilution is made with normal salt solution. With most workers when this point is reached the raccine is sterilized by heating and eresol or lysol is added for a preservative, and the whole kept in a tightlycorked bottle ready for use.

We hade derised a plan that does away with the preserative which often canses severe local irritation and at the same time aroids any contamination of the vaccine. Out of a quarterinch glass tubing we blow glass bulbs. into which we sal the raccine (Fig. 11). In making these the tube is drawn ont. making a diameter of about an eighth of an inch. About half an inch of the tulbe below this neek is sealed. heated and blown into the form of a buth. This is done by the mouth plaeed at the other end of the tube. The bulb is broken off at the neck and is ready to recerse 1 c.c. of the emulsion by means of our home-made pipet (Fig. 12).

The pipet is made out of quarter-inch glass tubing. and the curve above the bulb makes it easicr to handle the flnid more aceurately. A 1 c.c. mark is made by standardizing it against an ordinary 1 e.c. pipet. Ifter the emulsion has been placed in the bull, the ends are sealed in a howpipe. These bulbs now contain one dose of

2 mg. of dead tubercle bacilli suspended in 1 e.e. of fluid. 'This is diluted with normal sterile salt solution, so. that 1 c.c. contains $1 / 500 \mathrm{mg}$. This is bulbed the same as the other form of vaccine. When smaller doses are required the amount is meatsured in the hypodermie syringe.

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Fig. 12.-Filling bulbs with raccine with a 1 c.c. plpet.

1he emulsion. but the bacteria are still living. The nest step is to kill them heat. In order to do this they are placed in an oven, which is hrated to io degrees C. for half an hour. Wre now have the finished vaccine. Dfter cooling. the contents of two bulbs are put into a culture tube and incubated, to be sure of perfect sterilization.

Thes butbs leep indefinitely. When they are to be nsed the neck is filled. broken off. and the content: diawn out with a sterilized hypodermic.

The raccines are generally given in the left arm. the skin having previously been cheaned with lysol. water and alcohol. The puncture is scaled witl collodion. In making tubercular vacdine. or Nrew Tuberculin. we start with a concentrated product that we obtain from R. E. Rhode. iont N. ('lark street. Clicago. This consists of
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## THE V $\triangle$ LEE OF THE MTROSCOPE AND TEST TLBE IX MLACNOSLS.

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In presenting a paper on this subject. some hesitation is felt. for the reason that being engaged in laboratory work, an expression of opinion might be considered biased. Deeds speak louter than words in any achievement, and it is
undoultedly true that the clinician who has used laboratory methods extensisely and become accustonced to assign to them their true ralue could give a broader opinion as to their value than the microscopist himself. With this preface and understanding, the writer will venture to give his ideas as to the proper sphere of lahoratory diagnosis in clinical medieine to-day.

The tirst consideration is the persomel of the microsopist or chemist. The old saying, "The microscope does not iie." holds good, but upon "the man behind the gun" depends the responsibility of properly preparing the specimens for examination. He must have the proper technic and the necesary experience and knowledge to be able to draw the right conclusions. He must aloo have the courage to say, "I don't know" when he can not reach these conclusions.

It has been said that "to become a skilled clinician two things are necessary. The first is skill in the art and technic of clinical medicine. which can only be acruired by long and careful practice at the bedside. The second is the ability to judge disease in accordanee with biologic principles. By this is meant that a!l clinical knowledge minst rest on the eacact sciences of anatome, physiology. chemistry, pathology an? bacteriology, and tlat, without these, technic ir medicire would avail but littie."

To be a successful clinician ome must be able to interpret intelligently the information ontained at the bedside. It is equally important and necessary to be able to judge the disease from the stampoints of anatomit and physiolngy. Without this. medicine would necessarily fall back to the empiricism of the ancients, and the physirian who neglects either of these can not do the best for the patient or himself.

In the daily routine of a physician"s work he often feels the need of reconse to laboratory methods in clearing up some point in diagnosis. Indeed, at times the diagnosis depends entirely on the microscope or test tulse. How often have we foum tubercle bacilli in the sputum of an apparently healthy individual whe complains of a cold or slight hoarsenes. Or albumin and casts in the urine when he complains of headache. or in the course of an insurance examination. These things have become so eommon nowadays that they are orerlooked in passing judgment on laboratory methods.

The lahoratory methods of diagnosis have made rapid strides in the last few years, and few are the phrsicians who have not on their shelves works on "Clinical Diagnosis." test tubes and reagents for a few of the ordinary tests, and
perhaps a microscope. In many cases, however, the physician is too busy to take the time for this work, or if he does he finds that he has grown "rusty" on the technic and that his reagents have spoiled.

In the centralized commmities these difficulties have been obriated by the establishment of laboratories in charge of men trained in this line of work. In these place- the work can be done expeditiously, and the conclusions ean be considered fairly reliable. In order to be most reliable, the closer the relations between the laboratory worker and the elinician the better able will both be to draw the right conclusions.

There are many intelligent physicians who think there is no necessity for the microscopist to know anything about the clinieal history of the ease, and ret, no matter how many correet opinions have been given, if the microscopist makes one mistake, the physician's eonfidence in his ability is destroyed. While it is true that many specimens require no attached history. yet, whell some espeeial point is to be elucidated, the more the microsopist knows of the case the better alle he will be to give satisfaction.

This entire proposition of accompanying history resolves itself into that of the patient, who when asked by the doctor what he complains of, What are his srmptoms. replies. "You are the doctor: you tell me what is wrong." Many able pathologists refuse to make certain examinations umless the history accompanies the specimen. Not only is it important for the patlologist to nuderstand the case he is dealing with, but it is more important for the clinician to be able to interpret correctly the laboratory findings. The pathologist: duty ends when he reports his findings. and unless requested to do so he is not at liberty to draw conclusions as to prognosis, treatment. etc. The laboratory findings usually corroborate the clinieal diagnosis. Sometimes the findings are obseured by complieating eonditions, while at other times they are only of scientific interest and afford no aid in treatment. In the latter ease the physician should not feel that the microscopist has failed him, for negative findings are sometimes just as important as positive findings.

One of the difficulties sometimes met is that the practitioner fails to recognize the limitations of the microscope or test tube. Among the things along this line that the writer has had to deal with is the request to make sereral different examinations from one specimen. It should be remembered that eertain examinations require speeial preparation of the speeimens. This is espe-
cially trme in blood examinations. The pereentage of hemoglobin or number of eells per c.mm. can not be estimated from a dried film or a coagulated specimen of blood. Neither ean insanity or scrofula be demonstrated in the urine. Nor can a diagnosis of typhoid fever be made from the urine alone.

However, laying aside these extreme instances, it is also true that the physician does not always realize how many valuable pointers can be elicited from laboratory examinations, and when the time finally comes when the laboratory worker is fitted into his allotted sphere as consultant to the elinician then only will the full appreciation of laboratory methods be brought out.
'l'he specialty' of "internal medicine" has been dereloped in recent years simply by skilled clinicians taking full adrantage of laboratory methods. establishing private laboratories, and there working out difficult problems with the clinical and laboratory findings closely associated. This the general practitioner can do and is doing to a limited extent. Urinary examinations are perhaps ber far the most frequent laboratory procedures among practitioners. In urine analysis as in other laboratory work, the method of collecting the specimen depends on the information desired. For a bacteriologic examination a single fresh specimen is collected, using aseptic preeautions and at times catheterization. A fresh sam$p^{1} \mathrm{e}$ is also best for microsopic exammation of the sediment and for testing for acidity, albumin or sugar. For general qualitative and quantitative examination to determine kidney function. general metabolism. ete. a twentr-fourhome collection is neressar!.

The best procedure for general urinary work is to collect a trentr-four-hour sample and in addition a single freslis sample at the close of the twentr-four honrs. One of the most important points bronght out is the amount of urine passed in twentr-four hours. Many a case of toxemia exists because not chough water is ingested to flush the srstem.

The simple test for albumin is of great aid in making a diagnosis of nephritis, yet the presence of an albuminuria thes not always mean nephritis. Sor does the absencer of albumin in a single specimen exelude mephritis. The writer has seen a mmmber of cases in which albumin was present only at occasional intervals, while easts were present all the time. The microscopic examination is. therefore. the important thing, and the sooner insurance companies realize this the safer will be their risks.

The nitric acid layer test is the most reliable albmmin test, although 'Tanret's reagent is a more delicate test for special laboratory work. Fehling's solution is the common test for sugar. But a diagnosis of diabetes must not be made too quickly when this test gives a slight reaction. for the reason that other things, namelr, a concentrated wrine and certain drugs will reduce Fehling's solution, especially if the beiling be prolonged or too much urine adrled. In these cases the phenylhydrozen test should be used to rerify the Fehling test. The phenylhydrozen tes: is, however, too complicated for general use.

Another important test is for indican, which when found in pathologic quantities is evidence of intestinal toxemia. Other important tests are the bile test, blood test. Diazo reaction. acetone and diacetie aeid reactions, ete. The amount of total acidity often points the way to other special examinations. When the metaholic processes are in question, the amount of urea, uric acid, phosphates, chlorids, etc., passed in twentr-four hours should be ascertained.

Another important field for laboratory diagnosis which is neglected is that of blood craminations. by which many valuable hints am be obtained. By the use of a simple instrument like (Bower"s hemoglobinometer or Tallquist's paper seale, the percentage of hemoglohin can easily be ascertained. This is often important, for instance in neurasthenia, where the skin is pale while the blood is concentrated. The presence or absence of a leucocrtosis is often of rital importance in operatire cases and also where differential diagnosis must be marle between such diseases as malaria, trphoid ferer. or septic infection. In uncomplicated cases a marked leucocytosis absolutely rules out malaria or trphoid ferer. When a leucocrosis exist- a differential count should be made fiom a stained blood film to determine the kind of leucocrtes in excess. For instance, an exeess of neutrophilic leucocytes points to suppurative inflammation. An excess of lymphocytes points to di-cease of the lymphatic srstem, and the presence of mumhers of large lymphocrtes or myelocyes makes a diagnosis of leukemia.

In pernicious ancmia we find a low percentage of hemoglobin and mumerous nucleated red cells, while in secondary anemia we usnally find only the low percentage of hemoglobin. The Widal test for trphoid fever is made from the blood serum. This test, while not absolutely accurate, is atill the most reliable laborator? method for trphoid. It should be made after the first week of ferer, and can be made either from a
drop of dried blood or by collecting the fluid blond in a glass capsule．The microseopic ex－ amination of blood is made from a dried film on a corer glass or slide．In easy method is to place a drop of blood in the center of a slide and draw the edge of another slide across it at an angle of 45 degrees．It should be remem－ bered that these films should be made as thin as possible．and also that blood films，whether on slides ur corer glasses，should not be left to－ getlier．for the reason that，unless they are sepa－ rated and dried in the air，the slow drying which occur－when they are together allows the blood to coagulate and the cells to crenate，rendering the film absolutely worthless for examination．

The matarial plasmodia can be looked for either in tresh blocd or in the dried film．For routine work the double stain of ensin and hem－ atoxylin is to be recommended．and for malarial plasmodia the thionin stain．

The scope of this paper does not permit of the description of detailed methods of examina－ tion，so that only some of the most essential points in the examination of the different excre－ tions will be tonched upon．In the feces，for instance，the color and the presence or absence of free bile will indicate the state of liver func－ tion．The form，density and color will indicate the degree of constipation．The presence of pus， mucopus．mucus or blood in appreciable quan－ tities indicates varieties of intestinal inflamma－ tion．Microseopic examination will reveal to some extent the state of pancreatic digestion． Recently much attention has been given to the tests for nccult．i．e．，old changed，blood in refer－ ence to the diagnosis of uleer or cancer of the upper digestive tract．Parasites and their egos are found by mieroseopic search，also bacteria of rarions：kinds．including tubercle bacilli．

The examination of sputum，including bron－ chial and throat secretions，is another field of－ cupring an important place in elinical diagnosis． Tuberenlosis of the throat or lungs is many time diagnosed exclusively by the microsome： also other bacterial infection of the respiratory tract．The moming sputum is to be preferred for these caminations．Two separate stains sl：muld be made．one for tubercle bacilli and the athe？for other bacterial forms．The cellutar constitucnts and other characteristics，like the presence of elastic fibers．indicative of degree of lung destruction，can be studied if desired． Sometimes it can be determined whether or not pus comes from an abscess．In studving pus， exulates，etc．，for bacterial infection，ware should he taken in the collection．Sometimes a couple
of sumears or slides will answer the purpose．It other times the culture characteristics of bacteria must be studied before making a diagnosis． Thoroughly aseptic precautions must be used in collecting these specimens．The receptacle must be sterile．and if the specimen is collected on gauze or cotton it must be placed in a bottle ant？ tiglitly corked to prevent evaporation．

One of the most difficult of all bacteriologic （xaminations is the diagnosis of gonorthea in the female，especially the chronic form．There is always a multitude of bacteria in a vaginal or rervical secretion which simulate the gonococeus to such an extent that it requires great care and precision in the differentiation．Many patholo－ gist－hesitate to make a diagnosis of this sort without a thorough history of the case．

The field of stomach analysis is another at－ tractive opportunity to use scientific diagnosis and therapeutics．It is important to know whether the hydrochloric acid is increased or diminished before giving acids or alkalies．stim－ ulants or sedatives．It is also important to know whether a pain is due to an ulcer or to a simple inflammation．By the examination of the stom－ ach before breakfast，and by the use of the test meal，we can gauge the digestive power of the stomach and the abnormalities of the gastric jrice．By making a complete analysis of the stomach an early diagnosis of gastric cancer can often be made，and also important information in connection with disease of other abdominal organs．The writer has in mind two cases in which there was a question of stomach disease． possibly cancer．In both cases a thorough stom－ ath analysis in connection with the history and physical examimation enabled a diagnosis to be made of cancer of the abdominal viscera adja－ cent to but not involving the stomach，and which was proven at autopes．In this sort of work the pathologist must have access to the patient in order to give the final opinion，otherwise he can only report the findings of the stomach analysis． which must be compared with all other lata be－ fore a diagnosis is made．Recently considerable attention has been given to the examination of exudates and transudates for their demieal con－ stituents．bacterial content and cellular constit－ nents，so－called certodiagnosis．This differential diaguosis between an exudate and transudate is easily made．since an exudate is an inflamma－ tory product and resembles blood serum，while a transudate is due to circulatory or osmotie changes and contains a considerably larger pro－ portion of water．It is of considerable impor－ tance in diagnosis to know whether a given fluid
is due to inflammation or to cireulatory changes． This ditferentiation can be made absolutely in competent lands．In the case of exudates it is pos－ible hy cytndiagnozis．i．e．．by the differen－ tial comnt of the sedimented cellular elements．to indieate the kind of infection．The writer has in mind two cases in which the cerebrospinal fluid was examined in this way．One showed an exces of small lymphocrtes indicating a tuber－ cular infection．proren by the presence of tuber－ cle bacilli．which was also demonstrated at an－ topsy：The second case showed an excess of neu－ trophilic lencocytes indicating a pus germ infec－ tion which was corroborated by finding a staphy－ locoscu：in－mears and cultures，and subserguent stmptoms indicating this sort of infection．The whole－omences or nutritious value of mother＂ milk is often a question of import to the nursing infant．The use of a small milk－testing appa－ ratu．will give this information．

The examination of tumors and other path－ ological tiseues requites a large amount of expe－ rience．The medical sturlent at this time gets an insight into this work which he sonn forgets unless the practical work is carried on after he leares college．so that he must be rers eautious about giving opinions on important pathological ecetions．Ifter a considerable experience in this line of work the writer can reeall seceral mis－ takes．some of which should have heen reported that＂a differentiation could not be made as be－ tween certain pathological conditions．＂while other：were inexcusable except on the ground that there is no man－mo matter what his station in life－but makes mistakes．It is br our mis－ takes that we gain knowledge and it is safe to say that a painstaking worker will hardly make the same mistake twice．

It comes within the scope of this paper to mention among the newer pathological methods the opsonic therapy as adrocated by Sir A．E． Tright of London．Which，briefly stated．consists in treating infections by inoculating the patient with minute doses of dead cultures of the germ causing his infection．and thus br toxic irrita－ tion causing an increaso in the protective prop－ crties of the lolood．This increase of the protec－ tive agencies．Which are called opsonins．pro－ duces an acpuired immunity and cuables the syz－ tem to throw off the infection．The size and fre－ quence of the doses are regulated by testing the opsonic power of the blood by means of a unique laboratory method derised by Wright．The lim－ itation of this raccine therapr have not ret been establishect．but it bide fair to nccupy an im－ portant ronle in the treatment of infections

In this brief resume of the importance of the microseope and trot－tube，mention ha－been made of their nse in relation to medical diagno－ sis．This is by mo means the limit of their nee－ fulness．Their use in the developunent of the arts and sciences and in the public health ram－ sades have been and are of incalculable value． So matter what criticism is offered to their mse， the fact remains that their use has made it pos－ sible for the phricician of to－day to under－tan！！ the causes and effect of diseases．and to place in his hand－the most reliable weapons for their ex－ termination．

# THE OPHTHALTO－TTBERCLI．IN REACTION． 

（ieorge F．Keiper．A．M．，M．D．<br>Eye and Ear surzeon to st．Elizabeth llospital．st．Joseph Orphan Asylum，Children＇s Home．St．Anthons lome for the Aged．［゙．S．Pension Bureau．Etc．<br>\section*{LAFIFETTE，IND．}

In the Berlinor Wlinische Wochenseltrift for May ？O．190～．C．Von Pirquet describes a new method for the diagnosis of tubereulosis in chil－ dren．He raceinated a child with tubereulin．At the point of inoculation appeared a papule like the papule of raccinia．It first it＝color was bright red，then dark red，and gradually it faden out．He nsed two drops of diluted old tuber－ culin on the shin and then searified the latter．It the time of his report he had made the te－t 500 times in infants，securing positive reactinns in nearly all．The most marked reactions were in tubereulosis of the bones and glands．

In discussing the abore paper before the Berlin Medical sincietr on May 15．190i．Dr．Wiolft－Eis－ ner suggested the diagnosis of tuberculo－is hey the instillation of tuberculin into the ere．But he does not seem to have followed up hiv suggestion． The observations of Pirquet have been contimed numeroutls．

Engle ${ }^{1}$ and Bauer report that in is cases in infants raceinated for the diagnosis of tuberculo－ sis．six positive reactions occurred．Ther also report that in 200 children between the ages of 3 and 14 they secured results eren more satisfac－ tory than in the first series abore mentioned．

Ferr and LeMaire ${ }^{2}$ in a series of 49 cases rac－ cinated thus，obtained the Von Pirpuet reaction in 29 ．and in $3 t$ out of 39 eases the diannosis was confirmed by the subcutaneous injection of tuberculin．

Bandler ${ }^{3}$ used the Pirquet reaction in $20^{3}$ cases

[^17]of tubercular skin affections and $3 \%$ non-tubercular. In 22 out of the 26 there were positive reactions. In the series of $3 \%$ only 15 failed to derelop the characteristie reaction.

Dr. Louis Warficld, of St. Louis, ${ }^{4}$ after trying the Pirquet reaction in 138 cases, concludes as follows: "(1) The cutancous tuberculin reaction of Von Pirquet is a perfectly harmless procedure. (2) It is of ralue in the so-called pretubercular stages. (3) All adults do not react to raccination. (4) No reaction precludes tuberculosis in an active form so far as we can be sure of the results of any one test. (5) I positive test does not always mean tuberculosis: it may mean a healed lesion somewhere in the body, but it calls attention to the possibility of later tuberculosis; it also draws attention to the probable tuberculous nature of the case, and a more careful examination of the patient will sometimes reveal the previously overlooked lesion."

The discovery is certainly of great value and marks a distinct advance in the diagnosis of tuberculosis. What will be referred to in the Calmette reaction with reference to certain eye diseases of obscure origin will apply here also, for the Ton Pirquet reaction no doubt will serve to clear up the diagnosis and the etiology of the same.

The Von Pirquet reaction is the foremmer of the Calmette reaction.

On June 1\%. 190~, Calmette, of the Pasteur Institute of Lille, France, ${ }^{5}$ reported that if 1 per cent. afpeous solution of tubereulin, precipitated with alcohol previously, were instilled into the ere, congestion of the palpebral conjunctiva followed in about three hours in a tubereulons indiridual. The maximum reaction is reached in ten hours and disappears in from twenty-four to thirty-six hours. The first sign is reddening of the caruncle, which becomes corered with an cxudate scrofibrinous in character. This spreads to the inferior eul-de-sac in about six hours. The reaction lacks pain.
C. Lantemisse, on July $23,190 \%$, reported to the Paris Academy of Medicine that he had secured the same reaction with the typhoid bacillus. It may be that the ophthalmo reaction to the typhoid bacillus will displace the Widal test.

Comby ${ }^{6}$ writes that he lias tried the Calmette reaction in a large number of children. He prefers the $1 / 2$ per cent. solution of tubereulin which he has used in his last series in 138 cases in children. In 132 children a positive reaction was secured in 62. Autopsies in 4 cases proved the

[^18]diagnosis. In 60 eases it was negative, and six antopsics confirmed the negative findings in those f cases.

MeLennan ${ }^{7}$ reports 105 observations as follows: $: 0$ with the Calmette reaction, 20 with the old and 10 with new tuberculin. His conclusions. are: "First, for the most part, the Calmette claims are fully justified; second. the test apparently reveals the preseace of tuberculous lesions that are benign and unsmspected from a clinical point of view, as well as those which are more obvious; third, in those cases in which a subcutaneous injection of old tubereulin has given a positive reaction, or a negative one. the same result has followed the application of the ocular test.

Webster and Kilpatrick ${ }^{-8}$ found the reaction present in all cases where bacilli were found in the sputum.
E. Franke ${ }^{9}$ reports experiences confirming the observations of others.

Malan testerl io cases with positise reactions in tuberculous cases, including tubercular meningitis, peritonitis and pleurisy. Adranced cases showed no reaction.

Nessandri's is cases merely confirm Malan's. Eyre, Wedd and 1 lirtz ${ }^{10}$ report results in 138 cases: 63 were positive and $i 5$ negative. Every case of adranced tuberculosis was positive. The test causes the same reaction as the subeutaneous injection as to the opsonic index of tuberculosis. The negative plase is lengthy.
F. Kuhle ${ }^{11}$ reports positive reactions in 90 per cent. of 165 tubercular cases. 'The negative cases were the adranced ones.

Smithies and Walker, of the I'niversity of Michigam, ${ }^{12}$ report observations based on 242 cases. They had 198 negative reactions, hut they had tried the test upon a large number kiown not to be tubercular.

Mainina ${ }^{13}$ applied the Ton Pirpuet test to 208 cases and the Calmette test to 100 cases. His findings seem to indicate that the active tubercular lesion is diagnosed by the Calmette reactions and the latent foci by the Von Pirquet reaction. He states that Wien and Gunther warn the profession that the ocular reaction is not so simple a matter as first supposed, and cites cases from their experience to prove the same. One patient was a child of 3 with a spinal tumor. The instillation was followed by a clironic catar-
7. Brit. Med. Jour, Nee. 7, 1907.
\&. Brit. Med. Jonr:, llec. 7. 100 .
!. Weutsche med. Wochenschrift, Nor. 2S, 1007.
1t1. Lancet. Wec. $-21,1907$
11. lentsche med. Wochenschrift, Dec. 12, 100 T.

12 Jonr. A. M. A., Jan. 25. 1 (3Ms.
13. Hunchener med. Wochenschrift, Dec. t. 1906.
rlat conjunctivitis still evident months after the injection. In another patient there was swelling and smppuration, with slight irritation for some time. and finally phlyetenule. The conditions are still far from normal more than three months since the instillation. In a man of ed the suppurative secretion soon ceased. but it was followed by hemorthage into the conjunctiva and inflammation for more than a week.

Eisen ${ }^{14}$ reports positive reactions in 662 3 per cent. of cases ( 45 cases). The reaction in the eye subsided larmlesly in all exeept two. These tro had suffered with conjunctivitis since youth.

Feer ${ }^{15}$ warms against the application of the lest to serofulous children. It is liable to set up rebellious conjunctivitis. He recommends here the cutancous test of Ton Pirquet.

Zariboni ${ }^{16}$ reports the reaction positive in 23 patients who had symptoms of pulmonary tuberculosis. It was negative in 1: cases with no history of the disease.

In an editorial note attached to the review of the abore in the Journal A. M. A. for Feb. S: 1908. oceurs the following:
${ }^{*} \mathrm{G}$. Serafini states ${ }^{17}$ that the ocular test is not conclusive in cases of tubercular processes in the bones or joints. He relates particulars of 63 such cases in which it was applied. The reaction was positive in certain gonorrheal articular processes. in which there was nothing to suggest tubereulosis. as also in several cases of senile and other non-tubercular bone affections. He does not attempt to deeide whether the positive findings represent a latent tubercular focus or merely an accidental specific reaction. The reaction is less pronounced, the older the tubercular lesion and the sererer the anemia. He adds that the instillation of the tubereulin is not as harmless as has been asserted. The inflammatory reaction lasted for a week or so and was liable to reappear later if the eyes were exposed to any source of irritation. One patient with a gonorrheal wrist affection developed an intens catarrhal process in the conjunctiva with blisters and keratitis. The conjunctivitis has oceured in this case as also in a woman of 62 with arthritis without effusion. An intense ratarrhal conjunctivitis followed the instillation. with an abscess formation. In a man of 25 with a mild tubercular pulmonary process the instillation produced a reaction not only in the eyes but also in the lungs and glands, with general phenomena. In a few cases the negative response to the instillation differentiated a

[^19]grummal of other dubious non-tuberentar alfere tions. 'There was no reaction in three cases of certain hut mild tubereulosis."

Napier ${ }^{1 *}$ reports two cases in which he conld get no reaction although the cases harl pulmonary tuberculosis. Sometimes, he says. there is violent reaction. He also reports two cases in which there was no local reaction, hut a local change like the injection of tubereulin into the system.

Wolfi-Eisner and Teichnan ${ }^{19}$ write won the "Importance for Jrognosis of Ocular and ('utaneous Reaction to Thberculosis." They took a number of enrves and these curves show that the reaction may nceur in three ways: first. the specific skin reaction shows an abrupt rise to its highest point in from twenty to twentr-fomr hours and keeps high for the seeond day, subsiding on the third, or at the latest on the fouth day; second, this slows a rapid but weak reaction, reaching its highest point in about ten homrs and subsiding completely during the seeond day; third, this is a tardy and continuous reaction, not reaching its highest point until the end of the second day or later, but then persisting at this point for several days.
"The first standard reaction is encountered in most cases of incipient tubereulosis, and in the first or second stages when the disease shows a slow and farorable course, demonstrating that the organism is capable and is struggling against the bacillary invasion. The second weak type of reaction is observed in the third stage of tuberculosis, and in the first and second stages when the resisting powers of the organism are at low ebb. The tardy and prolonged reaction is encomntered in cases without any elinical signs of active tubereulosis. The conjunetiva does not show any reaction in this class of cases."

The practical conclusions of the article are that a lisely reaction, according to the first type, is a sign of favorable prognosis. as it shows that the organism is waging a vigorous warfare against its invaders, and with the aid of reinforcements from without, supplied by medical care the prospects are in faror of final victory.

Lery ${ }^{20}$ reports positive reactions in $S 0$ per cent. of 41 tubercular cases, and in 60 per cent. of it eases with dubious tuberculosis. Reaction Was positive in $21 / 2$ per cent. of 235 non-tubercular cases.

Walsh ${ }^{21}$ reports the ocular reaction in the diagnosis of a case of lupus. The reaction.

[^20]which was decided, occurred in twelve hours after the application of tuberculin.
A. Plehn ${ }^{23}$ casts doubt upon the reaction as a specific one for the diagnosis of tuberculosis. He instilled tuberculin as follows: In five cases of typhoid ferer with two positive reactions; in five cases of scarlet ferer with two positive reactions, one of these recoricring afterward under salicrlate of sodium; and in six cases of acute bronchitis with three reactions. To tuberculosis was present in any of the abore.
For much of the abore I am indebted to the Current Medical Literature reviews in the Journal A. M. A.

Is intimated abore, Calmette emplors a 1 per cent. solution of old tuberculin in water. However, recently the writer has been using the tablets of purified tuberculin prepared by Parke, Davis \& Co. One tablet dissolsed in 15 drops of sterile normal saline solution produces the 1 per cent. solution of tuberculin necessary for the test. The bottle and dropper are sterile. Houghton ${ }^{24}$ deseribes the preparation of the tabclts as follows:
"Well-grown cultures of human tubercle barilli on 5 per cent. glycerin bouillon is eoncentrated over a water bath at 80 degrees C . to onetentll of its volume. Then this is filtered to remove germ bodics. To a given volume of the filtrate is added $9 t$ per eent. alcohol, which throws down a voluminous precipitatc. Decant the alcohol. Redissolve the precipitate in distilled water. Filter through porcelain. The filtrate is again precipitated with alcohol ( 94 per cent.) : precipitate is washed with absolute alcohol and ether and dried quiekly in racuo. The residue is powdered aseptically and manufactured into tablets."

The test must be carefully made. It is better to drop the solution into the patient's eves while the patient is lying on his back to aroid the expulsion of the drop of tubcreulin by grarity. The upper lid is lifted and the lower lid held away from the eyeball and the drop placed upon the ocular conjunctira at the upper portion of the outer canthus. The drop is gently manipulated by the eyelid to secure even distribution. The eye is then closed for a few minutes. The drop may he instilled with the patient's head thrown far back. Under no circumstances should the patient be allowed to rub the eve. There are preeautions to be observed. Before instilling the tuberculin the eye and adnexa should be carefully inspected, for if inflammation exists the tuberculin had better not be instilled into that

[^21](.je. Morcover, it will be wise to observe whether the patient be scrofulous. If so, according to J. Citron, ${ }^{25}$ the solution should be one-fourth as strong as ordinarily used.

Several hours after the instillation (not less than three hours) there is a swelling and redness of the caruncle and the conjunctiva of both erclids and eyeball. There may be a sero-fibrinous secretion also prescnt in the lower cul-de-sae. Calmette states that the reaction appears in from three to six hours. In one of our cases the reaction was delayed for thirty-six hours, and in two for twenty hours. In one case we had a reaction in one hour and thirty minutes. Calmette further states that the reaction disappears in fortr-cight honrs, which, as above noted, will not likely always be the case. Several writers ${ }^{26}$ describe four stages or degrees of reaction, the mild, inoderately severe, intense, and very intense. In the latter the conjunctiva becomes chemotic and a month elapses before the conjunctiva resumes its normal appearance.

The following stages may be noted in the reaction: First, in about three hours the edges of the lids and inner canthus may smart; second, lachrymation may follow; third, caruncle and surrounding conjunctiva will be moderately red; fourth, in another two hours photophobia may derelop; fifth. a sero-fibrinous exudate appears over the caruncle and in the lower cul-de-sac; sixth, the lids become slightly swollen: serenth, in eight or nine hours the conjunctival vessels become risible, the eonjunctiva becomes a dark red: eighth, intense itching: ninth. if rubbed the eyes become intensely inflamed, with swelling of the lids.

Xo rise in tempcrature has been noted in the (ases. where a positive reaction has been secured. The reaction will not take place in the moribund. The old tubercular will not fikely manifest it as well as the patient with acute miliary tuberenlosis. A patient of Dr. II. F. McBride. of Daytom, Ind.. refused to show the reaction. notwithstanding the fact that he has a tubercular knee joint.

The meaning of the reaction from the general practitioner's standpoint may be summed up in a few words, quoting from a recent review in The Journal A. M. A. of an article by Calmette ${ }^{27}$ on the "Importance of the Ocular Reaction to Tuberculin in the Ceneral Campaign Against Tuberculosis." He writes of the great adrantage of detecting the trouble carly, especially in

[^22]2ti. Aubnert and lafond. Gaz. Meb. des Soc. Med. de Bordeanx. Aug. 4. 1907, and Auboret and Mogne, Jour. de Med. de Bordeaux. Aus. 25. 1907.
$2 \frac{7}{2}$ Bulletin de l'Acadamie de Iedicine, Paris, Jan. 14. 1908.
infant- ${ }^{\prime \prime}$ protect them against tubereular palents. for infants are not infected with tuberenlosis when hom. Moreover, a weeding-out process is posible whereby the infected ean be early sent to a sanitarium for the eure of the disease. ('almette further states that to date the reaction has heen tried in 10,000 eases withont harm.

T'o the ophthalmologist the meaning is plain also. As far back as 1881 Von Michel ${ }^{2 s}$ insisted that tubremlosis is the canse of many cases of iritis. Stephenson ${ }^{29}$ has shown that chorioiditis is firefuently due to tubereulosis. Stock ${ }^{30}$ has experimentally proven that tubereulosis is the canse of certain cases of iritis, chorioiditis, interstitial keratitis and phlyctenular uleers. Intractable ureitis may be due to tubereulosis. The Calmette reaction gives us a ready and simple means of determining the presence or absence of tuberculosis in these eases, the other physieal signs being absent.

Sydney Stephenson ${ }^{32}$ reports experiences with the Calmette reaction in eases of episcleritis ( 4 ). irido-cyclitis (2), and chorioiditis ( $\%$ ). In the cases of episcleritis the reaction was positive in two and negative in two. In the cases of iridocrelitis all three eases showed positive reactions. In the cazes of chorioiditis the reaction was positive four times and negative three times.

Nanco and Swift ${ }^{32}$ report experiences in the following cases: Phlyctenulat conjunctivitis ant keratiti- (4), episcleritis (2), lachrymal diseases (8), tuberche of chorioid (1), interstitial keratitis (1), and optic neuritis (1). There were fourtern positive reactions and eight negative ones.

In other words, the Calmette reaction is eapalse of heing of serviee in ophthalmology, not to mention otolaryngology:

Like all mew diseoreries, it has not yet passed the experimental stage. It has been used with recklesmess in many casess and the reports of bad results have in part been noted above. It is not as harmles as it has been heralded to be. In addition to the eases previously noted where had result- have appeared, .J. Comby ${ }^{33}$ met with excessio reaction twice among twenty-four children. T'o aroid finther trouble he used a $1 / 2$ per cent. solution, and in 108 smbsequent instillations no untoward reaction was observed.

De lapersonne ${ }^{34}$ eollected six eases of ulecrovascular keratitis due to the diagnostic use of

[^23]tuherembin in the ere. The vision was not impaired, however. There were, besides, two cases of iridocerclitis. His conclusions are: First. Inspert the ere before instilling tuberenlin: seeond, do not apply it to differentiate lesions of the (?feball, deep) or superficial; third, the reaction being most marked in children, caution is to be exercised with them. The complications studied did not manifest themselves mentil ten to twenty days had elapsed.

In the disenssion of Calmette's last paper mentioned above, De Lome eited thirty-fonr cases of exessive conjumetival reaction.

In the March, 1908, Archires for Ophthatmotogy, Dr. Amold Knapp reports a ease of "Interstitial Kicratitis After the I'se of Calmette's Ophthalmo licaction," presenting the case to the Ophthalmologieal seetion of the New York Aeademy of Medicine, January, 190s. The eye was previously healthy: On December 4, 190\%, he dropped a 1 per cent. solution of tuberculin into the eye of a 9 -year-old healthy German girl. The gencral reaction was well marked. After ten days cormeal infiltration appeared, arranged in three groups near the outer edge. On January $2 s$ they had coalesced, forming three rel-lowish-gray patches. covered and surrounded by Characteristic straight deep-seated corneal blood ressels. The infiltration is progressive, eridently shutting ofl rision. His conclusion is that the ophthalmo reaction ean not lie considered harmJess.
E. stadehnamm (alls attention to the faet that the eutaneous or ocular reaction is liable to flare up if tuberculin be injected even weeks after the primary ocular test.

Weber ${ }^{36}$ states that the test tried on fire doetors who sat up late at night to read. show positive raction, and in three the reaction was verv violent. He believes therefrom that the tendeney has been to undnly magnify the reaction as a liagnostie test.

Collins ${ }^{37}$ points out rery pertinently that the test is safest in the hands of the oculist, who is able, by examining the eves previous to the instillation of the tuberculin, to tell whether it be safe to apply the test. i. e., that the general practitioner is not the safest person, after all, to apply it.

In The Journal A. M. A., March 21, 190\%, Drs. M. J. Rosenau and J. F. Anderson, of the Hygienic Laboratory of the U. S. Publie Health and Marine-lIospital Serrice issue a warning relative to the ophthalmo reaction. Their ex-

[^24]periments show that the conjunctiva becomes hypersen-itive by the application of tuberculin, i. e.. if no reaction be obtained by the first application, a second application days hence will produce $i t$. They experimented upon twelve adult males in apparently good health. No reaction followed the instillations. In fifty-one days they repeated the experiment upon the same twelve. Ten of the twelve gave a typical reaction. They conclude that we must be cautious not to condemm the tuberculin of onc manufacturer if it gives negative results when a second application of another make gives a reaction which is positive. The last paragraph of their article is wortly of quotation cutire: "The power of tuberculin to sensitize the conjunctiva is a beautiful example of the usefulness of a state of anaphylaxis (local hypersusceptibility). The conjunctiva or any other tissue in such a condition of hypersusceptibility is armored against bacterial invasion. Thus if a tuberele bacillus lodges on a tissuc laaving the power to react at once. the tubercle bacillus would immediately be surrounded with the protecting humors and cells of the body. In other words, the natural immunizing agencies of the body would at once be concentrated on the spot where they are most needed."

The writer:s personal experience is limited to a few cases, some of which are jointly with Prof. s. Burrage of l'urdue University, who very kindly prepared the solntions used before the adrent of the tablets of purified tuberculin. Carl B. was brought by his physician. Dr. E. Parker, of Oxford. Ind.. because of an intractable ulcer of the entrance of the right nostril. involving also the upper lip. A 1 per cent. solution of tubereulin was instilled into the left eye. No reaction occurred for thirty-six hours, but it was then positive, the serofibrinous discharge appearing in the lower cul-de-sac and over the caruncle. Examination of the scrapings from the ulcer by Professor Burrage showed tuberele hacilli. Twelve other tests were made on members of the Indiana State Soldiers' Home. These were on undoubted cases of tuberculosis. In these we had three positive reactions.

## conclusion.

The ralue of the ophthalmo-tuberculin reaction as a diagnostie test for tuberculosis can not be ignored. True, some bad results have been reported, but the proportion of them is so small that, beyond a passing notice as to eare in making the test to avoid similar results, they may be almost wholly disregarded. The eontention is just that the oculist makes the test because the
average general practitioner does not consider himself competent to thoroughly inspect eyes to detect contraindications to the use of the ophthalmo reaction.

## WHAT THEY SAY ABOUT US

Another state journal has appeared. To those who have known its editor as the distinguished secretary of the Section on Ophthalmology of the American Medical Association it is not surprising that the new Jourvil of the Indiana State Medicil Assochation is one of the cleanest, best printed and best edited of medical publieations. Dr. Bulson has a genuis for practical work. and we congratulate our confrères of Indiana on having secured such an editor. Its editorial pages are as clean as its advertising pages. In medical preparations no adrertisement is accepted which has not been approved by the Council on Plarmacy and Chemistry of the American Medical Association. "Blessed be the tie that binds --." Let the renalists among medical clitors rail as they will. the time is coming when medical journals will clean up or quit. Congratulations to Indiana and to Dr. Bulson!-Kenluchi! Medical Journal.

We are glad to add to our exchange list The Torbsial of tife Indiava Stite Medical Asgocramios, the first number of which has just appeared. The great State of Indiana is a little late in entering the ficld of state association journalism, but that she has come to stay there can be no doubt from the fine appearance of this first number. It contains 48 pages of good, well arranged material, and is fortumate in having an editor of experience, Dr. Albert E. Bulson. Jr., of Fort Wayne. We predict for the new journal immediate and permanent success.-West Tirginia Medical Journal.
Tife maiden issue of The Jourval of the Indini State Medical Assoclation appeared in January. Dr. A. E. Bulson, Jr., is the editor, and Dr. B. P. Weaver assistant editor. The original articles are by Drs. D. C. Peyton, WI. N. Wishard, D. B. Myers, M. F. Porter and J. N. Hurty.

In addition to the work of the editor: there are two editorials by Drs. J. R. Eastman and G. W. McCaskey. The editorial. and in fact all departments, show good work. Dr. Bulson made a good publication of the Fort Wayne Medical Journal-Magazine, and with greater opportunitics we bespeak a successful future for the new enterprise.-The Central States Medical Monitor.

## THE JOURNAL

OF THE
INDIANA STATE MEDICAL ASSOCIATION
Devoted to the Interests of the Medical Profession of Indiana
Office of Publication, 219 W. Wayne St., Fort Wayne, Ind.

## JUNE 15, 1908

## EDITORIALS

## TIIE DOCTOR'S VACATION.

In these days of strenuous competition when every medical man wants to do his very best work, not only for the love of his work but for the sake of lis reputation and a means of livelihood. what more essential factor obtains than that of the physician occasionally taking an inventory of the measures at hand for conserving his own physical powers? Although notable exceptions are not uncommon, yet the fact remains that our profession is not one that favors longevity, and from a personal standpoint this would not for one monent deter the lionest man from entering its portals. But there are the loved ones who are dependent upon us, the few grateful ones to whom our services may have been a help and who likewise feel that our existence is in a way linked with their comfort and well-being, the possibility that we may be fortunate enough to possess even a single attribute that somebody will find worthy of emulating, and lastly the duty of every man to fill his place on earth and do to the best of his ability the work that is set before him. These are some of the reasons why duty demands the conservation of the physician's physical forces insofar as efficient services will permit. Not that we are in the least inclined to take issue with the old saw that "hard work nerer hurt any man," provided he be willing to heed Nature"s warnings, but the doctor after all is lont human and an occasional respite will certainly serve to decrease the necessity for Nature's service as monitor.

Equally important is the other benefit to be derived from a well-spent racation, viz., increased skill. The man who continuously remains at home in the same routine for months or rears will necessarily get into a rut from which even roracious reading will not rescue him. And God pity that man who has reaehed the point in his career where he can no longer profit ly sceing the work of other good men! The more a man's practice increases the greater should be the sense of responsibility imposed
upon him by the trust of his patients, amd hence the necessity of availing one's self of every opportunity to render more efficient service. And what better way can be adopted of gaining knowledge and skill in medicine than by gathering together and diseussing our various successes and failures, profiting by our mistakes and learning how to climinate them in the future, for another man to be pitied is he who never makes a mistake! Aside from this the temporary change of scene and enviromment, and the respite from care and responsibility even for so short a time help to fill a man with new energy and determination to do just a little better work than he has ever done before, always profiting by what he has seen and heard from other workers.

Is it not possible that the indefatigable Senn might have saved himself from a rather untimely death had he pursued some such comrse as that being followed at the present time by Dr. Robert Koch?

This year exceptional opportunities are offered to the medical profession of Indiana, for with the American Medical Association meeting in Clicago little time is lost in travel. much may be gotten in a short space of time. and hence there will be less sacrifice of time for the state meeting at French Liek. As will be seen by reviewing the published program. some excellent papers are in store for us, and with the majority of the members fresh from the Chicago meeting the discussions should be full of interest to every medical man of the state. True it is that The Jourxal will publish the proceedings and as many of the papers, with discussions, as possible, but the published discussions will of necessity have to be abstracted, and possibly something may have been briefiy dealt with in which you are most interested and to the discussion of which you could have added an important part.

To one factor can accomplish so much to promote the good fellowship of the profession throughont the state as the annual meeting, so that to the personal benefit is added that to the general profession of the state by rousing, good, annual meetings. Let us all unite to make this the banner mecting in the history of our live, progressive Indiana State Medical Association, for with the excellent program and pleasant meeting place every one should be able to say upon leaving, that Indiana will not yield the palm to any other state for gond fellowship and progressiveness in her medical profession.

THE COLLECTION OF THE DOCTOR'S ICCOUNTS.
We have recently learned that one of the respected and busy physicians of Indiana who has praciced medicine in one locality for forty years admits that he has never sent a statement to a patient or made any effort to collect money due for professional services rendered. Of course it goes without saying that the doctor has on his ledger unpaid accounts amounting to thousands of dollars, most of which are now worthless but many of which would have been paid promptly had an effort been made to collect them. Aside from the fact that such a practice is decidedly mibusinesslike and entirely uncalled for, it is unfair to the members of the doctor's family who look to him for support and a reasonable provision for them after his death: to the doctor himself who receives too little remmeration for his services and is deprived of many things which his earnings, if collected, would procure for him; to the patients who learn to look too lightly upon the ralue of professional services and who drift into a kind of panperism as conrems services from medical men; and to the medical profeswion at large, and the younger medical men in particular. becanse it makes it more difficult for those who desire to be businesslike and must collect what is due them in order 10 live.. to educate patrons to the belief that physicians, the same as other people, arc entitled to reasonably prompt remuneration for services rendered.

There is no good reason why physicians, like merchants, should not render statements moutlly and expect or even insist upon some kind of setthement of accounts at the eud of ninety days. The doctor is not permitted to owe for several months the butcher, the baker, the grocerrman, the drygoodsman, or cren the farmer from whom he buys his wood, horse feed or anything else. Why should the doctor extend more leniency to his patrons than the patrons grant him? Even the farmers, who ordinarily are the slowest pay of any class of people, take good care that they receive cash for everything they sell, and the most successful merchant in any line is the one who not only expects but demands prompt payment for his goods. The arerage doctor, on the other hand, seems to think he is not warranted in asking for auly money from his patrons for fear he will offend them, and in return for this short-sighted policy he loads his ledger with many accounts. some of which never were good. many were good onee but fail to be good with the lapse of time. and a few only are good after
a long wait because the integrity of the patron, a negligible quantity in many people, does not permit him to defraud even the lenient and unbusinesslike doctor.

It sounds very well to say that you are praeticing medicine for the love of it and for humanity's sake, but remember that you owe something to your family and yourself in the way of a real, tangible income from your labors, and last but not least, you owe something to your protessiou and your patrons. How are new books, instriments and an occasional postgraduate course to be paid for except with cash secured from patrons, and how do you expect to render proper services unless you are progressive? Is it not true that many a doctor who would like to "spruce up" a bit in a professional way is prerented from doing so on account of lack of funds which would be in hand if unpaid accounts of hundreds or eren thousands of dollars did not overload the doetor's ledger?

It is time lor medical men to get away from the sentimental thoughts which prevent them from considering the practice of medicine a business as well as a profession. It is not undignified nor unprofessional to expect and demand prompt remuncration for services rendered, and the practice of prompt collection of accounts is imperative if the physician is to reach the highest point of success from erery standroint. This does not mean that a physiciane must not extend leniency where leniency is due, nor chanity where charity is due, but it does mean that those who can pay but do not do so because of the leniency of the physician should be made to do so by persuasion or otherwise. No patron who is of the slightest value to the physician is going to offer objection to business methods on the part of the physician. and any physician can better afford to have only a $\$ 3,000$ practice and get $\$ 2.500$ in cash out of it than he can afford to do a $\$ 6.000$ practice and get only $\$ 1,000$ in cash out of it. Then, too, the chances are that the man who does the smaller volume of work but is adequately paid for it will do better work, for he realizes that he must give value received, and his extra time and extra income enable him to read, to attend postgraduate schools, and procure the necessary equipment which is required by a progressive physician. He is also more highly respected in his community because of his businesslike methods and his progressiveness which businesslike methods engenders, and he is at the same time doing justice to the family dependent upon him, to himself, to his profession and to his patrons.

HOME TREATMEN'T OF 'I CRERCULOSLS.
The impracticability of sanatorium treatment for the great majority of consumptives distributed throughout the comntry readers its serviee almost as meager as the so-called "elimatic treatment." Hence it is left to the medical profession to derise some efficient substitute that will be available to the vast number who must needs deny themselves the blessings of institution treatment or chimatic change. In its issule of May 9 The Journal of the American Medical Associetion has brietly taken up editorially the work of the C'ommittee for the Irevention of Tuberenlosis of the New York Charity Organisation society, which contains an acconnt of a sulscommittee's twenty months' experience. That part most germane to the subject is contained in the following paragraph:
"One hundred and twenty-seren patients Wre treated exclusively in their own homes. Out of thirty-five incipient cases, in only elecen did the disease progrese while in twenty-three cases, 66 per cent., the condition of the patient Was materially improsed at the and of the term. ot eighty cases originally diagnosed "moderately. adranced.' in les than one-half did the disease progress, while in forty-one the patients were improved. Exen out of twelve cases, originally diagnosed as ‘far adranced.' one patient improved and all were made more comfortable, and, above all, were put in circmonstances and given instructions which made them less likely to be foci of contagion to others. The arerage cost per patient lor accomplishing this has been less than dis.on per week. This ineludes not only money used for the patient, but also that spent for the family."
several lessons are tanght by this work, the dirst of wheh is the wrent necrisity of an early diagnosis by the family physicim. If material improvement ean be attained in 66 per cent. of the carly cases in the relatively shont time of twenty months, it is fair to presume that with a continnance of the regime a permanent come will surely follow in wer half of these cases. And this withont working any financial hardship of consequence on the patient such as would be wrought by a change of residence into some distant part of the country. And then, too. there is to be considered not only the actual saving of this expense to the patient himself. lont there is conserved for his dependent famil! that drain which would result from his more expensive maintenance away from lome. But perlapes more important than all else is the opportunity presented for the dissomination of knowtedge
concerning the eare of the tuberculous, their proper isolation, the care of their sputum and excreta, the immense therapentic value of sumshine and fresh air. ('ertainly if we are to attain the millenium in the conquest of the great sconrge it must be through prophylaxis and this, in turn. can only cone by edncating the people. 'Teach them to com't smohine and fresh ail and not to shun them, create in them a desire for temperate habits and plain, yet nutritions, food, and this, with a linowlerlge of the proper care for their sick, will surely win the battle. One of the most pernieious obstacles to be overcome is the firm belief, so deep rooted in the mind of the laity, that somewhere in the wilderness of nostrumdom there is surely a cureall for the "dread disease," and the pursuit of this panacea so occupies the mind and the purse that the belated visit to the phrsician reveals too oft a well-adranced lesion-a lasting tribute to conscienceless newspaper adrertising.

## TO INCREASE PROPHYLANIS.

With the adrent of the summer months come the increased morbidity and mortality among the little folks from intestinal disorder-s and the physician will do well to be on his gramed for the early detection of any posible sommer of contamination of the food supply for inlants and foung dhildren. Fortmately more and more is being accomplished in the larger citics of our state in procuring cleaner milk. for, after all, cow's milk most remain the mamstay of infant nutrition. In these days of comfort and conrenience in the rural districts when the farmers have easy acces to ice or cool rmming water, a little instrnction as to cleanly milkiner and the after-care of the milk will do much in the way of prophylaxis in those commmities.

Much more difficult is the solntion of the problem among the poor in the larger towns and eities where living quarters are cramped and rowded and clean milk a luxury. From England comes the report of an interesting experiment in one of the poorer London quarters, St. Pancreas, in the way of an effort to edncate poor mothers in the feeding and rearing of children. an account of which appears in the London letter of the Jownal of the A. M. .1. for May ${ }^{\text {D. }}$ 190s. " A school has been established which has a bicr shop vindow fillerl with pictures of rickety dhildren and an invitation displayed to passing mothers to come in and learn how to keep their babies from beaming bow-legged. A conker?
teacher from the London County Council attends and gives demonstrations in the preparation of cheap nutritious meals. In attempt is also made to get the father interested in the welfare of the mother and the child. Fathers are invited to the school, and after a cup of coffee and a pipe they receive 'talks' on hygiene. It is intended to open a milk depot for the use of mothers who ean not suckle their babies. Prizes are given to the mothers who attend regularly and follow the adviee given. The mothers pay a penny a fortnight for the elasses and the weighing of their babies. It is claimed that the school has already done something to lessen the infant mortality of the district."

Doubtless much benefit would accrue from such a plan carried out in our own cities. for an opportunity would be afforded for the dissemination of considerable nseful knowledge besides the question of proper food preparation. Such factors as proper ventilation both by night and by day, the adequate proteetion against flies by screens, bodily cleanliness, proper eare of diapers and exereta, water supply and many other rital problems of hygiene could be impressed upon the poorer and more ignorant classes in a way that would do lasting good for generations to come. Some of the energy spent in foreign missions, landscape gardening and pink teas could bring better results by some such humanitarian effort as this and in the end our nation would be a stronger and better one for it, to say nothing of the immediate suffering and sadness that would be aroided. And the benefits would not be limited to the little ones alone, for with good hygienic surroundings and a proper knowledge of ways of attaining such, more adult siekness would surely he prevented with the resultant ceonomic saving. In every city or town there are doubtless good medical men who would willingly give a portion of their time absolutely gratis for the promotion of this work. Can not a few philanthropic laymen be found in each city who will do as much?

## PRESA CORRTPTION.

Probally there is no other country in the world whose appetite for the newspaper is greater than our own and in which more dependence is placed upon the public press for information concerning topics of general interest and importance. By the establishment of rural free delivery the inteiligent farmer is enabled to be thoroughly eonrersant with the freshest data on the topies of the day and he has a right to expect such data to
be reasonably accurate. Likewise the day laborer contributes his share toward the maintenance of one or more of these instruments of enlightenment and edueation, and to him the sulbscription price of his paper often means no little sactifice. His children are early allowed the privilege of reading the newspaper and ofttimes that may be their only source for recreative realing. Is it any more than fair, then, that the material pullisher should be honest. truthful and uplifting in so far as it is posible to make it -0 : And is it not possible to fill the columns of our papers with good reading matter and legitimate advertising instead of "scoops" founded on what are known to be wild exaggerations and adrertising of what are proven to be frauds of the rankest sort? We know that is possible and are grateful for the few organs that have taken the stand for honesty eren at the expense of a few paltry dollars. The man who sells the columns of his paper to the charlatan, the quack and the nostrum dealer and knowingly gives space to fraudulent claims and guarantees is selling his sul for a mess of pottage and i.s just as guilty as is the fellow conspirator with the actual murderer.

## THE FRENCH LICK SEESION.

## INDIANA STATE MEDICAL ASBOCLATION.

Theradiy and Fridiy, Juae is and 19.
For the second time within a few years the Indiana state Medical Assoeiation will hold its dunual session at French Lick. The members of the Assoeiation who attended the last session held at this picturesque spot will recall that the place is an ideal one for society mectings a* well as for quiet and comfortable rest and recuperation.

French Liek is situated in Orange C'ounty, on the Monon and Southern railways. $1: 0$ miles southwest of Indianapolis and about (i) miles from Eransrille and New Alhany. The country surrounding it is mnusually picturesque. the high hills. fertile rallers, and wealth of foliage of its rirgin forest. giving it a beauty not often seen in the middle West.

Much of the popularity of French Lick is due to the springs which have made the place one of the famous American health reorts. The fame of the spring antedates the arrival of the first white settler in the region, for. according to Indian legends, the waters were regarded by the red men from time immemorial as a sover-
eigon remedy for most of the ills to which flesh is lecir, and the springs was the mecea to which they carried theip sick for hundreds of miles by buany a windmg trail throngh the primeval woods.
decording to published histories and deseriptions, the name French Lick is derived from two soures one being the fact that many of the early settlers in the ricinity were of Frencls birtly or extraction, and the other the well-rerified statement that almost down to a priod within the memory of living men great herds of deer and buffalo were wont to eome ont of the forests 10 "lick" the salty waters of the springs.
sodal. magnesia and lime, cabonate of magnesia and chlorid of soda. In addition to these salts, they also contain considerable quantitie of two gases-carbonic acid and -nlphuretted hỵdrogen.

The French Lick Springs Hotel, the largest and nost pretentious hotel at French Lick, is modern and up-to-date in every particular and affords accommotations for $\hat{i} 00$ guests. The sleeping apartments are all outside rooms. and firom the spacious veranda, which surounds the catire builling. and from nearly every window mall be obtained pleasant views.

The recreation and ammsement facilities at


I:uring recent years the combination of pieturespue scenery and pure, bracing air, with the medicinal virtucs of the springs and the comforts and conveniences of a palatially equipped and well-conducted hotel, have drawn many thousands of tourists and health-seekers to French Lick.

There are three mineral springs at French Lick, named Pluto. Proserpine and Bowles, respectively, which contain largely the same elements, although rarying in strength. All of thes belong to the sulpho-saline-alkaline waters. :hre principal clements being the sulphates of

Frenel Lick are raried. The clubhouse furnishes such attractions as billiards and bowling. Outdoor sports are provided for, including golf, tennis, baseball, trap shooting, horseback riding and driving. The golf course consists of nine holes over well-kept greens.
The park surrounding the hotel, covering in all an area of nearly 1,000 acres, and cxtending orer hills and ralleys, includes winding, shady paths where wild flowers grow in profusion and Nature lies undisturbed in primeral splendor.

Horseback riding has long becn a favorite form of recreation at this resort, and there are

few pleasures that equal that of wandering over trails through these beautiful woods along the course of some cool stream in its descent from the hill into the valley below. For those who prefer to travel by motor, the riews from the summits of Orange County hills afford a beauty of landseape that is a never-ending delight. Indiand is well known by motorists for its good roads, and there is hardly a time when there are not a number of machines in the French Lick garage. They are not only from Chicago, Louisville, Cincinnati, St. Louis. and cities neary, but from New York and the West. To glance orer a page of the hotel register one is impressed with the wide extent of the reputation of this resort, for one sees the names of eities scattered from one coast to another. and here
lowed by a ball. Friday night there is to be a musicale, cake walk and daneing. While the meeting is fixed for but two days, all of the scientific work will be completed by Friday evening, and many will remain over Saturday, which will be given up to social features. These latter include a golf tournament for the members and their guests, a baseball game. motoring, driving and riding parties with progressive euchre and bridge games in the evening.

Members intending to go to French Liek should write carly for their hotel reservations. stating the kind of accommodations and rate desired, and the number in the party. The rates at the French Lick Springs IIotel are from $\$ 3.00$ to $\$ 6.00$ per day, on the American plan. but accommodations may be had at other

and there the name of a visitor from South Ameriea, Europe or Australia.

The Committec on Arrangements. consisting of Drs. Geo. D. Kahlo, ehairman. J. R. Yung and Albert E. Sterne, have made ample provision for the eare and entertainment of the Indiana State Medieal Association.

The amusements provided for the members and their friends are quite varied. During the hours of the scientifie session the ladies will be entertained by trips to Mt. Aric. Cross Cave and there will be musie and light refreshments; driving. riding and motoring parties will wander in all directions.

The entertainment for the first evening will be the President's address, the reeeption, fol-
lotels in French Lick at rates varying from $\$ 1.00$ to $\$ 2.00$ per day. Among these may be named the Wells Hotel, $\$ 1.50$ to $\$ 2.00$ per day; Indiana Hotel. $\$ 1.25$ to $\$ 2.00$ per day; Tolliver Hotel, $\$ 1.00$ to $\$ 1.50$ per day, and Claxton Hotel, $\$ 1.00$ per day, all of these on the American plan. Dr. Geo. D. Kahlo, the Chairman of the Committee on Arrangements, authorizes us to say that he will be glad to personally attend to reservations for members upon request. The hotels are all located within a short distance of the Monon and Southern station, and busses meet every train. Members of the Orange Countr Medieal Society have been designated to meet the trains and to direet members and their friends to their hotels.

All of the meetings will be held in the Casino Building on the grounds of the French Lick Hotel Company．The general meetings will be held in the west room，and this room will also be deroted to the meetings of the Section on Medicine．The Section on Surgery will meet in the east room of the Casino Building，and this room will also be used for the meetings of the House of Delegates，where all the business of the Association is transacted．

The society will be welcomed to French Lick by Hon．Thomas Taggart．The principal guest of the Association will be Dr．James M．Anders， of Plitadelphia，who will deliver an address on
p．in．and 9：10 p．m．．and Louisrille at $10: 35$ a．m．and 5：50 p．m．Trains depart from French Lick over the Monon for Indianapolis at $5: 4.5$ a．m．and s：5．5 a．m．：Lafayette at 5：4．a．m．； Cincinnati and Indianapolis at $i: 00$ a．m．： Louisville at i：00 a．m．and $3: 10 \mathrm{p}$ ．m．：（hicago at $8: 5 \mathrm{5}$ a．m．and $9: 1 \mathrm{j}$ p．m．，and St．Louis at $11 \mathrm{a} . \mathrm{m}$ ．and $9: 15 \mathrm{p} . \mathrm{m}$ ．Trains arrive at French Lick over the Southem Railway at $\pm: 50 \mathrm{p}$ ． m ． and $10: 20$ a．m．from st．Louis and leare Frenclı Lick for St．Louis at $11: 3.5 \mathrm{a}$ a．m．ant $6: \pm 5$ p．m．；from Eransville at 111 ：21 a．m． and $4: 50 \mathrm{p} . \mathrm{m}$ ．．and leave French Lick for Eransville at $11: 3.5 \mathrm{a} . \mathrm{m}$ ．and $6: 4.5 \mathrm{p} . \mathrm{m}$ ．


Fritay morning．June 19，his subject being＂In－ testinal Autointoxication and Its＇Treatment．＂

French Lick may be reached by direct trains from Indianapolis and Evansrille，with close comections for almost all points in the state． There is a movement on foot to have a special train learing Indianapolis in the aftemon of Tune 1i．arriving at French Lick about ！：00 the same crening，although no definite arrange－ ments have yet been announced．Trains arrive at French Liek over the Monon from Chicago at $6: \pm 0 \mathrm{a} . \mathrm{m}$. s：50 p．m．and $9: 10 \mathrm{p} . \mathrm{m}$ ．：from St． Louis at $5: 50 \mathrm{a} . \mathrm{m}$ ．and $5: 5 \mathrm{p}$ p．m．；from Cin－ cinnati at $1: 10 \mathrm{p}$ ． mln ．；Indianapolis at is：5）

## のだR PRESIDENT．

lavid（＇．P＇exton，l＇resident of the Indiana state Medical lesociation，was born on a farm in Clark County，Indiana，Oct．1？，1stio．He was educated in the common schook of the county and afterward had three years of normal school training．He taught in the public schools of Clark County for a short time．He remained on the farm，becoming familiar with all of it＝ work，until he was about 22 years of age．He received his medical education，the first year，in the Ohio Medical College，at Cincimati，and afterward graduated at the Iniversity of Louis－
rille in 1886, and has continued to practice his profession at Jeffersonville ever since. He graduated at the Medico-Chirurgical College at Philadelphia in the winter of 98 and 99 . He was commissioned a major general and brigade surgeon in the Spanish-American War by the late lamented President McKinley, and after seeing service in the field he was detailed as chief medical officer of the State of Pennsylvania, and was stationed in Philadelphia in charge of sick soldiers in all the hospitals of the state. He is a member of the Clark County Medical Association, Indiana State Medical Association. American Medical Association, and Association

of Military Surgeons of the L. S. Army. He was a member of the first House of Delegates of the American Medical Association. He is chicf surgeon of the Louisville and Southern Indiana Traction Company, the Louisville and Northern Lighting and Railroad Company; surgeon of the American Car and Foundry Company, of the B. \& O. S. W. Railioad, and of the Big Four Railroad. as well as cxaminer for many insurance companies. He was married to Miss Henrietta S. Har, of Charlestown, Ind., June 26, 1883. He has been successful in the
practice of his profession and his genial manner has won for him a great many friends all orer the state.

## THE PROGRAD.

> THLRSDAI, JUAE IS.
> Mormag Sessiox, 9 a. M.
> Medical Section.

1. A Few Important Points in Regard to Nervous and Mental Diseases. Chas. F. Neu, Indianapolis Discussion opened by G. IW. McCaskey, Ft. Warne, and E. C. Reser, Indianapolis.
2. Mrocarditis from a Purely Pathological Standpoint................R. II. Ritter, Indianapolis
3 Myocardial Failure from Other Causes Than Valve Lc-ions....A. C. Kimberlin, Indianapolis
3. The Relationship of Heart and Kidney Affections

Robert Hessler, Logansport Discnsion opened by J. B. Berteling. Snutin Bend; F. B. Wrnn, Indianapolis, and Walker Schell, Terre Haute.
万. Diabetes, Diagnosis. Treatment and Report of a Case
L. L. Mobler, Summitrille
6. The Treatment of Diabetes..G. D. Kahlo, French Lick Dischasion opened by Allizon Maxwell, Indianapolis, and George T. Mchor, Columbus.

## Surgical section.

1. Strangulated Hernia, the Importance of It Early Recognition and Necessity of Its Radical Treatment ...T. B. Eastman. Indianapolis Dischwion opened by A. M. Harden, Evanwrille, and I. N. Trent, Mmicie.
2. The Uterus an Abdominal and Pelvic Tumor.
H. A. Duemling, Ft. Wayne
3. The Diagnosis and Treatment of Fluctuating Timmors of the Female Pelvic
fr. H. Grant, Richmond Discusaion opened br M. F. Porter, Ft. Warne, and L. J. Willien, Terre Haute.
4. The Pucrperal Perineum--Protection and Repair. .............. II. I. Rosenthal. Ft. Wayne Diseusion opened by \%. O. Sexton, Rushrille, and H. C. Pantzer, Indianapolis.
5. The Technic of Harelip and Cleft Palate Opera-
tions..................... Ea-tman. Indianapolis Discussion opened by J. H. Mliver, Indianapolis.
6. Excesses in Surgical Cleanliness.
MI. A. Austin, Anderson Discu*ion opened hr Edwin Walker, Evansville, and II. O. Pantzer, Indianapolis.

## Afteryoon Session, 2 to 5.

## Medical Section.

1. Disposal of Sewage in Small Towns
G. B. Lake Wolcottrille
2. Epidemiologs of Trphoid Fever.
II. O. Bruggeman, Ft. Wayne
3. Report of Committee on State Medicine.
..T. N. Hurtr. Indianopolis Discussion opened by F. A. Tucker. Noblestille.
4. Tuberculin Therapr... W. T. S. Dodds, Indianapolis.
5. The Early Clinical Diagun-is of Pulmonary

Tuberculosis......T. Victor Fecne. Indianapolis
6. Report of Committee on Tubercnlosis
J. A. Little, Logan-port

Discussion opened by Theo. Potter. Indianapoli-, and J. C. Blossom, Mit. sinmmit.

1. Scolionis

## surgical section.

Discumion openced hy H. Th tllen, Indianepolis and (: A. Dangherty, South Bend.
2. The Diagnosis and Treatment of sinus Throm bosis................J. F. Barnhill, Indianapolis Discussion opened hy L. F. Page, Indianapolis, and (s. II. Spohn, Elkhart
3. Obstruction of the Bowel-. E. D. Clark, Indianapolis
4. Obstruction of the Bowels from Trammatism
J. II. Ford, Indianapolis

Discussion opened by T. B. Noble, Indianapolis, and T. C. Kennedy, Shelbyville.
5. Gonorrheal Oplithalmia.. W. N. Sharp, Indian:polis Discuwion opened by D. W. Stewenson, liehmond, and A. P. Roope, Columbus.
(6. Demoid Cyste..........II. G. Nierman. Ft. Wayne Discu-sion opened by Moses Thorner, Indianapolis.

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                                    FtENiNg Sesshox, 8 P. M.
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Iresidents Addrew.-.The Physician As a Citizen" David C. Peyton, Jeflersonville

## FRIDAY, JUNE 19.

General sesciox, 9 a. m.
Address--"Intestinal Autointoxication and Its Treatment".........J. N1. Anders, Pliladelphi: Malical Section, 10 to 1 .

1. Relation of Phrsicians and Druggists
S. E. Earp and J. R. Francis, Indiamapolis,
2. A Plea for the l'e of Pharmacopeal and National Formulatory Preparations.

Frank H. Carter. Indianapolis
Diseussion opened by Joseph T. Stokes and II. E. Zimmer, Indianapolis.
3. A Plea for State Control of Inebriety and Drug Addictions...........A. L. Wiilson, Indianapolis
4. Report of the Committee on Inebricty
II. J. ILall, Franklin

Discuman opened by A. E. Sterne, Indianapolis, and George R. Green, Muncic.
5. Atypical I'neumonia. Chas. I. Sowder, IndianapoliDiseussion upened by II. C. AlcFadden, Shelbyville, and l?. S. Ilunt, límehester.

## Surgical scction.

1. Raynauds Disease.......John Kolmer, Indianapolis Discussion opened by Allen Pierson, Spencer, and C. K. Bruner, Greenfield.
2. Symposium on Obstetrics -
(a) -Normal Labor. . . Jane Ketchan, Indianapolis (b)-Toxamias of Pregnancy
L. Burckhardt, Indianapolis (c) - P'uerperal Infection
G. B. Jackson, Indianapolis (d)-Six Hundred Cases of Labor in Private Practice............. H. A. Cowing, Muncie Diseus.ion opened by E. F. Hodges, Indianapolis; s. J. Voung, Valparaiso, and E. E. Palgett, Indianapolis.

## Aftervoor Session, 2 to 5.

Medical Section.

1. Oenlar Manifestations in General Diveases
IV. F. Hughes, Indianapolis

Discussion opened by George Knapp, Vincemnes, and L. D. Brose, Evansville.
2. Etiology of Rheumatism and Chorea
IV. D. Hoskins, Indianapolis
3. Acute Rheumatiom in Children.
L. 1'. Drayer. Ft. Wayue

Dincumbin opented by d. A. Jacgerr, Indianapolic, ant II. A. Fox, Gosport.
4. Tuberenlin Therapy. .. IV. T. S. Dodds, Indianapolis garis and tcue Rosarea ...A. M. Cole, lnclianapoli-
Dindussion opened by C. S. Bond, Kichmond. and $r$. Li. Charlton, Indianapolis.
5. 'The Preant Status of Syphilis
................A. II. Brayton, Indianapolic
Dincuscion opened by W. H. Gilbert, Evansville Goethe Link, and IV. P. Garshweiler, Indianapolis
6. Icute N゙eplriti-
.R. R. Holder, Columbur
Disulnsion opened hy C. A. White, Danville, and IV. IV. Tucker, Greencastle.

## Surgical Scetion.

I. Fxophthalmic Goitre-
(a) Etiology and Pathology
J. A. McDonald, Indianapoli
(b) -Symptoms and Medical Treatment
. F. O. Dorsey, Indian:ıpoli-
(e)-Surgical Treatment ...J. V. Reed, Indianapoli-

Discussion opened by 13. D. Myers, Bloominglon, and C. E. Cottingham, Indianapolis
2. Some Considerations of Intra-Sigmoid Disease
G. IV. Combs, Indianapolis

Discussion opened by A. P. Buchman, Ft. Wayne and A. B. Grahan, Indiana polis.
3. Anesthesia Considered As a Specialty
C. N. Combs, Terre Haute
4. A Consideration of General Anesthetics
IV. R. Davidson, Eransille
5. Concerning Iyoscin, Morphin, Cactin Anesthesia .................... T. II. Jones, Anderson
Hisclssion onened by Ben Perley Weaver. Ft Wayne; J. 13. Fattic, Anderson, and II. S. Thurs ton. Indianapolis.
Pathology of the Seminal Vesicles and Prostate. with Suggention of the Necessity for Surgical Treatment. Charles E. Barnett, Ft. Wayne Discussion opened hy W. N. Wishard, Indianapolis.

## EDITORIAL NOTES

We wonder if Pluto is good for spring fever!

Remember the place-Freneh Lick.
Remember the dates-Thursday and Friday; June 18 and 19.

Indinas doctors turned out in force to attend the A. M. A. session at Chicago. But then Indiana always does things well.

Frescif Lick is one of the most eharming spots in Indiana. No more delightful place could be selected for the annual session of the Indiana State Medieal Assoeiation. The members will find it an ideal place for rest and recuperation.

Do not forget that your wife will enjoy a few dars at French Liek, and she probably needs a
rest and change as well as you. Take her with you to the annual session of the Association. The Committee on Arrangements has provided a series of entertaimments for her.

Read the adrertising pages of The Jounval and then make it a point to patronize the advertisers whenerer you can eonsistently do so. In occasional letter to the advertisers, saying that you are patronizing them and that you appreciate the fact that they are advertising in The JourNAL, will go a long way toward making them feel that their money spent with us is bringing returns. This means something to fou in the way of securing a larger and better journal.

Fort Whane is building a much-nceded eight-story fireproof hotel at an estimated cost of three-fluarters of a million dollars. It will be opened for business on Tan. 1, 1909. The Fort Wayne Medical Society has been waiting for the erection of a new hotel, thus affording ample accommodations for all visitors, before inviting the Indiana State Medieal .Issoeiation to hold another session at Fort Wayne. Now that a new and commodious hotel is in conrse of erection, the long-delayed invitation will be extended.

Tue Anchor Life Insurance Company of Indianapolis pays $\$ 5$ for life insurance examinations. Indiana doctors should remember this when grieving because this state is the home of so many "eheap skate" life insurance companies. And the Anchor Life Insurance Company finds that it is cconomy to pay a respertable fee for examinations, as it means better examiners and better service. We take pleasure in publishing in this number a letter from the company correcting us in the impression that no Indiana company pays a $\$ 5.00$ fee.

We met a doctor recently who was badly marked as a result of a siege of smallpox. He told us he was once a rabid anti-raccinationist and while in that state of mind he contracted the disease which disfigured him for life. Ten other people were exposed to the disease the same time he was, but, all having been raceinated, not one of them contracted the disease. The doctor now believes in vaccination.

What a pity that such a lesson should be required to prove the efficacy of a measure that has long since established its value and is recognized by scientifie men all over the world.

Dr. J. M. Axders. of Philadelphia, is to be the honored guest of the Indiana State Medical Association at the French Lick meeting. He will deliver an address upon the subject "Intestinal Autointoxication and Its Treatment." This address' will be a scientific eontribution of decided merit, as Dr. Auders is a man of extended experience. recognized ability, and one of the leading merlical inrestigators of this country. Aside from the purely scientific aspeet of the subject, the practical side will appeal to every physician, and the members of the State Association are to be congratulated upon having secured such an able man to present the subject to them.

Tire membership of the Indiana State Medical Association is now the largest in the history of the Association. Many new members have been secured by the A. MI. A. canrassers, but Tife Jocrnal is largely responsible, both directly and indirectly, for much of the increase. Without The Jourxal the A. M. A. canrassers would not have been put to work in Indiana. Hundreds of letters, accompanied by sample copies of The Jourval, have been sent to doctors eligible to membership in county societies, and these, followed up by the personal interriews of canvassers, have been the means of bringing many doetors into medical societies. The work will be continued, and it is not too much to expect an increase of sereral hundred in our membership before the close of the year.

IT is greatly to be regretted that the medical profession of America was not allowed more of an opportunity to show its appreciation of the distinguished Dr. Robert Koch upon the oceasion of his risit to American soil. And how happy we would have been had he found himself able to remain over with us for the Chicago meeting'? Yet if he can get in our land the rest he seeks from the arduous labors he has been performing, then by all means let us respect that desire to the letter. He is surely aware that no profession is more grateful than this of ours for the glorious work that this brave man has done and the sacrifice he has made to science, a sacrifice that doubtless to him would have been only a jor even though his government had not granted him his honorarium. The world needs all the Robert Kochs it ean get, so let us kecp him as long as possible.

The action of the corporation counsel for New York in warning the Board of Health
against licensing ostenpaths or receiving death certifieates signed by them is most eommendable. The man who is willing to aseribe all human suffering to some bony or ligamentous abnormality, usually a so-talled "displacement," is about as competent to eonduct a eareful autopsy and make a report of its pathologie findings as the arerage Imerican Indian would be to interpret the musie of Lohengrin. When the training of the osteopath ineludes a diploma from a reputable modieal eollege. supplemented by osteopathie specializing. then the matter will assume a diflerent aspect, but until such an iteal is attained then osteopathy should rest content to necupy a similar place with Christian Seienee and the other fads, viz.: to limit itself to certain selected instances, where its indications are plain.

After two years of wrangling as to the expediency of discontinuing the "Transactions," the Indiana State Medieal Association las shown its wisdon in launehing on the sea of state medical joumalism one of the eleanest and most handsome crafts that monthly floats into our harbor. Dr. Nhert E. Bulson, Jr. is the editor, and his foreword as to the poliey the Couneil will pursue in the matter of advertisements aceepted for publication, and the work he hopes to aceomplish for organized medieine. presages a gireat influenee and usefuhness for the journal. With the united and enthusiastic support of the membership of the assoeiation, the irleals set for it by those who have so long adrocated its publication will be quickly realized. The Journal is so much like us we are justified in claiming it as our twin sister, and just know that we will grow to be very fond of it as times passes on.-Journal of the Arlansas Medical Socicty.
'T're medical profession of the State of Maryland is to be eongratulated upon having a Senate that is sufficiently wide awake to realize the dangers of allowing Christian Scientists and faith healers to practice within the state unless they be erfuipped with a diploma of a regular physieian. And yet it is highly probable that this commendable measure was not enasted without some considerable aetivity on the part of the profession itself, without which little ean be expected in the way of medieal legislation.

This regulation will be of both direct and indireet benefit to the publie. In the first place it will materially deplete the ranks of these fakers in the state, beeause rery few, if any, will be able to qualify: and, seenndly, by virtue of the
broader education necessary to give them their medical degree fewer of these semi-religious grafters will be eveated. Nay the day be not fas distant when like restrictions will be inatgurated in all the states!

Ag.bls we wish to ask a more eareful revision of the copy sent us by county secretaries. It is gratifying to note that our request for trpewritten eopy is being eomplied with more generally, but the mere fact that a typewriter is leing used without regard to the inexperience of the operator does not remedy the diffieulty to any great extent. Misspelled words poor punetuation or entire laek of it, inemplete sentences, all make for a consumption of time in the abstracting of papers and reports that absolutely prechudes our giving to you all that we could if only we had rour eooperation in the matter. This comment is not offered in any spirit of eomplaint. for conditions are improving and we are enonuraged, but more as an appeal to fou to aid us in making our journal all that it is capable of being made.

Our publishers have complimented us highly on the quality of copy submitter to them and we are only laboring in the effort to make nur material worthy the praise they have given it.

Witif an outline of the program of the state meeting printed so long in adrance as it was in the May number, every one nnght to go to French Liek prepared to add something of interest to the diseussion of the papers presented. There is nothing that adds more to the life and interest of a medical meeting than free and high-grade discussion. It is not absolutely essential that one have had a unique personal experience in the subject at hand in order to present an interesting and helpful diseussion, if only one make limself thoroughly familiar with the work of those of larger experience in the line under discussion and then go prepared to think and draw conclusions for himself. Better far to have a few good papers well and freely discussed than a multitude reeled off to a silent audienee. Besides, it is unfair to a man who, after mueh study and work along eertain lines. eondenses his results and presents them in a eonseientious fashion. to allow his efforts to fall as though to a row of empty ehairs. Go to Freneh Liek and go loaded to give at least one subject a rousing, good discussion that will help make the meeting a red-letter one!

It is more than probable that New York State will soon have a law requiring the registration of every case of tubereulosis, for snch a bill has heen passed by the legislature and sent to the governor for his approral and signature. Sueln a law should carry with it rigid regulations eonrerming the sputum, stools, etc., and attaching a penalty upon family or attendant for failure to earry out such regulations. Recently we heard of a tuberculons patient who, while confined to his bed, amused himself by seeing how far up the wall he could eject his sputum. That such a practice could be tolerated in a eivilized enmmunity seems almost beyond human eomprehension, and the public should certainly be safeguarded from such an irresponsible person. Perhaps a certain amount of allowance should be made for ignorance in this partieular instance. but eren ignorance is no excuse for depravity. With the public instructed as it should be concerning the dissemination of tubereulous infeetion, properly reinforced by state laws rigidly carried out in each ease of such infection, there might be added hope of ultimately eonquering this lurking scourge.

Probable a majority of the members of the Indiana state Medical Issociation have never stopped to consider what it costs to publish a first-class medieal journal, and that it requires a good ileal of hustling and executive ability to raise the necessary funds to make both ends meet. We, therefore, think it entirely proper to say that every doetor who pays one dollar in dues to the Association, which dues inchndes a subscription to The Jorrial, receives The Jocrixil, which actually costs nearly twice as much. of course a large part of the expense of pmblication is met hy the income from adveriising, and without this income The Jourvar wouk be a small and comparatively insignificant periodical. Members of the Association should bear this in mind when we plead for the support of the adrertising pages, for it means much for the success of The Jourval. Please remember also that ont of about twenty state association journals there are only three that have clean adrertising pages, and The Journal of the Indinia State Medical Association is the only state association journal existing at the present time which from the initial number startecl out with clean advertising pages. To start right required the rejection of over $\$ 3,000$ worth of advertising such as is regularly accepted by some of the prominent medieal journals of the country, but we were determinal to
puldish a journal of which we could be proud and the advertising pages of which the Indiana doctors would not have to blush for with shame. The results tell the story. We are now publishing a journal larger than at first thonght possible for us to have, and because it is clean it has won the appreciation of our members as well as others who receive copies through exchanges and otherwise. It is published for Indiana medical mell and in their interests. and it is not dependent upon nostrum and other oljectionable advertising for its support. Its adrertising is above eriticism and will remain so.

But a word as to the support of Tire Jocrvil. We have pointed out that advertising enables us to publish a larger and better jonmal than would otherwise be possible, and every member of the Association is interested in haring a good journal. We ean only secure and hold advertising by proving to the adrertiser that we actually make the advertising pay for him. It is actual returns whieh he wants and it is a cold business proposition to him and no sentiment when he considers the adrisability of paying money for adrertising in The Jocrinc. Now the members of the Association can, by patronizing the adrertisers, make the advertising pay the advertiser and at the same time help Tie . locria.il. This can be done by no unfair diserimination, lout, all things being equal, showing preference for those firms who patronize us. For instance, there is no excuse for any member of the Association, if he buys his surgical instruments of a firm that contributes nothing to our support when there are fire or six equally as reliable firms that patronize us and add to the henefits which go to every member of the Association. The same thing holds true in the purchase or nse of anything required by the physician in his regular work. Reciprocity is considered fair in the conduct of any business, and there is no reason why medical men should not follow good business pelicy as well as any other class of people. We are not asking you to adopt any measures whieh smaek of a labor union boreott, but we are asking you to show advertisers that it pays to alvertise in The Jocraile which you own and the suceess of which means so much to you. Tief Jouratal not only deserves your support. hut it needs it if the greatest good is to come from the publication of a periodical which owes its existence to your needs and is published sole! y in four interest.

## CORRESPONDENCE

1NHRAN. LIFE INSERANCE COMPNNY
PAY心 \& INATION.
Lxdintapolis, May $\hat{\text { i }} 1908$.
To the Editor:-ln your estemed Joursio for the month of April I note. among other matters of interest, that you find occasion to speak in two instances with reference to life insurance. giving in connection with one of these instances a list of companies paying a flat fee of $\$ 5.00$ to their examiners for each report made by them.

I also note that you state, so far as you know. no Indiana company is paying such a fee. I respectfully heg permission to herewith inform you that The Anchor Life Insurance Company of Indianapolis, Ind., is not only paying a $\$ 5.00$ fee at present, but has been doing so since the day it began doing business.

Hoping that other life insurance companies may find it adrisable to pay a like fee, I am Yours very truly,
Tife Anchor Liffe Insurance Co., IV. B. Kitcuex, Medical Director.
(We take pleasure in publishing the above letter. It is comforting for us to know that at least one life insurance company claiming Indiana as its home has the good business judgment to pay a respectable fee for medical examinations and by so doing is able always to secure examiners from the better class of physicians. By paying adequate fees the Anchor Life Insurance Company can discriminate in the appointment of examiners and invariably secure competent services. Better examiners and more skill in examinations means better risks, and better risks mcans a saving to the company and cheaper rates for the policy holders. Therefore, it is conomy all along the line. and the Anchor Life Insurance Company is to be congratulated upon having considered the matter in such light.E.b.)

## CONCERANGG MEDICAL LEGISLATION.

Fort Wimne, May 15, 1908.

To the Fiditor:-When the Indiana State Medical Association meets. it should tlerote some time to medical legislation, remembering that it is not by counties nor by Congress that health laws are enacted, but by state legislatures.

An amendment of law is required in regard to notifications of births. deaths and infections discases. The whole onus is now placed on plysi-
(ains, contrary to the practice in England. (iermany, and other comentres. The notification is for the bencfit of the people, and they shoukd be made jointly responsible with the doctors in making it. If there were a fine for the head of the household in case of neglect, as well as for the doctor. there would not be so many instances where contagious diseases are disseminated by neglect of medical care for fear of the quarantine law.

Another amendment is suggested relating to boards of health. All licensed practitioners in a county or city should be members of the county or city board, respectively. These shoukd elect an executive committee of health for their district, and probably should name the secretary, who is the paid managing official. In this way only can the board, as you suggest, he dirorced from politics. No lay nuthority could so well know who is best fitted for membership on the exccutive committee as are the members of the profession. And this plan would have the further adrantage of securing a hearty conperation between all the practitioners and the secretary of the board in each county or city.

Wif. P. Whery.

## PERSONALS

Dr. T. S. Corerdile, of Decatur, who took a trip South for his health, has returmed home much benefited.

Dr. C. If. Campbell, of Hammond, who spent the winter in Florida, has returned lome and resmoned his practice.

Dr. W. F. Wood, of Mishawaka, is compelled to give up practice on accomet of ill health. He intends to spend a year in Mexico.

Drs. Heramen and Oscar Riece, who for the past year have been practicing medicine in the Standard District of Hammond, have discontinued their practice in Hammond.

Dr. Calyin Carter, of Brookville, who has been ill for several months, is much improved, and. while not yet able to attend to his entire practice is deroting much of his time to it.

Dr. (r. If. H. Kemper, of Muncie. councilor of the Eighth District. was elected commander of the Indiana Commandery, Loyal Legion. at a recent reunion of that order.

Derine the latter part of the month of April Ir. Addison, representing the Ameriean Medical Asiociation. secured eight applications for nembership in the St. Joseph County Medical society.

Dre. A. J. Willits, for a number of years a practitioner at Lowell. but who for the past rear has been practicing in Hammond, has mored to Chicago, where he has opened up an office on the South Side.

The following named physieians who paid their medical soniety dues for the year 190: were erroneonsly placed in the column of suspended members in the Transactions of 190: : Dr, B. F. Sinyder, Camden. Carroll County, and Dr. C. II. Burket, Warsaw, Koseinsko County.

Dr. J. I. Maris, of Paoli, formerly secretary of the Orange County Medical Soeiety, has recently bought out Dr. Shewman's practice at Waymansrille, and Dr. S. F. Teaford, of Paoli, has been elected secretary of Orange County Medical siociety to fill the unexpired term of Dr. Maris.

Dr. If. P. McMillex, of Deeatur, had a narrow escape from drowning while on his way to see a patient near Berne Wednesday night, May 6. The night was dark, and when about three miles north of Berne the horse stepped off a bridge into a flooded creek. The buggy followed, and Dr. Me Millen was thrown headlong into the stream. By grasping the floating buggy he was able to keep from drowning and finally erawled up the embankment to the road. In due time the horse was reseued, and the Doetor proeeeded on his way to the house of his patient, returning home later in a prostrate condition. As a consequenee of the afeident Dr. MeMillen eontracted a serere cold and was eonfined to his. bed for several days.

## NEWS, NOTES AND COMMENTS

Mres. Efizabetit Hood, wife of Dr. Theodore F. Wrocl, died at her home in Angola, May 5, 1901s, aged 66 years.

Plats have been received for a custodial building to be erected for the Indiana Village of Epilepties, गeff Castle, during the poming summer. The new building will cost about $\$ 20.000$. will be a brick structure, trio stories high, and will accommodate 25 patients.

Tine graduating exereises of the Indiana University Shool of Medicine, now the eombined medical schools that formerly constituted the medical departments of both the Indiana and Purdue universities. were held at Bloomington, Ind., May 20, 1908, a large class receiving the degrees. Dr. IT. N. Wishard, of Indianapolis. delivered the address on behalf of the medieal department, and President Bryan delivered the address on behalf of the Trustees of the unirersity:

Ox looking over the program for the meeting of the A. M. A. at Chieago, we find that Indiara was well representert. Aside from the fact that Dr. Edwin Walker, of Evansville, is rice-president, Dr. Miles F. Porter, of Fort Wayne. one of the trustees, and Dr. Albert E. Bulson. Jr., of Fort Wayne. secretary of the Section on Ophthalmology. the following gentlemen were on programs of seetions for the reading of papers:

Drs. George IV. McCaskey, Fort Wayne: Miles F. Porter, Fort Wayne: Thomas B. Eastman. Indianapolis; H. C. Parker, Indianapolis; F. C. Heath, Indianapolis; L. D. Brose, Evansrille; 1. F. Page, Indianapolis, and J. N. Hurty, Indianapolis.

Tile Northern Tri-State Medieal Asmeiation will hold its summer mecting at the Oliver Hotel. South Bend. Ind., July 14. The officers of the Association are: President, Dr. Albert E. Bulson, Jr., Fort Wrayne, Ind.: viee-president. Dr. William A. Diekey, Toledo, Ohio; seeretary. Dr. William F. Shoemaker, Butler, Ind.; treasurer. Dr. J. A. Weitz, Montpelier, Ohio.

The program for the South Bend meeting indudes a large mumber of rery interesting subjeets Dy prominent members of the Association. Dr. Casey A. Wood. of Chicago, is to be the guest of honor and will deliver the principal address, his subject being "The Present Status of Some Ophthalmie Means of General Diagnosis." The members of the Association will be tendered a banquet at the Oliver Hotel by the St. Joseph County Medieal Society:

## SOCIETY PROCEEDINGS

## ADAMS COUNTY．

The Adams County Medieal Society met at the oflice of Dr．Kellar of Decatur on April 10．The members were so ocenpied with the discustion of local atiatirs of interent to the society that the time pasced by m－ noticed，and ats Dr．W．W．I＇．Me．Millen，who was to have preented the praper of the evening，was ill with lagrippe，it was decided to postpme the program mutil the May meeting．Dr．J．S．lioyers was elected delegate to the state Association mecting to be held in June at French Lick．

Adjourned．
Mame L．Holloway，Nec．

## ALLEN COUNTY．

Fort Wayne Medical Society，meeting of $\lambda$ pril $1 t$ ， 190 s.
society met in regular session at Hope llospital． Meeting called to order by President Calvin，with 32 members present．The program being a clinical one， was in charge of Drs．Porter，Gilpin and llavice．

Tuberculosis of Bladder and Kidneys．－Case report and patient exhibited by Dr．J．H．Gilpin．Patient， male，aged 27 ，clerk，American．Family history nega－ tive except that one brother now has tuberculosis con－ tracted in Denver．Patient has had all of the diseases of childhood．As long as he can remember he has had to get up in the night four or five times to mrinate． About six years ago he began to sufler from frequent wrination and smarting，and a bearing－down sensa－ tion after wrination．He thinks there was blood at times．Has never had any gravel or gonorrhea．He urinates about every hour；mrine dribbles at times． He las no pain in the bladder region，but at times in the back．Five years ago left testicle swolled to －ize of fist and was removed surgically．In the past －ix months he has sulfered greatly with pain over pubes，and frequent urination and pain in the back． When patient feels rery had he passes some blood in the urine．In December，1907，he pasoed blood constantly for about a week．He has lost about 1.5 pound in the past six months．The condition is ex－ agerated on exartion．Ltine at times is milly as soon as passed．The pain has never been colicky but is a con－tant alehe，and worse after a night＇s rest．Patient has night sweats，afternoon temperature and reacts to tuberculin．
Erysipelas．－Case report and exhilition of patient by Dr．Gilpin．Patient infant eight months old．The erysipelatous inflammation began on the rulva and extended until the entire body was involved．The reatment followed was supportive and smptomatic． A few werks ago the baby developed ancesses，first in the scalp，whieh were opened and drained．Later two abscemes in the pharyns broke．This is evidently a pyemic condition．The temporature ranged from 101 to $1041 / 2$ ．This case illustrates that erysipelas is a self limited discase．

Mongolian Idiot．－Case report and patient exhib－ ited by 1hr．Gilpin．Patient baloy ten months old．This baby is the second child of healthy parents．At three monthe of age it was thought to have colie，as it rolled its eyes and cried ont．The eyes are of the Mongolian trpe．The child is sommolent and apathetic． It apparently neither seen nor hears．It takes nourish－
bent regularly and seems to thrive．There ane fone conditions．to com－ider in this canc，mamely：（1）Is it a Mongolian idiot？（br is the eometion due to（ 2 ） myxedema，（3）rickets or（4）hlinduc．．The baly was placed on thyrods and impooed for a time，but as the dose was increased the condition herame wores． It lies very listless but notices the rattle of a bell or whistle．Child will not sit np alone．There is no edema．Child thought to be a Mongolian idiot．
In opening the disenssion，Dr．MeCaskey said，in dia． cu－ang the kidney case，that he does not believe there is any question but that germs do pas－from bladder to kidneys．They travel up the mueosa．
Dr．Wheelock，in discusing the lat report．－aid that ophthalmoscopic examination is very un－ati－fac－ tory，but there is an optic atrophy present．This， however，would hardly explain the listleane－and sommolence．
Dr．B．Van sweringen，discuming last（ance report， was of the opinion that the condition in a congenital aflair that involves the sight and hearing．This ac－ counts for listlesshens and lack of mental development． The child has grown too much to be a cave of myxedema．The sparms indicate an involvment of brain tissue．The are of errapelas is intereting as showing the amount of resistance the babo had．
Dr．Porter，on the infection of the kidney from the bladder，said that infections of thi－sort are common． An ascending infection is what kills men who have hyperthropy of the prostate．Catheter treatment re－ sult：，in about it per cent．of cases，in infection，and they die in about four or five years after beginning catheter life．

Dr：Bulson，in discusing the last care，said that he had made an examination of the infant－eyen and that there is a pupillary reaction in both eye－，which in－ dicates that there is not a total atrophy．

Dr．Drayer，in reference to the case of tuberculosis， said that organisms of the non－motile type do not ancend．Leferring to the second case he said that the mortality in general erysipelas occurring at birth or during lirth period is high； 95 per cent．of these eave die， 50 per cent．in the tirst year．They die of inani－ tion after they recover from the erysipelas．Another queer fact about this case is that aboceses are sterile． Jatient had no fever．With reference to the third ease he sad that this child is not an ordinary idiot． It is one of those borderline cases，and he believer that organotherapy should be relied on for diagno－is．

Dr．Jan Buskirk，discussing the last case．suggent that there may be a congenital lack of blood supply（1） a portion of the brain．

## The discussion was closed lyy Dr．Gilpin．

Detachment of Retina．－C＇ase report and patient ex－ hibited by Dr．Harice．Patient 14 year－of age．He wats first seen one month ago，at which time he had faiting rision in the left eye．The left eye had been injured a conple of times．Dr．Havice gave a short talk on detachment of the retima．

Ulceration of the Cornea．－Case report and patient exhibited by Dr．Harice．Patient，a man，wat injured five days ago by being struck in the eye with a piece of metal which was removed and eye bandaged．Dr． Harice was consulted the next day，the eye being swelled and cansing the patient much pain．At the point of injury there was an ulceration．Dr．Havice said that all ulcers of the cornea are calused by in－ fection．As exciting canses，trama stands first．As treatment for uler of the cornea Dr．Havice gave the
following: For simple cascs, cleansing, atropin and "rest. When the patient has a foul, ragged uleer, mop ont the ulcer and apply pure carbolic acid by means of a wisp of cotton on a probe. If this does no good, repeat, aud if this also fails, use actual cantery. Later teaching is not to open the anterior chamber in ease of hypopion on account of danger of infection. Prognosis depends on location, extent and depth of the ulcer.

In opening the discussion Dr. Bulson said that the aletachment of the retina in the case presented by Dr. Havice is of trammatic origin. These cases frequently have traumatie cataract, and all are apt to terminate in degenerative changes and inflammatory affections of uveal tract requiring removal of eye. Dle advises rest and posterior sclerotomy if seen early, but when spen late no treatment is helpful.

Dr. Wheelock said that eaution should be used in the use of atropin, as tension is increased by atropin, and circulation is interfered with, and therefore drainage is disturlsed. He has had the best results with canterization with pure crystals of carbolic acid.

Cancer of Uterus.-Case report and patient exhibited by Dr. l'orter. l'atient, female, aged til years. She passed menopause at 51 . Has had three children, the youngest of whom is 24 years old. Has good family history. Her present tronble began with a slight bloody discharge one year ago last winter. The examination shows the cervix normal, and a body about the size of fist adherent to the left pelvic wall. The uterus is hard and there is a fetid discharge. She was curetted about a year ago for hemorrlages and at that time was adviwed against operation. Dr. Porter asked "What should be the attitude of the turgeon under surla circumstances toward the physician who gave sucle adrice in a ease of this kind ?"

Tumor of Parotid; Endothelioma.-Case report and patient exhibited by Dr. I'orter. This is a so called mixed tumor of the parotid. This tumor has been there for 38 years, but has grown rapidly of late. It is essentially but mildy malignant. The question is. where does the trouble commence? In this case there was a very complete capsole. This growth involves the glandular structure per so. Dr. Rhamy prononneed it entothelioma.

Cold Abscess of Tubercular Origin.-Case report and patient exhibited by Dr. McCaskey. When the patient came to the lospital he wam probably suffering from toxemia of intestinal origin. Dr. Mc.Caskey later located an abscess nonder the deep fascia of the right loin. On opening the abscess it was found that it went. up and back to the spine, and a few specula of bone and material tubercular in character came away. The alsseess was cleaned out and the cavity packed with a 1 per cent. iorlin gauze for four or five day- and then the pationt put out on the street. as he thinks the outdoor esercise and freedom of movement is better for lim than to be shut up in the hospital.

For Diagnosis. - Casp report and patient exhibited by Dr. Nr•Caskey. No diagnosis yet made. Patient was bronglit to the hospital for obstruction of the bowels, resulting from peritonitis, probably due to appeulicitis. Patient single, age 20 , and a farmer. His family history is negative. He harl typloid fever a great many years ago, from which he completely recovered. Ten days prior to admission to the hospital he had pain in the umbilical region and romiting every few minutes. Daily morements of the bowels was
spcured wit's cathartics and enemas. Pesterday the bowels moved three times, and patient is still vomiting. The belly is distended and rery hard and tender over the entire surface: the condition not localized. Pulse so, temperature $99{ }^{2} 2$ to 101 .

In the discussion Dr. Porter said that he believes this to be a case of peritonism. He advises that no mealuine be given. but only water for ten day, with rest and light diet. He think- no operation is neressary for relief, but thinks the patient will recover.

Dr. B. Van sweringen said that peritonism is an indefinite term and believes it is mwise to use it.

Dr. lheall -uggested the possibility of tubercular peritonitis.
Dr. Gilpin closed the discus-ion by speaking on the remote pathology of the case and reported a case that was opened and a few mesenteric glands found enlarged.

Adjourned.
J. C. Wallace, Ner.

## (Meeting of April 28, 1908.)

Society met in regular session at the assembly room, with 22 members present. Meeting ealled to order by President Calvin. Socretary Wallace being absent Dr. Norgan acter as secretary. The subject of the "vening was "Rheumatism." Dr. S. E. Mentzer read "paper on "The Etiology of Aeute Articular libermatiom." 1)r. (x. 13. M. Bower read a paper on "Acute liheumatism; Pathology and Clinical History." 1)r. l. 13. Mek゙eeman read a paper on "Acute Rheumatism; Complications and Treatment."

In the discusion Dr. Drayer cited a mase which had come under his olservation of a man. aged 2 s , who had been ill one week and was convalescing. but suddenly became deliriou-, with a temperature of $107 . \mathrm{i}$. Ifter a lypodermic injection of morphin $1 / 4$ grain the temperatme roee to 108.5 . Patient died three hourlater of acute articular rhemmati-m. Postmortem showed a temperature of 111 one hour after death. Dr. Drayer says that acute rhematism is a -pecifice infection. Te objocts to woolen clothing in any acute fobrile disturbance. He siys the usual dowe of sul. icylates is too small.
1)r. Boyer - in referrincy to damp climates. clamed that the do not predispose to acme rumbatism. say ing that mome rase were found in the Rocky Nountain dintrict than in damp rexions. He gave as a remann that people do not perspire in high altitudes. He adroentes rest in bed until entirely well. and large dones of sonnum salicylate. He says that children who have tonsillitis whond be watehed earefully, as this condition predisposes to rhemmatism.
1)r. Rothschild reported a ease of acute articular rhemmatism in a woman 75 years of age which ran d typical course. He said that cases of salpingitis frefuently have rhemmatic pains.

Dr. Rhamy said that the bacterial origin of rheumatism is mot settled. He think- it is due to different organisms. He says hyperpyrexiu occurs just previnus to death in these cases and continues after death. Ile says these very high temperatures may not be what is ordinarily called fever, but a disturbance of the heat centers.
1)r. Ralwles discussed cases following tonsillitis, reporting a rase with a temperature of 107 , with rerovery.
1)r. Whitson of Muncie di-cussed hereditary predis. position.

Dr. English said that he was disappointed in the fact that nothing new in treatment has been suggested.
the adrocated the use of 30 -grain doses of salieylates foun or five times a day. He also adrocated strychnin when there are symptoms of heart trouble. IVe objeets to woollen muderwear on patients who are in bed. He reported a case of large edfusion in pericardium in rheumatic case.

Dr. Nioman said that pationts usually diagnosed own case as rheumatism when it is often something eluc.

Ir. Beall reported a pare following tonsillitis. He said that salicylates have been used over 100 years. being given as willow bark, which contains salicin. He adrocates rest. Said that in the Isle of Madagasear there ale few cases. although the altitude is low. He thinks the climate has little to do with rhemmatiom.
131. (ireenwell said that heredity is certainly a factor in the diesase. He salid that ehilling of the body when perspiring is often the eanse. Tonsillitis should alway - be treated with salicylates.
I)r. Morgan objected to these patients wearing underwear while in berl, as it retards elimmation. He said that high temperature often appears in a number of other diseases which may occur with rheumatism, as tetanus I 10 ; uremic eoma with convulsions 10 s , altnongh without convolsions usually subnormal; injuries to cervieal eord IlO-112: sunstroke IT?. The dose of salicylates is usually too small.

Dr. Calvin said that we do not know just what rheumatism is. He believes there are many cansen, but perhaps the disease is bacterial in origin. He believes in kepping open the emunctories. He referred to tonsillitis as a cansative factor which he said is contagious in many eases. He thinks hereditary predisposition exints, and reported a case bearing out his belief. He referred to the geographical location of disease. The disease is worst in the northwest and around the great lakes. He said that in this region everybody had malaria a few rears ago, and consequently a pathological condition of liver and spleen exists, making impaired climination as catuse of rhenmatism. He adid that if any mistake in treatment is made it is giving too much salicylate and not emongh eliminants. He said "Clean out the sewers."
1)r. Mentzer closed by sayiner that climate, in his opinion, has little to do with disease, and the same is true of seasons. He read abstracts from his paper answering most of the questions asked.

1r. Bower wid that high and dry elimates of the Allogheny momitains have no rheumatism.

Motion was carried that the paper of Dr. Rosenthal read before Twelfth Councilor 1nstret Medical Society be referred to the State society.

Motion was also carried that the paper of Dr. Duemling on "The Uterus as a Pelvic and Abdominal Tumor" be referred to the State Society:

Adjourned.
E. E. Morcan, N゙・e. protcm.

## (Meeting of May 5, 1908.)

Society met in regular session in the ansembly room with twenty-two members present. President and vieepresident leing absent meeting was called to order by secretary On motion 1)3. L. P. Drayer was ealled on to pre-ide. Minutes of two previous mectings read and approved.

Progressive Muscular Atrophy.- Case report and pationt exhibited hy Dr. MreCaskey. Patient man. laborer. age 40. Family history negative. Thic condition was fira noticed abont one year ago when the patient complatiod of stiflues in the neck and shonlders. and
abont the same time weakness in hands and thmma. - little later he noticed a marked weakness of the alms, and twitching, this finally involving the inner a-pect of the thighs. He lost in weight from 270 to 17.) pounds. The museles of his arms beeame shrunken and flabby. In $1 \$ 96$ patient was injured by a heary ralload tio falling on his back in the lower dorsal recion. Whieh rendered him uneonscious for perlaps half an hour, when he was able to stand, and in about an hour could walk. Following this accucut patient was in bed for two weeks. When lie felt able to again go to work. This history of injury is al litale far away. lont is of interest in the etiology. the lavoratory findings were negative. There are groups of muscles Wasted, hi foream now heing only nine inches aromud. There is alon wasting of the geltoids and infra and *upras spinata. In addition to these atrophies, on close examination ale found minnte twitehings of these grompe of muscles. which are farcicular contractions. The lesion is located in the anterior comma of the spinal cord. In this ease the ebbow jerk is present, and the knes jerk is present and really exaggerated. There is $n 0$ donus and no Babinski. The absence of marked sensory symptoms excludes lesion involving the meninges and posterior nerve roots. The anterior eornua and crossed prramidal tracts are involeed. The diagnosis is progressive muscular atropny with slight involvement of the eross prramidal tracts. The eleetrieal reactions in the lower extremities are momal, and but a little change in qualitative and considerable ehange in quantitative in upper extremities. The tendency in these eases is to progress. The treatment indieated is strychnin, and alteratives 10 build up the general health. as the best that can be expected is only to stay the progress of the disease.

Acute Rheumatism in Children.-Paper hy Dr. L. P. Drayel, in which he says that he prefers to term the condition acute theumatic fever. This discase is due to an infection with the germ microeoceus rhemmatiens. and the tonsil is the point of entrance. He said that few if any of these eases necur prior to the third year. He referred to the eomparative mildness of joint involvement and mentioned the frequency of heart manifestations and the frequent ocrurrence of primary endocarditis. The eardiac manifestations are the most severe ones, as there is a marked tendency to reeurrence. Nodular rheumatism is the form peenliar to childhood. Erythena nodosum is now questionably supported as a form of rheumatism. The relation between ehorea and rhenmatism is very elose. The most essential factor in treatment is absolute rest in bed, so far as possible.

Muscular Rheumatism, Clinical Varieties and Treatment, was the title of a paper by Dr. J. C. Wallape. in which he discmsed hmbago, plenrodynia and torticollis. In treatment he ealled attention to the excellent results from applieation of heat with a hot iron.

Chronic Articular Rheumatism: Pathology, Symptoms and Treatment.-Paper presented by Dr. E. A. Crull. in which he said that change of (limate and ncenpation are of value to the treatment. Coneentrated violet ray with a small therapentie lamp will give much relief, and piperazin water has given most exrellent results in this disease.

In opening the disenssion Dr. Weaver said tnat it is questionable whether vaecine therapy is of any value in rheumatism.
1)r. Morgan said that heredity plays an important part in the causation of rhemmatism. Cases of tonsilli-
tis shom be treated as if the disease were rhemmatism and they will get well quieker. He recently made a postmortem on a young man who gave a history of rheumatiom, finding the perieardium and heart ghed together as though one organ. This condition had existed for a number of rears. He said that nodules should be looked for more frequently than they are.

Dr. Beall said that musenlar rheumatism should be regarded as general infection with local manifestations in the connective tissue. These nodules are microscopically the same as the nodules on the valves of the heart. He has seen three cases of erythema nodosum and no history of rheumatism was obtainable. He referred to a case oi museular rheumatism oceurring in the back at 3 a. m., which.lasted until 6 a. m., the condition remaining for about one month, and then got well of itself. Loeal applications are preferable.

Motion made and earried that Dr. Drayer's paper be referred to state soeiety.

Dr. Kane spoke on heart complications.
Dr. Boyers said that salicylates made from the true ail of wintergreen should he nsed.

In chosing Dr. Drayer said that more than two-thirds of the cases in children give a history of transmitted tendency. Chorea is due to some active toxin, be it rhemmatism or what not. Piperazin water gives excellent results in selected cascs.

As the meeting of June 2 oceurs at the time of the meeting of the A. M. A. motion was made and earried that this meeting be postponed.

The following applications were read and referred to the board of censors: Drs. D. E. Kanffiman, W. F. Schrader, W. A. Connolly, George J. Studer, II. E. Steimman, Edward Kruse, C. C. Kimmel. J. E. Bickel, S. F. Henderson, E. H. Underwood, P. S. Titus, John McArdle, H. K. Mouser, B. Clark, H. A. Ray, W. H. Thompson, Edward Moser and Joseph D. Morgan.

Adjourned.
J. C. Wallace, Sce.

## (Meeting of May 12, 1908.)

Society met in joint session with the Fort Wiyne Retail Drnggists' Association in the assembly room. Hecting ealled to order by Prosident Calvin, with iwenty-four members present. Ninutes of previous meeting read and approved. The applications read at previons meeting were reported on by the board of consors, and on motion the secretary ca-t the ballot of the society for them.

The Relation Between the Medical Profession and Druggists was the title of a paper by Mr. C. ]3. Woodworth, one of Fort Wayne's prominent druggists, in which he said that this relation shonld be harmonious, as they are both useful one to the other in the care of the sick. Conditions are diflerent than they were years ago, when the druggist had to mix his own drugs and make his pills, but now all he has to do is to measure out some liquids and write the directions, many times having to go to the wholesale house and buy an original package, paying from $i 5$ cents to $\$ 1.50$, then charging the patient only 40 or 50 cents for the prescription, when the ehances are that the druggist will never have an opportunity to use the same compound again. He thinks the doctor shoukd be able to preseribe for himself and not let the other fellow do it, and then the druggists conld again make a fair "living and keep up the dignity of their profession. He said that overmedication was miversal in this country, and that it was the canse of a great percentage of the mortality among infants. Frequontly people come
into his store wanting him to preseribe something for their aliment, and he invariably refers them to some physician, telling them that he might do them harm by giving something not required in their condition, and generally suceeeds in haring then consult a doctor. He says that he does not approve of eounter preseribing, nor does he think that the physician should dispense his own medicines, for the reason that if he does not find what he wants in his limited stock he will invariably substitute for the next best.

The Physician and the Pharmacist.-This paper was read by Dr. - I. P. Puchman. He spoke at length concerning the use of proprietary medicines by physicians, calling attention to the fact that if we wonld use the drugs listed in the U. S. P. and N. F. and fit the medicines to the patient and not the patient to the medieines the results would be much better, and the physicians would also be doing a very good thing for the uplifting both of the medical profession and the pharmarists. The medical profession meeds the good druggint. Ile also said that he can not imagine a divorcement of the mutual working interests of the phammeist and the physician ; however. it is incumbent that the pharmacist shall practice pharmacy and the physician practice medieine.

In the diseussion Mr. E. L. Mertz said he wished there would be less proprietaries.

Dr. Bulson said that there are two things that tend to increase the number of proprietaries: (1) Ignorance of materia medica and therapentics among medical men who are constantly looking for something to cure disease and to make the practice of medicine eaty. (2) The money in it for manufaeturers. The active eooperation of the intelligent active practitioners of this country is needed to lielp the present crusade against proprietaries in order to win out. There are three ways in which the medical profession can overcome this evil: (1) They must refuse to aecept samples of proprictaries. (2) Never prearribe them. (3) Refuse medical journals that accept nostrum advertisements. There must also be influence brought to bear on the publie press.

The dischssion was closed by Dr. Buchman and Mr. Wootworth.

Motion made by Dr. Bulson that a committee of three physicians be appointed to confer with a committee of thace druggists to consider evils mutually felt, and adrise means for their correction and to take into acoonnt the prescribing of proprietaries. dispensing by physicians, and counter prescribing hy phar macists.

Adjourned.

1. C. Wallatce, Nor.

## ELKHART COUNTY.

The Elkhart County Medical A-sociation met in resnlar ression May $\bar{i}$ in the rooms of the Elkhart feademy of Dledicine. Ninutes of previous meeting rearl and approved.

Orificial Surgery.-Paper presented by Dr. W. B. Fireider. He said that the orificial philosoply deals with the lower orifiees of the body. especially those that are guarded by the sphincter museles. as the rectum and both the male and female wrethre. These arifices are supplied with two sphincters. the upper and the lower. The upper in each instanec is composed of inroluntary muscular fibers, and is con sequently supplied by smpathetie nerves. The lower
sphincter is made $n p$ of rohmtary muscular fibers and is gowerned by the cerebropinal nervou－system．Since the bood stream is reaponsible for all bodily eommerce． it is the duty of a phyician to see that it is free and not blockaded in any of its part－．The harmony of the sympathetic nervou－system is re－ponsible for this action．In all forms of chronie troubles there is sympa－ thetic nerve impingement，either in the rectum or the sexual organs，or both．To instutute mutritive changes in the body the orificial surgeon does all around orificial work，sued as ditation of the rectum，removal of hemorrhoids，pockets and papillæ，repairs lacera－ tion－of the cervix and perinemm，eireumeises the long and adherent prepuce in the make，and unhoods the －litoris in the female．All these procedures stimulate smpatactic nerve action，fhus the eapillaries and eure many emonic eases that are declared hopeless．

The paper was discussed ly Drs．Kiuhn，Lemon and Benham．It was evident from the discussion that pirysicians in general do not agree with Dr．Kreider， although it was conceded that much yood is aeeom－ plished by the orificial surgeon．But many are operated on with no improvement whatever．It was generally agreed that where a pathological condition exists it should he discouraged．No operation should be under－ taken withont a definite knowledge that diseased con－ ditions exist，and the prognosis favorable after the operation．It wa－brought out in the discusaion that Dr．Kreider has cured a number of rery bad cases of nemrotic states by orificial surgery．It is evident that many physicians have not investigated the subject．As Dr．Kreider was obliged to take an eartier car he could not close the disenssion．

Gastric Ulcer whas the title of a paper by Dr．J．C． Fleming．Ihe adid that gastric uker oceurs elinieally in two forms，（1）the round or peptic uleer，occurring in young culorotie females 15 to 30 years of age，whieh heals rapidly under proper rest and treatment，and（2） the chronic ulcer，a harge．irregntar ulder，oceurring during the course of chronice gastritic．The symptoms may be typical，doubtful or katent．They are（1）pain or tenderness．（2）hematemesis，（3）hepreacidity； these making up the so－called typical triad，and to which may be added romiting，pyroxis．anemia and emaciation：The eourse of the gastric ulcer is emi－ nently chronic，showing great tendency to recur．Sear＊s observations show that 50 per cont．rewer within five vears．It i doubtful if large ulcers ever heal．Gastrie uleer is subject to the same pathological lans as an uker in any other part of the body．If recognized early and treated properly it will heal rapidly．If allowed to go on until the edges become hard and in－ durated it is hard for it to heal．As to what consti－ tutes a cure，Edwards says nine monthis withont symp－ toms and Musser two years without symptoms and absenee of oecult bood for a long time．The complica－ tions of gastrie ulcer are perforation，perigastritis， hemorrhage and malignant degeneration of stenosis．

As to treatment he said that a patient with a gastrie ulcer is in a critical condition，and should be put to hed for a pertiod of at least four weeks．As preliminary treatment he advises seven to ten days of starvation and rectal feeding，followed by a period of two weeks on liquid diet，small amounts five or six times a day， this being followed by another week or ten days of light dict，and gradual return to regular diet．Regard－ ing surgieal treatment，he said that uncomplicated gastrie ulcer is a medical disease．Cammon＇s and Manrys experiment－have proved that if the pylorus
is patent the food will pass through the prorie open ing rather than through the stoma produced by gastro－ entero－tomy，and that the stoma of the gatioenteros tomy will close，in a wery short time if the pylorus is patent．Muser．s classical report of 1.871 hospital （asm of gastrie ulcer collected from literature from 1897 to 1907 ，and 586 cases obtained from private com－ munieations prove conclu－isely that uncomplieated ulcer is a medical disease，and that complieated ulcer is sometimes a surgical disease．If perforation oceurs it is always a surgical disease．if hemorrhage oecurs acutely it is rarely a surgical disease，and if repeated and chonic in spite of medical treatment it is a sur－ gical disease．If symptoms of obstruction of pylorus hom glass contraction or adhesion persists in spite of medical treatment it is a surgical disease．However， he says that pylorospasm must be ruled out before resorting to surgery．If symptoms of gastrie uleer continue in spite of medical treatment and ineapacitate or threaten life the ease is surgieal．
Following the reading of this paper Dr．James A． Work，Jr．，gave laboratory tests and examinations of the contents of the stomach and very nicely demon－ strated the tests as they were brought out by Dr． Fleming．It was elearly shown what can be done in the laboratory in the diagnosis of stomach diseases．

In opening the discussion Dr．1．W．Short said that the pain in gastrie uleer was very depressing．In perforation the condition is one of collapse．

Dr．O．II．Stauft said that she agreed with the essay－ ist that the patient should he put to bed and kept there for three or four weeks，but the condition and sur－ romendings of some are such that it is impossible to earry out this proeedure．It is a problem what to do with such mnfortunates．
1）r．H．K．Lemon said that he ean not agree with the essayint that a dilated stomach may not he path－ ologieal．He aloo says that uleers of the stomach should be eonsidered as surgical and not medical eases

Dr．J．B．Porter said that ulcer of the stomach is not so easily diagnosed as one might think by reading the varions articles on this subject．He affirms that many errors are made in there casen that are not eleared up until on the portmortem table．He men－ tioned a ease that had only a few symptoms of ulcer of the stomach，but in consultation with Dr．B．F． Knhm it was deeided to operate on the man．The operation verified the diagnosis and the man made a good recovery．
In elosing the discussion Dr．Fkeming reasserted that a dilated stomach was not pathological if it emptie－ itself in seven hours．

Motion was carried that a committee of three be appointed to secure material for scientifie work．The president appointed Drs．Spoln，Stauft and Lemon．
Adjourned．
George W．Spohn，Sec．

## FRANKLIN COUNTY．

The Franklin County Medical Society met in regular session Monday，May 4，in the Court House，Brook－ ville，with a good attendance of members and several visitors present．Meeting called to order by President Patteroon．Minutes of April meeting read and ap： proved．The papers of the evening were by Dr．Phillip L．Muh of Oldenburg．on＂Myxedema．＂and Dr．A． L．Preston，Fairfield，on＂Rheumatism－What Is lt？＂ These papers were greatly appreeiated and dicenssed by all present．

The name of Dr．M．F．Cupp of Metamora was pre－ sented for membership and he was manimously eleeted． Also the name of 1ri，Charkes Schum，the oldest phrisi－ cian in the comnty．Was presented for honorary mem－ bership and he was umamously elected．Dr．Schum gained his education in Austria and served in the Aus－ trian army as a surgeon for a number of years．

The next mecting of the society will be held on Mon－ day．Tune 1．at the Court House，Brookville，at which time Dr．．T．C．Clawson of Cedar Grove will take uj， the subject of＂Fxophthalmie Goitre．＂There will also he a paper by Dr．S．A．Gifford of Laurel，the subject to be rloosen later．

Adjourned．
C．II．Mayfeed，Sfec．

## HOWARD COUNTY．

The Howard Connty Merlical Society met in reanlar Geasion at Kokomo Friday．May 1．Meeting was called to order hy President Dr．R．II．Ross，with the largest attendance of the fear present．Dr．J．N．Hurty，spere－ tary of the lndiana State Board of Healtly，was the gnest of the society．and delivered an address on＂The Medical Inspection of fichool Children．＂All the mem－ hers of the medical profession and the school authori－ ties were invited to hear this address．Dr．Hurty advo－ cated regular medical inspection of school elhildren in that the physical ailments of chitdren should recrive proper attention．and that the conditions now so pro－ lific in promotion of infectious disease may be rem－ redicd．He also dwelt on the necessary sanitary precan－ tions and proper furnishings．The paper bought out a full discomion，not only from the physicians，but from Superintendent $\operatorname{Ogg}$ of the eity sehools，the high s－liool faculty amd School Board．

The societ lloward Comnty Medieal Society recommends that shool rhildren of the publie schools of Howard county be required to pass a phỵical examination before en－ tering shool，and that the school authoritien take seps to instruct teachers in these important matter－．＂ （ ）ther reolutions adopted were as follows：

Whereas．The International Congress on Tubereulo－ sis will he helel in Washington，D．C．．Sept． 26 to Oct． 13． 190 s，and．

Wheneas．The sad eongress is being promoted by eminent scientists and plilanthropists and is approved by the Cnited States and all European governments． therefore be it

Resolerd，By the Howard County Medieal Society， that it most heartily extends its approval and support to the International（＇ongress on Tubereulosis，and herewith directs that the president shall appoint dele－ grates to represent said society at said congress，and be it further
liesolrerl．＇llat the society send a copy of this resoln－ tion and a list of the names of delegates to the spere taryegeneral of the congress，Colorado building，Wianlı－ ington．1）．C．

The delegates appointed are：Dr．W．H．Mchlurg， Dr．J．W．Wright，Dr．N．C．Hamilton，Br．J．M． Moulder，Fr．J．H．Carmelley and IV．H．Martin．

In the evening Dr．Inurty lectured in Grace Meth－ odist Clureh．under the allspices of the society．and the big auditorium was filled．His subject was＂The Prevention aud Cure of Tubereulosis．＂and has awakened wide－pread interest in Kokomo．

Adjommet．
Mihl J．Mabtin，Nec．

## KOSCIUSKO COUNTY．

The Konciu＊ko County Medical Society met Nay 5， 1908．The papers of the evening were by In．．J．G． Nehrlas．Warsatr，on＂Anatomy of Eindocardium， Synovial Membranes and Peri－Aarticular Struetmres．＂ discussed by Drs．liurket，McDonald．Yoeum．Hawortlı and Howard：Dr．C．R．Long，Piesceton，onl＂teute and Chronic Articnlar Rheumatism，＂discossed by Drs． Burket，Haworth and C＇ary：Dr．C．N．Howard．War－ saw，on＂Muscular Rhemmatiom，Clinical Varieties and Treatment：Rhemmatoid Arthritis，＂discussed by Drs． Me．Donald，Cary，Nehrbas，Long，Haworth and Burket．

At this meeting Dr．M．S．Socum，of Mentone and 1or．J．Cr．Nehrbas，of Winona Lake，were selected as delegates to the State meeting to be held at French Lick Jume 18 and 19，Dr．C．Norman Howard was elected secretary－treasures to fill the vacancy call－ed by the removal of $\mathrm{Dr}_{1}$ ．C．A．Undermood to Dan－ rille．Ind．
The program eommittee was re－elected to prepare another six months＂program to follow the expiration of the present one．Dr．G．W．Anglin was elected to fill the varancy made on the committee by Dr．Under－ wood＇s departure to Danville．The committee is com－ mosed of：Chairman，Dr．N．Austin Cary，Silver Lake： Dr．G．W．Anglin，Warsaw，and Dr．C．Norman Howard．Warsaw．

Adjoumed．
C．Nomman Howard，Sec．

## LAKE COUNTY．

The society met in regular session at Cumy May－ in the parlors of the Gary Hotel，with eightern mem－ bers and six visitors present．Eight new members were added．making the total membership fiftronc．A committer was appointed to arrange a joint meeting with the Lake Connty Dental Society and a motion eamied to repuest from the district eomeilor a perma－ nent organization for the Tenth District．

The first paper of the evening was by Dr．E．E． Exans of（iary on the sulbeet of＂Exophthalmic Goiter．＂ After reviewing the phyiology of the thyroid and parathyroid glands．the therapentics of Graves disease， both medifal and surgical．the essayist presented a report of threr eases，appurently cured or greatly benefited by the eontinued use of the tincture of bella－ donna eombined with strychnia．

The diseussion was opened by Dr．Slanklin，who briefly reviewed the history diagnosis and pathology of the eondition．The was followed by Drs．Loring and Oberlin．

Emergency Surgery was the title of the next paper， pesented by Dr．W．S．Fauhts of Gary．The author dealt with the exigencies of first attention，laying stress upon the necessity for greatest possible cleanli－ ness．He farored the use of warm，moist dressings and the more general use of anti－streptococo $i$ a and anti． tetanic sera．He then passed to the treatment of localized injuries and exhibited certain splints that in his hands had proven particularly efficacions in the treatment of fractures．
The paper was discussed by 1）r．H．F．Slatrer，who recommended adhesive plaster approximation of facial injuries in preference to sutures becanse of the better cosmetic eflect．

Adjourned．Willidm F．Weis，Sec．

## MARION COUNTY．

## IMIIVMPOLA HEHCII，SOCIETY．

（Meeting of March 24，1908．）
The soriety wias called to order by the President，Dr． Wron．The minntes of the last meeting were read and approved．The applieation of Dr．Eugene Buohler was read the second time and referred to the Council．The evening was deroted to the discussion of the relation of the physician and pharmacist．

The Relation of Physicians and Druggists was the title of a paper by Dr．S．E．Earp．Tle said that the recognition of pharmacy as a profession gives a greater dignity to the relationship between physicians and druggists．The ethical relations between physician and pharmacist should be as far as possible the same as those between physicians．Sehools of pharmacy，de－ partments of pharmaey and other institutions，and laws regulating the practice of pharmacy，all con－ tribute to the betterment of conditions．A faithful and conscientious drnggist may be recommended by a physician，but not to the exelusion of other，equally competent druggists．Courteous treatment is expected by physician and patient，hence the druggist las the right to expect the same in return．and an adherence to the murritten code of ethics is csential．The emsayist called attention to the inethod by which people im－ posed upon the druggist for the relief of a cough． The druggist has an opportunity to be a public bene－ factor by informing such persons that a cough is frequently a fore－rnnmer of tuberonlosis，the cure of which depends upon it． early diagnosis．A rather uptimintic view was taken in reference to substitntion and counter prescribing and the evils which result from such practice were enmmerated．As the world is getting better so are conditions of this kind improv－ ing，and men honest in their profession will not stoop to underhanded procednres．The publio is being edu－ rated to the importanee of hygiene，－anitation，amd preventive medicine by the medieal profession，and in this the pharmacist must help．He is in a position to render the physicians work more eflective，but an oreasional reference to the unwritten hw of ethice betwren the physician and the druggist will not come almiss．

J．Fi．Francoin also read a paper on the sume subjert， ixeginning with a brief review of the history of the two professions．We believes the whold diseltssion to－ day revolves around fonr points：（1）The preseription itself．（2）The recommendation of medicines by the druggist．（3）Adherence to the standards of the （＇．S．l＇．and the N．F．（4）Professional courtesy．In regard to the first point．the ownership and copying and refilling of prescriptions，he fully subseribed to the conclusions of the joint committer of the Chieago Medical Association．The Arogerint should never recommenu patent medicines，display them or allow his name to be attached to them．The anthor referred to the completeness of the Pharmaropeia and National Formulary and urged their general use．He pointed out the sednctiveness of the large mannfarturing phar－ maces and his detail men；the glaring fart that the mannfacturer is concerned not with the alvance of －cientific discoveries and thr promotion of acemrate investigation but primarily with the sale of his goods．

A Plea for the Use of the National Formulary and Pharmacopœal Preparations was the title of a paper by Frank H．Carter，in whieh he referred to the wide－ －proad and growing interest in these sulbjects and the
large nmmber of meeting similar to this that are being held．Proseribing of regatar memedion he helieves to he desimble to all partios concormed．exeept the large mamufacturer．Good etlects from such prescrib）－ ing mentioned by the anthor were a clase tonch botwern the physician and his patient，greater aceur－ ary and independence in administering remedies．cheaper －npplies to the patient，a docent protit for the phar－ macist for his skill，and a saving for the phamemeist of the mecessity for filling up his shelve and tying ug his rapital with a great lot of proprictaries of doubtful value．

In the diacemsion Mr．E．W．Zimmer sald that the mamfacturing pharmacy bunines in 190.5 was esti－ mated at $\$ 75,000.000$ ．In a recont aldren．Profencor Remington said that le rould wame two drug－．castor oil and phenolphthatein，which were adverti－ed under seventy different names in various parts of the world． He blamed the druggists for their share in the present state of allairs．Too oftell they have empha－ized the side issmes in the artickes in thre dmo hosines and made the actual preparation and dinpern－ing of drugs a minor matter．At the present time the Pharmacopeia and National Formulary are guide boards pointing on the one hand to medical and rthieal wati－faction and on the other hand to legitimate profit for the phar－ marist．There is one caution to be given even if these authorities are followed：physicians will be urged to specify some one firm s brand of these official prepara－ tions．and if this is done it will compel the druggist to carry a momber of brands of the same article，and only add to his burden．The National A－aociation of Retail Druggists has iswned a hooklet to be had for the asking which will assist in the selection of regular remerlies in the place of those of manown romposition which have been used to meet certain conditions．

Mr．Noseph Stokes aid that when phy－icians shall see that the pharmacentioal profession gencrally is competent to perform its work and that it refrains from attempting the work of a physician for which it is not fitted，pharmacy will be certain to receive the －lupert and comborsement of medicine．What the drmg－ wist should do is to of ronduct his bu－ine－s as to appeal to all clanses of phexicians，the one who dia－ penses his medicine as well as the one who writes prescriptions．The physicians have done much to en－ rollogge the habit of self－mealeation．and bring criti－ rism on the druggist for commter prearribing．by tell－ ing patients to get certan articles from the droggint． giving the names of the drugs so that the patients know what they are nsing amb are almont－nre later to secure those articles on their own re－ponsibility and advise their u－e by others．Two－thirk of the proprietary articles．he derkarm are sold ower the drug store counter withont a prescription．

Đr．C．I2．Schefer said that the great question is， What is the remedy？The fanlt and the remedy lie to a great extent in the mediral suhool rarricula．The school should be prepared and equipped to teach phar－ marology hy modern laboratory method－．Civen a －tudent well trained in the physiologie artion of drongs and their chemistry，and he will write intelligent pre scriptions and not depend on proprietary preparations． There shonkl be animal experimentation and clinical study ats well as pmarmacentical hambling．Doctors －hould be discouraged from taking an interest in the manufacture of preparatıon for their owin financial profit．

Dr. IV. H. Forman agrees with Dr. Schaefer as to the deficiencies in the medical school curricula. One obstacle in the way of a rigid adherence to the Formulary is the time and study necessary for an article to be placed in the Formulary and its constant tend rncy to become obsolete. This hiatus is now being filled by the Council on Pharmacy and Chemistry of the A. MI. A.. and attention to the work of this body will give the information desired on new preparations. as they appear. Ethics is largely a matter of the individual. A drug or a preparation may be classed as ethical, but if its action is unknown to him who preseribes it the remedy is unethical, for him. Nothing given ignorantly can be ethical. He believes that no preparation shond be preacribed that can not be prepared by any competent local pharmacist. Selfmedication in greatly increased since the multiplica tion of proprietarics. Loss of respect for the medical profession on the part of the public will surely rewnlt if patients discover doctore u-ing proprietaries which they publicly and otentatioustr denounce. When the speaker read the letter of Edward Bok in a reeent iscue of the Jowmal of the A. M. A. he did not accept the assertion as to the frequent use of proprictaries by physicians. Subsequently upon examination of 800 preseriptions in the city he found that 45.5 per cent. called for proprictaries either wholly or in part.
1)r. Theodore l'otter recalled that eleven rears agu he presented to the society a paper on the same subject, the publication of whiel paper he had some dif. ficulty in obtaining because of the hold the manufacturers had on the journals through their advertisements. Simplicity in prescribing is the first great lesonn in the reform movement. The number of proven useful drugs is tery small. The masters of medicine in days gone by and now, exercise the greatest simplicity and eare in the use of drugs. This was impressed upon him in his work as an interne under Whittaker. In recent years we have been led antray ly commercial interests.

Dr. F. R. Charlton suggested that this society begin the propaganda for reform in this region and that a committee be appointed to draw up a circular letter to the plysicians of this county setting forth the attitude of this society in the matter. Notion carricel and the chair appointed Drs. Potter, Charlton and Earp on this committee.
1)r. G. W. Woollen spoke of his student days under his preceptor. Dr. Bolbs. For some time he filled all the preseriptions for the latter and was impressed with the simplieity of his therapy so far as drugs were concerned. The curse of practice today is polypharmacy: If a correct diagnosis is made the drug indications are almost always very similar.

In elosing the diselussion Dr. Francis was asked if the society would be willing to take joint action with the local branch of the American Pharmaceutical Association. On motion thi was ordered, and the chair delegated this work to the committee just appointed.

Adjourned.
R. H. Ritter, Sec.

## (Meeting of March 31, 1908.)

Society called to order by the president, Dr. Wynn. Minutes of previous meeting read and approved. The applications of Drs. Arthur M. Calvert, Roy Egbert, Barclay Ratcliff and Johm .J. Booz were read the first time and ordered posted. The Council reported favorably on the application of Dr. Eugene Buehler and the report was adopted. The secretary called atten-
tion to the death, during the past week, of one of the active members, Dr. Franklin W. Hays. On motion the Secretary was instructed to prepare a suitable mimute for this occasion.

Scoliosis was the title of a paper by Dr. David Ross. The term was defined as excluding the emmpensatory curver. In the etiology sex seems to make a little difference, the excess of females being most likely due to inconvenience eaused in matters of dress. Although no ages are exempt the condition is more common during the formative periods. The etiologie factors are. deformities as shortening of one leg: paralysin. "specially anterior poliomyelitis: occupation, as in school ehildren. stone cutters, etc: congenital lateral curvature. a rare condition: heredity. probably a small factor. Symptoms: The first thing noticerl is often weakness and awkwardness of child. The deformity is acompanied or sometimes preceded ly pain, gencrally of a dull dragging motnre. Museular cooirdination is often wanting, and neurasthenia and hysterical symptome are often present. culminating siomethes in all the mpleasant symptoms of misplaced vincera. Diaguonis: Inclination of the body to one sille: rotation of the spine. curve shown by line of spinous processes in the erect posture. Prognosin: Good when taken early. Disease curable and progmosis better in cases hegimning later in life than for cally ehildhood. Treatment principal is laid down lỵ ifhitman: First, to overcome all restriction to passise motiom; second, to strengthen weakened mumbles, especially those whose action is opposed to deformity; third, to insist on the avoidanee of all over fatigue and improper postures; fourth. to sup port the weak part by a brace if the deformity can not be otherwise corrected.

In opening the discussion Dr. J. H. Oliver spoke of the necessity of doctors and mothers oberwing ehildren during their growth. Too often this comdition is wholly overlooked until the stage of fixation, only: to be discovered loy the dressmaker. Straight backfor children require vigilant maternal care. Rest in bed and an abundance of nutritious food, massage, and later intelligently directed gymmastics are essential elements in treatment. Faulty postures are assumed to compensate for weak, contraeted and painful muscles, the brace being a last resort. The speaker uses the brace in but a small percentage of cases, and then merely for fixation and the prevention of further deformity.

1r. Charles R. Sowder referred to the interest that. should be aroused in the internalist in this direction. llis duty is to educate mothers in the examination and care of their chiddren. Wuch can be accomplished by publie play grounds. baths, and rational school furniture. One of the bad results of this deformity: is the diminution of the respiratory capacity and a consequent deficiency of oxidation. Curvature sometimes follows emprema, still further affecting respiration. Prophylaxis is all important. Neurasthenie symptoms in these cases are resultant upon a general systemic depravity, and a depression of practically all the regetation functions.

Dr. Guido Bell said that this subject is of especial interest to the school sanitarian, as the seating of children is of prime importance. The child should sit with both feet squarely on the Hoor, the whole lengtl of the thigh on the seat, the elbows comfortably on the desk and the desk overhanging the seat so that the chitd could•write without leaning too far forward.
1)1. D). F. Lee has seen a mumber of these (atses following chorea. ľaulty seating is doubtless a fator. Leather cases have in his hands aflorded abmost immediate relief of the deformity and reasation of the fhomeie manifestations and eventually a complete cure.

Dr. Nelson 1). Brayton, home on a furlough from the Ancon Jlospital at Panama, was requested by the president to tell something of his work and the conditions there, which he did in a very pleasant manner.

Adjourned.
R. H. Ritter, Nér.

## (Meeting of April 7, 1908.)

Society was ealled to order by President Wymu. Minutes of last meeting approved without reading. Applications of Drs. Jaeob Buehler, Frank E. Abbett and Freaman H. Hibben, having been posted thirty days were read the seeond time and referred to the Council. The committee appointed at a previous meeting to draw up statements expressing the attitude of the society regarding prescribing non-authorized preparations reported through its chairman. Dr. l'otter. secretary was ordered to have this report printed and to mail it to erery practitioner in Marion eounty.

A memorial prepared by Dr. Brayton for the late Dr. F. W. llays. was read and made a part of the mimutes. lrogram was made up of case reports.

Double Mastoiditis Followed by Left Sigmoid and Jugular Vein Thrombosis.-Case report by Dr. .J. F. barmhill. Operation. Recovery. Girl aged 16. Five week ago had severe attack of measles and discharge in both ears. Three week: later disonarged by attending plysicician, followed by high temperature, chills, double vision. srncops, and profound deafness, pain over both mastoids; both cars disclanging. Both mas. toids cleaned out and free communiration established between mantoid wound and midde ear. Extensive cellulitis on loft side and osteitis on right side, marked. Patient took ether badly. No pain following operation and general condition improved. Continuons fever. rising to 104 on the tenth day and $10.5 \frac{1}{2}$ on the twelfth day. Lencoestes 18,000 , with so per cent. polymorphonuclears. Diagnosis of simm thrombosis on the left side because that side had been the worst of the two. Nigmoid sinus widely exposed toward the torcular and jugular ends. Vesel incised for a distance of about two inches, the upper end being fombl filled with a firm coagulum and the jugular end contanined creamy phs. No thud blood secured from the direction of the jugnlar bulb. Mastoid wound packed and jugnlar vein exposed from the entrance of thyroid npward. It was foum thrombosed from entrance of facial upward, hence was ligated below the facial and completely resected above as far as possible. A small cigarette hrain was inserted the full length of neck woumbl. subsequent course uneventful.

Extreme Mobility of the Tongue.- Case report and patient exhihited by Dr. S. A. Jolmson. Patient with slight eflort could place tip of tongue in naso-pharynx and palpate all structures in that region. Tongue large and loosely attached to points of leverage. Pharyngeal vault spacious and remarkably short antero-posterior diameter of palatal bone. No lesion of the naso-pharynx.

Cardiac Neurosis. Two case reports by Dr. E. C. Thomas. Case l. Woman aged 39, true palpitation. Nemrotic, with attacks of cardiac irregularity for the past two years. Present symptoms: Sense of impending danger, great fear, dyspuea, preeordial pain, oceafonal nalueal and eructation of gas. During paroxyms many deviations from nomal heart action are
shown by sphygmographis tracing the paroxysme lasting from a few minntes to an hour. Predisposing ranses seem to be the approath of menstruation. aronte attarks of indigestion and constipation.

Case 2. Woman aged 4?. Tachycardia, attributed to vomiting and diarhea, with nerve shork right fears ago predisposing.

Dr. J. R. Eastman exmbinted Carwardine clampe and disenssed their value as rompared to the Jherphy button and other clamps for giastroenterostomy.

Dr. W. F. Clevenger reported two cases of primary nasal and pharyngeal diphtheria.

Multilocular Cysto-Sarcoma of the Ovary.-Case report by Dr. Moses Thomer. Woman aged (i.s. first became conscions of tumor six montlis before being referred to Dr'. Thorner. Complained of dysuria. constipation and hearing-down pains. General. condition good: other viscera negative. Left ovary incorporated in large cystie mass, slightly adherent to omentum, side of uterus, and abdominal parietes: right ovary rystic: and was also removed: meventful recovery. The growtly is mondoubtedly of emnective tissue origin. In certain phases presented there is a question as to whether it is simple arcoma or whether it is of endothelial or parathelial tissue origin, the eysts heing extraordinary dilatations of the lymplatic spaces in the ovarian structure.

Penetrating Wounds of the Abdomen.-Dr. Paul F. Nartin reported two penetrating gun shot wounds of the abdomen and two penetrating stab wounds, with reeovery of all but ome.

Pleurostomy for Infection of Lung and Pleura.-Dr. J. V. Reed reported four cases. Case 1. Child if years old. Left lohar pnemmonia with pyothorax on the twentieth day: Sulb-perisostal resection of $1 \frac{1}{4}$ inches of eighth rib. Lung collapsed, pleura eovered with a thick layer of fibrin: double drainage tube. Two days later general condition improved. but lung permanently collapsed and covered with nerootic exndate. Ttue replaced by one with Hange. making clo-ure airtight about woind. A-piration with bottle and manometer. Negative pressure. 30 millimeters. aided in expansion of lung. with passive hyperemia of pleura. Completed expansion, of lung in four weeks. Subsequent listory uneventfinl.

Case 2. 13oy j, years of age. Right-sided lobar phenmonia. On reventeenth day resection of rib for pyothorax, with immediate lung expansion. Convalescence rapid.

Case 3. Boy $21 / 2$ years of age. Nine months prerious to ammision right-sided pnemmonia followed by pyemia. Operated on two months later but did not heal for five montlis. On admission was greatly emaciated, temperature 100 to 101 , lencocytes 15,000 . dullness and absence of breath sounds over lower left side of chest. It operation no pus was found in pleural cavity nor on aspiration of lungs at several places. Drainage tube inserted and wallea off with gauze, passing the base of the lung. Second day after operation dressings found soaked with pus, abscess of lungs having evacuated throngl path of least resistance.

Case 4. Male aged 45. typical typhoid fever, with marked bronchial symptoms.

- Adjourned.
R. H. Ritter, Sec.


## (Meeting of April 14, 1908.)

Society was called to order by President Wrym. Nlinutes of lant meeting read and approved. Jr. F. C.

Heath called attention to the meeting of the State Society at French Lick, and the necessity of the early selection of papers for preliminary program to appear in the next issue of The Journal.

The Technique of Harelip and Cleft Palate Opera-tions.-Paper by J)r. J. R. Eastman. No abatract furnished.

The discussion was opened by Dr. J. H. Oliver, who said that despite the legion of operations described text-books were adhering to the older mothorls. Age limit is being pushed steadily backward. He now operates for both fonditions within the first month instead of later as formerly, believing that the shock is not so great, the tissues softer and more easily monded. He objects to the Lane operation on acrount of the eontour of the moutl which it makes. He has come to approve thoroughly of Brophy's operation. and prefers horse hair almost exclusively for closing the soft palate, beginning his sutures high up. making the floor of the nose first. Plenty of time is essential, making the operation in as many tages as desirable rather than attempt too much at one operation.

Dr. H. R. Allen deprecates the use of any one method to the exclusion of all others. He favors carly operation and Jroplyy's plan. Instead of Mayo's retention suture tapes, he has devised two lateral lead cleates, held by chromicised catgut sutmes. If the nose remains unduly prominent a triangular segment from the cartilage may be removed with good rosmetic eflect. Care shomld be taken to avoid the noteh in the rermilion border often seen. He mentioned the spring arrangement to prewent tension on the lip.

The Present Status of Syphilis, by Dr. A. II. Bray. ton. The essayist dwelt chiefly on the sociologic and physiologie bases of venereal disease and referred to the adrance that had been made in the study of syphilis. He has little faith in the present agitation and lecturing to the laity on the nature and eflects of this usease. There must be education of the people against prostitution and towards a pure family rela tion. He believes that the development of pure and simple home and family life, early marriage more children in families, and the restriction of divorce are to be the greatest factors in the combat with renereal diseases.

In opening the discassion 1)r. W. P. Garshwiler (alled attention to the past few years' advance in the knowledge and etiology of syphilis. Positive diagnosis ly the finding of the spirocheta may be made carly, whereas fomerly it was necessary to wait for the applearance of the secondary lesion. Uselessness of extensive eauterization or expision of the primary lesion has also been established since the diseise has already become general.

Adjourned.
R. H. Ritter, Nee.

## (Meeting of April 21, 1908.)

Society was called to order by President Wymn. Minutes of last meeting approved without reading. Applications of Drs. Eugene Bishop Namford and C. C. Wood were read the first time and ordered posted.

Obstruction of the Bowels was the first paper of the evening, by Dr. E., D. Clark.

Obstruction of the Bowels Due to Traumatism was the title of the second paper, by Dr. J. H. Ford.

In oprening the discussion Dr. H. O. Pantzer said that the greatest difficulty now was in the right diagnosis. Temperature is a matter of great importance and should be taken with greatest care. Often the
themometer in the mouth shows no elevation where rectal temperature may show a rise of two or three degrees. Frequently obstruction is a complication of appendicitis. An inflamed or active bowel is pronc to obstruction, a normal or inactive one is not. Panreatitis is often the cause of obstruction. Iuscultation of the abdomen may show spasmodic action of the bowel in the movement of gas and fluid, splashing, ete. Light pressure in palpation is more valuable than the deep rough jabbing, in order not to give rive to pain, but to discover any that may be present. The custom of giving strong progatives is permicious, and is accommtable for many fatalities.

Dr. S. P. Seherer emphasized the necessity of differentiating the claracter of the obstruction, some not being surgieal and some especially those wanout fever. that mend themselves. The paralyzed gut is the one demanding operation. Contrary to Dr. Pantzer's statement he has seen sereral cases in the extreme condition where purgatives relieved it and surgical interference was umnecesalry. Many caves have been fortumate in getting well because they refuse surgery.

Dr. O. (i. Pfaff said that the surgeon is made to operate as a dernior ressort. He operates as rapidly as possible, handling tho gut as little as po-sible. If no more, oet out one loop of the intestine and relieve the condition without attempting any refinement of the diagnosis since the primary calues is not necesearily important at this time the object being to relieve the obstruction. Jrice's advice is "Get in quiekly and for (God's sake get ont quickly." He condemned too active pmrgation.

Dr. D. F. Ler believes the condition not so distinetly surgical as might be infermed from the papers read. Brilliant results are achieved from ligh rolonic Hushing when laparotomy should rertainly have heen inexcusable. Surgery as well as medicine has its place.

Dr. A. 1s. Graham would distinguish between con-tipation or impaction ant true obstruction, the former fircling to rathartios and eolonic flushing but the latter to surgery only. The papers deal with real obstruction, hence only surgical procedures are to be eonsidered, the greatest desideratum being earlier diagnoxis and hence earlier operation. A previous history of tuberculosis or malignant growth of a long continued and slow undermining of the general health on which are ingrafted aente symptoms. make the diagnosis simple. Incidentally he referred to the defects of the ordinary colon tube which is so liable to eurl in the rectum and thus fail to throw the water up into the colon. He adrises the Wales bougie for colonic injections.
1)r. T. B. Noble would operate in old eases of fecal impaction. since around such an old mass, often hardened to the consistency of stone there sometimes derelops inflammation, ulceration and the formation of ricatricial bands protucing true obstruction. Dilatory tactics in treatment are responsible for the high mortality, and physieians should not be responsible for such procrastinations. If Dr. Clark would say to operate in six hours he would say to operate in six minutes after the correct diagnosis was made if it were possible.

Dr. E. C. Thomas referred to the absolute refusal of many patients to submit to operation and the consequent dilemma of the attending physician. Under such circumstances only purgatives and enemas can be made use of with a hope for the best. Physicians are often criticised for not having their patients operated on when they are powerless to do so.

Dr．J．F．Eastman in－isted that wi－dom and nice judgment were an nece－ary in handling these cases a－ in any other condition．Uperation should follow im－ mediately upon definite diagnosi of ob－truction．Nikl cace rielding to purgatives and enemas are not real obstructions．The one esential of suecess is the early recognition of the sydrome of ileus．then waste no time with eolonic lavacre．but open the abdomen．

Dr．Clark and Dr．Ford then clowed the di－cm－aion．
Adjourned．
R．H．Ritter，Nec．

## NEWTON COUNTY．

The Jewton County Mediaal Society was organized May 1．and the following officer－elected：President． L．H．Recher．Morocco：vieepresident．J．IV．Merry． Mt．Ayr；secretar？．J．fr．Kinneman．Goodland：treas－ urer．（：F．Triplett．Jr．．Morocco：board of censor－． f．H．Van Kirk．Kentland．and H．F．Leedom．Mo－ rocro：delecrate－to the state anociation．T．E．Collier． Prook：F．Kennedy．Coodland．and IT．M．Porkimon． Brook：program committee．B．W．Pratt．T．E．Collier and J．Fr．Kinneman．The society wa－organized with the following member enrolled：B．W．Pratt．C．C Ba－sett．Frank Kenmedy：Tohn $\mathrm{Ci}_{\mathrm{i}}$ Kinneman．Grood－ land：T．E．Collier．W．M．Porkison．Brook：C．F．． Triplett．Jr．．L．H．Recher．H．F．Leedom．F．L．More－ honse．Morocen：G．H．Van Kirk．H．M．Campbell． J．IV．Merry．Kentland．

The annual due－of the society are $\leqslant 3.0$ ．
Arljourned．
J．G．Kinveman．ser．

## ST．JOSEPH COUNTY．

The st．Joveph Comntr Medical Societs met in South Bend Anril（i，The firt majer of the evening was ly Dr．E．P．Wagner on＂The Anatomy of the Lang－：＂ making use of some well executed blackboard draw－ ings．Dr．H．M．Jiller reviewed the＂Phys－iolngr of Respiration．＂The subject of＂Yormal Phrsical Diag． nosis：was presented by Dr．Wr．H．Baker．
Adjourned．Cimales H．Bosenbery．Sec．
At the meeting of April 13 ．Dr．$\therefore$ ．$T$ ．Baer read a paper on＂Chronic Bronchitis．＂which was freely． discllseed br those in attendance．

Adjourned．Chable，H．Bosenbert．Sec．
At the meeting of April 20 ．the general－ubject wa＝ ＂Pneumonia．＂＂The Etiology and Bacteriolog？＂were discumed by Dr．C．S．Bosenbury．＂The Pathology＂by Dr．W．M．Peek and＂simptom－and Signs＂by Dr．（＂． F．Hansel，Many of the members present took part in the discussion．

Adjourned．

## Charles H．Bosesberi．Nec．

At the meeting of April $2-\mathrm{Dr}$ ．W．G．Wegner read a paper on＂Pleurisr．＂Dr．H．T．Montromery gare a talk ou＂The Treatment of Lobar Pnemmonia．＂re－ lating his experience with large dowes of quinin．Whiclu gave favorable result－in hi－rasts．He recommenderd the use of this agent．not in small s－10 grain dose－ but in $40-60$ grain do－ev after the plan advocated ly： （Galbraitl．In the discal－oion which followed several members opposed the treatment on theoretical grounds． while a few who had used quinin in mawive dose－ were convinced that it very materially altered the course of the disease．

Adjourned．
Charles H．Bosexbury．Nec．

## BOOK REVIEWS

Tie Devflopmext of Ophthaldologi in America， 1s00－1sio．A Contbibltion to Opifthalmologic Ilintory axim Biography．By Alvin A．Hubbell，M．D． lantlialo．N．Y．
Thin is a volnme of nearls 200 pages and is a re－ publication，with much enlarged text．of an addres delivered before the section on ophthalmologr of the A．M．A．at Atlantic City last June．The book contains twenty－nine ！ortrait－of pioneers in American ophthal－ molngy and eight cut illu－trating the old eve in－titu－ tion－and ophthalmologie－ubject－

New Books．Messr＝．W．P．Saunder＝Compans．med－ ieal publi－her oi Philadelphia and London，annonnee for publieation beiore Jume 30 a list of books of un－ u－ual intere－t to the profession．We especially eall the attention of our reader to the following：

Bandler＂ Medical fryecology－treating exclu－ －ively of the medical side of thi－subject．

Bomey－Tubercule－is．
Tolume 2．Kelly and Soble－Ciynecologs and Ab） dominal Snrgers．

Folmme 4．Kepn－Surgery．Cant－Constipation and Inte－tinal Ol－truction．
－chmmerg＇－Di－eaven of the skin and the Eruptive Fever－

Join C゚．DaCo－tา．Jr．－Phr－ical Diagno－i－．
Todd＇s Clinical Diagnosis．
Camac－Epoch－Making Contribution＊in Medicine anci Surgers．

All of these works will be protusely illustrates with original pictures．

Disorders of Pespiratiox axd Circtlation：Part 2. Pradycardia and Tacirycardia with Bibliograpiy． By Prof．Fimund von Neuzzer．M．D．．Protescor of the Second Medical Clinic．Viema．ete．Authorizet English Translation by Andrew MacFarlane．MD．． Profewor of Medical Juri＝pruuence and Phtrical Diagno－i－．Albonv Medieal College．etc．Cloth．nn． 1．50．Price．$\leqslant 1.25$ ．E．B．Treat $\mathbb{\&}$ Co．．Sew Iork． 100s．
This little volmme，the second contribution to the －ubjects of cardiae and respiratory disorders．deals with the subject－treated in a mo－t concise manner and proves even more interesting than Part 1 of the series．Etiology．pathology and diagnosi＝share suf－ fieient－pace with elinical Ilustration to make the work remarkably readable and one is led to wonder at the amount of ground that is well covered in an few prges．This is probably to be accounted for by the concisenes and tersenes of the deacriptions．In addition to the parts on tachyeardia and bradyearata． there i－an appendix containing an article br Howell on the Cause of the Heart Beat，another on the Adan－Stokes Symptom Complex．containing Adams＊ oricinul article in full and ab－tracts of Stokes and His articles as well as abstracts from American and Briti－It medieal literature and foreign bibliography on Adams－Stoke diseases and tachycardia．Altogether an cxceedingly interesting and well written little work is here presented to the profession．

# THE JOURNAL <br> OF THE <br> Indiana State Medical Association 

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
ISSUED MONTHLY under Direction of the Council

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## ORIGINAL ARTICLES

THE PHYSICTAN AS A CITIZEX.*<br>Datid C. Peytoz, M.D:<br>President of the Indiana State Medical Association. JEFFERSONVILLE, IND.

To be a good citizen is the noblest attribute of man.
"Not what men think I am, but what I am, makes me a joy or sorrow to myself."

It was a saying of the great physician, Nothnagle. that "only a good man can be a good doctor." In this age of rast material development, the means, by some subtle alchemy, too frequently becomes converted into the end, and worldly success the only legitimate objective point of human endearor. We need only to open our eyes a little way to see the great struggle going on about us: a struggle in which ethics, morality and the "square deal" play a rather pitiful part. Would enumeration not seem trite? Politics, even in high places, courts of justice, great corporations, legislatures, life insurance companies, those semi-elcemosynary institutions that seem to have been run chiefly for the benefit of the runner; many of the institutions that have been inrestigated in the last few years have been found to be rife with graft and greed and fraud and humbuggery.

The ethics of the hour condones any chicanery that wins a smile from the Goddess Gold. In this malstrom of cold business practicality, this seething torrent of raw human elemental strain and struggle, how exotic and fantastic seems the fine philosophy conreyed by that sentence, "only a good man can be a good doctor," and yet it is

[^25]true. The medical profession. While it may be infected in spots with the diplococcus of Mammon, is, in the main, sound. The fundamental altruism on which our guild rests renders us immune to this insidious malady. Yet I would not have you conclude from this that I wish to detract from the importance of the doctor taking a most serious riew of the business side of his work, for ultra-altruism will not satisfy the exacting demands of modern commercial principles. The physician must establish and maintain a status. commercial and professional, in his community that commands the respect and confidence of his fellow-men. The doctor is a citizen in spite of the fact that he is a doctor; he is a citizen first and then a doctor, and as such he owes to his state a duty that can not be discharged by merely making moncy out of the misfortunes of its citizens. He should be patriotic in all that the word means. and the following description of patriotism by William Jennings Brran is exceedingly good: "Patriotism is a virtue that must be displayed in peace as well as war. and may be defined as that love of country which leads the citizen to give to his country that which his country needs at the time his country nceds it. In time of war the citizen may be called upon to die for his country; in time of peace he must live for his country. In time of war he may be called upon to give his body as a sacrifice; in time of peace his country demands his head and his heart, his intellect and his conscience. You have shown that you were willing to lay down your lives in order to purchase liberty; now you will be called upon to exhibit selfrestraint and moral courage in dealing with problems of government."

Igain, the following from the Ionorable William H. Taft, who in a recent address spoke eloquently for the higher standard of those entering
the serrice of state and nation, when he said: "Assuredly there is a career in the public service. One may not prophesy for every man commendahly ambitious to enter it that he will end an ambassador, but there is abundant opportunity for useful work. A good head and good health are necessary. with the disposition to work hard. There are opportunities on erery hand for men to distinguish themselves by service of eminent value. As to rewards, I do not talk of rewards. For the clase of men to whom I would have the idea of public service appeal the matter of rewards would be irrelerant. I say to you that there are rewards which are unknown to him who sceks only what he regards as the substantial ones. The best of all is the pure joy of service. To do things that are worth doing, to be in the thick of it. Ih? That is to live. The poor man who chooses this way will have to live plainly. as things go nowadays. It least he will not pile app a surplus of wealth. Why should he want to? Wre used to be told in a homely adage that a millionaire had no adrantage over a poor man in his capacity for food and drink. Wealth prorides small satisfactions, but not deep ones. It (an give no felicity like that which comforts the man who has identified himself with something bigger than himself. which thrills the heart of the patriot, of the public servant." Let us see to it that we rive to the full measure of this duty.

In this comection, let us review briefly some of the more important things accomplished and point out others that should be the immediate object of our endeavors.

First, we are justly proud of the distinction we have attained by the consolidation of our medical collcges, thus placing medical education in Indiana entirely within and under state control, which makes us one of the only two states in the union taking this advanced ground in the matter of medieal clucation. Minnesota being the other. The consummation of this high ideal lifts medical education in Indiana to a pinnacle that is, indeed, glorious. We have established a most salutary precedent. one that is the legitimate result of the state control of medical practice. If the state is to control the products of cducation, it is not onlr logical, but inevitable, that it must control the education itself. This is a duty of the people to themselves and one from which there is no escape. It is, however, greatly to the credit of the medieal profession of our state that in this instance, as in many others, the physicians lave taken the initiative in a strictly pro bono publico spirit. In order that the thing: thus accomplished shall bear the best fruit, teachcrs should be selected by reason of their special
professional fitness for the subject to which they are assigned. Questions of carnings and dividends must be climinated and medieal teaching should have no interest whaterer in the commercial results of its enterprise. It is not necessarily true that the seliool with the largest classes can do or is doing the best work, for the mere fact of abnormally large elasses may be suggestive of ulterior methodism in their assembling. sucecss in teaching lias to do with the very fundamental principle of preparedness in its hroadrst sense, and mere patronage can not and should not enter into the question. Modern jdeas would seem to demand a reorganization of the general principles of teaching. Every efficient living thing is monocephalic. or single headed, which idea must obtain with erery efficient educational agener. The teacher's duties to his students and the institution should be a first lien upon his time and his energies. Of course, the right of the teachers of the clementary branches to accept private practice is. and slould be, limited strictly to the time they could spare from their duties to the state as represented in and by the institntion with which ther are connected. and as a matter of equity to the teachers and safe guarding the best interests of the students the temptation for these teachers to violate this obligation should be effectually removed by salaries sufficient to enable them to be independent of private practice.

In many respects our state occupies adranced ground in the matter of medical legislation. Our rery efficient Secretary of the State Board of Health, together with the other members, not only of the Board of Incalth, but the profession generally, has secured the passage of many important and lifc-saving laws. In about seren years the Indiana State Board of Health has achiesed the reputation of sceuring the most accurate mortality statistics of any state in the Union. The Monthly Bulletin, published by the State Board. in which is printed the state mortality figures, is in demand in all parts of the world.

The fact that tuherculosis causes the death of one out of every seren members of the human family, and that about fire thousand die in our state annually of this disease, and that those ill represent many times this number, causing a loss to the state each year of millions of dollars, impresses us with the importance of any steps looking to its control, and the further fact that this disease is not only absolutely preventable, but curable, if taken in its incipiencr, is cause for congratulating the people of Indiana that the legislature of 190 imade provision for, and a site
for a State Hospital for Consumptives has been purehased. Much of the credit for this is due the State Board of Health, with Dr. Hurty in the forefront of efficient aetivity. Let us hope and see to it that the legislature of 1909 appropriates money for the necessary buildings and for the support of the institution.

Before learing this subject-a subject, I regret to say, our legislatures and law-making bodies generally seem loath to have leave us-let us see for a moment, if you please, as to its national importance. In 1906 we had 160,000 deaths from tuberculosis, while we had 800,000 ill of the same disease. From typhoid ferer in 1906 we had 28,000 deaths and 180,000 ill of this disease. Think of the enormous loss or cost to the country in dollars and cents. The loss of human life and the loss of time by reason of the hundreds of thonsands ill each year of tubereulosis costs us a sum suffieient to not only maintain cur great navy, but to build two first-class battleships each year. These stupendous facts are so startling that the arerage mind fails to grasp the eold, clammy situation of this unfortunate multitude.

The importance of the proposed National Department of Public Health is emphasized by these statistics, which show that existing public health agencies in Washington, which are seattered throughout the various departments of the gorernment, are defeetive. The thousands of miles of our rivers from whieh we get a large supply of our drinking water, which are being daily conserted into great sewers by being made the reeeptacle of all the filthy and infectious waste of a neighboring city, thus spreading typhoid fever broadcast, stands as a monument to the failure of the present system, and the ghosts of the sacrifieed cry out in disgust. These and other startling data serve as a summons to the medical profession to a most important dutyone of medical legislation. The physician should bring not only his high general intelligence, but his raluable special intelligence to bear on legislative problems of vital importance to the public. Nobody knows so well as he the actual human bearing of eeonomic conditions and of laws that modify them.

The limited number of physicians, found in our state and national legislative bodies is to be accounted for in but one of two ways-either the medical profession or the public is ignorant of, or indifferent to, this most important condition of our civil and social duty to the general public. There were but four physicians in the two houses
of Congress of the United States during the session ending in Washington in 190~, while France, the other great republic of the world, liad in the two houses ninety-two physicians. Franee, with a population of less than forty millions and about thirty thousand physieians, as compared to the United States with approximately ninety million people and about 125,000 members of the medical profession, makes a contrast at once so striking as to amount to a sociologic phenomenon. This being true, the question arises, Who are these men? What, for instance, is their status in their respective countries? They are a distinguished body of men, capable and sincere, and will compare quite farorably with their legislative associates, thus establishing the desirability: as well as the neeessity of physicians as legislators. Not so much our right, but our duty to the state and its general good furnishes 11 an incentive, and, as I believe that service is the mcasure of greatness in the indiridual, so I believe that service is the measure of our greatness as a national body.

So let us turn to our own beloved profession, the noblest and most useful profession on God's footstool. Let us panse and think. Let us be honest with ourselves. Have we been active in methods of edueation having for our aim higher ideals? Have we been leaders in an cffort for the general uplifting of our civic status? The intelligence we have acquired by reason of our eontact with the innermost reeesses of hovel and mansion, of eottage and palace, enlarges our capabilities; shall we exercise this intelligence in the halls of legislation for the benefit of the general publie? It has a right to expect this of us, and wie should see to it that we are not wcighed in the balance and found wanting. Our profession boasts of cultured and able menmen who could discharge this duty with signal ability. Will they do it? None can do it better. Shall we not see them in greater numbers in our state legislatures and the National Congress? Our own Dr. Good, who is the nominee of his party for Congress from his distriet, deserves the active support of erery member of the profession regardless of creed or party affiliation. In such times of emergency as confront us, when the evolution of the many modern and advanced ideas that are of such vast importance to the general public good, are burning questions of the hour that must and will be settled in the immediate future, none but brave hearts and proficient minds can be relied upon to render such an accounting of their opportunities as will
reflect eredit upon our profession. let us hope that other physicians may take a firmer hold upon the responsibilities so vital to our very civic life. In our own state in the legislature of 190 i the following names of physicians are mentioned as a roll of honor:

Dr. Horace G. Read, of Tipton Countr, who was most active in securing the sterilization law, which promises the only hope of precenting the perpetuation of paupers and criminals. His work will ever stand as a monument to adraneed ihought.

Dr. Frank J. Simison, of Tippeeanoe County, who introduced and secured the passage of the free antitoxin law that has been such a boon to those of our citizens not able to afford this remedy which has made this once dreaded disease a subject of rigilance and not of fear.

Senator Eran L. Patterson, M.D., of Franklin Countr, who worked assiduously for the sterilization law and the free antitoxin law.

Senator M. M. McDonald, M.D., of Knox County, who was always on the right side of all medical and also other adranced and good measures.

Representative Charles E. Scholl. M.D.. of Carroll Country, was also one of our efficient and faithful workers for all measures affecting the public good.

Representative A. M. Porter, M.I... of Martin Countr, was the chairman of the Committee on state Medicine, Health and Vital Statistics. He was alwars to be found on the firing line. and his work is a credit to the profession.

The war against transmissible diseases carried on by the State Board of ITealth has been effeetire, for the statistics show a marked decrease in diphtheria, scarlet fever and typhoid ferer, the three enemics that have been so persistently attacked.

The food and drug and bacteriological and pathological departments of the State Board of Health, with their efficiently manned laboratories. have done most excellent work. Whereas, in 1906 , the year of the opening of the laboratories, it was found that 64 per cent. of all food and drug samples examined were either adulterated or below standard. now less than 15 per ctilt. are so found. This great improrement of 49 per cent., representing an enormous saring to the people. has been sccured by rigid and honest enforcement of the law. The bacteriological and pathological laboratory is now known throughout the entire state for its accurate cxamina-
tions, and the profession in every county seeks its gratnitons aid in the good work of relieving human suffering. We are, indeed, to be congratulated in the matter of our State Board of Health. which in a little over one decade las achieved an international reputation.

The doctor sliould be a force for the clean, plain. moral life of his community. He more than all others can influence the lives of his clientele, and thus his opportunities and responsibilities are inseparable. 'Too often there is something mawkish and disagreeable about the generally accepted teaching of morality. But the morality of science, while in accord with that of the chureh, is alive, alcrt, buoyant with joy, and springing, as it does, from the plainest lessons of luman experience, bears the indisputable evidence of enlightened common sense.

The doctor should lead his fellow-men. The service which he alone can render them can be adequately done only when inspircd by a lore of mankind, illuminated by the light which science sheds.

A great writer once said: "There exists in society three men who never can possibly esteem the world. They are the priest, the doctor and the lawyer; they wear black, perhaps, because they are in mourning for all the rirtues and for all the illusions." It can searcely be doubted that the doctor sees more, hears more and knows more about the dark side of humanity than any other profession; in fact, than all other professions. He, as it were, is behind the scenes and sees the make-up of the actor. He knows men as they are, their weaknesses, and their strength, their follies, their vices and their rirtues, their cowardice and often their heroism. He learns to love humanity beeause of its rery weakness and delights in serving it because of its great need. The one great lesson which our work teaches, and which we would all do well to learn young, is that happiness and success consist in serving others; in giving, not getting. He is the best physician and the happiest and most useful man who renders the most service. Hard work, plain living, high thinking, a sympathetic pity for the iollies of men, a chivalric charity for the weaknesses of women, a buovant, helpful, hopeful, cheerful. clean personality-these will go far toward inspiring in the minds of others that biologic ethics which we call right living, and will make us a factor in bringing about a healthy conception of life and further the cause of the moral evolution of the race.

# INTESTINAL AUTOLNTONICATION゙ AND ITS TREATMENT.* 

Jaimes M. Anders, M.D., LLL.D.

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PHILADELPHIA, PA.
Intestinal autointoxication as a morbid condition was first markedly emphasized by Bouchard and later br his many followers. Its true importance is still unknown, but it is safe to affirm that it has not receired the degree of practical consideration from the profession at large that it deserves.

Enterogenous autointoxication is not denoted by a definite set of pathologic or clinical phenomena, and our positive knowledge concerning its exact causation and of the chemistry involved in the morbid process is also decidedly imperfect. The fact that the concept of different clinicians in recent times. regarding the nature and importance of this condition. has been widely different, may account for the slow progress toward scientific accuracy in its study.

Intestinal autointoxication not being recognized as a disease entity, it has not been seriously considered by the great bulk of the medical profession. On the other hand, further study of the subject in the spirit of intelligent research, observation and experience is greatly to be desired. Although its pathogenesis is imperfectly understood. it may be safely assumed that when the absorbable, intestinal, toxic substances-leukomains and ptomains-resulting from normal digestion are formed in abnormal amount, autointoxication occurs.

Chemical investigation has shown that ofttimes disease is attributable not so much to mierobic action as to the products of intestinal fermentation and putrefaction. As well said by Field,, "Digestion, too, while it transforms albuminoid substances into peptones, also gires birth to alkaloidal poisons and, lastly, toxic substances derived from intestinal putrefaction."

Entering into the generation of an excess of these toxic bodies are three main factors: first, ingestion of too large quantities of albuminous foods: second, certain intestinal lesions, including defective motility brought about in a great rariety of ways, and, third, abnormalities of metabolism. From recent personal experience and observation, the writer is convinced that fat

[^26]and sugar, taken in quantities abore the phrsiologic capacity of the organism, are also responsible in certain cases, at least.

Before considering the local etiologic conditions (which may be acute or chronic) in detail, it is well to recollect that certain protective bodily functions are operative, with a view to overcoming the deleterious effects of the toxins already taken up from the intestinal tract. Thus, their elimination is effected, in a measure at least, by the functional activity of the kidneys, skin and liver (the so-called "filtering function"), as well as that of the respiratory and digestive tracts. It is obrious that defective renal, hepatic and cutaneous function may predispose to intestinal autoinfection in the presence of a moderate quantity of toxic bodies. It follows, as will be seen hereafter. that the eliminative processes are to be stimulated in the treatment of the condition, and it is, in a measure, by reason of the therapeutic results obtained in accordance with this view that we are justified in assuming the dependency of symptoms upon intestinal toxemia. On the eontrary. and more significant clinically. are the functional and organic disturbances produced by the intestinal toxins in the rarious excretory tissues and organs of the body.

It must be emplasized that to not a single one of the poisonons intestinal toxins-or a special group of toxins even-are the clinical feature, which they originate, ascribable. This statement rests on the results of the combined efforts of many careful investigators, among whom may be mentioned Eisching, Groyer, Alonzo Taylor, Edsall and de Schreinitz, Kraus and others. But, though nothing definite is known in regard to the nature of the poison, in general, it may be safely assumed that insufficiency of the physiologic proc esses inrolved in nutrition. may be an essential underlying prercquisite. It is especially worthy of emphasis that alimentary intoxication originates only from certain elements of food in the presence of abnormal states of metabolism. Finkelstein" pertinently remarks: "The srmp-tom-compler in the adult which we call autointoxication and ascribe to intestinal toxins may be due in reality to the pathologic fate of certain elements of the food (e. g., fat, sugar) in the intermediate metabolism.

This observer gives typical tracings and clinical histories to show the importance of the therapeutic results obtained by treatment of infants on dietetic principles. The alimentary intoxication can be made to appear, ranish and reappear at

[^27]will by changing the diet; his experience also teaches that certain febrile conditions, suggesting typhoid or cholera, are solely and exclusively dependent on alimentary influences. The clinical picture of intestinal autointoxication in children differs materially from that met with in the adult, and it can not receive further attention here.

Kohlbrugge points out that under normal conditions the small intestine may not contain any bacteria, so that the putrefactive changes which occur take place principally in the large intestine or colon. Obriously, if the colonic contents be not systematically removed, an increased amount of toxins will be the result.

Under conditions of health, certain autotoxins are present within the body, but these are dealt with successfully by the eliminative organs or rendered harmless by certain antitoxins excited by them in the circulating blood. On the other hand, "under abnormal conditions and in the presence of the failure in action of the inhibitory processes, the injurious and toxic action of the imperfectly oxidized products of metabolism is evident; in other words, antointoxication of the organism" (Albu).

It is manifestly confusing and unscientific to classify, as has been done by Bouchard, schwalbe and others, among the autointoxications all of the infectious diseases. Chapman ${ }^{3}$ wisely remarks: -Specific infectious diseases must not be included with autointoxications: only substances which originate in, or are elaborated within, the system should be regarded as causing autointoxications. Thus, mussel or sausage poisoning is a different process from intestinal putrefaction in which poisonous diamins are formed within the bowel lumen. In other words. autointoxication must not be confounded with autoinfection."

Intestinal autointoxication, howerer, has been slowly rising in the scale of abnormal states demanding recognition and judicious treatment. Recent investigations have extended our knowledge of the class of substances known as toxins, which are generated within the body, and in this connection Weichardts observation and deduction are of profound interest to the physiologist and clinician concerning the "Ermudungstoxin" (fatigue-toxin).

Weichardt ${ }^{4}$ found that from the muscles of animals in a state of cxtreme fatigue can be prepared a toxin which is characterized by its specific action upon the animal organism. When

[^28]small animals are injected with quantities somewhat less than the fatal dose, the respiration becomes retarded and the temperature depressed, while the fatal dose itself produces death after a relatively short period of latency. When injected in doses too small to produce the toxic cffect upon the cells, it renders the animal immune, and from the blood serum of such an immunized animal the corresponding antitoxin can be obtained."

A pure fatigue-toxin was also obtained from certain regctable substances and by the action of oxidizing agents of a chemical nature upon albumins, or by the eleetrolysis of albumin solutions.

Whilst we can not ascribe any specificity of action recognizable by definite clinical symptoms, to the toxin taken up by the intestinal tract, yet it is definitely known that they are derived mainly from the albuminous substances preriously ingested by the individual. It is not one of the points of this paper to show that the toxic bodies formed during the digestive process are similar in their physiologic or pathologic significance to the so-called fatigue-toxin, but rather to present the subject of toxins formed within organized bodies in a somewhat broadened aspect.

The present theme has no reference to certain other recognized forms of autointoxication. For example, that due to general abnormalities of metabolism or autointoxication caused by disappearance of the function of an organ. as in muxcdema. Iddison's disease and the like. Igain, the subject of the relation of enterogenous autointoxication to diseases of organs representing certain specialties (e. g.. ophthalmology, otology; gynecology and the like) does not concern the present discussion. ${ }^{5}$ As preriously intimated, however, the form of autointoxication under consideration can not be disassociated from the toxic phenomena induced by retention of physiological products of metabolism, as in uremia, although in the majority of instances it is doubtless caused by certain poisonous products resulting more directly from an excess of albuminous food. It must be confessed, howerer, that the precise end product in the process of proteid metaholism on which the chronic autointoxication is dependent is as yet unknown.

In summarizing the known ctiologic factors. I would assign conspicuous positions to the following in the order given: 1. Impaired metabolic processes: 2. errors of diet, or the ingestion of too large a quantity of proteids, and, although less

[^29]commonly of fats and sugars; 3, constipation ; 4, intestinal pathologic states, as chronic appendicitis, mucous colitis and gastroptosis with or without coloptosis. Maytum ${ }^{6}$ states that antointoxication has an influence in almost all, if not all, diseases. In most instances, however, this is subordinate and probably exerts no controlling influence over the course of the diseases to which it is secondary ; in others, more particularly in protracted forms of the acute infections (e. g., typhoid fever), it may exert a telling effect upon the symptoms and issue.

From an etiologic standpoint, the cases should be subdivided, according to their origin. into gastric and intestinal forms of chronic autointoxication. The gastric rariety is caused by pyloric obstruction followed by marked motor insufficiency, with stagnation of the stomach contents. The great majority of the cases, however, are of intestinal origin; the peptones, as is well known, pass into the intestinal canal and if the natural metamorphosis does not takc place within the physiologic time limit, then putrefactive fermentative changes set in with resulting poisonous products.

The subject of chronic intestinal autointoxication from a chemical point of riew has been concisely and clearly stated by Forchheimer ${ }^{\overline{7}}$ as follows: "The changes in these two substances (albumin and nuclein) are the result of the activity of enzymes or of bacterias. The substances produced by enzymes are albumoses from albumin and the xanthin bases and uric acid from uuclcin. In both instances pancreatic digestion is the principal cause. The action of bacteria manifests itself only upon albumin, as far as we know, in the form of pancreatic putridity and the bacterial processes which go on in the colon. The substances which result from this process and which interest us are phenol and indol, Brieger having shown that the rest of the bodies formed during putridity of albumin are little toxic.
"It has bcen shown that some of the albunoses formed during digestion are toxic, that is, when injected into lower animals. Of the purin bodies. xanthin, hypoxanthin, paraxanthin, hetroxanthin and adenin have also been shown to be toxic. Urie acid is toxic in a certain sense only; when it is injected into animals in large quantities no toxie symptoms are produced, but local symptoms may result under favorable circumstances. Both phenol and indol are toxic; in the lower animals indol produces decided symptoms (Herter) ; as the production of phenol and indol usually go

[^30]hand in liand, the determination of one is sufficient for clinical purposes in order to determine the amount of putridity in the intestine."

Symptoms.-No single characteristic grouping of features is presented by this condition. Castric symptoms are among the most common clinical manifestations, but their explanation offers marked difficulties. Doubtless they are often dependent upon primary affections of the stomach, in which cases they would act as accessory causes of the intoxication. Krelil has shown that in gastric conditions accompanied by diminished HCl , the tendency to putrefactive intestinal changes is facilitated. Conversely, an excess of HCl in the stomach contents may be noted in some cases. Further investigation may reveal the exact relationship that exists between these gastric phenomena and chronic intestinal intoxication, while onr positive knowledge at date of writing docs not permit of a clear discrimination of those that cnter into the causation of the condition from those that belong to its symptomatology.

Forchheimer suggests the possibility that various substances formed in the colon may be elimimated into the stomach and there produce either functional or organic disturbance. The cases accompanied by dyspeptic and other gastric features will display a coated tongue with more or less fetor of breath, and the intimate and common association of chronic intestinal autointoxication and Rigg's disease (pyorrhea alveolaris) have been emphasized by certain writers.

Constipation is among the commonest features of alimentary intoxication. In the case of constipation, there is a discoverable element of causalive relationship, and this symptom. as will be shown hereafter, presents one of the most important indications for appropriate treatment. Constipation may altcrnate with diarrhea, while in others mere irregularity of bowel action exists. I careful phrsical examination of the colon, more particularly by light percussion, will indicate the presence of an orerfilled condition of the bowel, most commonly in its descending portion. Palpation may detect a doughy mass or masses in one or more sections of the colon, and after removal of these fecal accumulations more or less thickening of the intestinal walls due to a catarrhal state with infiltration may be detectable. In the individual case, therefore, the copremia may originate similarly with each recurrence, the lesions mentioncd above inhibiting peristalsis in a given portion of the colonic mucous membrane. The gastrointestinal symptoms thus far described are often found to be secondary to certain intes-
tinal conditions, e. g., mucous colitis, chronic appendicitis, gastroptosis and the like.

There are cases in which old fecal accumulations, usually occupping the ascending portion of the colon or the neighborhood of the sigmoid, are accompanied by fluid stools, ranging from one to sereral in number daily. Here the antotoxic manifestations may be mild in character and eridenced by an ocasional headache and so-called bilious attacks. Occupation has not been shown to liare any etiologic significance, as some writers have supposed. The metabolic anomalies in association with intestinal putrefaction and stagnation manifest constantly an inordinate excretion of alimentary decomposition products in the urine.

Brunon and Guerbet, ${ }^{\text {s }}$ from their exceptional studies, have formulated the following conclusions: "1. The coefficient of intestinal fermentation is the relation of the ethereal sulphates of the urine to 100 parts of total urinary nitrogen estimated in $\mathrm{SO}_{3}$. 2. As a result of experiments made by one of the authors on healthy indiriduals. this coefficient is often less than 1 and nerer passes 1.4. Diets such as milk, regetarian, mixed or meat, do not affect this result. 3. On the other hand, in patients in whom one suspects lepatic or renal insufficiency (except in the case of uremia, in which it tends to be depressed), this coefficient may serve to measure the degree of alimentary intoxication. It exceeds 1.4 and may reach a very high figure. In their observations this eleration of the coefficient almost alvays coincided with a slight albuminuria. 4 . The diet has a very marked effect on the eoefficient ; the regetarian or milk diet associated with absorption of lactic acid ferments lowers it. J. Clinical improvement has always been observel in these cases. 6. The determination of the cocfficient of intestinal fermentation is a simple clinical procedure. This coefficient is capable of giving the physician useful practical indications for diagnosis, prognosis and dietctic treatment."

My personal experience and observation indicated an increase in the elimination of indican in practically all cases; this is in consonance with the obserrations of most writers, and I have further demonstrated the faet to my own satisfaction that indican is increased most decidedly in the cases showing marked accumulations throughout the colon. It is olbrious that in direct proportion to the renal elimination of indican will be raised the autoprotective power of the hmman

[^31]organism. On the other hand, its disappearance from the urine does not impair the protective processes, but points to a subsidence of the putrefactive fermentative changes in the intestine. Obriously this urinary constituent becomes of the utmost importance for both diagnostic and prognostic purposes. and clemical examination of the urine for its presence or absence can not. therefore, be considered too tedious for the general practitioner.

The microscopic urinary findings are unimportant, the principal ones being calcium oxalate crystals and hyaline and faintly granular casts. Chemically the urine has rarely shown any morphologic elements, except that the uric acid has been generally found to be increased. I have never observed albuminuria in cases not complicated with chronic nephritis. Among urinary phenomena stand out prominently the marked rariation in the 24 -hour quantity; and the specific gravity may not bear an inverse ratio to the daily output, but conversely is sometimes unusually high, despite an increased daily amount.
I have observed marked acetonuria in a prenonderating proportion of my cases of chronic autointoxication of intestinal origin. This finding is indicative of impairment of the intermediate metabolic proceses, the indol and hyposanthin bases being imperfectly assimilated, leading to acidosis.

The nerrous system, more particularly the rasomotor tract, is decidedly affected by the irritant autotoxins. It is exceedingly important, however, to distinguish between nervous disturbances induced by the absorbed toxic substances and those resulting from primary changes in the neuro-mechanism of the body. Before classifying the given disease as being autogenetic or enterogenous. an attempt should be made to positively exclude organic risceral and nerrous diseases. On the other hand, it will be found impossible to discriminate the commoner forms of ncurasthenia (due to fatigue-toxins from orerwork) from those in which intestinal autointoxication is the point of departure. Due to the toxins circulating in the blood (acidosis) the alkalinity of the nerre envelops is decidedly impaired, with resulting nerrous manifestations, principally neurasthenic and hysteric. I would caution my hearers against the fallacy of making an assured diagnosis of either autotoxic hysteria or neurasthenia without clear and conrincing eridences of the presence of the etiologic conditions. For whilst the influence of intestinal autointoxication in the causation of neurasthenia is undoubted, the majority of cases of the latter condi-
tion do not bear the stamp of an enterogenons toxicosis.

De Vries ${ }^{9}$ has emphasized the psychic phenomcna of intestinal autointoxication, which he attributes quite generally to the result of long continued constipation. These are depression, dread, fear, nostalgia, melancholia, delusions and the like. It is to be recollected that, although sometimes a previously existing intestinal intoxication appears to be an underlying cause for an exacerbation of psychic symptoms, such as described above, there are other and more common exciting factors reeognized for the same phenomena. According to the writer's experience, the particular grouping of nervous manifestations seeming to be inost prominent are a feeling of languor, marked lassitude, loss of physical and mental energy, vertigo, insomnia, drowsiness, irritability and occasional headaehes. Tarious motor and sensory disturbances are also encountered.

The autotoxic cutancous conditions sometimes met with are erythema, urticaria, eczema and acne. In close clinical union with the skin eonditions dependent upon autointoxication of intestinal origin are gouty or rheumatic joints and muscular rheumatism, as well as indicanuria. In an interesting case of my own in which the intestinal featurcs were practically constant or chronic in their course, exacerbations occurred at irregular intervals, characterized by nausea and romiting (at times), fever ranging from 101 to 103 F., and defervescing by lysis, either urticaria or erythema with multiple arthritis (without migration) resembling acute or subaeute articular rheumatism. Such attacks often follow flagrant errors of diet, as in the case just referred to. Among the cardio-vascular concomitants, special mention should be made of neurosis and generalized arterial sclerosis with secondary myocardial degeneration. Instances of chronie myocarditis may be encountered in symptomatic connection with enterogenous autointoxication, but it is not clear that the latter condition is the sole cause for the former. Unquestionably, certain cardiac neuroses, such as attacks of palpitation, tachycardia and rarious forms of arrhythmia, may owe their origin to toxic absorption from the intestinal tract. The same causative influence habitually maintained exerts a potent effect in the development of arterial sclerosis.

Obviously, depending upon the individual's susceptibility, it may be months or sears before the first indications of sclerosis of the ressels ap-

[^32]pear, and as-ociated etiologic factors are commonly soon or late in evidence. The intestinal autotoxemia admittedly leads io the development of purin bodies, including uric acid. which, in turn, are potent in the production of sclerotic changes in the vascular system. During exacerbations in the course of enterogenous autointoxication, I frequently have been able to satisfy myself of the presence of marked vaso-constriction of the peripheral blood vessels, presumably the resultant action of the toxic substances absorbed from the intestines upon the intima of the ressels.

There is no more difficult problem in medical diagnosis than the positive recognition of chronic intestinal autointoxication. The diagnosis of this condition should always be made with much caution and reserve, after careful consideration of the anamnesis and a judicious balancing of all data bearing upon the ease. If there be presellt any recognized acute or chronic affection, the diagnosis of primary enterogenous autointoxication is precluded. It is not permissible to regard the given case as one of chronic alimentary intoxication, retrospectively, merely because the symptoms have disappeared as the result of an eliminative plan of treatment, since this method also serves to remove other disposing and exciting eauses. In connection with the principal causative factors, the following symptom group would sutfice for an assured diagnosis: heavily coated tongue, fetor of breath, often indications of Rigg's disease, headache at intervals, constipation, evidence of fecal aceumulation in the colon. the elimination of an increased amount of indican and (commonly) acetonuria, showing impairment of intermediate metabolism. Lces characteristic, perhaps, although strongly confirmatory, are the nervous manifestations and the associaterl fcbrile, arthritie and cutaneous conditions previously described.

From personal experience and observation in a considerable number of cases, the writer feels that it is imperative to draw a practical distinction between primary chronic autointoxication of intestinal origin and that form which occurs secondary to other acute and chronic diseases. In the latter variety, which is decidedly more common than the former, the alimentary autointoxication is sufficiently open to observation to lee recognizable, and it requires attention. but is not to be regarded as the principal disease.

Treatment.-The prophylaxis of enterogenous autointoxication must embrace first and foremo:t a consideration of all known etiologic factors. Witlo a view to diminishing further formation of
toxins，the diet must be carefully arranged，as a rule．The＇quantity of unsuitable food which may rary in different cases must be exeluded from the dietary．For example．I have ohserved instances in which the carbohydrates（sugar． starch）were to be principally eliminated，al－ though in a preponderance of the cases the pro－ teids in abnormal amomet were potent in cxeit－ ing the fermentative and putrefactive processes．

In the acute form of intestinal antointoxica－ fiom，a marked．temporary restriction of diet，cren to fluids alone．is adrisable．During the acute exacerbations in the course of chronie intestinal antointoxication，especially in that form charac－ terized by so－called bilious attacks，accompanied with headache（migraine），the dict should be regulated in accordance with the indications for the intestinal condition，not as to the cephalalgia． 1 have found that absolute abstemionsuess from food for a period of twentr－four hours meets the cerpuirements of this group of cases from an ali－ mentary viewpoint．

In general，to meet the demands of nutrition in the chronic forms and at the same time mini－ mize the production of intestinal toxins，the lighter and more digestible albmmoids，such as milk，eggs．fish，orsters，fowl（except turkey） and game（in season）－all in moderate quantity －in combination with wholesome fruits，green regetables，cercals，potatocs，cither mashed or baked，and a small amonnt of fat and sugar． forms the bases of an appropriate dietary．In the sceondary form．the diet is to be formulated with reference particnlarly to the primary affection． and if rightly adjusted tends to mitigate or eren remore the cause of the secondary condition．

Tea and coffee should be replaced by milk． cocoa and hot water as bererages．Alcohol of all forms must be used cautiously，and when．as sometimes happens，it causes ill effects，its total exchsion is imperative．I small amount of light acid wine．as claret or Rhine，aids in keeping the patient in a good state of nutrition and may be ordinarily recommended unless special contra－ indications exist．

The second leading indication is to empty the bowels by the use of laxatives possessing antisep－ tic properties，of which the most useful are calo－ mel and the salines．It is my enstom to preseribe a course of calomel at the beginning and later at varying interrals of time according to the degree of intensity of the local phenomena．Each course of this remedy is followed by a saline laxative， such as the phosphate of sodimm dissolyed in hot water while fasting，and it is continned daily so long as the indications，as shown by the condi－
tion of the stomach，the character of the dejecta and urimary finding：，persist．

Certain of the so－called alkaline－saline mineral waters which owe their superior therapentic ralue principally to the presence of sodium．calcium and magnesimm sulphate，together with a smaller percentage of sodium chlorid，and the carbonates． are also decidedly cfficacious．Such waters are to be found at Carlsbad，Dix les Bains．ITomburg． Baden．Weisbaden and other springs abroad．as well as at certain spas at home．Not all cases． howerer，need to be sent to resorts，but only the more severe and protracted ones．In the majority of instances．home treatment，inchading the use of sakine mineral waters or salts made from them． may be successfully employed．They should be administered on rising and hot．

In intractable forms．colonic irrigation with various antiseptic solutions given in the usual manner should be advised and encouraged．In no other way can the mucons membrane of the colon and rectum be so quickly and thoronghly cleansed．These high encmata shonld be admin－ istered at regular intervals of from 24 to 48 hours and their temperature should be not less than $100^{\circ}$ F．For the fecal impaction when etiologically associated with autointoxication，it is best to give a small hypodermatic injection of morphin（gr． $1 / 16$ ）and then to administer ese－ rin（gr． 1 sol）every four hours until the desired result is profluced，or．failing to obtain relief therebr，high enemata．copious．and regularly repeated．containing ox－gall and magnesium sul－ phate，may be tried．

Further elimination of the toxic substances is to be secured by stimulating the action of the sweat glands．Among farored means to accom－ plish this purpose are the hot water baths and the electric．Russian or Turkish baths．I am clearly of the opinion that it is preferable，although not an absolute necessity，for the application of hy－ Gropathic measures to send the patient to some well－regulated institute．

Perhaps the chief channel of elimination is the urinary tract，and present－day professional opin－ ion in regard to meeting this indication may be formulated by saying that the best diuretic is plenty of water．The use of mineral waters that tend to stimulate kidney secrection is also to be concouraged and advised．My own best results have followed the use of either Poland water or one of the feebler lithia waters．These are to be tagken in large amounts，and my rule has been to allow three liters per diem in divided portions at stated intervals．In cases in which there is car－ diac insufficieney with lowered arterial tension．
cardiac stimulants, e. g., digitalis, strophanthus and the like, may be employed with a riew to raising the vascular tension and thus aiding the niltration of water throngh the kidneys.

Stern ${ }^{10}$ emphasizes the value of enteroclysis of large amounts (from 4 to 8 liters of 0.6 per cent. sodium chlorid solution). hypodermoclysis and intravenons injection of sodium chlorid solutions for the production of free diuresis. This methonl slould be bronght into requisition only in case of failure of the means adrocated above.

An important item of treatment remains to be considered, to wit: physical exercises or suitable manual work which is useful in promoting the general metabolism, improving the digestive function, stimulating the respiratory function and lastening elimination by the cutanenus and other routes. Another possible effect of exercise is the direct oxidation of the intestinal toxins. The form of the exercise and also the time and frequ:ency must be adjudged for individual cases. In all cases, howerer, muscular activity must be carried forward systematically and should be encouraged in the open air. In cases in which adequate physieal exertion is unsuitable, I would advise the judicious employment of massage supplemented by various forms of swedish movements.

After preventing the ingestion of an excessire quantity of food. it is customary to prescribe intestinal antiseptics. Trite though this recommendation may seem. and ohriously of secondary importance as compared with the combating of causes, I have nerertheless obserred manifest innprovement from their use in cases attended with marked meteorism. From efficient doses of charcoal and benzonaphthol given in combination with extract of pancreatin and pepsill. the best and speediest henefits may be expected. For the prevention of the putrefactive changes. HCl well diluted after food has proved serviceable in my hands. It has been recommended to employ ouly such agents as are soluble in the intestinal tract. Forchhemer advises the use of the socalled intestinal pill, i. c.. one in which the eoating is dissolved only in alkaline medium. Waldstein's method of preparing these pills, which usmally contain either menthol. themol or $\beta$-naphthol, is to coat them with an alcoholic solution of shellae containing salol (salol-coated pills).

It is not the object of the present paper to disches the treatment of the rarious conditions and diseases to which chronic intestinal autointoxication may be secondary. In this large group of cases, however, an attempt should be made to pre-

[^33]vent further poisoning with ptomains and leukomains, to promote elimination and meet symptoms as they arise, provided always that in so doing the ains and objects of the treatment of the primary disease is not controverted thereby.

## THE OPJORTLYITY FOR WORK, PROG-

 RESS AND PEACE.*IV. N. Wishird, M.D.<br>INDINAPOLIS, LND.

It is estimated that the number of students who are citizens of Indiana and who annually seek a medical education, and who have a right to look for ample educational opportunity within the boundaries of their own state, is between 600 and $: 00$. At least half have heretofore attended nedical schools located outside of this state. The total number doubtless will and should diminish relatively as educational requirements become more exacting. And yet there will still be many more than the total number of those who now and who heretofore have constituted the entire student body of the different medical schools in this commonwealth. The causes of this in the past have been varions, but the duty of those who are charged with the responsibility of medical elucation in Indiana in the future. it seems to me, is clear. It is not difficult to discover the influences which have in the past led so many medical stndients to go outside the borders of their own state and which will hereafter inevitably influence, may we not lope, a diminishing number to do the same thing. It may not be unprofitable, however, 10 consider some of these influences.

Among them may be recognized incidentally the usual individual factors which determine the clowice of a particular educational institution of any kind, such as the fact that a relative or friend may have attended the school selected or that some especial circumstance or influence may have been operative. But more important and fundamental reasons must be conceder in explanation of the remarkably large per cent. of those who have gone to medical schools elsewhere.

The fact is too patent to be questioned that medical schools in this state have been laboring under disadrantages that have made the highest success impossible. Tery naturally students who have collegiate training and who have also ample financial resources will seek the medical schools possessing the best equipment taken as a whole.

[^34]The answer to the financial and administrative handicap which has restricted the noble eflorts of those who have sought to elevate the standard of medical education in Indiana and in other states in the past is found in the one word, University. There has been no lack of unity of opinion as to what constituted the remedy, but there has been an honest and somewhat radical difference of opinion as to its application. The solution has happily been found in an agreement which, although possibly questioned by some who entertain opposite views, is, nevertheless, I believe, the very best possible solution of the situation. This solution is well expressed in the recently published statement over the signatures of the presidents of Indiana and Purdue universities. In saying that the best possible solution has been found, I am glad to quote the opinion of a distinguished ex-president of this university, Dr. David Starr Jordan, expressed in an interview some three years ago, when he said that he believed the plan which has now been adopted would be best ealeulated to meet medical educational necessities both for research work and the practical training of. medical practitioners. Is one who has been deeply interested in and somewhat actively identified with the recent events leading $u p$ to the present solution of this problem in Indiana, perhaps it may not be inappropriate for me to express the convictions which have been entertained by, and have influenced, a very large proportion of those having the liveliest interest in medical education. There has never been. so far as I am aware, anrthing bnt commendation of the course of the authorities of this university in undertaking and maintaining the excellent department now conducting the medical work of the freshman and sophomore years at Bloomington. In this the proper anthorities have wisely recognized the necessity for such provision as an essential and integral part of university work. But there has been a widespread opinion that medical educational necessities require also that ample provision should be made for the first two years of laboratory work in direct connection with the last two years of clinical work. If it is the right of the state to define the edncational qualifications which shall entitle a man or woman to enter the practice of medicine, it is also the duty of the state to make the broadest and most ample provision for obtaining medical training. Such provision can only be the broadest possible and the most ample which gives an elective opportunity to take laboratory and clinical work separately or in direct conjunction. Happily this opportunity is now afforded, and in both instances ample and
well-equipped laboratories are provided, each doing excellent and equally good work. There are many and satisfactory reasuns for what might otherwise seem an unnecessary duplication of work. The future development of this school must necessarily include the early establishment of a postgraduate department for practitioners which, of necessity, must be in intimate relationship with the elinical part of the work clone in the junior and senior years. In anticipation of the establishment of a postgraduate department ample provision for review and experimental laboratory work by physicians who now go elsewhere should be made. 'This larger and greater unirersity opportunity which is now aflorded is to me a most attractive one. Let us keep within our borders and provide ample facilities not only for these postgraduate students, and those who now seek the regular comrse already provided, but also the considerable number of graduates of nonstate schools whose views of college loyalty and other reasons may heretofore have led them elsewhere.

Loyalty on the part of its alumni is an inraluable and absolutely essential asset of every college or university. Its helpful and supporting power in critical periods of an institution"s career has many notable examples. Its inflnence upon the subsequent educational actirities and associations of the individual is a matter of common knowledge. This is notably true in the selection of a professional school. Indiana Unirersity has had no more potent aid in her efforts to establish a medical department than the splendid support given by her graduates in every city and county from Lake Michigan to the Ohio. The opportunity happens to have been afforded some of us who have differed with her on certain matters in the past three or four years (which happily are no longer matters of controversy) to have had abundant evidence of the loyalty of the graduates of the state university. I hare repeatedly expressed the highest admiration of this loyalty, however much I may at times have demurred at the particular direction it took. This loyalty has been shown cheerfully, heartily, earnestly. Doubtless in many, and possibly in the majority, of instances without especial interest in the particular incident that called for its display, but because their alna mater had sounded a call to her loyal sons and daughters to give her their needed assistance. What is true of Indiana University is true of DePauw, Wabash, Earlham, Notre Dame, Hanover, Franklin, and all other schools, both state and non-state. In the present solution of the medical problem in Indiana I am absolutely convinced that more has recently been
done to disarm any spirit of antagonism on the part of these institutions and their graduates than is generally realized. From the graduates of the combined colleges and universities of Indiana the student body of the Indiana University School of Medicine must in the future be chiefly drawn. The time is near at hand when a diploma from a licensed high school will no longer secure admission to an institution that is endowed with authority to confer a medical degrce. In the future under the ample provision now assured there can and should be no reason why this school shall not receive the sympathetic support and achieve the splendid success which its obligation to all the citizens of the state demands of it as an educational institution and which every friend of medical education should desire for it. You will pardou a personal word in closing.

Some of you have done me the honor during "the late unpleasantness" to credit me with being a rather earnest opponent. I have fought for simply what I believed to be fundamental. and gave best assurance of permanency in building up a great medical sehool in Indiana. With others with whom I have been associated I have sought to attain that whicll I knew was nearest the hearts and received the sympathetic support and carnest approval of a great majority of the members of the medical profession in this state. The adjustment attained insures the endorsement of the profession, it guarantees elevation of the standard of medical education, and it will unquestionably increase the number of those who take the first two years work at Bloomington, as well as at Indianapolis, and will by giving a complete course in medicinc in the latter place afford oportunity for reference and review laboratory work in the junior and senior years, and by this dual and elective plan give certain assurance of the success whieh has been so notably attained at Cornell and elsewhere.

And now let us have peace and unity of effort. If anyone still entertains a lingering doubt that the desired end has really been attained, I am glad to say that his doubts are unfounded. On the night of April 4, 1908, at the joint conference of the offieial representatives of Indiana Unirersity, and Purdue University, and the Indiana Medical College, when the proposition of Indiana University was under consideration, I asked Hon. B. F. Shirely, president of the board of trustees of Indiana University, a question to which he in his official capacity gave an emphatic affirmative reply, and to which President Bryan also gave an affirmative reply. The question asked was simply this: "Do you interpret the proposition which you
present to mean that you will not only assent to. but that you will honestly and earncstly work to secure legislative approval of a permanent four years" course in Indianapolis?" The cordial acceptance of this plan by the authorities of Indiana University should, and I believe most heartily does, bring peace and tranquility to medical educational efforts in Indiana. Let us justify this belief by united and harmonious effort.

## RURAL AND YILLAGE HYGIENE.*

## D. $\mathbb{T}$. Robertsox, M.D. deptit, ind.

My title would indicate that there is a difference between urban and rural districts in this very important matter of the prevention of disease. It is true that while both wage warfare against the same foes, better methods are usually observed in the cities. Statistics indicate that fatal discase is less prevalent in the country, and this notwithstanding the carclessness observed in the enforcement of sanitary regulations there. Often we find no evidences that there are any regulations applying to rural districts except in such special cases as an outbreak of smallpox or other virulent contagion, and it is this lack of authority that constitutes the greatest defect in the present system. It now takes a regular procedure in the courts to suppress a too odoriferous pigpen situated in a village or unincorporated town. There is no autocrat there to demand instant cessation of such a nuisance and enforce the demand.

It is my belief that a little more paternalism is absolutely necessary if we are ever to accomplish much in these country places. This idea of independence that is bred and trained into Americans becomes pernicious when it leads men to object to any health regulation that entails personal loss. Avarice has fought against and interposed objections to almost every advance in sanitary methods.

The health conditions which many large cities attain by the exercise of constant vigilance are the natural inheritance of the country. It has been said by some one that "God made the country and man made the town," and when we compare the country and town from a sanitary standpoint we fcel that we must sulscribe to the sentiment so tersely expressed. The maintenance of the health of the people is the crowning function

[^35]of gorernment. but we Anericans do not beliere it, for while we have at Washington a department of agriculture and one of commerce. samiitation is not thought of sufficient importance to be similarly dignified.

Health is said to be 90 per cent. of eapital. and if ron don't beliere it get the testimony of sick people and be convinced that it is true, and laring been convinced do your best to spread the infection. Fiobert $G$. Incersoll once sneeringly asked why God didn't make good health contagious instead of disease. The sanitarian makes answer that He does do so then He gets control of the boards of health.

If, then, the care of the health is of such great importance as I have arerred, its custodians should be chosen only on the high ground of fitness. No "grafter" parading in the stolen uniform of a patriot should ever be entrusted with a duty so sacred as that of conserving the publie health. Questions of life and death demand too much conscience to stay inside of politics unlesthe politic is strictly of the Folk-Hanly brand.

For many years men lave been stumbling onto facts that hare been of the greates importance in prophylaxis, but the prevention of disease as a science is the product of a rery recent time. The revelations of bacteriology alone made such a science possible. When I was a student of medicine. not so rery long ago. I heard a revered teacher give roice to the prophesy that the time would come when physicians would be better paid for preventing disease than for curing it. The ideal, dimly perceised by him. is rapidly becoming a realitr, and in no other department of medicine do such splendid opportmities for honorable distinction present themselres.

Medical students twenty years ago considered preventive medicine decorative rather than mseful, but to-day it is a matter of pride to observe the achierements that lave come along this line. Is the world: most impressive example of this we lave. unfortunately for our pride. to look away from Imerica. The samitary corps in the Tapanese army operating in Mancluria in the recent war shamed us by the admirable work it did. Look at its record and then look at our own in the spanish-American war and find canse for self-gratulation if tou can. Organized responsibility resting definitely on some efficient and particular pair of shoulders was the secret of Japanese success. and the lack of it the explanation of our failne. Theirs was a demonstration to the world, seennd to none ever given. in practical proplylaxis.

Another conspicuons example in preventive medicine in which our own conmtrymen plaved a vinrtlyy part and carned the erorlastinge gratitude of the world is the story of Havana. which you all know so well. For many decades she was one of the plague spots of the tropics. Weath sallied forth from her port ravaging our consts and inrarling onr interior. But brave investigators established a definite etiology for vellow ferer. and Harana is to-dar, what it nerer was before in all it- historry, a clean and healthful city. To-tay no terror writes itself in pallid and despairing faces at the bare mention of vellow ferer, but the cascs that come in from the Isthmms or other tropical points are conreved. securely envered. to the general hospital and there treated rationally intelligently and humancly with small fear for infection. Thanks to the work of faithful and comrageons men. it is no longer a foe in the dark. This writes itself a wonderful triumplı for preventive medicine. but let us not forget that the addition of this truth to our art demanded struggles and sacrifice and martyrs, and the martyrs were there. By their sacrifice they added unnumbered centuries of happy life to hmmanity and demonstrated anew the fact. declared of old, that he who would be greatest among yon mist become the servant of all.

There are other problems, the correct solution of which means so much to the world. The con--truction of the Panama Canal is not a problem for the civil engineer primarily. but for the sanitarian. It presents some peculiar questions to him, and its completion finally will depend upon the answers he gives. But this is just one of the larger opportmities that are presenting and I only mention it to imprese you with the importance of the general theme of prophylaxis.

The prevention of discase largely concerns itself with the 'fuestions of air, water, food, soil and personal habits. In the maintenance of healthy existence, pure air. pure water and pure food are essentials, but pure air is of first importance because of the necessity of a constant supply. Country air is generally pure on the outside of the houses, but on the inside. owing to faulty construction and bad management, it is often rery noxious. Those abominations known as door strips are put up, the windows are tightly closed, the doors are sliut and locked. Now add to this air-tight room an air-tight store and, at night, to facilitate the giving of needed attention to a protesting first-borm. add a lighted lamp. turncel low, and you can see one of the methods hy which the grandson of a pioneer, who
slept where night overtook him, and lived to get bis second eyesight, slowly but surely suicides.

I hare no doubt that many, if not all. of my brother phrsicians present hare walked into a room similar to the one abore described, say about 3 a. 11 . on a ivinter night. and if $s o$ it isn't necessary for me to punish language trying to make it convey a correct idea of how your olfactories resented the insult. The people who sleep in meh rooms complain of a dark-brown taste, headaches, lassitude, and if they (an not be induced to reform they soon wear pallid faces, lave hectic flushes. habitual cough: and wasted hodies, and a later observation will rery likely disclose a funeral cortege. This isn't a risitation of divine wrath; it isn t a case of disease contagion. It is simply a case of bad air.
lery often I find houses in which there is not a single room that is adapted to use as a sick chamber. Doors and windows so located that the room is draughty or clse no chance for air. Transoms are so arranged that cold air comes into the room in a gale. Such rooms are an abomination. Often tragedies occur in them, for which the doctor stands more than an even chance of receiving the blame. Did time permit I could relate some painful personal experiences in proof of it, and I dombt not that many of you could duplicate my experience.

The tronble with such buildings is faulty architecture, and it can only be remedied by popular education on sanitary questions. The proper place to begin this edncation is in the construction of our public bnildings, and more especially in the construction of our schoolhouses, for there the most important years of life are spent, and certainly the rery best is none too good for these embryo citizens.

The orator has learnedly and wordily referred to the little red schoolhouse as the palladium of our liberties. If it is to be a real safeguard to our liberties we ouglit to make it promote not only his mental activities and adrancement, but we ought to see to it that it promotes as well his physical and moral well-being. We do this by building it to contorm to the most approved plans. The schoolliouse ought to be a model in sanitary construction, but we know that it is exceptional to find one that is so. Usually the pupils are alternately freezing and suffocating; colds are engendered, throats become irritated and sore. I homeless bacillus of malignant type finds a location farorable for its growth, an epidemic is inangurated, and perhaps some deaths occur, all because the heating and rentilation is defective.
speaking of schools. I am reminded that while *cheolrooms should be irreproachable from a sanitary point of view, the teacher himself should be in good lealth. It is really more important that he be well than that he should be competent to teach the principles of music, which I understand is now a requirement. No pity for the only daughter of a dependent mother should be a factor in securing for her a position as teacher if her health record is shady.

Especially should we guard against the cmplorment of tuberculous teachers. I myself attemiced a school one of whose teachers a con--umptire, taught until within a few weeks of his death. Such a thing should now be impossible anywhere. Think of it, the dust in that recitation room held constantly in suspension, myriads of hacilli ready to implant themselres on any tarorable location, such as a sore throat or irritated bronchial tubes. Those charged with the selection of teachers should bear in mind that physical fitness is primary in importance.

There are efforts being made to have competent medical supervision and inspection in the cities, but what shall we do in our country schools: Let us have more teaching of the prinriples upon which health depends. Pope well said that "the proper study of mankind is man." Let teacher and pupil study physical man togecher. Make the course in hygienc so full that the teacher will be competent to exercise all the more common functions of the sanitarian. Make it one of the specific duties of the teacher to care for the health of the children entrusted to his care. Certainly the surroundings in which a rhild is to pass the first years of its life should be conducive to perfect physical development.

The L'nited States census report on vital statistics for 1900 shows that typhoid ferer is much more prevalent in the country than in the cities. This is a severe arraignment, as the facilities for prevention are much greater in the country districts.

There are three important sources of typhoid infection: (1) Direct transfer from infected drinking ressels, eating raw fruit in sick room, and eating cold victuals; (2) through the mediation of the common housefly; (3) infected water and milk.

It is my belief that the fly is the most common infecting agent in country places, and prerention of typhoid depends largely on our ability to slut him out of our dwellings. Better give moner to the hardware dealer for wire screening than to fee the doctor.

Every sate board of health should specify the kind of closets and their proper care. some one compelent should be designated as health oflicer in crery township, with power to act. Pigpens should be banished from towns and villages. In small rillages the alley is often used for manure heaps, demised pet cats. tin cans and cholerastricken chickens. Two pig styes often face each other across the narrow way, the wallows of which in mid-smmer are filled with fetid mud. The odors which emanate from them on a warm smmer night, when the air is heavy with moisture, are no reminders of Eden. I asked a county health officer to look at the landscape from which I drew the above picture. He came cighteen miles to see it with me, but when I asked him what I must do about it he said he had no authority to aet. This was some years ago and I hope that cre this his powers have been extended.

What we need is more education along sanitary lines, good laws well enforced, and a realization by the people that prevention is better than cure. All these are needed to accelerate the tardy pace of the much talked-of but long overthe millcnium. It is my belief that a eard issucd by the state board of health giving explicit directions for the proper construction of closets and the care of exereta, distributed through county and township board to every physician for general use among the people, would be a very useful measure. The card might contain other items on houschold hygiene.

Speaking of closets reminds me that there ought to be public conreniences of this kind maintained by every incorporated town. A stranger in North Vernon to-day, if away from a hotel, is dependent upon the saloon for such accommolations. It ought not to be left for this parasite, that is the greatest menace to the physical and moral health of mankind, to do through motives of self-interest, the only motives that ever aetuate it, what it is the duty of the municipality to do for the same reason. Every real sanitarian knows that we maintain and protect by our laws a greater nuisance in these same saloons than is afforded by foul air, pigpens, infected wells and adulterated food eombined. John Burns, the great English labor leader, recently said: "Throughout the centuries the drink shop las been the antechamber to the asylum and the recruiting station for the hospital." His testimony agrees with your personal experience and olservation, and with mine, and must, therefore, be true. And if it is the trath, the drink shop i. a muisance and should receive the treatment of a nuisance that is to be suppressed.

In comelusion I would say, let us work for a better and more eflective sainitary law: one that extende effectively to the rillige and the country place. Let us fight for the systematic care of all human excrement and our air will be purer, our water better, trphoid rarer and life sweeter.

## LOBAR PNECMONIA: ITS PATHOLOGY AND TREATMENT.

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Lolbar puemononia is a very common disease, and one of much interest and concern to the general practitioner. It is a subject that is much written upon by those who are wise in medieine. We are carefully adrised as to the plan of treatment, and warned against different lines of treatment and against the cxhibition of various remedies. We are advised never to apply cold to the chest, as it reduces the vitality, nor hot applications, as they are conducive to suppuration. We are also advised not to administer aconite, as it weakens the heart and causes capillary stasis, and that opium should be withheld because it locks up the secretions and prevents expectoration. We are urged to earefully close the doors and windows to keep out the cold, as the difficulty originated from taking cold.
Then the drug nihilists speak up and tell us that drugs have no effect, that the disease is microbic and self-limiting, and that treatment is of no avail. And after we carefully follow these admonitions and rarious plans of treatment we get the usual death result, 18 to 25 per cent. double pneumonias dying and all but a few singles recovering.

It is now a generally aceepted faet that lobar pneumonia is due to the toxin elaborated by the Diplococcus lancoolatus or the Micrococcus pneumonia. It enters the lungs by inhalation and locates itself in the air vesicle, where, if the ritality has becn reduced by exposure to extreme cold, or irritating gases or other substances ealculated to produee slight eongestion or the least solution of eontinuity, it becomes active, and of all pathogenic bacteria I think it the most prolific, as the prodromal period is the shortest.
The toxiu being an irritant, an inflammatory proeess follows. A fibrous or plastic exudate is thrown out and the air vesicle and the bronchiole to the extent of about one-fifth of an inch is completely filled. This constitutes the entire anatomic pathologie lesion. In itself it constitutes no loss or destruction of tissue necessary to life,
and if death does not occur from toxemia, liquefaction and absorption follow, leaving the tissues in every way normal. The exudate in a lobar pneumonia never of itself suppurates, for it is alway's plastic.

Inflammatory exudates are always largely the same, their only difference being in the proportional quantity of the exudate constituency, which is liquor sanguineous, white and red corpuscles, with the cause-producing bacteria. Normal inflammatory exudates always coagulate and become plastic. But if the bacteria produce products which prevent coagulation, then it remains liquid, and we have a suppurative inflammation which destroys tissues and often ends in abscess.

In croupous pneumonia the exudate always coagulates, and consequently we have a plastic inflammation with no destruction of the parts. Why do patients die of pneumonia? Croupous pneumonia usually attacks one or two lobes of the same lung, and while it is confined to this area there is sufficient remaining aerated lung tissue to easily sustain life, and the patient always reeovers unless the bacteria are extremely virulent and there is sufficient toxin elaborated to paralyze the cells of the life centers and produce death. We have then death from toxemia. But if the disease travels to the opposite lung and a part of that becomes inflamed and hepatized there is not sufficient healthy lung tissue remaining to properly aerate the blood and the patient dies of asphyxia. Hence, we have two modes or causes of death: first, from toxemia, and, second, from asphyxia. Few cases die of toxemia. Jost cases of single pncumonia recover, most cases of double pneumonia die, and they die from asphyxia before the toxic products have time to bring about hematic conditions and cell destruction sufficient to cause death. The cases that die of toxcmia are those eases of single pneumonia where one or two lobes are involved, with very decided objective symptoms, as weak, flabby muscles with consequent heart failure and distended abdomen, very high temperature and active delirium. This occurs when the conditions of the system and climatie conditions are most favorable for the growth and production of the microseopie vegetation which produees the peculiar pneumo-toxin. For this reason some seasons we have epidemics with great fatality, while other epidemics of the same disease are noted for their moderation.

If we expect to go further than mere symptomatic treatment, which is all that is offered to us in text-books, we must endeavor to hold the in-
flammatory action in abeyance, preventiug, if possible, the involvement of a second lung and death by asplyxia. We must also endeavor to disorganize or neutralize the chemical product known as the toxin and render it inert. If these two objects can be aceomplished. the deatlo rate in pueumonia would be nil.

The plysiologic processes in inflammation are the same in all tissues and in all parts of the body, and must be treated upon the same general principles. Shut off the blood supply. Coldblooded or bloodless animals or bloodless tissues have no inflammation. They repair injury bey cell proliferation.

Relieve the irritation at the nerve periphery or lock up the brain centers so that they can not receive it. It is the irritation transmitted to the brain that eauses the increased blood supply or congestion. This can be done witll opium and its derivatives. Then partially paralyze the heart so that it can not respond. This can be done positively with aconite. You ean bring the pulse rate down to normal or below and reduce its rolume. Apply moist heat to the thorax to soothe the nerve filaments and assist in allaying irritation.

You can not prevent the inflammation, from the fact that at your first visit the patient has had his initial chill and reaction has set in. The lung is in a high grade of inflammation and the blood full of toxin. But you can intelligently attempt to lower the inflammatory action and hold it to the tissues then inrolred. In other words, control the inflammation by allaying irritation, or render the brain centers unable to receive the impression eaused by irritation, and slow or weaken the heart's action so that it can not force an inereased amount of blood to the seat of irritation. Then administer agents, if there are any, that will chemically combine with the toxins and render them inert and also agents that act as germicides destroying the cause-producing organism. You will then have specific medication and something more than symptomatic treatment.

In the summer of 1881 I was ealled to see a young woman, 19 years old, who was suffering from general peritonitis originating from some masked pelvic disorder. The third day the pulse was 140 , temperature ranging from $1041 /$ to 105, abdomen highly distended and tympanitic. with active delirium. I concluded that she was going to die and advised counsel. They dispatched a messenger for Dr. Haggerty, of Elkhart, 17 miles away. We saw her about 6 o'clock that erening. The Doctor looked her over and said there was not much doubt about her dying.
and that he had nothing to suggost further than what I had been doing. bont that he wonld give her sul grains of yminin. as he had often seen that amount abt promptly. 1 moistened 50 grains. making a tahlesponful of prinin domgle or Cream. ant succeeded in getting the patient to -Wallow it. We retnrned home and I saw the patient the next morning and found her temperature normal. her pulse s.i) and mind elear. Her tompanitis slowly subsided and she marle an uninterrupted reenvery: The attendants informed me that "she sweat profusely all night."

The following winter Mr. C.. of Wakarusa, in the woutern part of this countr, contracted a facial crripelas. involving the eres and mucous mombrane of the notrils: and I beliero became moningeal. His pulse was very rapid. temperature 111. , and he became violently delirions. requiring fonr or five men continuously to restrain lim. and making it rery difficult to administer agent-. Abont ! o bock in the erening of the thind day I placed a temporary gag in his mouth sand gare him a large tablespoonful of quinin dongh. I saw him early the next morning and fomd hi- temperature nearly normal. pulse 90 . delirium gone and sleeping like a child. I gave him nothing more internally or externally. The -welling of the face and hearl rapidly disappeared and convalesernee mas established.

Many times since those years I have preseribed large dose of quinin with of ten very positive result. hut 1 mention in detail the abore cases as being my first experience with large doses of grinin and the -triking resnlts obtained.

In the Jommal of the A. M. A. Ir. IV. .J. GalWraith of sonora, Mexien. puhli-herl an article on the quinin treathent of lobar phemonia. in which he recommends the administration of so to 60 grains and follows it in two or three hours. if necessary: with doses of 20 to 41 grains. He alao recommended the tincture of chlorid of iron in 10 to 1.5 m . doses every fonr lours. alternating it with 10 gr . duse of quinin. If the temperature does not fall. the general symptoms decidcdly abate within six or eight hours. he repeats the large dose of quinin. With this line of treatnent he has reduced his mortality to ? per cent.

In the Journal of the A. M. A., Nor. 18, 1905. I): (: F. Neider, Genoa, N. Y.. publishes the results of three cases treated in the same manner. and one a donble pnemmonia. without a fatality.

In the Journal of the A. M. A., Feb. 10. 1906, page 410). Irr. Calbraith presents another artiele detailing the history of twelre cases treated with the quinin method by other phrsicians in the same locality withont fatality.

In the Jutururt of thr .I. M. . I., March 12. 1906. 1age is! . 1)r. A. L. (instetter, acting as-
 Ho-pital service. Nogales. Ariz.. hospital service. sal:- "Pnemmonia is a rery preralemt disease in Sograles and vieinity. My motiality in eases was
 lad a death from phemonia since I hergan the phinin treatment according to Mr. Galbraith: methoe!.

In the Jomemot of the . I. M. A.. Thly ?n. 1906. page 2? 2 . Dr. Ňeider of (ienoa. N. I... reports twelse more cases treated by the quinin method with one deatlo. The death occorred in a eonfirmed alcoholie who was previously sutfering from pulmonary tubereulosis.

In the Jommal of the .I. M. .1., Tan. 12. 19:2: page 131. Dr. M. A. B. simith. profersor of medicine in the Halifax Medical College. report- four (ases treated by the quinin method, one a double puenmonia. with no fatality. Se belieres that puinin is as mucle a specific in pneumonia as antitoxin is in diphtheria. In a footnote to this article Dr. Smith refers to a communication from Dr. Galbrath in which he mentions that he has treated and had reported to him orer 300 cases of pnemmonia treated by the quinin methot. with a mortality of ? per cent.

My early experience with large doses of quinin. and knowing it to lee a positive specifie in malaria. I was casily led to follow Dr. Galbraith: teachings in reference to quinin in pnemmonia. Lnring the last rear I have had but two cases of prue. ummixed cases of lobar pnenmonia in which I could put the quinin treatment to a test. The cases are as follows :

ChaE 1.-Patient C. H.. aged 3s. had -evere chill Jnly 1: . 1906. followed by ferer and pain in left lung. I first saw him July 19. Temperature $102 . \therefore$. pulse $1 ? 0$. respirations 39 . with profinse bloody sputa, an anxious expression and dnll leaden conntenance. Prescribed opium and aconite and omitted quinin from the fact that I had no quinin with me and patient lived nine miles in the country. July ?0. 9 a. m.. temperature $10 \%$ pulse $11 s$, respirations 30 , with pain and hepatization developed in lower part of right lmgg, saturating elothes with rusty sputum. Gare him 3 : grains of quinin. and 16 more in one honr. and ordered $\delta$ grains every four hours. alternating with \& minims of tincture ehlorid iron. Tuly ? $1 .+\mathrm{p}$. m.. temperature 10 . pulse 11 . respirations easier and patient feeling more comfortable. Gare 32 grains of quinin and followed in one lour by 16 more and entinued routine quinin and iron. Left instructions that he be given $3 ?$ grains of quinin at 9 a. m. the next morning. July ?巳. 亏े p. m.. temperature ? 91.
pulse su, pain gone and sputum rapidly disappearing. C'ontinued quinin and iron every four hours. July : 23,4 p. . 1 l ., temperature 100 , pulse i:, respiration 30. With this slight increase of temperature and rapid respiration 1 felt warranted in giving him $2 t$ grains of quinin. July 24, 4 p. m., temperature 98.6, pulse 68, respiration 28 , patient sitting up fanning himself. The rapid breatling was due to the remaining hepatization without inflammation. He had no further inflammatory action, but it required about a week to complete resolution.

Gentlemen. this was the first cave of double pneumonia, during thirty-two years, that [ treated to a successful termination.

Cise 2.-Patient II. L., aged 24, serere chill the evening of February 2, followed by fever, rough and pain in right lung during the night. Saw him February 3 at 12 m .: temperature 103.5, pulse 120. respiration 36. with copious rusty sputum. Gave him 48 grains of quinin. and ordered $\delta$ grains every four hours, and 12 minims of tincture chlorid of iron alternation. February 4,9 a. mı., temperature 103, pulse 114. respiration 30 , no pain. feeling comfortable and rusty sputa rapidly disappearing. Gave him to grains quinin and continued routine. Saw him at 5 p . m., temperature 101.2 . pulse 105 , respiration 28 , no sputum. Continued routine quinin and iron. Fehruary $\therefore$, temperature 99, pulse is. respiration 2. . Ordered $t$ grains quinin every four hours and continued the iron. Fehruary i, found him dressed and about the house. apparently in normal condition. This was five days from initial chill.

Dr. Bosenhury of our eity also had the courage to try the quinin treatment in four cases, and kindly gave me an opportunity to see them sereral times during their progress, and has furnished this history:

Case 1.- C. C., aged 21; called to see him March 2i, 1906: temperature 103, pulse 120, respiration 31 , severe pain in right chest. Marclr 28, temperature 104. pulse 120, respiration 32 , profuse rusty sputa and increased pain. March 29.4 1. m., temperature 104.4 , pulse 110 , respiration 40 , continued serere pain. With fear and trembling, 50 grains of quinin were given and 5 grains every tiro hours thereafter: also 10 m . of tincture chlorid every four hours: $11 \mathrm{p} . \mathrm{m}$. ., temperature 102 . pulse 104 , respiration 30, all pain gone and patient comfortable; 30 grains more of quinin were given. March $30.10 \mathrm{a} . \mathrm{m}$., temperature 102.4 , pulse 96 , respiration 34 : at this time 30 grains of quinin were given; 6 p. m., temperature 103 , pulse 96 , respiration 32 ; 12 p. in., temperature 102 , pulse 100, respiration 30: 30 grains quinin administered. March 31 , 10 a . m., temperature 102.8, pulse 110 , respiration 28; 2.5 grains quinin given; 5 p. m.,
temperature 102.8 , pulse 84 , respiration 20 ; 20 grains quinin were giren. April 1, 10 a. m., temperature 101. pulse 88, respiration 24; 6 p. 111., temperature 102 , pulse 88, respiration 30 ;次 grains quinin given. April 2. 10 a a. m., temperature 100.t. pulse 81 . respiration is, large dose omitted and routine doses continued. April 3, condition normal. temperature 98.5. pulse 30, respiration $2 \cdot$, resolution not complete.

Cise 2.-Male. aged 20: ealled April 11, 10 a. in.: temperature 102 , pulse 120 , respiration 36. pain in lower part of left lung with rusty -puta: to grains quinin given, and 12 grains every two hours thereafter, with 10 m . tincture dhlorid of iron every three hours. Saw him one hour later and gave him 24 grains more; 5 p. III. temperature 103 , pulse 128 , respiration 32 : gave him 36 grains, and 18 grains one hour later. April 12, $10 \mathrm{a} . \mathrm{m}$., temperature 99.6, pulse 96 , respiration 26 ; ordered 6 wrains quinin wery two hours and iron continued. April 13, 12 a. m.. temperature 99 , pulse is, respiration 2. In this ease the treatment began April 11 and terminated April 13.

Cise 3.-R. M., male, aged 22, weighing 200 pounds and an alcoholic. The doctor was ealled to see him May 12, 1906. Patient had been siek three days and attended by another physician, who informed the parents that he could not recover. It $2 \mathrm{p} . \mathrm{m}$. on the fourth day his temperature was 103.5 , pulse 132 , respiration 30 , consolidation left lower lobe, with severe pain, and profuse rusty or rather bloody sputa. Marked hehetule and great prostration. Was given 48 grains quinin at 4 p. m., $2 t$ grains two hours later and 6 grains every two hours thereafter, and tincture chlorid of iron 15 m . every four hours. May 13. 9 a. m., temperature 101.4, pulse 120 , respiration 21: 24 grains quinin given. May 14, 11 a. m., temperature 103 , pulse 112 , respiration 24: 30 grains of quinin given. and at 12 a. m., 1s grains more were given: 10 p. m., patient delirions, temperature 102. pulse 108, respiration 2t: given 30 grains of the triple bromids every three hours. May 15. 10 a. in.. eontinued delirious, temperature 100 , pulse 112, res piration 30: continued routine treatment and the bromids: delirium passed away and slept quietly all the afternoon. May 16. 8 a. m., temperature 95.6. pulse 108, respiration 24: routime quinin and iron continued, bromids omitted. May 1\%, temperature, pulse and respiration normal. but resolution not complete. Patient in three days was attending to his business.

Case 4.-B. C., aged 22. The doetor saw him first Oct. 23, 1906. Had pain in left chest, short haeking cough but no expectoration, temperature 102 , pulse 120 . On physieal examination for phemmonia no definite findings were found. but the evening of the same day he began to expectorate bloody sputum. The next day at 10
a. m. his temperature was 103 , pulse $1 \geqslant+$ and respiration 3?. Complained of severe boring pain in chest, cough frequent and discharging bloody sputum, body corered with perspiration; gave to grains of quinin and one hour later : $t$ grains, and followed with 1 : grains every two hours, and tincture chlorid of iron every four hours; at 5 p. m. his temperature was 101 , pulse 110 . respiration 2s: gave 24 grains of quinin and continued small doses thereafter. October 25. 10 a. m.. patient had a fairly comfortable night. pain in his side mostly gone; gare 2.5 grains quinin and continued routine: 5 p. m... temperature 99, pulse 95, respiration 24 . From this time on patient was practically normal except resolution, which required about three days.

Dr. Bosenbury makes this practical obserration, "that quinin undoubtedly acts as a phylaxin, either micro or toxo, rapidly limiting the inflammation and establishing a normal equilibrium, but that plastic exudates can not be so rapidly remored, but leare during the next few days under non-inflammatory conditions."

The first stage in all specific diseases being the actire inflammatory stage, I would inmediately resort to anti-inflammatory measures. Which are: relieving irritation and limiting or cutting off the blood supply and following this, or in connection with it, the administration of an antitoxin or toxicid. Ind quinin, at this time. seems to be the only agent that may possess that quality.

Dr. Galbraith: conclusions are that when the temperature has reached 105 or over the dose of quinin should be from 60 to $i 0$ grains as an initial dose, followed in one hour br one-half of the first quantity. If the temperature ranges from 103 to $10 t$ then an initial dose of 40 to 50 grains will be sufficient. If a lower temperature is found in the beginning, then 40 grains. which is the smallest dose he would adrise. He also administers the tincture of chlorid of iron in from 10 to 15 minim doses every four hours, alternating it with 10 -grain doses of quinin. And in the event, at any time, of a pronounced rise of temperature lie repeats the initial dose. He also strongly adrises against any compromise in the way of dividing the doses of quinin during the active pneumonic stage.

My obserrations, in the six cases that I have been able to watch under large doses of quinin, hare been that within a few hours after the initial dose the become quiet and composed, the rustr sputa begins to diminish. pain subsides, the pulse becomes decidedly slower and stronger, the dull leaden hue of the face disappears. and the rital depression is decidedly reliered. I do not beliere that quinin acts simply as a febrifuge, but as a
toxicid by combining chemically with the toxic product. forming a new compound that is inert or non-pathogenic. In all acute specific diseases bacterial life is short, the virulence and duration of the disease is almost entirely dependent npon the action of the toxin produced while the bacteria are in evolution. Hence in the rational treatment of specific diseases toxicids should be searched for rather than bactericides.

I believe that Dr. Galbraith. and those who reported eases treated in like manner, were !onest and made lonest reports as to the clinical results. I know of no reason why they should mislead or juggle with facts. And if these reports were true it is a wonderful step in adrance of the old sympcomatic treatment with a death lose that is appalling to mankind. It must be remembered that most of these cases were reported by men who were practicing at a rery high altitude, where ihere could be but little pulmonary obstruction without asphyxia, owing to the fact that atmosphere at a high altitude is poor in oxygen. The death rate from pneumonia at these places is from 50 to $: 5$ per cent., and ret this result was lowered to about ? per cent.

So far as my personal judgment is concerned, I am fully convinced that quinin is a patent. powerful and raluable remedy in pneumonia, and that it exerts positive specific action in streptococcus toxemia involving puerpural or erysipelatous inflammations, consequently I feel warranted in putting it to a full test in pneumonia. And as long as you have nothing better than symptomatic treatment to offer your patient in defense of his life, you nor he, have anything to lose in a careful and conscientious trial of the powers of large doses of quinin in this deadly disease.

While I am thoroughly satisfied that the body of this audience will not take kindly to the suggestions in this paper, and will, at least mentally, subject them to ridicule, if the seed falls upon the least receptive soil and one mother is saved to her babies, then my efforts hare not been in rain.

During his stay in New Lork Dr. Koch visited the offices of the health department and was enthusiastic in his praise of the antituberculosis work inaugurated in this city by Dr. H. M. Biggs. He said that Berlin was about fire rears behind lew Iork in the organization of the tuberculosis crusade, and was watching witll interest the progress of the work here. Dr. Koch also visited the quarantine station and was much interested in the organization of that service. He was particularly impressed by the successful campaign which Dr. Doty has maged against mosquitoes in Staten Island.-Teu Iork Medical Journal.

## THE JOURNAL

OF THE
INDIANA STATE MEDICAL ASSOCIATION
Devoted to the Interests of the Medical Profession of Indiana
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JULY 15, 1908

## EDITORIAL

## HEMOLYSIS IN MALIGNANT DISEASE.

In his oration on surgery at the Chicago meeting Crile opencd up a subject of such interest and import that if his hopes are realized and his apparently well-founded theory becomes a clinical reality, it is difficult to measure the debt of humanity to him and to those who are working along similar lincs. By means of a comparatively simple blood test a diagnosis of malignant disease has been established where before it could only be suspected. And in the fight against cancer this has becn the one bête noire to our success. Radical operation at an early stage of the disease gives a reasonably good prognosis as to curc, but the difficulty lies in making the diagnosis before the lesion has diffused itself sufficiently to preclude its complete surgical eradication. And we know that some forms of malignant disease are prone to early metastasis. Nobody flatters himself any longer that he has made an early diagnosis of cancer of the uterus in the presence of hemorrhage and a stinking discharge; cancer of the breast when axillary, subclavicular or supraclavicular nodules are discernible; or cancer of the stomach when the romitus reveals microscopically well-defined cancer fragments. That there is frequently a pre-cancerous stage is believed by such men as Boas, Ewald, Houser, Rosenhcim, Leber, Mayo, Rodman, Moynihan and others, who recognize in ulcer this prc-existcut form of malignancy. If this be true, then there is certainly a time in the early history of the malignant process when the lesion is absolutely localized, and it is just at this time that the disease must be recognized if we are to improve our percentage of cures. So that a reliable working test that would establish a diagnosis of malignancy at this stage would prove an even greater boon to humanity than the discovery of Koch's tuberculin.

The reaction, as given by Crile is as follows: "The blood serum of a cancer patient may hemolyze normal corpuscles, but normal blood serum
nsually does not hemolyze the red corpuscles of a cancer patient. In some patients-thus far only those with inoperable cancer - there was reverse hemolysis, i. e., the cancer corpuscles were hemolyzed by normal serum. In some cases there was no reaction. If this reaction is to be of diagnostic value then it must occur in cancer cases only or in diseases not readily confused with cancer.
"In 125 normal individuals tested there was hemolysis in no instance. Among eighty patients with cancer, 82 per cent. showed liemolysis, while those with benign tumors showed no reaction. In the cases of tuberculosis those showing hemolysis showed a much greater autolysis than hemolysis, thus giring a characteristic reaction. In chronic suppurations and acute infections no hemolysis occurred."

A correct interpretation of the test proved it of positive ralue in the following cases: Longstanding breast myxoma recently enlarged, clinical diagnosis "cancer transformation," hemolysis negative, the case prored benign; bone tumor gradually enlarging for six months. clinical diagnosis "sarcoma," hemolysis negative, osteomye-liti:- was demonstrated; a like result obtaincd in a tumor of the claricle; breast tumor in a woman of 46. clinical diagnosis "carcinoma," hemolysis negative the tumor proving to be a small cyst surrounded by hyperplasia: secondary anemia with indigestion but without other cancer symptoms showed hemolysis, two months later epigastric tumor presented and fragments of romitus showed carcinoma; luetic sigmoidal stricture under treatment ten years showed hemolysis. at operation early stage of "cancer transformation" was revcaled: uterine fibroid without suspicion of malignancy showed hemolysis. at operation "sarcomatous transformation" in tumor center being disclosed. So that although Crile does not beliere in its present state of development the hemolytic test for malignancy to be specific. yet it has. in his hands, proven raluable as a diagnostic aid and occasionally has furnished the only evidence of malignancy.

Furthermore, basing their work upon that of Gaylord. Clowes, Beebe and others on cancer inmunity, Crilc and Beebe were able, by orertransfusion from an immune animal. to cure transplantable sarcoma in nine out of eleven dogs. some caclectic and even showing metastasis. The cured animals becoming in turn immune, were similarly cmployed for other dogs, and though repeatedly inoculated with sarcoma since, have remained both well and immune for orer a year. From this they went to the human and attempted
immmization in six sarcomatous subjects into whom normal blood was transfused after remoral of their tumors. Mthongh of round and spindlerelled rarieties, and hence of bad prognosis, they are now, after sixteen months, apparently free from the discase and show no hemolysis. It is hoped that they may become available in the future for curing and immunizing others until a colony of immunes becomes established.

Go that all this, though being as yet more or less in the experimental stage. ret offers us a ray of hope that we are not at our zenith in the fight against cancer and that ultimately we may be as victorious as has been the crusade against the great white plague.

## EDITORIAL NOTES

Tue (irant County Medical Society has nearly $\$ 1.350$ in the treasury. That is a remarkable showing for a county medical society and indicates an excerlingly prosperons condition.
so wren space in this mumber of The JounNil has been required for the reports of the sessions of the Indiana State and the American Medical Issociations that it became necessary to carry orer to the Ingust number some of the reports of proceelings of countre societies.

We dands desire to call attention of comoty secretaries to the necessity of semeling ns items of news, and particularly information concerning deaths and removals. Short obituary notices concerning deatls of members of comnty societies should be forwarded promptly. New-paper clippings are always appreciated, but due care should be observed to mark date of publication on the clipping.

The Journal is sent regularly to members of the Tudiana Sitate Medical Ssociation who have paid their dues for 1908. There are 200 or 300 doctors who have not paid their dues but think they are still members of the Asociation and consequently entitled to 'Tine Jorrisile. It might be well for county sectetaries to remind all delinquents that their mames will be added to the list of emspended untess settlement is made at an early date. The list of members in good standing will be published in an early number of Tres Jouraidl.

To atteve an ammal session of the Xmerican Hedical Aseociation is one of the erreatest treats Which a phesician can lave, and if the attendance at the ('hieago session is a reterion, the value of attendance at the A. M. A. scosions is becoming more and more appreciated by a larger number of medieal men. The American Medical Sssoriation is to-day the largest and best medieal association in the world, and the seitmtilic work acomplished by its members ranks as foremost in practical and scontific value. In attendance at an . 1. M. A. session is equivalent to taking a short postgraduato comrse and every man who desires to be progressive and in touch with the adrances in medicine should profit hy the adrantages offered.

We hope we sliall see no more sonvenir programs like the one issued for the French liek sescion. Aside from the fact that it was superfluous, it receised and merited severe criticism on account of the character of the advertising. Nostrum advertising should have no place in any publication issued in the name of the Association or in the interest of the Issociation. What is true of nostrum adrertising is also true of nostrum exhibiting, and the House of Delegates acted wiscly in passing a resolution directing future committees on arrangements to refuse to permit firms who manufacture. sell or advertisa medicinal preparations not approved by the Conncil on Pharmaey and Chemisty of the A . II. I. to exhilit at any of our Association meetings.

We ILAVE recently received some cirenlars ("one cent apiece in stamps") sent out by Francis B. Livecay, Sykesville, Marrland, in which an impassioned and anarchistic plea is made for the abolishment of the publie schools becanse they interfere with child labor. He says that honest labor for the child and the bread that it brings is worth more than an education and starvation. Ile (laims that 50,000 childrem are dying cerery year as a result of edueation. President looserelt and senator Beveridge and everrone else in favor of child-labor laws, are severely consured, and the American Medical Lesociation and all doctor's rome in for severe criticism becanse adrocating more education concerning preventable diseases. Evidently the insane astums of Maryland are all full or this arank would not be rumning loose.

The committee reeently appointed by President Bryan of Indiana University to risit rarious leading medical schools of the country, after
a tour of inspection, found medical teachers generally throughout the country familiar with the reeent union of medieal teaching forees in this state. They not only commended most heartily what they designated as the "Indiana morement," but were enthusiastie in their belief that what has been achiered in Indiana would be most helpful in elerating the standard of medieal edueation elsewhere.

The ehairman of the Council on Nedieal Edueation of the American Nedieal Issociation, in his official report, referred to the amalgamation of the medieal interests in Indiana as one of the most hopeful features in the evolution of medical education which has perhaps oceurred in years. Protessor Welch, in speaking of this subject, eongratulated the profession of Indiana that whereas, with a population of $3,000,000$, there is but one medical school (that assured to be of first-class order), Maryland, with a lesser population has eight medical colleges.

We hope and pray that the next session of the Indiana State Medical Association will develop a iittle more enthusiasm in the purely seientifie work of the Association. The excessive heat did much to take attendance from the sections, but it did not in the least interfere with the polities of the Association, whieh seemed to be orerworked from the begimning to the and of the session. The progran gave promise of affording the members a scientific treat, but with few exceptions the papers were read to tery small alldiences. In some instances the essayists falled to put in an appearance, and to cap the climax a number of papers were read by title. 'This kind of work should not prevail at future sessions, and we hope some radical aetion will be taken to prevent its repetition. There should also be no meetings of the House of Delegates conflicting with meetings of the seetions. The first meeting of the House of Delegates should be on the day preeeding the first day of the session, and all other meetings of the IIouse of Delegates slould be at hours not conflicting with the meetings of the sections. Unless some attention is given these matters our State Association will fail to live up to its aims and objeets.

We desire to eall special attention to the fullpage announcement of the Indiana Thiversity School of Medicine found in the advertising pages of this number of The Jocrial. The amnouncement is noteworthy from the faet that it is the first official bulletin of the one and only
medical school in Indiana resulting trom the consolidation of all the preriously existing medical schools in the state.

The amicable and equitable settlement of the Indiana Medieal College question is a source of great sati-faction to ereryone and we are prond of the fact that the contending factions: in the medical profession have considered the question and come to a settlement of with the single purpose in view of having but one medical school in the state, and that one of exceptional merit and under the control of the state. The result is a distinct adrance in medical education and at once puts Indiana in a position to lave one of the best medical colleges in the eountry. It now remains for the legislature to deal liberall! with the Indiana I'niversity when making an appropriation for the medical department, and we believe that with the influence which a united medical profession and the lay friends of the L'uiversity can bring to bear, the desired result will be attained.

To occupy a place upon the prograur of one' $=$ state society should be considered an honor second enly to a place upon the program of the national society. That such an honor should lee so lightly regarded as for its recipient to fail to attend the meeting. prescnt his subject and be glad of the epportunity, unless rital interests prevent, is both ungrateful and unfair. Nis little time and pains are spent in arranging the program for the amnual mecting of a society of the magnitude of that of our state, and it is expected that all who are farored with a place thereon will gladly re--pond. Many a member who has the interest of his society at heart attends at considerable sacrifice of time and business interest, and he has a right to expect that the program will be all that it originally purports to be and perhaps.s even more. Often-times more is gained from the dischistion of a sulbject than may have been coresed by the es-ayist. particularly when the time limit is short for the reading of papers. as it needs must be. There are of eourse, certain extenuating eircumstances, such as death or serious illness in one"s own immediate family, which furnish a legitimate excuse for an essayist to absent himself, but in the absenee of such exigencies there is little excuse for the man who allows his name to appear upon a state program, or any ether, for that matter. and fails to fulfill his obligation to those who have so honored him.

We sincerely trust that it will be a long time betore we have a repetition of the many defaults that obtained at the French Lick meeting.

T're registration as ordinarily carried on at our annual sessions is of little value because it does not represent a list of members who are in attendance. Oftentimes the names of doctors who are not members, and eren the names of exhibitors and other laymen, will be found on the registration list. This should be changed at future meetings, and we belicre it is time to adopt some such system as that used by the A. M. A. in registering attendance, whereby only those who present mombership cards or other credentials are permitted to register. There is no reason why the seeretary of the state association should not issne a membership card to every member who has paid his dues for the year, the cards being rery similar to those issued by the A. M. A., and such cards would always be a passport at the annual sessions of the state association. Another good reason for the issuance of membership cards i- that it gives erery member something which definitely shows that he is a member in good standing and cutitled to all the rights and benefits of the association, including a subscription to The Joctival. Until the membership card is i-sued he is not entitled to the rights and benefits of the association. We hope that with the beginning of the new year on January 1, when the amnual assesement for 1909 becomes due, memberbership cards will be issned to each and every member, and that such membership cards or other equally definite means of identification as a member will be a requirement for registration at Terre Haute.

We fulte received some letters written by some of the Indiana life insurance companies to medical men concerning the $\$ 3$ examination fee, which would prove interesting reading if published. These letter: indicate that it is not a question of what the services are worth but what the doctors will aecept for the work which influences life insuranee companies. One company cren has the lirazen effrontery to say that a doctor can afford to drive five or six miles and make a life insurance examination for $\$ 3$ becanse the $\$ 3$ life insurance examinations made in his office overbalance the lack of sutficient fees for the five or six mile drive: and they put up the further argument that doctors frequently make drives of five or six miles to see patients and are nerer paid for the service and life insurance companies are ahrays good pay. This certainly is the limit, but it is no more than can be expected from organizations that have as their ultimate aim to get all they can aml give as little as they can.

We believe that it is high time for the medical profession of Indiana to take lold of this matter in a fearless and rigorous manner. Two or three counties of the state lave already taken a positive stand, as eridenced by the communieation from Benton County published in this issue of The Jourval. If more counties will take a similar stand it will not be long before the insurance companies paying but $\$ 3$ for examinations will have hard picking in Indiana, and they deserve the fate. Incidentally we believe the medieal directors of insurance companies are deserving of severe criticisn for their fight against the medical profession in efforts to secure adequate compensation for professional services rendered.

## CORRESPONDENCE

## THE THREE-DOLLAR FEE FOR LIFE INSURANCE EXAMINATIONS.

Oxford, Ind., June 29, 1908.

Editor The Journal:-The physicians of Benton County have decided to charge all old-line life insurance companies $\$$. .) for each examination. Most of the eompanics hare aceepted the proposition without a word and are paying the price, while others are making a fight. One company has run examiners in from another county, but when the applicant asks that his family physician be permitted to make the examination no objection is made to the $\$ 5$ fee demanded. We have not a man in our country who will make an examination for less than $\$ 5$, and we are sorry to think we lave brethren in the cities who are so cheap and who do not think cnough of their profession and ability to demand a proper fee for their work, but are willing to accept anything a company may offer.

The companies will tell you that you are well paid for your work and that you do not assume any responsibility, but let them have a loss or two from oversight or ignorance on the part of the examiner and you will sec how soon they will find another examiner. They say they can not afford to pay more than $\$ 3$ for a life insurance examination. Hare you heard of an insurance company breaking up lately unless to beat some one? Have you heard of any officers of life insnrance companies working for small salaries? Has any effort been made to cut down the large salaries paid to officers and large commissions paid to agents so that the policy holder could get his insurance cheaper? We do know that life
insurance is one of the greatest moner-making schemes in existence, and, to my knowledge, the companies have not reduced the premium in order to help the insured. But this is nothing to us one way or another, except that we know they are able to pay the fee. We know that an lonest and capable physician is a necessity to any insurance company, and we know that his serrices are worth $\$ 5$ for erery examination he makes. If you seek the serrices of any good lamrer for an opin10 n in a case where anything from $\$ 500$ to $\$ 1.000$ is insolved he will charge you not less than $\$ 5$ is $\$ 10$. In a life insurance examination anything from $\$ 1.000$ to $\$ 10.000$ or more is involsed, and a fee of $\$ 5$ for passing an intelligent opinion upon the risk, based upon careful examination, is reasonable indeed.

The insurance companies will pay a $\$ 5$ fee if all medical men refuse to make examinations for less. We ought to put a price on our labor and not allow any one to dictate to us what we can charge. Let us discuss this question in our country and state societies and in our journals. Our profession should not be lowered to the level of a trade, and our services should not be bought like the serrices of a common laborer. Our weakkneed brethren should have the courage to say "no" when offered $\$ 3$ to make an examination for some agent who is getting 65 per cent. of the premium. It is only a matter of time until all of the insurance companies will pay the full $\$$. fee, as ther have done before. Then the fellows who were cheap will be dropped. The insurance companies will have no more use for cheap examiners and the man who has held out for a full fee will get the work. This is not a conspiracy to extort an unreasonable price for services or an effort to intimidate any one, but an effort to secure reasonable and just remuneration for work that is wortl all that is asked for it. The man who thinks that his time and ability are not worth more than $\$ 3$ should not receire more than s.3. and it is a safe proposition that he is giving services actually worth even less.

Respectfully,
R. E. Lee.

## PERSONALS

Dr. G. G. Eckart has assumed the practice of Dr. A. M. Loyd of Marion, who is locating in the West.

Dr. C. A. Whatitich has givell up hie practice at Marion and has gone to his former home in Keokuk. Iowa.

Dr. Ed Crise, house surgent of the Lutheran Hospital. Fort Wayne, is in Europe doing portgraluate work.

Dr. C. J. Rothschild, Ft. Wayne, leaves the latter part of this month for Europe, where he will do postgraduate work for sereral weeks.

Dr. and Mrs. War. F. Shemaker. of Butler, are making an extended trip to the Pacific Coast. They expect to be away two or three months.

Dr. Geo. I. Kiflio, president of the Indiana state Medical Association, served as official physician for the Democratic convention at Denver.

Mr. G. L. Greenitilat, Ft. Wayne, has returned from an extended racation trip which included a risit in Chicago, where he did postgraduate work.

Inf. Geo. T. McCor of Columbus, ex-president of the Indiana State Medical Association, lost his. eldest daughter, Mrs. Gertrude MrCor Thomas, by death the last week in June.

## NEWS, NOTES AND COMMENTS

Trie member: of the faculty of the late Purdue School of Medicine presented to President Stone of the unirersity a beautiful gold watch and an (ngraved testimonial of regard signed by all the members of the facultr. as an evidence of their appreciation for his efforts in bringing about a satisfactory solution of the medical college question in Indiana.

Tire Chicago and Suburban Health League held an important meeting at Indiana Harbor March 2. The question discussed was "What Is to Be Done to Prevent the Spread of Typhoid Feter in the Cities Bordering on Lake Michigan. Especially Those of the Calumet Region:" The idea of the league is that each physician in the cities of the Calumet region who has found a case of contagious disease should be prompt to report the same to the secretaries of the health boards.

The rity of Logansport has passed an or－ dinance regnlating the selling and the practice of medicine by itinerant physicians and other per－ －onl：－The ordinance is as follows：
section 1．－Be it ortained，by the Common （＇onncil of the city of Logansport．Ind．＂that be－ lore any itmerant physician or other traveling person is authorized to practice or offers to prac－ tice as a physician or sell or offer to sell any medicine or other drugs or remedies used in cur－ ing and healing diseases or recommended for such nse．Within the limits of the eity of Logans－ port，Ind．，surch itinerant physician or other trar－ cling person shall make application to the city controller for a license granting such privilege， which application shall specify the number of days such itinerant physieian or other traveling person intends to practice or olier to practice or sell or offer to sell such medieine．Arugs or reme－ dies therein and shall pay to the eity treasurer fifty $(\$ 50.00)$ dollars for each clay said itinerant physician or other traveling person intends to practice or offer to practice or sell or offer to sell such medicine．drugs or remedies．The city eon－ troller mon presentation of a receipt for such payment shall issne a lieense for the nomber of days such receipt was issued．

See．2．－Any person or persons，firm or cor－ poration，or any person or persons acting as agent to any firm or corporation，or person．or persons，volating any of the provisions of this ordinance shall，upon conviction thereof，be fimed in any sum not less than fifty（ $\$ .50 .00$ ）dollars or more than one hmetred（ $\$ 100.00$ ）dollars for the first violation and not less than fifty（ $\$ \mathbf{\$} 0.00$ ） dollars or more than three hmadred（ $\$ 300.00$ ） dollars for each subsequent violation．
sec．3．－Nothing in this ordinance shall be construed to apply to traveling salesmen in the sale of medicine．drugs or remedies to bona fude hruggists or physicians．

Sere t．－This ordinance shall heomme in full foree and effeet on and after its passage and legal publication thereof．

Presemted to the malor for signatime June 1. 1908.

Approved this 1st day of June． 1908.
（．F．Hinmostree．City Clerk． Geo．P．Mcker，Mayor．
C．F．II．maontree，City Clerk．

It is reported that ．J．Lor Wallach，who elaims he ran coure leprosy，has been permitted by the Homolulu Board of Health to treat the lepers of the Molokai ettlement．－st．Lowis Medical Rerien．

After a long contest the Maryamd State Senate，wn Mareh 19，pasisel a bill preventing Christian Scientists or faith healer from praeticing in Maryand without the diploma of regular physicians．The bill has already passed the house，－Tle Medical Fortnightly．

# SOCIETY PROCEEDINGS 

Indiana State Medical Association．

French Lick Session．

## （First General Meeting．）

The fifty－ninth ammal semonom of the Indiana state Medical fisociation wati held at French lick，ludima， June 15 and 19,1905 ．The first general mocting was ealled to order by the president，1）．（＇．l＇eyton，of
 Thomas＇lageritt made a few felicitous remarle wel－ coming the doctors to fremeh Lick．It the conclusion of his remarks，on motion，he was made an honorary momber of the society．Dr．Kiahlo，of the locai ar－ rangement．s committer，matde an amomnemont con－ ecring entertaimments and the moeting then divided into the medieal and surgical sections and took up the weientific part of the program．

## （Second General Meeting．）

The second general meeting was hekd carly Friday morning．Dr．J．M．Anders，Philadelphia，the honored gus－t of the－ nimociation，delivered an addere on＂ln－ testinal Autointoxication，＂after which the two see－ tions took up the regular order of work．

## SURGICAL SECTION．

## （Morning Meeting，First Day．）

The Surgical section was called to order hy Dr．D． C．Peyton，President of the Association．The papers read and dincursed at this meeting were：＂strangu－ lated Hornia，the Importance of Its Early Recognition and of Its Radieal Treatment．＂hy T．B．Jastman， Indianapolis：＂The Diagnosis and Treatment of Fluctu－ ating Tumors of the Female Pelvis，＂by G．H．Grant， Richmont；＂The Puerperal Perinemon，Its Protection and Repair．＂hy M．I．Rosenthal，Fort Wayne；and ＂The Teclmic of Harelip and Cleft Palate Oprations，＂ by J．R．Eastman，Indianapolis．

## （Afternoon Meeting，First Day．）

At the afternoon meeting of the Surgical section the following papers were read and discused ： ＂hoolio－i－．＂by bavid Rose，Indianapolis；symposimm （1n obatinction of the bowels，$(a)$＂Obstrmetion of the Bowels．＂E．1）．Clark．Indianapolis：（b）＂Olstruction of the Bowel from Trammatism，＂J．H．Ford．Intian－ apolis：＂（Gonorrheal Ophthahmia，＂by W．N．Sharp．In－ dianapoli－：and＂Dermoid Cysta，＂by H．G．Nierman， Fort Wayme．

## （Morning Meeting，Second Day．）

It this meeting of the Surgical Section the follow－ ing papers were read and discuserd：＂Raynatul＇s Dis－ rase，＂by John Kolmar，Inclianapolis：Jn the sympo－ sium on obstetrics the following papers were real： ＂Sormal Jabor，＂by Jane Keteham．Indianaplis； ＂Toxemias of Pregnance＂by L．Burckhardt．Indian－ apolis：＂P＇uerperal Infection，＂by G，B．Jackson，In－ dianapolis；and Dr．Hugh Cowing，Muncie，gave a＂Re－ port of bot Cases of Labor in Prisate Pratetice．＂

## MEDICAL SECTION．

## （Morning Meeting，First Day．）

The Medical Seetion was ealled to order by W．H． Stemm，of Sorth Vernon，First Vice President of the Asociation．The papers read and discussed at this，
neceting were: "A Few Important Points in Regard to Nervons and Mental Diseases," by Charles F. Neu, Indianapolis; Srmposium on the heart, (a) "Mrocarditis from a Purely Pathological Standpoint," R. H. Ritter, Indianapolis: (b) "Myocardial Failure from Other Causes Than Yalve Lesions," A. C. Kimberlin, Indianapolis; (c) "The Relationship of Heart and Kidney Affections," Robert Hessler. Logansport: sympo sium on diabetes, (a) "Diagnosis and Treatment with Report of a Case," L. L. Molley, summitrille; (b) "The Treatment of Diabetes and Clycomia," (f. D. Kahlo, French Lick.

## (Afternoon Meeting, First Day.)

It the afternoon mecting of the Medical Seetion first day, the following papers were read and discussed: Symposium on public hygiene, (a) "Disposal of Sewerage in Small Towns," G. B. Lake, Wolcottville: (b) "Epidemiology of Typhoid Fever," П. O. Bruggeman, Fort Wayne: (o) "Report of Comnittee on State Medicine," J. N. Hurtr, Indianapolis. Symposium on tubereulosis, (a) "Tuberculin Therape:" IV. T. S. Dodds, Indianapolis: (b) "The Early Clinieal Diagnosis of Pulmonary Tuberculosis," T. Victor Keene, Indianapolis; (c) "Report of Committee on Tuberculosis," J. A. Little, Logansport.

## (Morning Meeting, Second Day.)

It this meeting of the Medical Section the following papers were read and disenssed: Symposium on pharmacology, (a) "Relation of Phyieians and Druggists," S. E. Earp and J. R. Francis. Indianapolis; (b) "I Plea for the Use of Pharmacopeal and National Formulary Preparations," Frank H. Carter. Indianapolin: symposium on incbriety, (a) "A Plea for State Control and Treatment of Dipomania, Inebriety and Drug Addietionc," 1. L. Wilann. Indianapolis: (b) "Report of Committee on Inelriety;" H. J. Hall, Franklin; "Atypieal Pnemmonia," Charles R. Sowder, Indianapolis.

## (Afternoon Meeting, Second Day.)

On aecount of the heat and the fact that many members had gone home, a number of papers were read by title. The medical and surgical sections joined. The following papers were read. completing the program: "Ocular Manifestations in General Disease," by W. F. Hughes, Indianapolis: "Some Considerations of Intrasigmoid Diseases," by (f. W. Coombs. Indianapolis: "Etiology of Rheumation and Chorea," by IV. D. Hoskins, Indianapolis: "Report of Committee on Prevention of Venereal Diseaces." be Gocthe Link. Indianapolis; "Anestheties Considered as a Specialty." by C. N. Combs. Terre Haute.

The President-elect. Dr. Cr. D. Kahlo, of French Lick, was introduced by Chairman Peyton and made a few remarks, thanking the As-ociation for the honor.
Adjourned to meet at Terre Haute in the Autumn of 1909 .

## THE HOUSE OF DELEGATES.

## (First Meeting.)

The first meeting of the House of Delegates was ealled to order at 2 ocelock p.m. ly President D. C. Peyton, Thursday, Jone. 18. Dr. F. C. Heath, Secre tary, read his report, which, on motion, was referred to the auditing committee. The roport of the treasmrer, Albert E. Bulson, Jr., of Fort Wayne. was also read and referred to the auditing committee. Dr. Bulson also made the report of the Conncil, including
a luici statement as to the establishment of The Jotrval of the Indlaxa state Medical Ansociation and its expence.

The C'ouncil recommended changes in the by-laws of the A-wodiation, which were required to lay over one day before heing acted upon by the House of Delegates, and also some other recommendations, as follows:
First, that Sections 13 and I4, Chapter ix of the bylaw be amended to read as follows:
-.section 13. The fiscal year for the A-sociation shall be from January 1 to December 31. and all asesements shall be for the fiscal rear and payable in adrance. The secretary of each component soeiety shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated phrsicians of the country to the Secretary of this Issociation on January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his societr, and promptly forward to the Secretary of this Association the assessment for such new members. The assessment -hall be the same for all members and entitle the members to all the henefits. including the publimations of thin A-sociation, from the time of paying the as--esement to the close of the fiscal year only.
"Section I4. Any countr society which fails to pay its asarsoment or make the report required by Feb) ruary 1 of each rear shall be held suspenderl. and none of its members or delegates shall be permitted to rewive any of the publications of the Asociation or participate in ans of the business or proccedings of the J-meiation or of the House of Delegates until -nch reruirments have been met."

Serond, that Section 11. Chapter ix, of the by-law be amemed to read as follows:
". It some mecting in adrance of the anmal sesion of this - Ironciation each county society shall elect a delecate or delegates to represent it in the House o: Delegates of this Association, and the secretary of the society -hall send a list of such delegates to the serretary of this Association at least 30 days before the ammal -rxion."

Third, that Scction 5. Chapter vii, of the by-law be amended to rad as follors:
"The Council, as the Finance Committee of the Ison. ciation. whall have authoritr to appropriate money for and provide for and superintend all publications of the Issociation, and shall have authority to appoint an editor and such assistants as it deems nercary. and fix the amount of their salaries. All money rio (eived by the council and its agents resulting from the discharge of duties assigned to them must be paid to the Treasurer of the Issociation. The Comeil shall ammally audit the accounts of the Treasurer and secretary and other agents of this Association, and present a statement of the same in its annual report to the Hlouse of Delegates, which report shall aloo specify the character and cost of all the publicationof the Ahoriation during the year and the amonnt of other property belonging to the Asoctiation, under its (wntrol. with such suggentions as it may deem nefes ary. In the event of a racancy in the office of the secretary or Treazurer the Council shall fill the vacancy mutil the next annual election."

Fourth, that "the reports of standing committees of this A-nociation be printed in the mumber of Tue Jotrail i-wued immediately before the ammal ses--ion at which such reports are intended for presen-
fation, and that in view of this publication the reports be not read before the Honse of Delegates but be discussed and disposed of without reading."
lifth, that "the next annual meeting of the Indiana State Modical A-sociation shall be held in the Fall, preferably the last week of September or the first week in Oetober, the cxaet dates to be determined by the oflicers and the Committee on Arrangements."

The report of the Committee on Public Policy and Legislation was ealled. The report was to be read in the medieal section and discussed. Chairman Hurty stated that the committee had two recommendations to make, and in that commection Dr. Edwin Walker, of Evansville, offered the following resolution:

Wherfas, It is necessary that the General Assembly of 1909 shall make an appropriation to construct and conduct the Hospital for Treatment of Tuberculosis, which was created by the General Issembly of 1907, the site for the same being purchased, therefore, be it

Resolved. That the Indiana State Medical Association heartily favors such an appropriation, and that the organization as such and its members as citizens and taxpayers urges that the said appropriation. being for a true and great economy, be very liberal. Ind be it further

Resolved, That the President of this Association shall appoint a special committee of ten, to be called ${ }^{6}$ The Indiana State Medical Ascociation Committee on Appropriation for the Hospital for Treatment of Tubereulosis." and it shall be the duty of said committee to advocate before the next General Assembly, in the name of the Association. that a liberal appropriation be made for the construction and support of the said? hospital.

On motion the resolution was adopted. In the same connection Dr. T. B. Noble introduced the following resolution concerning the Committee of 100 of the American Health League, and moved its adoption:

Whereas, The Committee of One Hundred, and its auxiliary society, The American Health League, are organized for the purpose of advancing the public health interests and the establishing of a National Burcau of Public Mealth, and,

Whereas, The said organizations are of the highest character and have in their membership many of the most prominent philanthropists, statesmen and physicians of our land, therefore, be it

Resolred, That the Indiana State Medical Association indorses the above named organizations and the objects for which they are organized, and heartily recommends them to the people.

Carried and adopted.
The Committee on Tuberculosis and the Committee on Prevention of Venereal Diseases had no recommendations, and the reports were placed in the program to be read Friday in the medieal section.

Dr. Sharp, of Jeffersonville, Chairman, read the report of the Committee on Medical Education and cffered the following resolution relative to the combination of the medical schools and the affiliation with Indiana University:

Whereas, The authorities of Purdue University, and Indiant Cniversity, have mutually agreed, in the interest of all concerned, and in the higher interest of medical education, to combine the former medical schools of this State under the control of Indiana University, and

Whereas, The mutnal agreement referred to is fully set forth in the following published statement, viz.:
"The efforts of Indiana University and of Purdue T'niversity to promote medical education in this State throngh cooperation with the members of the profession and with existing proprictary medical schools have been undertaken in good faith and with the one aim of establishing this important branch of profes. sional training upon a sound educational basis. Indiana University has sought for many years to estab. lish and develop such a department, in which efforts it has encountered many obstacles, but has made contimued progress. Purdue University entered this field only when convinced that a service could be rendered to the profession and to the State by the tamler of its offices in consolidating existing courses and aiding in the evolution of a single, strong medical school at Indianapolis under the auspices of the State and with the cooperation of other educational interests, a task which was undertaken only after it secmed that other efforts in this direction had faliled.
"Out of these efforts by the two institutions had grown an unfortunate controversy which operated to confuse the situation, and beeloud, in the minds of the public, the true relations of the universities. In the belief that the present conditions are delaying the educational progress and interfering witl the highest functions of the two universities the logical conclusion follows that the two medical schools now in operation in Indianapolis under the direction of the two universities should be united in one school, and that this should be under the exclusive control of one or the other of these universities.
"Since Purdue University has at no time regarded a department of medicine as an essential part of its program, and, on the other hand, Indiana University believes that it has been especially charged with the responsibility for such instruction, the lattel institution has been selected to proceed in the matter, and the trustees of the two universities have this day mutually agreed to the following conditions to whicn the faculties of their respective medical schools assent, namely :

To a union of the two medical schools under the direction of Indiana University.
"To a selection of the faculty of the new school witis due regard to the members of the present faculties.
"And to the maintenance of a complete medieal course in Indianapolis as well as the two-year course in medicine at Bloomington.
"Only in this way does it seem feasible to accomplish the ultinate purpose of developing for the State a sound system of medical education, which has been the aim of both parties in their efforts in the field, as well as to promote the harmonious and friendly relations so essential to the proper discharge of the functions of both universities.
"It is hoped, therefore, that the citizens of the state, whether remotely or intimately interested in this question, will accept the above decision as evidence of the disinterested motives of these institutions, and their desire to serve the State with undiminished energies.
"W. L. Bryan,
"President Indiana University.
"W. E. Stone,
"President Purdue University.
"Indianapolis, April 4, 1908."

Therfore, Resolved. That the Indiana State Medieal A-nociation fully and cordially indoree thi= movement and helieves it is the wisest po-sible solution of the question of medical education in Indiana. and will best tend to secure the best results. Aloo.

Resolved, That we congratulate the authorities of the two universities, and the medical sehools referred to. and pledge our efforts to secure the enactment of proper legislation to carry out the basi- of union agreed upon which provide- for "The maintenance of a complete medical courve in Indianapolis as well as a two-year course in medicine at Blomington."
ine resolution was adopted by a rising rote and the members seemed to regard the settlement of this matter with great satisfaction.

The report on Necrology was not read but will be published in The Jocraal.

The Committee on Inebriety, Dr. H. J. Hall, Franklin. Chairman, offered the following re-olution eoncerning preliminary steps for the establi- ment of an hospital for inebriate, and moved its adoption:

Resolved. By the Indiana State Medical Asonciation that preliminary step- be taken for the establishment of a hospital for inebriates at the next meeting of the state Legislature.
The resolution was adopted. The report of the eommittee will be publithed in The Jotraal along with the other report-

Dr. F. C. Heath, of Indianapolis, introduced the following resolution concerning the repeal of the present optometry law, which, on motion, was adopted:

Resolver, That the Indiana State Medical Association unqualifiedly favors the repeal of the present optometry law, on the ground that the relief of eyestrain is the practice of medicine, and no standard of fitness for such work should be established unless it include eomplete knowledge of the anatomy, phrsiology and the diseases of the eye, and the effect of diseases of the general system thercon.

Dr. Varble, of Jeffersonville, introduced the following resolution, which, on motion, was adopted:
Whereas. Lertain new-papers, periodicals and magazines like the Indianapolis Erening Teus, The Ladics Home Journal and Collier's Teekly, have, in the recent past, and are now, most honorably defending and educating the public against fraudulent swindlers, pretenders and robbers who hare been and are now seek ing to defranu. swindle and rob the credulous sick and afficted bs misrepresentation and falsehood through the columns of the press, therefore, be it

Resolved, That we recommend that all honorable physicians everywhere give undirided and faithful -npport and encouragement in every pos-ible way to the publications above mentioned, and to all others of like character. We view with surprise and shame the dishonorable mercenary spirit of any newspaper or periodical of any kind that will stoop so low, and so far forget all the attributes of honor and decencr as to sell its columns, give its support, or in any way join any conspiracy with imposters and swindlers to impose upon, deceive and swindle the credulous af Hicted, who, in many instances, by reason of long-continued, hopeless affliction, are already impoverished.
Dr. Albert E. Bulson, Jr., Fort Warne, introduced the following resolution, which, on motion, was adopted:

Resolved, That the (ommittee on Arrangement- here after do not acrepit a- exhibitors at any ses-ions of the Indiana state Iledical Association any firms that are selling to physicians, or exhibiting to phy-icianproprietary preparation- not approved by the Council on Pharmacy and Chemistry of the American Medical A-sociation.

Adjourned.

## THE HOUSE OF DELEGATES

## Second Meeting.

The second meeting of the House of Delegates waheld Friday afternoon. The roll call showed 6.5 officer*, councilor:- and delegate- present.
The election of officers resulted a* follows:
Pre-ident, George D. Kahlo. French Lick; First Vice Prestuent, E. D. rreeman, Osgood: Seeond Tice President, Charles H. McCully, Logan-port: Third Vice President, Charle- (nittick, Frankfort: Secretars. F.

Heath, Indianapoli-: Treasurer, Albert E. Bulion, Jr., Fort Wayne.
Dr. B. O. C. Bowell. Laporte, was elected councilor of the Tenth district, for three rears, to succeed E. G. J’links, of Michigan City, and Dr. W. R. David-on, Evansille, First district; W. H. Stemm. Sorth Vernon. Fourth di-trict; IV. N. Wi-hard. Indianapolis, Seventh district: C. A. Daugherty, South Bend, Thirteenth district. were re-elected councilor-, each to serve three rears.
Delegates to the American Medical Association, for two years. W. N. Wishard, Indianapolic, and Edwin Walker, Evansville; for one year, G. W. Thompson, Winamae. and H. C. Sharp, Jeffersonville: alternates, J. T. Dickes. Portland. and G. H. Grant, Richmond.

Terre Haute was selected as the place for the next se-sion. and it was woted to have a two days se-sion. A motion wa- made and carried that the delegates at the Terre Haute re-ion be provided with a di-tin-gni-hing badge.
The amendinent- to the by-law- and other recommendations presented by the Council at the preceding inecting, were taken from the table and pased unanimously.

A resolution pledging the Association in an effort to totally bani-h saloons was laid on the table, it being the general consensus of opinion of the delegates that the A-woeiation ought not mix in politics.

The following resolution was unanimously adopted:
Resolver, That the Indiana State Medical Associa thon. in annual session June 15 and 19, l905, most cordially indorses the International Congress on Tuber-culo-is to be held at Wa-hington, D. C., september $\because 1$ to October 12, and that the President be empowered and directed to appoint ten delegates to represent the - fisociation at -uch Congress.

The Afrociation also unauimously pasied the fol lowing resolution:
Wereas, Dr. Charles A. L. Reed, of Cincinnati. habeen urged to become a candidate for the Lnited States Senate from Ohio, and,
Whereas, The States of Missouri and Kansas, and the American Medieal A-ociation have unanimou-ly. adopted resolution: urging and approving Dr. Reed ${ }^{\circ}$ candidace, therefore be it
Resolved, That the Indiana State Medical Association, in annual ses-ion this June 19, 190s, at French Lick springe, heartily indorse his candidacy and recommend that every honorable means be eniplored to procure his election.

The thank- of the Association were voted to Dr. J. II. Anders. of Philadelphia, the gnest of the Asmociatron. for his admirable scientitic addres., the officers and committers of the Asociation, the French Lick llotel (ompany, and the Orange Countr Medieal society for their services in making the french Lick meeting an umpualified sucees.

Adjourned.

## THE COUNCIL.

Mr. President and Members of the House of Delegates:
There have been two meetings of the Council since the lant session of the Association, the proceedings of hoth meetings having been published in Tue Jotrxat. -It the first meeting the organization work was discussed and farorable action taken upon the proposition to establish a journal for the - -sociation. Arrangements were also made for two or more lecturen to the public in each councilor district hy Dr. J. N. McCormick, the A. M. A. medical organizer. At the second meeting farorable action was taken on the proposition to employ A. M. A. canvasscre to seeure new members for the county medical societics. A. a result of this action about one-third of the State has bech workel by the canvassers, resulting in the securing of 1.50 applications for membership in county socicties. The remaining portion of the State wifl be worked by the canvasors during the next few months, and it is thought that fully 350 more applications for membership will be secured, thus adding j00 to the membership of the state Association. The work ha- been carricd on under the immediate direction of the Council, and The Jotrasal has been of material asaistance in securing such satisfactory results. From 200 to 400 sample copies of Tiff Jocraal have been sent out wery month to eligible doctors, each accompanied by a) letter soliciting application for membership in the local medical socicty. The councilors have aho rendered valuable servier in efforts to increase interest in medieal organization.

Tife Jotrasil has finished the first half year of its: sistence and secmingly has met with the approval of a majority of the members of the Association. It the start a large part of the expense of publication had to le gemaranteed by the editor, as the A-wociation had not sufliciont funds to meet the expense. hut at the present time the a-sured income for the year is not only sufficient to publish a joumal of 48 pages every month, as originally intendef, but to warrant the addition of more reading pages and a greater liberality in the way of illnstrations. The eost of publishing The Jocraal in its present form and size for one year will be approximately s.000. not counting any salary for the editors. Of this amount about $\$ 1,800$ is receised from the Asoociation in subseriptions and the balance must be secured from advertising. Remuneration for the editors' services is to be paid from any surplus at the close of the rear.

The eatorial policy of The Jocraxal has been to work for the mpbuilding of the medical profession of the State, and to adrocate and uphold principles which reprenent the best interests of the profession. The advertising poliey has been to accept no objectionable advertising, and in earrying this poliey out it has been necessary to refuse over $\$ 3,000$ worth of advertising contracts, such as are regularly accepted by many other journals.

The Council reeommends several amendments to the ly-laws for the purpose of facilitating the purely busi-
no- management of the Aroctiation. These amend-ment- inclucle the fixing of a detinite time for the begimning of the fincal year for the Asociation and the time for parment of dues and receipt of reports from county secretaris, and giving the Conncil full authority to control the pulbication of The Jotranal. including all expense pertaining thereto. A change in the date of holding the amual sesion is atso recommended, and it is urged that the Committee on Arrangements accept as exhibitors at amual sessions no firms who are ablling or advertising pharmaceutical produets not approved by the Couneil on Plarmacy and Chemistry of the American Medical Aroociation.

The councilor districts report as follows:
Finst District: IV. R. Daridson, Evansville, Comncilor. This district is well organized and the county societies seem to be in a flourishing condition. The membership remains about the same, but there is an increased interest in society work. The distriet has a good district society, meeting twice a year and having a good attendance.

Secozd District: George Knapp, Vincennes, Comncilor. This district is thoroughly organized with a good, active society in each county, and with a much more harmonions feeling among its mombers than there has ever been. The membership remains about the same. Tife Jocraxal has been greatly appreciated.

Third District: Walter J. Leach, New Albans, Councilor. This district is not in as flourishing a condition as it should be. The counties of Lawrence, Floyd, Clark and Seott are doing good work, but the countics of Dubois, Harrison, Washington and Crawford are not having regular meetings. The Councilor expects to risit these latter counties during the year and try and stimulate some interest in society work. There have been two splendid district meetings during the year, one at New Albany and the other at Jeffersonville.
Forkth District: IV. H. Stemm, North Vernon, Councilor. In this district the membership remains practically the same, although onc or two counties show an increase. The loss by deaths, removals, cte., counterbalances the gain. There is a vast improvement in the professional spirit since last year and a more fraternal fecling exists. leading to better work and attendance iu the eounty society meetings. The district society is in a flourishing condition, there being a large attcndance at each annual meeting. Three of the county societies, Decatur, Jackson and Jennings, have taken up the postgraduate eourse of study and are very enthusiastic over the results secured by the new plan. Tife Jocraval gives universal satisfaction and has received no word of complaint or criticism.

Fifth District: J. H. Weinstein, Terre Haute, Councilor. The counties of the Fifth District are in good condition. Parke eounty is having regular monthly meetings whieh are well attended, and renewed interest is shown in the work. Vermilion county has becn completely reorganized and is now holding li-weckly meetings. Putnam and Clay counties are holding monthly meetings and in some places they have organized local postgraduate elubs, which are proving a great suecess and very beneficial. Vigo county is holding weekly meetings and following closely the post-graduate course of study. The membership in Vigo countr has inereased over 25 per cent. in the last six months, making the number 108 on its roll. It has taken up the work with a great
deal of earnestnes and is using pathological exhibits presenting cases．and numerou－tereoptican slides are shown．The district medieal sockety meets twice ai year．in March and september．The september meeting alway－being held in Terre Haute，and the Jiareh meeting being migratory．While a great deal of work has been lone in the past year，yet there demain－a great deal more to be done，and the coun－ cilor hoper to be able to give a still better report bext year．

Sintif District：D．IV．Stevenson．Riehmond，Com－ cilor．This district is now well organized and every countr has a flourishing medical society．Franklin county was the last to organize an active working so－ ciety，hat it is now in exeellent condition．The district society is sery well attended and is productive of an immense amount of good．Fayette cominty has atlopted the poitgraduate course and is doing excellent work．

Sevextif District： $\mathrm{IV}^{\circ}$ ．N．Wishard．Indiamapoli－． Councilor．This di－trict is well organized and thows a substantial growth in the membership of nearly all of the countr societies．There is also a splendid fra－ ternal fecling exi－ting in the majority of counties．The diatrict society is thoroughly organized ard its meet－ ing－are very well attended．

Eigitil District：G．W．II．Kemper，Muncie，Coun－ cilor．In this district each county is thoroughly or－ ganized and the sereral county societies are doing good work．There have been slight gains in membership in all of the societies．Harmony prevail in every so－ ciety：There is a weil organized dintriet society which meets semi－anmually．It is well attended．valuable papers discussed，and much interent is manifested．

Nivtif District：George Rowland．Covington． Councilor．The district contains nine counties and the Comeilor lives in the extreme sonthwestern portion． The railroad facilities are such that it is difficult for the Councilor to visit the several comnty medical so－ eieties in the district without considerable loss of time．The organization work has，therefore been largely done by correspondence．Some of the societie： are not as active as others，but all report regular meet－ ing－and considerable interest in soriety work．There hare been no material gains in membership．The Jocrasal has met with general approval by all mem－ ber－。

Textif District：E．G．Blinks．Micnigan City． Councilor．In this district the counties of Lake．Por－ ter and Laporte have societies in excellent condition． Newton county organized May lst with thirteen mem－ bers and promises to be an active organization．Jas－ per and Benton counties have no societies of any con－ sequence，but could be brought to life by an aetive Councilor residing in one of those counties．In the district there has been a slight increase in membership． As yet no district society has been organized owing to the poor tramsportation facilities．but as soon as in－ terurban service begins it will be possible to have a good district society：The Jocmal pleases every one．

Eletentif District：Charlé M．MeChilly，Logans－ port．Councilor：In thin distriet the country societies are all in a healtly condition with the exception of White county，which seems to be in a bad way from a medical organization point of view．This society has had but one or two meetings in the past year and those meetings have been poorly attended．There is a strongs feeling of personal antagoniom and at present there seem－but little possibility of affecting harmony：

Three of the countr societies in the district are follow ing the pootgraduate work as outlined by the A．M．A． ant other have the matter under consideration．Two counties have parsed ordinances placing prohibitive licenses on the itinerant physicians or other traveling peronn vending medicine，and the Mellical Practice Act i．being more rigidly enforced．There in a tlouri－hing district medical society which meets semi－annually： There has been a decided increase in the membership， brought abont through the work of the A．M．．．can－ va－ser－The Jocrval and the effect of Dr．Mecor－ mack＂：lectures．

Twelftif Distriet：Albert E．Bulson．Jr．．Forit Wayne．Councilor．This di－trict is well organized with the possible exception of Whitley county，where a society exist－practically in name only．The Allen rounty society．the largest and most progressive so－ ciety in the di－trict，meets weekly and shows a marked gain in memberthip．now having 112 members．It be－ gan the pootgradnate work but abandoned it with the close of the first half year and returned to regular pro－ gram－．Which have alway been of great interest to a！l members．There are twenty eligible physician in the county to be secured as members of the society．Adam－ county，which was dead for so long，now lats a very flourinhing society of twenty members with regular n：enthly meetings which are well attended．There is also entire harmony in the profesion of that comens． In this county it is suggested that braneh societies shonld be establitherl in some of the populous town－ not ca－ily accessible to the county seat where the regular meeting＊are held．Noble county has had an active medical organization for a good many years． even though the society meets but four time per rear．It hats thirty－two members in good standing． an increase of two during the last year．The meet－ ing－are all well attended and the programs are acditable from every point of view．Entire hamony prevails and the society as a society controls all contract for treating the county poor，the remmera－ tion for the service being quite satisfactory．Stenben Countr has a membership of 21 ，an increase of $s$ during the past year．The scientific work is not 11 l to the standard but seems to be improring as a resuli of the interest taken by some of the younger mem－ bers．There is some lack of harmony in the medieal profesion，but this seem－to be gradually dying out． Well－Comuty has regular meeting once a month，and every eligible doctor in the county is a member of the －ociety．Harmony prevail－and the scientifie work is satisfactory．DeFalb county is in good condition with a membership of 24 ，an inerease of 6 over lant year．There are still eight eligible doctors in the connty whose applications the society expects to have． within a short time．LaGrange Commty number every eligible doctor in the county in its membership． and the organization is in a flourisling condition in every respect．The district society is a wide－awake organization and its semi－annual meeting resemble State society meetings on account of the large attencl． ance and the high character of the scientifie work done．

Thirteentil District：C．A．Daugherty，South Bend．Coumeilor．This district is a very well organ－ izet district，there being flomrishing societies in every county．The membershp has inereased in most of the societics and a harmonious feeling exists．The Jow xal pleases all members and is a great improvenent
over the "Transactions." The di-trict nociety is a live organization and it - smi-ammal meeting bring out a large attembanee and excellent seientific work.

Ahabert E. Bleson, Jb., N゙ce.

## REPORT OF SECRETARY

Mr. President and Mrmbers of the House of Delegates:
Your seeretary begs leave to present the following report:
The paid membership to date for 1908 is 2.455 , at leant 250 more than was ever reported at the ammal sesoion. About 1.50 members have failed to pay their dues prior to the ammal sewion. We expect that the rear will show a gain of several laundred. Benton. Crawford, Franklin, Newton and Starke Counties have been reorganized so that we now have organizations in every comen of the State except Brown, Jasper and Ohio, and doctors from each of these counties belong to societies in adjoining comities. The new Jocrasal, and the A. M. A. organizers now working in Indiana, are to be large factors in increasing the membership. In a few counties the number of delinquents is still large, early payment of dues being contrary to cutom and therefore difficult. Respectfully -ubmitted,
F. C. Heath, Sec.

Approved: IV. H. Stemin,
G. IV. H. Кemper.
fuditing Committec.

## REPORT OF TREASURER.

Mr. President and Mrmbers of the House of Delegates:
lour Treasurer respectfully submits the following report for the rear ending June 18, 1908.

Albert E. Bulson. Jr., Treasurer. in aceount with the Indiana State Medical I-oociation for the year, cmling June 1s, 1908:

$$
1907 . \quad \text { Debit. }
$$

May 21. To cash on hand..
1908.

Janl. 1. To (asll from Secretary, dues onl lecteal for year 190, ............... 2. $2 \times 2.20$

Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 , 67.18

## credit.

By ean to Secretary, honorarimm and incidental ехреич ..........................s 313.00
By cash to Chaiman Committee on Publication. honorarinm
100.00

By ea-h to Chairman Committee on Necrology, honorarimm and incidental expenses.
13.72

By. ca-h to J. 13. Champion, tenographer, 190 meeting
120.00

By cash to bentinel Printing Co., printing.. 32.53
liy cash to S. H. East, typewriting and ad-
drewing and mailing circulars.
60.24

By. ©a-h to Joweph Ratti, envelope........... 6.00
By eash to Cleary \& Bailey, printing....... $51.2 \overline{5}$
By cash to Thited Nitates Express Co., exprossage -tationery to Councilors
6.70

By (ath to Conneilor* expences................ 142.33
13. (a-h to William B. Burforl. Transactions of $1900^{\circ}$
$1,400.22$

| Total | 22:246.31 |
| :---: | :---: |
| Balance on hand | 520.87 |

Grand Total .................................at.18

Your Treasurer las alon received from the sede tary *-4.5. repreming duc- collected to date for the year 190s. from which has- heem paid to The Jotrial., on the order of the Council. Ststl.2.) leaving : balance of s6i3.7. from this rear's dues. or a total balance of sl.134.62. Vomr Treasurer holds thic yearmpaid bills amounting to approximately ssso, which. upon approval, will be paid, leaving a balance oi approximately $\boldsymbol{\gamma}^{2}=0$ in the treasury with all indebtect. nese of the A--ociation paid to date.

Respectfully submitted.
Albeat E. Bulans. Jr., Treas.
Approved: W. H. stemm.
(i. II. H. Kemper.

1urliting Committer.

## REPORT OF COMMITTEE ON MEDICAL EDUCATION.

## Mr. President and Members of the Housr of Delegates:

The Committee appointed to report on Medical Education, begs leave to submit the following:

After many months of eareful consideration. the several interests enncerned in the medical colleges of the State have combined: and the one great institution resulting will receive the cordial support of the members of the Arsociation.

No words are needed from this Committee to emphasize the possibilities for good that must accrue from this union of the teaching forces, the clinics, and the class work, as will be planned and executed by the wise directors of the new college.

At the next session of the Indiana University Sehool of Medicine. several new and important features wili be ineorporated as a part of the medieal college work. as a result of an investigation of the leading medical colleges of the United States by a joint committee appointed for that purpose.

The State Board of Medieal Examination and Registration have continued their efficient work, and are keeping Indiana on the same high plane on which their past labors have placed it. With 21 other States, it requires a four-year high school period, or its equixalent; and begimning in 1910, the Board will require one year of work in a college of arts devoted to phy--ies. chemistry and biology, in addition to a fouryear high sehool education. While all of these proposed adranees are to be endorsed, your Committee would urge that a constant effort be made to attain hicher ideats, and that the college which is so inseparably an interest of the State Medical Association, be brought as rapidly as pos-ible to the plane which will entitle it to the recognition not only of all the medieal colleges of thi country, but of the whole medical world.

This is not imposible. In this country there are 48 per cent. of the medical eolleges of the world. Twenty years ago, the most of these were ridiculed abroad, and the diploma of none of them was considered as sufficient evidence of a medical education to entitle its holder to engage in practice. While the various laws of the continental nations still prohibit our countrys graduates from actually practicing. it is gratifying to note that the pre-medical requirements of the Enited States and the European coun trics are no longer so widely apart, and in several instances the medical conse in this country is the equall of any in the world.

The problem of reciprocity remains the greatest one yet to be solved. In whole or in part, 34 states now réciprocate.

In conclusion, your Committee urges that a uniform pre-medical course, followed by such a collegiate course that all the States will without restriction or evasion grant the graduates of such course a license to practice. be the aim and effort of the Indiana State Medical Association to sccure.

Respeetfully.

> H. C. Sharp.
> Johs C. Sextox.
> Gerrge H. GraNt.

Committee.

## REPORT OF COMMITTEE ON INEBRIETY.

Mr. President and Members of the House of Delegates:
The provision of the pure food law that went into effect in the United States during the past rear, requiring the per cent. of alcohol and other dangerous drugs to be placed on the bottles containing patent and proprietary medicines, is proving a splendid protection to the people against the formation of drug habits, and it has the approval of the medieal profession. This is one of the most substantial adrances that has been made in recent sears in the prophylaxis of inebriety. We are pleased to note that one of the medical men of Indiana, Dr. Harves W. Wiley, who is now at the head of the Government Chemical Department at Washington. had much influence in procuring this wholesome law. Dr. Reed Hunt, of the United States Hygienic Laboratory, has been rendering valuable serviee in this department. He has recently made experiment showing the effect of small doses of alcohol in increasing the susceptibility of animals? bodies to poisons. His experiments also demonstrated that lower animals fed on an extra supply of sugar foods could resist three times as much poison as those fed normally, while those that were fed on small quantities of alcohol were killed br one-third as much poison as those that received the normal diet. The experiments of Prof. T. Laitinen, as reported at the Stockholm International Congress against Alcoholism, shows the effect of small doses of aleohol in increasing the susceptibility of animals to infectious diseases and the lowering of the vitalits of their offsprings. To the International Congress mentioned above, our government sent two representatives of the medical profession, Dr. Macnicholl of New Mork, and Dr. T. D. Crothers of Hartford, Conn.

A substantial adrance has been made in the study of inebriety and other narcotic drug habits by the organization of the Scientific Temperance Federation of Boston, Mass. This is direeted wy the leading physicians and other scientific men of New England. Many valuable books. pamphlets, papers and other studies in this field which in the past had too limited usefulness. simply because they are not kept on file, and the facts were not brought to the attention of the general public by some central independent agency, failed of their purpose. There was need, therefore, of a trained acquaintance with the publications and help of disassociated workers which would at once refer the inquirer to the particular facts he wished, and could turn all useful information on these subjects into every possible channel into which it could reach the people. The Scientific Temperance Federation was organized to meet this need. What has been done by a campaign of education towards stamping out
typhoid fever, malaria, tuberculosis and other prerentable disease can be done to a large extent with alcoholism and narcotics, when the physicians take hold of these questions with the same energy and with conviction born of thorough acquaintance with the progress of seientific inquiry. Anotleer very practical aid to the medical profession interested in this department is the Journal of Inelriety, published by the Scientifie Temperance Federation with Dr. Crothers of Hartford, Conn.. as the editor. This is the most scientific and helpful journal published in the English language on the prevention. care and treatment of those addicted to drug habits. The number of papers published in our medical journals on the subject of inebriety and morphin and the cocain habits has been greater during the past vear than ever before. The cocain habit. especially in our larger cities. is very rapidly on the increase and the writer is reliably informed that systematic effort is leing made. for commercial reazons, to extend the use of this drug throughout the comntry. Medieal men heed to be on their guard and if preventive legislation could be secured it would prove a blessing to humanity. The thirty-eighth annual meeting of the Socicty for the Study of Alcohol and Other Narcotics, held in connection with the meeting of the American Nedical Association at Chieago, was by far the largest held during the 38 years of its history. Many carefully prepared papers were read and addresses were given by phrsicians who have filled the highest offices in the American Medical Association. Not only through the medieal press. during the past year, has the subject of inebriety received more eareful consideration than ever before, but literary and edueational journals and even our daily newspapers have given the subject more extensive notice than ever before. The results of scientific investigation have been given to the general publie more fully than during any previous year. It is well known by all physicians that the laws of every State in the Union require the teaching of the effects of alcohol and other dangerous drugs on the human body. in our public schools. This is certainly laying the foundation for intelligence as regards the danger of forming the destroying drug habit. Our nation has not only become a world power, recently, in a commercial and diplomatic way, but has also become an educational world power. For only very recently have the leading countries of Europe framed their Scientifie Temperance educational lars after those of the United States.
We certainly commend the excellent paper just read setting forth the necessity for a hospital for inebriates in Indiana. It is true, as the author says, that the best efforts of physicians are rendered useless because we ean not control this class of patients. The plan as outlined for a State Hospital is certainly commendable. The humanitarian and financial reasons he gives are strong. In nearly half of the States in the Union the various legislatures have passed some law looking toward the care and restoration of this unfortunate class. A few States have built and equipped hospitals for their treatment. Others have provided for the appointment of guardians with power to send to private hospitals the habitual inebriate but not at the expense of the State. Others have provided that an habitual inebriate may be sent to a State insane asylum. Still other States permit the treatment of the habitual drunkard at the expense of the State, restricting the expense to $\$ 25$ a week or even $\$ 100$ for the entire
treatment of the patient．The superintendent of the Mas－alchmettes Hospital dites the fact that incbriates to be treated in the insane a－rhum contribute very largely to the entabli－hment of a state Honpital fol Incbriates．I am reliably informed that at leant one of （bir holdoover spators has a bill prepared now to be introduced at the next sesion of our State Legrinature looking to the establishment of such a state institution． lour Committee on Inebricty ha－had hille prepared at least twice，ready to be introdnced，to establish a state Inchriate llospital：but the－trong plea for an epileptic loopital and a ho－pital for the treatment of tubercu－ losis．both of which were needed．led us to withhold these hills in fasor of those other institutions．＊ome－ thing will soon be done in Indiana in this direction and certainly the directing wiodom of the medieal protesoion is mered that the best powible means and phan－hould be adopted．

## H．J．Hall． <br> C．A．Datgherity． <br> J．Il．Greex． <br> II．F．Gerrisif． <br> －－U゙stiv Fexk．

Commillce．

## REPORT OF COMMITTEE ON TUBERCULOSIS．

Mr．Presintent and Members of the House of Delegates：
The great movement against tuberculosis is now most thoroughly established in every eometry．The facts con－ ceming the prevalence of tuberenlosis and the factors known to he rhiefly responsible for its so universal provalence，as well as the enential matters in the great tight against it．have been reviewed br former eom－ mittees of this organization and are also being very thoroughly treated by professional and lay publiea－ tion－of the day．

While there is still much diseusion upon the trans－ miwion of bovine tuberele bacilli to the hmman being and vice versa，it is now pretty well acknowledged that in man this diseare has a double etiologs，being caused by either or both the human and bovine bacilli，and that in mo－t cases both are present with the limman predominating：also that the action of these two batelli is somewhat antagonistic，cau－ing a more or less chronic course，while on the other hand those eases in which only one varioty is found， are the most virulent apd most dificult to treat． Eitch of these varicties is best treated with its own tubereulin．

It is also noticed that the bovine bacillus is more atten found in the parts of the boty detant from the air parsagre－namely，in the hemph glands，bones， retc．Pathologists are－ill divided ats to whether the buode of contrance is chiefly by inlablation and through the post nasal avits．pharynx and alveoli or br the ingestion of food amd throngh the gastrointestinal tract．Dluch progress has been made in the early diagonosis of tulerenlosis，and this is most important for the suecessful treatment．Not only has much （mphasis been laid upon the chnical findings，but additionill tents have heen developed either for diag． nosis or confimation－namely，the opthalmo tuber－ falin test of Calmette，the cutaneons or vaeeine tent of Pirguet，and the precutaneous or inunction test of Moro．While suffieient data has not been collected to－peak definitely of these different tests，yet they have been used in sutliciently large numbers of cases to prove themselves of great value．There has also
been a remarliable revival of interent in the nee of tubereulin both as a diagnontic and theraperatic agent．

Vew impethe hav been given to the theory of latent tubrerenlosis dating from rhildhood，which calls for clowr attention to the rpper air paseatres and the prompt removal of offending fom－ils．ademods and other pathological conditions．Medical in－pretors to the public－rhools are common to some of the larger cities．

The secretary of the state looard of Mealth and other have pent much time in lerturing before farmer－institutes．labor organizations and social chubs during the past year，with a greatly increasing demand for their services．and many heath butletins have been distributed among there ambiences amd to the general public dowhere．Arrangements have heen made with public school superintendent－of some of the cities and counties of the state for talk－to the pupils upon health and hygiene．

We are yet in the begiming of great（ampaign of education，but we are behind many of our sinter －Lates．The Pemsylvania Legivature Las．at its lant a－aion．appropriated $\$ 1.000,000$ Sor the benetit of thic caluse：$\$ 600.000$ for the establishment and main－ tenance of one or more sanatoria and $\$ 400.000$ for the establishment and maintenance of di－pensaries， dis－emination of knowledge and for the study of the －ocial and oceupational conditions．The state of Olio hav under construction a sanatorium for incipient eases．and the last legislature passed an act provid－ ing for a hospital in each county for rhronic eane of tuberculosis．Many other states are taking similar －teps．but probably the most effective work is being done in the soutlowestern part of the Enited States， Colorado．New Mexico，Arizona and California，for no place is more concerned in this quention of the heppless consumptive there heing vearly an over－ whelming influx of sick and poor people whose whn state immediately cease to be in any way responsible for their support．They realize that the immediate problem in the fight is the disposition of the helpless con－mmptive，both on humanitarian grounds and in the interent－of publie safety．

Tuberculosis find victims among all elasses，but it i－cosentially a disease of porerty with its neeessary concomitant－－ignorince and filth－and from these culture gromble the germs are flung broadcast to －pread the infection in more farored places．No one thing．not even war itself，is so great a drain on the resources of the country．It is estimated to disable une－quarter to one－third of the population at the prodnctive periods：i．e．，betwenn 15 and 4.5 years． Its victims represent a great army withblawn from the active productive forces of the country；and in the very nature of things more than half this army must be supported lys charity，public or private．

This is the keynote of the problem．Reience may very well be able to stamp ont the disease entirely， but the proper means must be provided and the vie－ tims must be placed in favorable surroundings and maintained there under favorable conditions until they are cured or until death renders them no longer a menace and a source of infection to others．How beat this may be done is a question that confronts the whole world as well as every indivadual country．In no part of the world has it been met adequately and in each country the course of action must be guided by the sum of existing conditions．But in the ulti．
mate eonsideration it is too large for private charity; or for sectional control. It is so deeply rooted in our social fabric that it demands the attention of society as a whole, and must have municipal, state and national aid. It comes as truly within the province of the general goverument as the repelling of an army of invasion. And if $10,000,000$ American eitizens or . .000 chizens of Indiana to-day were threatened with death by a foreign power, the whole country would arm and rise to meet the emergenc:; no city or community would be left to protect itself as best it could; but a systematic campaign, based on all obtainable knowledge of the invader, as well as the forces avail able againt lim, would be pm-hed to the utmont.

The victory over yellow fever and smallpox, the lowing battle, with typhoid fever, diphtheria and eonsumption, and the misuse of relief means in recent great calamities prove that we need a department of P'ublic Health as seriously as we need a department of Agriculture or Commeree and Labor. Since the "greatest asset of a people is the lealth of its citizenship." is it not time this department should be created? Lntil we have such a department to battle srstematically with tuberculowis, the control of it can be only local and temporary, but the fight must be carried on with whatever means are available. We can not pass it br with indifference beraluse we are very deeply concerned both financially and physically.

To-day the sanatorium is recognized as one of the greatest factors in the warfare against tuberculosis.

Every individual cured in such an institution as well as many who are only improved will cease to lee a danger ta his friends. Humanits. therefore, demands that the state sanatoria be establi-hed, that the afflicted may be cured and that the "great white plague" may not be transmitted to other a and handed down to the next generation as one of the great sinof this. The state sanatoria are important edueational centers, where object lessons in the prevention of tuberculosis are given, and whose patients taken from the homes of the poor where their frimble could searcely help becoming infected, are placed under hygienic conditions to be cured, if possible: and if not eured they are at least taught how not to be a danger to their fellows. They are aho taught that fresh air, regular habits and careful living have much to do, not only with curing the disease or prolonging life, but also with preventing the spread of the disease. The individuals treated in these institutions return home as missionaries teaching that fre-h air and better living are necessary to life. Evers one returned from state sanatoria is a power for the prevention of tuberculosis. This state has purcha-ed a tract of land in Park countr, but as yet it has appropriated no money for the creetion of building-

This committee most earnestly pleads with every physician in the state to put forth his miting energies, by way of political influence, social relationship, or otherwise to encourage this work until tuberculosis, like yellow fever, shall cease to be a source of suffering and sorrow and deprivation to ourselves and our fellowmen.
J. A. Little.
E. P. Easley.
C. H. Emery.

Charles R. Sowder.
A. M. Cole.

Committre

## REGISTRATION AT THE FRENCH LICK SESSION.

## Total Number, 3 I2.

f, H. Kamman, Sermour. W. F: lhoggs, Salem.
Fred Heller, Browntown. (ha-. N. Murphey, Salem. Neal Matlock. Medora.
G. II: Copeland, Moorefield.
Wim. N. Wishard, Indianapoliz.
J. Piudolph Fung, Terre Haute.
B. O. Bowell, Laporte.
H. H. Martin, Laporte.

George Knapp, Vincennes.
Geo. J. Cook. Indianapolis.
(ieo, F. Lewic, A-herville.
J. B. Duncan. Bedford.
(t. F. Holland, Bloomington.
II. F. (ientioh, Sevmour.

Albert $\because:$, Bulson, Jr., Ft.
Wayne.
B. D. Myers, Bloomington

1. J. Knapp. Washington.
O. K゙. MeDittrick, Wfash ington.
Jacol, V. Paker, IIarrods lurg.
r. V. Reced. Indianapolis.
T. V. Keene. Indianapolis.
T. F. Spink. Wa=hington.

Tohn J. Kyle. Indianapotis.
Henry Herr. Washington.
II. D. Schwartz. Portland.
I. O. Dicker, Portland.

Thoma- J. Dirgan, Indianapolis.
Allinon Maxwelt, Tndianapolis.
F. (i. Gri-ier, Columbia (ity.
Gien. WV. Willeford, Washington.
(r. F. Itarris, Bloomington.
T. 1. Iray-, Brum= City.

Augu-ta F. Knoefel, Lin ton.
L. B. Hill. Seymour.
K. К. Wheelock, Wayne.
J. H. Ford. Indianapolis.
T. K. Ritter. Sermour.
F. 1. Van Sandt, Bloomfield.
Ḥ. O. Bruggeman. Ft. Wayne.
Helene Knabe. Indianapolis.
M. II. Kuteh. Terre Haute.
J. L. Freeland, Indianapolis.
fr. IV: Combs. Indianapolis.
IV. M. Varble, Jeffersonville.
J. A. Little. Logansport.
G. II. Thompson, Winamac.
C. F. Briggs, Sullivan.
C. S. Blaek, ITarren.
E. E. Mitehell, Bedford-

Chas. P. Lenthart, (Galena.
II. C. Sharp, Jeffersonville.
A. G. Wollenmann, Ferdinania.
H. C. Weisa, Rockport.
W. L. McClain, Scottsburg. H. C. Lowder, Bloomfield.

Jane M. Ketcham, Indian apoli-.
C. D. Ryan, Croosplains.
G. T. Beckett, Ver-ailles.
II. Joteph Coomes. Bates ville.
II. N. Thomn-on, Sulliran.
H. IV. Shirley, Shoal-
II. L. Gilki*on, Loogootee.
II. D. Martin, Bloomingtoin.
C. D. Luckett. Engliah.
A. I. Donaldson, Washing ton.
Tance May, Wa=hington.
David II. Sterenson, Richmond.
Albert E. Sterne. Indianapolis.
J. M. Dimen. Ft. Wayne.
F. C. Ifeath, Indianapolis.
M. F. Boulder. Frankfort.

George D. Kahlo, Frenels Lick.
R. E. Troutiman, Logansport.
M. A. Spink. Tndianapolis.

Geo. H. (irant. Richmond.
A. L. Ziliak. Princeton.
R. S. Inderson. Princeton.
J. W. Metiowan, Oakland City.
Chas. 1. Miller. Princeton.
J. L. Morris, Princeton.
F. M. Payne. Princeton.

IIm. Cluthe. Tell City.
C. M. Brucker, Tell City.
M. Robinson, Dubois.
S. I'. Sherer. Indianapolis.
R. B. Dugdale. South Bend
II. II. Noan. French Lick.

Edwin Walker, Evansville.
J. F. Weathers, New Albanr.
Ft. F. H. Wileox, New Albany.
II. E. Yoze, Vallonia.
S. L. Lingle Paoli.
L. Lindlev. Paoli.
II. II. (filbert, Evansville. Robt. F. Paker, Orlean $=$
E. P. Fasley, New Albany.

Wm. Moore, New Albany.
F. P. Itunt, Leipsie.
M. P. Hallingworth, Princeton.
L. E. Grant. Marengo.
D. V. Mer lary, Dale.
-1. M. Harden, Evan<ville.
S. L. Carion. Lincoln City.

Thomas Eastman, Indianapolis.
D. E. Taylor. Velpen.
H. A. Minore, Indianapolis.
J. H. Oliver. Indianapolis.
G. II. MaCasker, Fort Wayne.
A. W. Dierking Colitic.
\& F. Teaford, Paoli.
S. T. Montgomery, Cynthiana.
B. A. Rove. Linton.

Chas. F. Hope, Coatsville. George Kiciper, Lafayette.
C. A. Daugherty, South Walter N. Sharp, IndianBend. apolis.
J. W. Bates, Broad Ripple. David C. Peyton, Jeffer-
C. W. H. Kemper, Muncie. sonville.
(i, Reynard, Union City: W. M. Helms, WilliamsJ. C. Webster, Lafayette. burg.
II. R. Moffett, Lafayette. J. N. Hess. New Marion. Geo. 13. Lake, Wolcottville. W. W. Wadsworth, MumChas. II. MeCully, Logansport.
Georce B Gren
R. E. Holder Columbus
M. M. Lairv, Lafayctte.
K. C. Hershey, Carmel.

George Revis, Lafayette.
D. F. Lee. Indianapolis.

John F. Barnhill, Indianapolis.
I). J. Cummings, Brownstown.
A. B. Cray, Monticello.
P. G. Foust, Santa Fe.

Mr. Rosenthal, Ft. Wayne. Wayne.
Edgar Cox, Kiokomo.
H. A. Fox. Gosport.
J. L. Thompson, Indianapoli..
T. N. Murty. Indianapolis.

Geo. T. MrCoy, Columbus.
C. II. English, Ft. Wayne.
L. Burrage, Lafayette.
G. D. Miller, Logansport.
A. L. Palmer. Logansport
IV. J. Mitchel, North Vernon.
James II. Grcen, North Vernon.
IV. H. Stemm, North Vernon.
L. O. Carson, Traders Pt.
J. C. Blossom, Mt. Summit.
C. M. Harris, Bourbon.
H. C. Nierman, Ft. Wayne.
B. M. Olbrien. New Winelicster.
W. J. Sandy, Martinsville. Geo. Rowland, Covington.
T. J. OBrien, Stilesrille.
f. O. Barnes. Seymour.

Joseph R. Eastman, Indianapolis
T. O. Armficld, Elwood.
A. L. Wilson, Indianapolis.
J. L. McElyoy, Darlington. Clarence Abbott, Otwell.
II. S. Cainpbell, Lafayette.
J. 13. Carber. Dunkirk.
C. II. Tomlinson, Cicero.
II. IV. Hoggatt, French Liek.
II. B. MeDonald, New Augusta.
F. D. Norton, Columbus.
G. B. IIammond, English. B. J. Moffitt, Lafayette. Fred R. Gobbel, English.
C. F. Neu, Indianapolis. IV. .J. Norton, Hope.
II. T. S. Dodds, Indian. apolis.
F. B. Wrmn, Indianapolis.

Moses Thorner, Indianapolis.
T. W. Smith, Wabaslı.
E. J. Libbert. Aurora.
E. D. Fireeman, O-good.

Maurice Ǩrebs, Huntington.
H. R. Shotts, Nebraska.
S. B. Elrod, Hemrville.
C. E. Ifolton, Holton.
II. R. Lackey, sermour.
II. J. Damer, Elnora.
T. C. Hoover, Boonville.
L. T. Cox, Napoleon.
A. R. Logan, Algiers.
IV. S. Garrison, Temyson.
S. V. Wilking, Roanoke.
E. G. Lukenever, Huntingburg.
T. WV. Swarts, IHunting. burg.
Chas. Barnett. Ft. Wayne.
A. May, Crothersville.
C. F. Boyd, West Baden.
E. O. Danicls, Marion.
J. V. Bower, Malott Park.
T. IV. DeHass, Indianapolis.
S. E. Earp. Indianapolis.
J. Kolmer, Indianapolis.
C. B. Harpole, Evansville.

I Toliver French Tic. J. A. Gibbons, Mitehell. A. J. MeDonald, Bedford.

Chas. A. White. Danvilie. F. R. Rover, North Salcm. A. Gertrude Wolferman, Indianamolis. P. Woolery. Heltonville.
A. M. Cole, Indianapolis.
J. W. Benham, Columbus. J. A. McDonald, Indian
S. Cook. Gentryville. apolis.
S. L. MePherson. Mont-Charles R. Sowder, Ingomery.
F. F. Tourner, Blooming. ton.
U. G. Kelso, Dubois.
. Kelso, Dubois, G F Deinv Iadison
E. F. Steinkanp, Hays- L. E. Lukemeyer, Hunt ville. ingburg.
Geo. T. Williams, Craw- S. N. Stuteville, Frandfordsrille. riew.
B. P. Weaver. Ft. Wayne. H. Harter. Newtonville.
A. W. Brayton, Indian W: D. Hocl-ws. Indianapolis. anolis.
C. F. Stonc, Shoals G. B. Jackson. Indianapolis.
M. F. Porter. Ft. Warne. Willard Parrish, Shelby J. T. AlcFarlin, Williams. ville.

## The American Medical Association.

## Chicago Session.

The Fifty-ninth Annual Session of the Ameriean Medieal Association was held in Chicago, June 2 to 5. For the first time sinee the St. Paul meeting in 1901 the Association met in the center of the comntry. To this faet, as well as to the greatly increased membership in the last few years, is due the large attendance. In the four days of the session $6,47 \mathrm{i}$ members were registered. Including those Chicago members wno did not register, there were at least 500 in attendance whose names do not appear on the registration list. The actual attendance would not fall far short of 7,000 . Adding at least 10,000 guests, exhibitors, ete., makes the actual number of persons in attendance about 17,000 .

The House of Delegates was ealled to order on Monday morning at 10 oclock, by the President, Dr. Joseph D. Bryant of New York, who in his presidental address commended the work of the Council on Pharmacy and Chemistry as well as that done by

Dr. MeCormack in educating the public. He also recommended that a standing committee be established to elaborate the ethical principles underlying the practice of medicine and that general instruction in ethical medicine be made a part of the undergraduate course. He dwelt particularly on the efforts now being made to restrict animal experimentation and recommended action by the House of Delegates on this subject. Dr. Bryant also called attention to the invitation extended by President Roosevelt to hin as President of the American Medical Association, to take part in the Conference recently held at Washington on the Conservation of Natural nesources.

The report of the General Secretary showed that the membership of the Association on May 1, 190s, was 31,343 . a net gain for the past year of 3,825 .
The report of the Board of Trustees included the customary report from the auditing company, showing that the entire business for the fiscal year of 1907 was $\$ 385,030.89$; that the total expenditures of the rear had amounted to $\$ 35(6,222.21$, leaving a net revenue for the year of $\$ 28,80 \mathrm{~s} .68$. The report showed that during 1907, 2,715,293 copies of the Jownal had been issued, forming a weekly average of 52,217 , an increase of $121 / 2$ per cent. over 1906.
The Committee on Medical Legislation reported that the Army Medical Reorganization Bill and the Car-roll-Lazear Pension Bills had become laws during the last session of Congress. The importance of uniform and adequate state legislation on the practice of medicine and the preservation of public health was cmplasized as well as the necessity of careful study of the problems involved. The Committee recommended that pending the completion of the work now leing done only those changes in existing laws which are imperatively needed should be attempted by State Associations. The formulation of the Vital Statistics Bill endorsed by the Cuited States Census Department, the American Publie Health Association, the Conference on Cniform State Laws of the American Bar Association and the American Statistical Assoriation, was reported and the endorsement of the House of Delegates was asked for this measure. The report of the Chicago Conference on Medieal Legislation was also given.

The Comncil on Medical Education reported that the work of the Council during the past year has been along the following lines:

1. The inspection and classifieation of medical colleges as (a) acceptable, (b) doubtful and (c) unsatisfactory.

2 . The conducting of an amual conference with representatives of state examining boards and leading educators for the discussion of the important problems of medical education and medical licensure.
3. The collection and compilation of data regarding (a) medical college students and graduates, and (b) regarding results of state license examinations.
4. A thorough investigation of preliminary and medieal education in Europe.
5. Working for the adrancement of the requirement of preliminary education in the United States to include a rear's work in physics, chemistry, biology and modern languages.
6. Obtaining accurate information regarding high schools and universities in their relation to medical education.

The Board of Public Instruction reported that it had secured a Secretary, Dr. R. Max Goepp of Philadelphia, and that it was considering the establishment of lecture systems and of state boards of public instruction and intended to publish articles in the magazines and public press for the enlightenment of the public on disease.

The Committee on Ophthalmia Neonatorum advised the enactment of laws in each state regarding the registration of births and placing the control of midwises in the hands of the boards of health: that health boards distribute circulars to midwives and mothers on the dangers and prophylaxis of this discase; that state and local boards of health prepare and distribute proper prophylactic solutions with specific directions for their use; that proper records le maintained in all hospitals in which children are born; that periodic reports be made by all physicians 10 boards of lealth; that concerted effort be made along the lines of public education throughout the country: This report was approved by the chairmen of the Sections on Ophthalmology, Obstetries and Diseases of Women and Hygienc and Sanitary science.

The Committee on Scientific Research recommended the appropriation for the assistance of each of the following:
Drs. D. J. MeCarthy and M. K. Myers, Philadelphia, ". In Experimental Study of Cerebral Thrombosis."

Dr. Kirl Voegtlin, Baltimore, "Chemistry of the Parathyroid Glands."
Dr. Isabel Herb, Chicago, "A Study of the Etiology of Mumps."

Drs. li. M. Pearce, Albany, N. Y., H1. C. Jack-on and A. W. Elting, "A Study of the Elimination of Inorganic Salts in a Case of Chronic Universal Edema of Unknown Etiology with Apparent Recovery."
Dr. H. T. Ricketts. Chicago, "An Investigation of the Identity of the Rodky Mountain Fever of Idaho with that Found in Western Montana."
On Tuesday afternoon, at the inird mecting of the llouse, the reports of the Reference Committees were taken up, the reference eommittee on Medical Education approving the work of the Council on Medical Education and recommending that it be continued. The Reference Committee on Reports of Officers recommended the appointment of a committee of five to consider the elaboration of the Principleof Ethics. Resolutions condemning the legislative eflorts to restrict animal experimentation were presented. The action of the Board of Trustees in preparing the second edition of the Directory was approved. The Reference Committee on Legislation and Political Action recommended the approval of the model law for vital statistics, which recommendation was adopted. The resolution presented by Dr. A. T. MeCormack of Kentucky, requesting all State Associations publishing or controlling medical journals to restrict advertisements to such preparations as were approved by the Council on Pharmacy and Chemistry was adopted. A committee of three to confer with a like committee from the American Pharmacentical Association in regard to drug stores was authorized. The candidacy of Dr. C. A. L. Recu, of Cincinnati, for the United States Senate, was endorsed.
On Thursday afternoon the annual election took place with the following results:

President-Dr. William C. Gorgas, Ancon, Panama.

Fir-t Vierermoident-Dr. Thoman Jefferom Murray, Butte, Mont.

Second Vice-President-Dr. John A. Hatchett, El Reno, Okla.

Third Vice-President-Dr. Thoman A. Woodruft, Chicago, Ill.
Fourth Vice-President-Dr. E. N. Hall, Wood. burn. Ky.
General Seretary-Dr. George If. Simmon:. Chieago, 111., re-elected.

Trea-mrer-Dr. Frank Billinga, Chicago, fll., reelerted.
Trustees to serve until 1911-Dr. Wi-ner R. Townsend, New York; Dr. Philip Milk Jones. San Francisco; Dr. William T. Sarles. Sparta. Wis.
The following were elected honorary members: Dr. Edward F. Schaefer, Edinburgh. Seotlind; Dr. Augu-t Martin, Griefwald, Germany; Dr. E. Trearher Collin-, London, England.
The Committee on Transportation and Place of Ses. sion recommended Atlantic City as the next meeting place, which ehoice was agreed to by the Ilouse of Delegates. The lieference Committee on Legislation and Political Action reported, requesting the Committee on Medieal Legislation to arrange for a conference with the Committee of One Hundred, the SurgeonsGeneral of the Army. Nary and Publie 1Lealth and Varine-Ho-pital Serviees with a view to securing cooperation on the establishment of a National Department of Health. After the transaction of some routine business the House adjourned.

One hundred and thirty-four member of the House were present out of a total membership of one liundred and forty-two.

The soeial events of the week were particularly at tractive. On Monday night the seeretaries of the state assoeiations and the editors of the state journal:met at dinner and completed the organization of a State Secretaries and Editors Association. A dimer to foreign guests, as well as a number of other social events, also occurred on Monday evening. On Tuesday evening twenty-coen almmi dinners were hekd in the varion- hotels and restaurants througliout the (ity, the largent being that of Northwentern Eniversity Medical School, held at the Illinois Athletie Club, at whieh over s00 almmi were pre-ent. On Wedncsday evening the President's reception and ball waheld at the Coliseum, thonsands of member-and guest. being present. On Thursday evening the local pro-fe-rion tendered the members of the - l-sociation a smoker at the Colisem at which the attendance amounted to abont 8.000 . Nimerous social attrace tions were prowided during the day for the badies and gnests, including reception- at the South shore Country Club, Chicago Noman* Club, etc. The sectionwere all largely attended and the program- were of a high order. The session was in every way the mo-t noteworthy of any which has ret been held and it in anticipated that come years will clap-e before the record eatablished will be surpaned.

Ainsles, Robert, Indiana A-pinall. Novitas B., PlyHarbor.
Harbor.
Allen, H. R., Indianapoli-. Austin. Naynard A., AnAmbrose, U. C., Connersville.
Ash, E. E., Goshen.
derson.
Au-tin. F. H.. North Madison.

Baren- l'aul J., Craw. Clark, J. H.. Commerwille ferd-ville.

Clark. Stanley A., South Barnett. Charles E., Ft. Bend. Wayne. Clapp, Fred R., Ligonier.
Bamhill. John F., Indian- Clevenger. William F., ln apolis. diamapolis.
Bartholomew, A. C.. Lo- Cline. L. C.. Indianapoli-gan-port.

Clouse, B. A., Columbin:
Bechtol. 1. C., Marion.
Belt, Richard. We-t Terre Haute.

Cochran, Robert W., Madison.
Cole, Albert II., Indianap. oli-.
Berteling, John B.. South lend.
Bicknell. I. J., Goshen.
Bird. Charle- R., Greens burg.
Bi=hop, Mumford Eugene, Indianapolis:

Collins, C. C., Roachdale.
Cook. Charle- I'., New Albany.
Cook. George J., Indianapolis.
Cook, L. II.. Bluffton.

Blaek, Frank W., Ligonier. Haute.
Blinks. E. G., Michigan Combs: Geo. W., Indian. (its: apolis.
Plount. R. D.. Valparaiso. Copeland. Chas. C., North
Blue, C. L... Tocsin.
Boggs. IV. R.. Salem.
Bonell. B.. Laporte. Madison.
Corsen. J. C., Vialparaioo.
Cowen. Lewis C.. Rising
Bosenbury, Chas. S., South Sun.
Bend. Cox, Edgar. Kokomo
Botts. Elwin H., Zanes. Crampton, Chiss. C., Delville. phi.
Bower. G. 1. M., Fort Crawford, Chas, Lee. VeWayne. ray.
Bower. Whitfield, Miehi- Cronier, Nart C., Union gan City.

City.
Bord-Snee, Harry, South Cromer. L. G., Union City. Bencl. Crull. E. A.. Ft. Wayne.
Bradfield, John. Logans Culbertoon. Sentt, Vevay. port.
Tramkamp. Allan L., Rieh- (nthbert F. S. Kingman mond.
nithbert. F. S.. Kingman Bramon, G. D., Crown Wincer. Wayne
Point. Darroch. S. C.. Cayuga.
Brarton, A. W.. Indianap- Darroch, W. Г.. Cayuga. olis.
Broughton. F. H. Wolcoltville.
Broughton, Frank, Waterloo.
Brokaw. R. E., Portland.
Broue. L. D., Evan-rille.
Brndi, G. G.. New Thaven.
Bryan. T. A.. Plainfield.
Buck Dexter t Lapori Diclman, F. C.. Fulton
Puchanan, William Austin, Dickes, John T.. Portland Hammond.
Bulson. Albert E., Jr., Ft. Dinemore. W. H.. Kramer. Wayne.
Mulla, M. S., Gas City.
Butterworth, C. M., South Bend.
Caffee. Bennett V.. Terre Taute.
Calvin. IV. D.. Ft. Wayne.
Calvin. II. D.. Ft. IVayne. apolic. $\quad$ R. B., South Camblell, ${ }^{\circ} \mathrm{C}$. W'. Hammond.
Carnelley, James H., Kokomo.
Carey. Willis W., Ft Wayne.
Carson. L. O., New Aur gusta.
Caylor, Char. E., Pennville
Chittiek. Chas.. Frankfort. Egan. 13. II.. Flora.
Clark. Edmund D., Indian- Edkelman, Metiu- XI., Elkapolis.
1)angherty, Chas. A., South Bend.
Defrees. II. .J.. Nappanee.
Denant, M. S.. Walkerton.
Dewey, E. L.. Whiting.
Dewey, F. N゙., Elkhart.
Dellees. Roy E., Kerstone.
Diclman. F. C.. Fulton.
Dierking. A. W゙.. Oolitie.
Doerr. J. F.. VIt. Vernon.
Douglas. Walter. Indianap olis.
Dußois, Franklin L., Lib. erty.
Dugan. Thoma= J.. IndianBent.
Dunean. .T. B.. Bedford.
Dryer. D. IV.. La Grange. Eherhard. E. L.. Soutin Whitley.
Eberhardt. Wr., Miehigan City.
Easley, E. P.. New Albany.
hart.

Eidson, J. II.. Bourbon.
Emery, C. H., Bedford.
English, C. H., Ft. Wayne.
Englerth, Perry O., North Judson.
Epperson, Adah, South Bend.
Eshleman. L. II., Marion. Gary
Fankboner, IV. A., Marion. Hicks, L, F., Stilesrille.
Farver, M. A.. Middlebury. Hiestand, If. J., Pemnville
Flack, O. M., Boswell.
Fleming, C. F., Wabash.
Fleming, J. C., Elkhart.
Foxworthy. Frank W., Indianapolis.
Franke, II. E., Newton.
Freeland, J. L., Indianapolis.
Freeman, E. D., Osgood.
Frink, C. WI., Elkhart.
Frost, I. F., ILuntingtom.
Galbreth. IV. II.. Rocktield. Ifoopingarner, G. B., Elk Garber, J. B., Dunkirk.
Gardner, Lucy IV., Bloomington.
Garrett, John D., Indianapolis.

Gibls. J. C., Crown Point.
Gilbert, Joseph L., Ken- Jughen, IV. F., Indianapo dallville.
Gilbert, Wm. H., Evans- Hughes. W. L., Indiana rille.
Gillespie, J. F., Green- Hunt. John S., West Tarre castle.
Gilson, Edmon A., Corington.
Goodrich, C. D., Elkhart.
Graham, A. B., Indiannp olis.
Graham. Hannalı Ml., Indianapolis.
Grant. L. E., Marengo
Gray. J. Lacius, Laporte.
Gray, John II.. Bloom field.
Grayston, B. II. B., Huntington.
Grayston, IV. S., Marion.
Green, William L., Pekin.
Greenwell, Franklin, Humtertown.
Gremwalt, G. L., Fort Wayne.
Girubli, A. f.. Mongo.
Groman, Il. C., llammond.
Hackler. R. P.. Mectaryville.
Hager: II: . 1 , Gouth Bend.
Hagenbaugli. E. .J., Elkhart.
Hall. H. J.. Franklin.
ITall. IT. M., Camden.
Hankins, Madge P', Terre Hante.
Hamilton, Allen, Ft.IV:ym.
Hamer, H. (द., Indianapo lis.
Hatfield. Sidney J., Indianapolis. ton.
Harris. Cyrus M., Bour- Kimmel, Cecil. Ft. Wayne lion.

ITarrold, E. O., Marion.
Hayden, A. M., Eransville
Hay, B. F. Syracuse.
Hays, T. A., Burns City.
Haỵs. Woodward H., Albion.
Heath, F. C., Indianapolis.
Herr, Henry, Washington
Hessler, Robert, Logansport.

Hill, H. B., Logan-port.
Hill. J. II.. South liend.
Jobs, Alice L., Indianapolis.
Ifoffman, Geo. E., Logansport.
Holder. R. E., Columbus.
Holland, P. C. Bloming ton.
Hood. Thomas C., Indianapolis.
hart.
Hoover. P. N. Boonville.
Howard, C. Noman. Wai saw.
Howat, II. F., Hammond.
(ity. Harbor. Hate.
Ifunter. T. E.. Versailles.
Iturty. T. X., Indianapolis.
Ingalls, Albert, Elkhart.
Jackャon, J. Il., Lyon-
Jacquitl. O. S., Lawrenceburg.
Jay, M. T.. Portland
Jeflries, II m. E., Indianapolis.
Jeming-, Harrictt B., Elkhart.
Johnson, Carl E., Oti-
Tohmston. II. F., Richmond.
Jones. J. G., Vincemues.
Jones, Jay J., Medarrville.
Jone., IIilu. E., Clayton.
Just, Guy H., Buckingham.
Kahlo, (George D., Frencil Lick.
Kalbícioch, 1. IL., Pem
Kane. Alfred, F't. IVayne.
Kearns. Thoma- A.. Flora.
Kelle: J. C., Mitchell.
Keiner. George Frederic, Lafayette.
Keith, Freeman E., Modoc.
Kemper, G. IV. I., Muncie.
Kennedy. T. C., Shelbyville.
Kerrigan. John J., Michigan City:
Ketheart. N. I., Columbia City.
Kime. John F., Petersburg.
Kimberlin. Albert C., Indianapolis.

King, \I. O., Rochester.

King. J. E.. Richmond.
King, Frank A., Garrett.
Kirk, Elliott II:, Veeders. burg.
Kitson, F. S., North Manchester.
Knabe, Helene, Indianapolis.
Knapp, Geo. Vinceunes.
Knapp, Chas., Eransville.
Knowlton, Millard, Terre Haute.
Kolrr. Thomas W., Hammond.
Kremer, Nicholas A., Madison.
Kulm, B. F., Elkhart.
Lake, Geo. B., IVolcottville.
Lawhead. IV. E... Inwood.
Larman. Daniel II:, ln-dianapoli-
Leach, II. J., New Albany. Mix, Cliarles MI. Muncie.
Leavitt. R. Il., Terre Moore. E. P., South Bend. Haute.
Leiter, II. A. (laypool.
Lemon. II. K.. Goshen.
Libberts, Edw. J.. Aurora. Morgan. E. E., Ft. IVarne.
Linvill. J). S., Columbia Morris. John E., Indianap City:
Lloyd. A. II.. Marion.
Long. IJ. II., Laporte.
Loop. A. L., Economy.
Loomis, Clas,. Vevar.
Loomis, John F., Marion.
Lorenz, John II., Evaneville.
Lowder. Lindsey T., Bloom ington.
Macker, C. II.. Portland.
Darshall. George Dexter, Kokomo.
Vartin. J. S., Rolling Prairie.
Martin, P'anl F., Indianapolis.
Marvel, ('hate., Richmond.
Mattion, Jimes A., Na tional Military Home.
Mattor. Emest L., Terre Haute.
Maritr, D. E.. Fowler.
Maxwell, Allison, Indianapolis.
May. A. Crothersville.
Mcillister, E. B., Terre Halute.
McPride, James L_.. Zanesrille.
Machakey, G. W., Fort Warne.
McCa-lin, Carl N., Earl Park.
Alc'omell. Joseph, Terre Haute.
Mrcully, Chas. II., Logansport.
Melonald. IV. B. New Augusta.
Meraughey. Walter M., Greencastle.
Itefrowen, T. J., V'incennes.
McGrew. H. A., Laporte.
MeHugl, J. E.. Ft. Wayne.
McKieeman, Robert B., Ft. Wayne.

Moore, H. A., Indianapolic.
Montgomery, 11. F., soutil Rend.
Mckinney, Jas. W., Bluffton.
McQuown, O. W., Marion.
Mentzer, S. E., Monroeville.
Mercer, D. J., Poe.
Metcalf, J. E., Cary
Metts, Fred A., Osian.
Mcyer, J. H. William, Laporte.
Miller. II. M. Sonth Pend.
Miller. Charles A., Princeton.
Miller, D. L., Goshen.
Miller, E, D., Logansport.
Miller, G. II., Corington.
Mills, C. C., Red Ker.
Mirandi, IV. F., IValker ton.
Mitchell, E. E.. Bedford.
Mitchell. II. F., Soutl Bend.
olic.
Morris. Geo. B. Poneto.
Morrison, Frank A., Indianapolis.
Mountain. Joseph R.. Connerscille.
Mueller, F. M., Lawrenceburg.
Murphy, O. C., Scott-burg.
Myers, B. D., Bloomington.
Myers. Isaac N., Maples.
Myers. J., Alton.
Neier. O. C., Indianapolis.
Newkirk, J. W.. Gary.
Niblack. E. S., Terre Haute.
Niesclang. Clarles C. F., Ft. Warne
Noble. Thomas B3., Indianapolir.
Noble, Sarah A., Eant Chiicago.
Northrup, A. H. Marlile.
Northrup, A. II, Markle.
Oliver. J. H., Indianapolis.
Olney: Thomas A., South Bend.
Packard. C. IV.. Gary.
Page, La Fayette, lidianapolis.
Page. IV. B., Middlebury.
Pantzer, Hugo O., Indianapolis.
Pate, J. R., Milan
Parne. Alaric T., Terre Haute.
Pearson, John R., Bedford.
Peck. Nalter M., South Bend.
Perry, Chas. H.. Lewis Creek.
Peyton. David C., Jeffersonville.
Pfatf, O. G., Indianapolis.
Pierce, II. J.. Cloverland.
Pierion, Allen, Spencer.
Poinier, E. W., Andrews.

Poland, Clysses G., Mun- Sowder. Charles R., Incie. dianapolis.
Porter, Miles F., Fort Smith, G. H., Knights Warne.
Porter. J. B.. Elkhart.
Powell. .I. Z., Logan-port
Powell. Nettie B., Marion.
Preston II P Plymonth napp, J. A., Goshen.
Pries, C. R., Geneva.
Prondfit, Leuis, Wiscola.
Radclifle. Flord E., Bour-
bon.
Ram-brok, C. R., Hunt. inghorg
Randall. Edwin Ambia.
Ranke, Henrs. Ft. Wayne.
Rarick. I. E., Wolcottville.
Rawles. Loman Talmage, Huntertown.
Rea, IV. Cr., Muncie.
Rea, O. A. Culver.
Reed, Jewett Y.. Indian apolis.
Redding. J. L., Bluffton.
Reagan, R. M., Monon.
Repan-, Robert, Greer wood.
Ritter. Mary Thayer, Angola.
Rhamy, B. Wr., Ft. Wayne.
Roark, C. A., Milton.
Rohinoon, C. C., Indiana Harbor.
Robison, Elwood, Ross- Stormont, R. MI., Stewville.
Robison, John E., Frankfort.
Rose. B. A., Linton
Ros. Alex. A., East Chiago.
Ross. David, Indianapolis.
Root, W. W., Parker.
Rutkauskas, Anthony Fazis, East Chicago.
Sauders, I. M., Grcens burg.
Sensenich, R. S., South Bend.
Schneider. A. L.. Ft. Wayne.
©chick, M. F.. Ft. Wayne.
Sehlieker, A. G., East Chi cago.
Schuman, O. V., Columbia City.
Seulder, C. P., Washington.
Scudder, J. A.. Edwards. port.
Scull. L. Eleanor, Hammond.
Shafer. IV. Rochester.
Shanklin, Leslic B., Sulliran.
Sharp. Walter N., Indian apolis.
, E.. Hammond. Ver VIayne, E. J., Evans-
*haw, s. L.. Kimmell. rille.
Shepherd, Vincent, Dupont. Vaughan, I. .T., Topeka.
Shepherd, George W., Red Vaneleave, R. H.. Farmher.
Shocmaker. S. A.. Poneto. Wade. Frank C.. Lima
Short, R. R.. Union Mills. Walker, Edwin. Evansville,
Short, I. Wright, Elkhart. Ward, J. F.. Vevay:
Showalter, J. E., Waterloo. Ward, J. O., Peru.
Shmmaker, Wm. F., Butler. Ward, John P. Vevar.
Slonaker, C. Lee, Leiters Washburn. I. M.. RenssaFord.

Weaver. Benj. Perley, Ft. Wayne.
Weis, Whn Din.
Womstein, Jos. H., Terre Ilaute.

Mood. H. H. Angola
II. Thiting. Wood, Theodore F., In-

Westfall, 1. B., Lafayette. gola.
Wiedemann, F. E., Terve Woolery, IHomer, Bloomllaute. ington.
Wiggins, Edward L., El- Woolery, Perry, Hiltonwood. ville.
Wiley, Harrict. Portland. Wolfeman. A. Gertrude,
Wilson, L. A., Kingsbury. Indianapolis.
Wilson, H. W., Michigan Woodruf1, C. A., Ligonicr: (ity.
Willeford, Geo. W\%.. Wiath ington.
Williams. Alice B., Columbia City.
Williams, L. L.., Brazil. Wyhoum, D. C.. Sheldon.
Willians. W. H., Lebanm. Wyinn. Frank B., Indian. Williamson, Marry, Ma- apolis. rion.

Wyatt, 1. R.. La Grange
Wishard, Wm. N., Indian- Yencer, II. W., Richmond. apolis. Yenne, C. IH. Washington
Whery, Mary 1., Fort Yoeum, M. G., Mentone.
Wayne. Young, Simon J.. Valpa-
Whitelatch, Bine, Pierce- raiso ville.

## Allen county.

## FORT WAYYE MEDICAL NOCIETY

## Meeting of May 19, 1908.)

Society met in regular ses-ion in the assembly room with 30 members present. President and Vice-President being absent, mecting was called to order by the Seetetary. Minutes of previous meeting read and approved.

Gout: Theories of Causation, Clinieal Varieties, was the title of the first paper of the evening. by Dr. W. P. Whery. He said that attacks occur mostly at night. Gout is not a local disease, but the local manifestation is the safety valie. Drinking water and plenty of it is the best solvent of urie acid. He said that sorlium salts should be avoided in the treatment of gout, even table salt. Among the remedies highly recommended for the treatment of this disease are colchicum and cimicifuga. The lot air apparatus is also of great service. The universal law that everything benefieial generates omething detrimental aceounts for gout. He said that meat eaters more often have gout, and quoted from history to show that such is the case.

Rheumatoid Arthritis: Etiology, Symptoms, Diagnosis. Paper by Dr. B. Van Sweringen, in which he discussed neuropathie origin, and said that disturbances of sensation, glossy kin, and their symmetrical distribution tend to show that the disease is of nemropathic origin. Organisms have keen found that are said to cause the eondition. He said that the disease attacks females more frequeutly, and usually the poorer classes of patients; however, there are exceptions. The condition is said to follow shock. The acute form is most likely to be diagnosed as aeute intlammatory rheumatism. He closed with giving an oflhand talk concerning the outline as set forth in the postgraduate course.

In opening the discussion Dr. Barnett reported a ease of gout in which there was a deposit two inches long in corpora cavernosa in penis of physieian.

Dr. Beall said that he had seen one case, which was a case of poor man's gout. There were trophi in the ears. In about 60 per cent. of cases are found trophi in the ears as white kernels. The majority of evidence now lean- to the bacteria origin of arthritis deformans. He las seen the spine of one case of spondrlitis deformans after dissection.

In closing the discussion, Dr. Whery said that mental and physical strain brought on attacks of gout in London 40 years ago, during his practice there, and not eating and drinking. He said that attacks of gout were used by diplomatists to aroid discussing delicate questions.

Pathology of Seminal Vesicles and Prostate, Preceding Instrumental Epididymitis. was the title of a paper by Dr. Charles E. Barnett, in which he said that gonorrheal epididymitis, like gonorrheal salpingitis, resolres itself from the acute stage after proper treatment in a comparatively short time, but the retained pathology, after resolution has reached the limit, is likely to ever remain a menace during the future life of the individual. The cssayist considers that in spite of every precaution taken to prevent infection, there are certain few epididymites that occur after the first sound introduction, especially since the adrent of the Kollman dilator, which, in his opinion, is due to disturbance of the pent-up pathology contained in the prostate and seminal resicles. He considers the Bartholin gland and duct pathology the best conparison with the female compared to the scminal vesicle pathology in the male. In closing, he said "surgery is governed by necessity, and if no other means centrol vesicular pathology. surgical removal is the necessity for the resicle, as well as the prostate, when infected."

The discussion was opened by Dr. Drayer. He made a motion, which was carried that Dr. Barnett's paper be referred to the State Association.

The Board of Censor reported unfarorably on the application of Dr. B. Clark. Thes reported favorably on the applications of Drs. L. J. Zoeller, R. V. Murray, D. E. Murray, W. H. Thompson, I. N. Myers. Motion was made by Dr. Drayer that the by-laws be suspended and that the Secretary cast ballot of the Society for these men. Seconded and carried.

Motion made that the Fort Wayne Medical Society instruct its delegate to extend an invitation to the State Socictr to meet in Fort Wayne in 1909. After much discussion the question was laid over until the next meeting.

Dr. Calvin announced the society's committee to meet with druggists: as Drs. Bulson, Morgan and Van Buskirk. Dr. Bulson re-igned and Dr. Calrin was appointed in his place.

Motion made that the Society purchase a number of the pamphlets on the Great American Fraud and send them to teachers and chergymen. Motion carried.

Adjourned.
J. C. Wallace, Scc.

## (Meeting of May 26, 1go8.)

Society met in regular session in the assembly room with 36 members present. Meeting called to order by Secretary J. C. Wallace. On motion, Dr. H. O. Bruggeman was called on to preside. Minutes of previous meeting read and approved.

Gastric Ulcer. Clinical case report br. Dr. B. Van Sweringen. Patient, man. aged 63 , in apparently good health, was suddenty taken with pain in the right hypochondrium, and in the back and right shoukder.

He was given hypodermics of morphia to relieve the pain. After resting some the patient romited. He liad romited several times after the attack started. There was no tenderness in the back on either side of the spine. The character of the pain and the location or distribution pointed to gallstones. Upon examination the next day there was pain in the right hypochondrium, and rigidity in this region, as well as in the region of the appendix. The belly was opened; incision being made so that region of gall bladder and appendix could both be inrestigated if necessary. The appendix was examined and found to be the seat of the old trouble. It was gotten up with difficulty. Free pus was found in the peritoneal cavity, but as no perforation of the appendix could be found, therefore there must have been some trouble somewhere else, as the pus did not come from the appendix. The gall bladder was palpated, but no stones were found. The incision being enlarged, pus was found coming from the stomach. The opening in the stomach was closed with Lembert sutures, with the intention of making a gastro-jejunostomy later, as the patient was in a very bad condition. Drains were inserted. The operation was done one week ago, and now the patient is doing fairly well.

In opening the discussion Dr. Porter said that it is not nccessary to have a perforation of the appendix to account for pus in the peritoneal cavity. The location of the perforation accounts for location of the pain and tenderness. The direction of the least resistance was down to the R. I. fossa, and, therefore, the pus went to that place. He said that there is a larger per cent. of recoveries after perforation in gastric ulcer than in intestinal perforations, as the gastric contents are relatively more sterile than the contents of the intestines. It will be very interesting to note the progress of the case and whether the ulcer will get well.

Dr. English stated that vitalitr had much to do with the rccovery of the patients after a perforation. The ritality of a patient with gastric perforation is muel better than those with intestinal perforations such as occur in typhoid ferer.

Dietetics in Rheumatism and Gout, was the title of a paper by Dr. A. P. Buchman, in which he said that in the first fow days or period of invasion of any diaease there is little assimilation, therefore it is wrong to give food. He said that if constructive metabolism is in aberance, it would seem that foods would be a menace rather than an aid. The personal experience of the csayist has been that patients are without appetite or desire for food. and will not eat unless ther are forced to do so by their friends. In certain forms of chronic rheumatism he belieses that ther do better on restricted diet, such as proteids and water. There is no single dietary which is adapted to every rheumatic case. The author thinks that the least quantity nif food is the best, assuming that excessive metabolism is the trouble at the start. If you now cut a- withdraw food you cut out future excessire metabolism, and then by getting rid of the products of excessive metabolism you cure the case.

Therapeutic Action of the Salicylates. Paper by IV. O. Gross. He said that in order to intelligently study the therapeutic action of salieylates it is important to know something of their composition. (1) What is salicylic acid? (2) How is it obtained? (3) Salts of salicylic acid. (4) Action of salicylates ther.
apeutically. With reference to the first division of the subject. he said that on examination it is found that salicylie acid is an organie acid, existing naturally in eombination in rarious plants, such as strawberries, raspberries, blaekberries, currants, plums, black cherrics, aprieots, peaches, grapes, crab apples, apples and oranges. It is also a eonstituent clement of the oils of wintergreen, biceh and other plants of the spirea family. Hoout 24 rears ago Kolle suececded in producing salieylie acid at a moderate cost by mixing phenol with carbon dioxid through the instrumentality of sodium. The sodium salt thus obtained is dissolved in water, decomposed by hydrochlorie aed, the salicylie aeid filtered off, washed and crystallized out of hot water.

In the study of theraps, particularly in regard to the aetion of salieylates, we are confronted with the ever apparent chemieal changes which are eonstantly oceurring in the human body, both in health and disease. When the natural ehemieal reaction is interfered with through improper food or other causes, the abnormal condition resulting may usually be correeted by the adnimistration of agents acting ehemieally. While agents other than chemieal may, and often do, serve therapentie purposes, they eventually aet chemieal! ${ }^{1}$ y or alter the abnormal conditions in the various tissues and organs of the body. The faet that the abnormal conditions can not always be corrected, simply means that the proper reagent has not been employed or that decomposition has so far advaneed as to preelude its arrest or change.

In studying the therapeutic action of the salieylates we find that they not only suspend the action of diastase, but also the starel digesting power of the panereatic serretion. Salieylic aeid was originaliy brought to the notice of the profession on aeeount of its inhibitory inllnence on putrefaction, as small quantities prevented the souring of milk, and one-fifth of 1 per cent, is sufficient to prevent the development of bacteria in ordinary organie mixtures. This antiseptie power of saliectie aeid led to its use in preserving rider. It is largely used in the eanning of eorn, beans, peas, tomatoes, and other vegetables. When salieylic acid is given to man in doses just sullicient to manifest its presence, synptoms closely resembling einchonism result. Moderate therapentie doses appear to have $n o$ powerful inlluence upon the circulation. Sueh physiologieal evidenee as we have indieating that they increase artorial pressure somewhat by exeiting the vasomotor conters and directly increasing the eardiac force. The action of the acid upon the nervous system seems to be a depressant of the motor eenters. Moderate doses increase the frequeney of respiration, probably in part by an action upon the peripheral pneumogastries, but chiefly by a direct influence upon the respiratory: It is absorbed and cireulates in the blood probably as sodium salieylate, and is climinated partly unchanged, as a salieylate, and partly as salieylurie acid.

The question of the comparative medieinal value of the artificial and natural salicylie acid is one of great importanee to the medical profession. It is an established fact that the artificial aeid is more poisonous than the natural acid. Acoording to Dunstan the poisonous properties of the artificial acid are due to the presence of tince impurities, the meta, ortho and paracresotie acid. Of all the salts of salicylie acid, per-
hipps the strontium salicylate deserves special mention.

What has been said of the salieylates holds equaliy true of another very important remedial agent, namely, salol, or tcehnically ealled phenyl-salicylate. It has been largely used in rheumatism as a substitute for salieylic acid, but it is much less prompt than is that remedy.

The external use of salicylic acid in the strength of $\mathrm{J} / 1000$ makes an ideal application in swellings due to infection. Some of the fake caneer applications contain salicylic acid in combination with other irritants.

In opening the discussion, Dr. B. Van Sweringen spoke on the difference between true and synthetic salieylates, and said that in his personal experienee lie has been able to see but very little difference. In the treatment of inflammatory rheumatism he has had the most suceess with salieylate of soda, but very often not until large doses were given. Conecrning dictary, he said that he thinks it is unwise to feed unring aeute symptoms. In elronie forms, where there is nutritional disturbance, the treatment should be pushed as rapidly as possible.

Dr. Drayer stated that in one who has a tendeney to abort, the salieylates have a tendency to act as an abortifaeient. He says he knows that salicylic acid will inerease the menstrual flow, and sometimes bring it on; therefore, we should be eareful in using it in pregnant women. Regarding permanent deafness from the use of salieylates, he said that large doses, Ij grains four times a day for a week, produeed deafness lasting four months. He said that 30 grains $t$. i. d. las a decided effect in stopping pruritis of diabetes. In phosphaturia it will clear up urine and stop the reflex nerve pains. It is one of the best drugs in use.

Dr. Pulliam said that the reason sodium salieylate deranges the stomaeh is that bottles in drug stores allow moisture to get at the medicine and change it, forming sodium hydroxid and salicylic aeid. The deeomposition of salieylate of soda is what deranges the stomaeh

Dr. Weaver stated that Osler is giving saliein in 20 grain doses to children every two hours, elaiming less stomach disturbance.

Dr. Wheolork said that aeute artienlar rheumatism is a septic infection and the tonsil is the offender. The value of salieylates resolves itself into that of an analgesie. He gets remarkable results from salieylates given with large quantities of water. As to the physiological effcet lee says that there is an effeet similar to cinchonism, where there is ringing in the cars or fullness. This effeet is produed by one drachm in 10 or 12 hours. Me said that the best results were secured, not by going beyond this effect, but rather stay this side in using salicylates.

Dr. Buehnan said that aeute rhemmatism is a general toxemia. There is no construetive metabolism during acutc invasion period, and it usually takes at least four days after the crisis before we have eonstruetive metabolism. One patient will eome into the stage of eonstructive metabolisin earlier or later thau another.

Dr. Gross closed the diseussion of his paper.
A motion to invite the Indiana State Medieal Association to meet in Fort Wayne in 1909 was discussed at length and finally earried.

The following resolution was presented:

Resolved, That after June 30, 1908, the Fort Wayne Medieal society shall discontinue the so-ealled postgraduate system of instruction. And be it finther
Resolved, That the Program Committee of the society be, and hereby is, directed to prepare a program for use after the summer vaeation, which program will be similar in its nature to the one in use before the adoption of the postgraduate program.

## (Signed.)

## H. O. Bruggeman.

Motion made and seconded that the above be postponed until the next regular meeting.

Hotion made by Dr. Porter. and seconded by Dr. English, that the delegates and members who attend the American Medical Assoeiation and State Assoeiation meetings attend with a view to reporting matters of interest to the local society on their return. Dr. Drayer seconded the motion, making the amendment that the chair appoint one man for each section. Amendment accepted. Motion as amended earried.
Adjourned.
J. C. Wallace, Sec.

## CLAY COUNTY.

The Clay County Medical Society met in regular session May 21, at the office of the President, Dr. S. G. Hollingsworth. The applications of Drs. M. A. Freed and H. R. Vandiver of Clay City, C. L. Ray of Cory, J. A. Davis of Coalmont, and Dr. Griffin of Brazil, were presented, and after a farorable report by the Board of Censors, all were received as members of the soeiety.

Motion made and earried that the society have one afternoon and one crening meeting each month, the afternoon meeting to be on the second Thursday, and the evening meeting on the fourth Thursday. A committee, consisting of Drs. Cook, Dilley anu Sourwine, was appointed 10 arrange and publish in adrance for the entire year a definite program for each regular session, and to provide an afternoon summer meeting in some central part of the county on the banks of Eel river, to which the doctors' families be invited.

Dr. F. C. Dilley was appointed to secure a regular meeting place in the publie library building.

Adjourned.
(f. W. Findey, Sce.

## CLINTON COUNTY.

Clinton Connty Medical Society met May 7, at S:30 p. m.. with President Gemge W. Brown in the chair. Dinutes of previous meeting read and approved. The first paper of the evening was by Dr. R. H. Ritter, of Indianapolis, on "The Blood." This was followed by a paper on "Strangulated Hernia," by Dr. John H. Oliver, of Indianapolis. These papers were freely discussed by all the members present. At the close of the session the members and invited guests, to the number of thirty, repaired to the cushwa parlors, where a banquet had been prepared.
Adjourned.
Chas. Chittick, See.

## DELAWARE COUNTY.

The regular meeting of the Delaware Comnty Medical Society was held May 1, with 23 members persent. The committee appointed to draft suitable resolutions in reference to the death of Dr. William L. Snyder, reported as follows, which was adopted by consent:

Whereas, In the untimely death of our friend and co-worker, Dr. William L. Snyder, the medical profession has lost a member whose scholarly attain-
ments, high character and noble purposes had woa him a conspicuous place in the profession; and,

Whereas, The community he served has lost a faithful friend and able counselor; and,

Whereas, His family has sustained a profound sorrow; therefore be it

Resolved, That the Medical Society of Delaware County extend to the family, the faithful wife, loving mother and devoted brother, in the hour of profound sorrow through broken ties, blighted hopes and defeated aspirations, its sincere sympathy.
The Board of Censors reported favorably upon the applieation of Dr. George F. Ames, Eaton Ind., and he was duly elected to membership in the society. The following applications for membership were received: Dr. U. G. Powers, Albany; Dr. N. D Berry, Muneie, and Dr. Earl S. Green, Muneie.

An excellent paper on "Heredity" was presented by Dr. A. A. Cecil, and ably discussed ly Dr. W. IV. Wadsworth and others.
Motion made and earried that Dr. Cowing"s paper on "Six Hundred Cases of Labor in Private Practice" be referred to the Indiana State Medieal Association for presentation at its next meeting. Motion made and carried that the June meeting of the society be postponed from June 2 to June 12.

## Adjourned.

II. S. Bowles, See.

The regular monthly meeting of the Delaware County Medical Socicty was held Friday, June I2. Resolutions of respect were adopted on the death by drowning of Dr. Homer M. Shaw, of Gaston, a member of the soeicty.

The Board of Censors reported favorably upon the applieations of three physicians for membership in the society, filed at the May meeting, and they were cleeted to membership as follows: Drs. Earle S. Green, Muncie; Noah D. Berry, Muneie, and U. G. Powers, Albany.

Dr. A. II. Good presented a paper on the subject, "Pucrperal Peritonitis." in which he emphasized the value of serum therapy in this affection. The paper clieited an excellent and general diseussion by the members. Among the points brought out were the extreme neressity of prophylaxis, the blameworthy tendency to regard and handle peritonitis, septicemia, etc., differently when they appear during the puerrerium, and the danger of sepsis from the parturient woman examining herself during the progress of delivery.

Adjourned. D. M. Green. See, pro tem.

## KOSCIUSKO COUNTY.

The Koscinsko County Medical Society held its regular monthly meeting at the Court House in Warsaw, Jme 9. Meeting called to order by President C. R. Long, of Pierceton. Minutes of the May meeting read and approved. The following physicians were elected to membership: Drs. W. O. Benson, Milford; Emanuel Stockberger, Milford, and Forrest J. Young, Lepsburg. Dr. S. S. Allen, of Packerton, was unanimously granted a certificate as to his moral, ethieal and professional character, to be used in securing right to practice in the State of Illinois.

The first paper of the erening was by Dr. E. E. Haworth of Claypool, on the subject, "Anatomy and Histology of Tumors," which was discussed by Drs. Schakelford and Hines of Warsaw. Dr. A. C. MeDonald of Warsaw, read a maner on "Differential Diagnosis of Malignant and Benign Tumors: Varieties,

Location and Miero-copie Appearance." This paper was disensed by President Long of Pierceton, and Dr. Llaworth. Dr. C. E. Thomas read a paper entitled, "Cancer and Fibroids of the Cterus." Drs. Fermier, Long, Haworth, McDonald, Hines and Howard participated in the diseussion. Dr. Fermier presented a pedunculated fibroid tumor of the uterus. The operation was performed eight years ago (a complete hysterectomy being done), and the patient is well to-day.

Adjourned.

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C. Normat Howard, Nec.
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## PIKE COUNTY.

The Pike County Medieal Society met in regular session June 9, with an exceptionally large attendance. Dr. J. T. Kime presented the first paper of the evening on the subject, "Prostatitis," giving many interesting facts regarding this disease, and showing the good results to be obtained from the use of faradic electricity: The paper was freely discussed. Dr. Walter M. Hunter was also to have read a paper on "Puerperal Fever," but was compelled to leave before reading on aecount of illness. Drs. Coleman and Basinger reported several interesting eases to the society. All the physicians of the county were invited to attend the meetings and join in discussions whether members or not.

Adjournedi. E. S. Tmel, Sec.

## BOOK REVIEWS

Glimpses of Medical Europe. By Ralph L. Thompson. Professor of Pathology, St. Louis, University School of Medicinc. Cloth: pages, 235: priee, \$1.50. J. B. Lippincott Co., Philadelphia, 1908.
This book contains a very entertaining and instructive deseription of things medieal as seen by an Aneriran physician during a visit in the medieal centers of Europe. The book is not intended as a guide in any sense and yet it contains much information eoncerning the varions hospitals, clinies and medieal teachers of Europe which will prove of value to the man who is about to take his first trip abroad.

Bier's Hyperemic Treatmext in Surgery, Medicine and all the Speclalties: A Mancal of its Pracmical Aprlicatiox. By Willy Meyer, M.D., Profes: or of Surgery at the Xew York Postgraduate Medical School and Hospital; and Professor Dr. Vietor schmieden, Assistant to Professor Bier at Berlin University, Germany. Octavo of 209 pages, illustrated. i'hiladelphia and London: IV. B. Saunders Company, 190s. Cloth, $\$ 3.00$, net.
This contribution is an attempt to bring before the profession in brief form what is known about Bier's hyperemic treatment up to the present time. Especially noteworthy and commendable is the freedom from extravagant claims and fine spun theories concerning this rather new ret promising therapeutic agent. Actual elinical results are presented, together with suggestions as to the possibilities in other conditions, without any elain for the remedy as a panacea. The physician is not asked to diseard other well recognized and ralnable therapeutic measures, but merely to consider hyperemia for what it is worth, in the lope that it will be given just credit for what it has already
accomplisled and a patient and conscientious trial wherever it may seem to be indieated.
The whole method is of eourse founded upon Bier's conception of inflammation as an auxiliary to a cure rather than a detriment, and as Nature's own weapon in fighting infection. The various kinds of hyperemia are deseribed in detail, together with their methods of induction, and then follows a résume of the elinieal conditions in whieh it either has been or may be advantagcously employed. The work ends with a very modest conclusion and an appeal to the profession for a more extensive and thorough trial of what would appear to be a rational therapy where indicated.
Diseases of the Nose, Throat, and Ear, Medical times a slightly elumsy diction have erept into what must otherwise be considered an execllent résumé on the subject dealt with and for which the profession owes its thanks to the authors.

Diseases of the Nose. Throat, and Ear, Medical avd Subgical. By William Lineoln Ballenger, M.D., Professor of Otology, Rhinology and Laryngology, College of Physieians and Surgeons, Chicago. Illustrated with 451 engravings and 16 plates, 905 pages, eloth, $\$ 6.00$. Lea \& Febiger. Philadelphia and New York, 1908.
This is the most comprehensive as well as the most practical and thoroughly up-to date work on medical and surgical diseases of the ear, nose and throat that has ever been published. Such marked adranees in the knowledge of these subjects have been made within a comparatively short time that no apology had to be offered for the presentation of such a thoroughly modern work to the medical profession. The author has rery wisely solieited and secured the vers latest opinions from recognized authorities in his particular specialty and incorporated the knowledge thus obtained with his own, based upon extensive experience and painstaking investigataion, thus giving to the reader an exposition of the subject which earries with it the weight of the leading progressive oto-laryngologists and presenting at the same time the very latest and most advanced thought on the subjcets considered. To enumerate all of the special features of the work would require reference to a large number of subjects, for nearly every chapter has something in it whieh marks it as being entirely modern as eompared to other books on the subject which have found a place among authoritative works. Particular mention may be made of the considcration of diseases of the aceessory sinuses and their relation to other diseases and conditions, the rôle which infection plays in the discases of the ear, nose and throat, and the operative treatment for the surgieal diseases or conditions. Bronchoscopy and esophogoscopy, resection operations for the relief of deviated septum, the intranasal operation for disease of the accessory sinuses, the grafting of the facial nerve for the cure of facial paralysis. and many other subjects which have lately received such marked consideration and altcration of opinion are all considered in a most admirause and satisfactory manner. The wealth of illustrations, a large portion of which are original, add materially to the value of the book and make of it an atlas as well as a text-book. The mechanieal features of the work are also all that eould be desired. In short the book fills a demand for a practical yet comprehensive and modern treatise on the subjects discussed. and the author has fulfilled his efforts in this direction in an eminently satisfactory mamer.

# THE JOURNAL <br> оя $\overline{\text { tuI }}$ <br> Indiana State Medical Association DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA <br> ISSUED MONTHLY under Direction of the Council 

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## ORIGINAL ARTICLES

## THE DIAGNOSIS AND TREATMENT OF

 FLUCTUATING TUMORS OF THE FEMALE PELJIS.*Geo. II. Grant, M.D. RiCHMOAD, IND.

The diagnosis of the rarious forms of fluctuating tumors of the pelvis requires great eare, each individual ease presenting its own peculiar symptoms and difficulties. Direet and conjoined examination must always be employed, and eren by these methods errors may oceur unless the general physieal conditions and past as well as present history of the patient be interrogated and. correetly interpreted. After exhausting all other means of inquiry, it will not infrequently happen that nothing exeept an exploratory incision into the field in question will positively establish the eharacter of the disease and reveal the extent to which the organs are affected. For instance, an ovarian eyst and a parovarian eyst present no different signs, symptoms or history, and both may quite easily have all the symptom-complex of an early tubal gestation. Other instances of the same character will occur to every praetitioner, but the limits of this article prevent a full claboration of the matter.

Certain pelvie aecumulations of a fluid character are conmon to botll sexes, the more important being psoas and iliae abscesses, distended l,ladders (both urinary and gall bladders), renal tumors, floating kidneys. encrsted ascites, intestinal tumors, hydatid, pancreatie and mesenterie crsts, retroperitoneal glands, and crists of the

[^36]urachus. Psoas and iliae abscesses originate either from a breaking-down rertebral bone or from suppuration of the ilio-saeral joint, or of the inner surface of the ilium or aeetabulum. The pus follows the iliac muscle-sheath, finally appearing below Poupart's ligament in the space hetween the outer edge of the rectus femoris. sometimes pus burrows along the sartorins, appearing along the course of that muscle. The history and the fact that pressure on the tumor causes its displacement will usually establish the diagnosis of these collections. Attention to the neerrosed bone and drainage from the lowest point, cither anteriorly or posteriorly, together with care of the general health, constitute the indications for treatment.
lus may aceumulate in the pelvis from any form of abdominal suppuration, as quite frequently, for instance, after appendicitis. After tupture of a pyosalpinx, the pus may gravitate to Douglas cul-de-sac, firom whence, as a temporary means of relief, it may be evacuated by an incision back of the cervix. Sometimes this will aceomplish a completc eure, but the diseased tube remaining many sequele, sucll as fistulx or recurrent pelvie peritonitis, may eventually demand the tube's removal. Unless a urinary bladder is saceulated, the eatheter will determine whether distention is present. Gall bladders extend from abore downward into the pelvis, and hare such a history of pain, with recurrences of jaundice, nausea and other symptoms that establishment of their diagnosis is usually easily made. Ascites is ordinarily easy to differentiate, beeause of its aceompanying diseased conditions. Floating kidners, renal tumors and cysts of the wrachus and panereas also can be traeed from above downward into the pelvis, and each of these conditions will have its own history to aid in a diagnosis. Encysted ascites, mesenterie and
intestinal cests and that rery rare discase, hydatid crsts. may reguire an exphoratory incision to make a positise diagnosis. Preparation must always be made to conclude such an incision hy a complete operation for a cure of the conditions that may be found. The tumors of the pelvis that are distinctively diseases of the female are hedrammios, or uterine costs. extrauterine gestations, orarian and parorarian ersts and the various forms of salpingitis (hydio-, sacto- and pro--alpinx).

A fluctuating tumor inseparable from the pelric brim below, with resonance above and beside it, and known not to be a distended bladder. is probably either an ovarian or a uterine tumor.

If the tumor is ovarian. it prohably has a pedicle and is limited in its range of motion upward. If it is eontinuous with the uterus, giving the impression that no pediele exists. and has a history of rapid growth, with irregular or suppressed menses, morning sickness and perhaps ballottement. tubal pregnancy is probable. If such a case suddenly develops intense pain, with a very rapid pulse. cold. sweaty skin and the ather symptoms of hemorrhage, a ruptured extrauterine gestation probably exists, and the utmost caution must be exereised in its management.

Salpingitis is usually bilateral, and is the sequel of some other disease, either specifie, tubercular or of some less virulent micro-organism. Its symptoms in the early stages are merely those of metritis or pelvie cellulitis. Pain, usually dull, aehing or of a burning sensation, is felt. This is inereased by any local pressure such as cxamination by touch or speculum, and it is exaggerated by the effort to defecate. On local examination a ver'y tender, irregularly swollen mass of a rounded character can be made out on one or both sides of the pelvis. Care must be exercised in sueh local examination for fear of breaking the tumor and releasing its contents iuto the peritoncal earity.

It was the author's experience to have recently ninder his care the three kinds of pelvie tumor last mentioned, all at the same time. One was an unusually large parorarian multilocular cyst. The second case combined the results of a chronie salpingitis and an ectopic gestation. and the third was an uncomplieated tubal erst. In the first or large tumor. the weight of which was thirty pounds. there was a history of irregular. scanty menstruation, which led to the belief that prognancy existed. Ifter a few months, however, the normal function was re-established, and the tumor grew rery rapilly and assumed the
chameteristics of an orarian eyst. The patient complained of soreness and pain of a neuralgie nature above the right orary and imagined she felt fetal movements. but later it was definitely established that these were due to gas in the intestines. The contour of the abdomen was smooth and symmetrical and always found about the same. Wistinct fluctuation was easily detected upon palpation and dulness upon perenssion. Complaint was mate of dyspea, especially in the recumbent position, and a general discomfort due to abdominal distention was experienced.

After a delay of eleren months the patient was fully convinced by repeated eonsultations that the coudition present was an orarian crst and that abdominal section must be done.

On the 10th of March I removed the tumor at the Reid Memorial Hospital. A long incision was required, because of the size of the tumor, commeneing three inches above the umbilicus and extending downward to the pubes. The main eyst contained twenty pounds of fluid, and after delivering the sac in the usual manner eonsiderable difficulty was encountered in removing the supplementary eysts, which were quite firm and numerous and whieh, in addition to the sae itself, weighed ten pounds. While not adherent, the mass was so bulky it was diffieult to remore through the long incision. Her recovery was un-eventful-she walked about the room on the twentieth day and returned home a few days later.

The second ease has the following history:
Nine years ago, after a severe attack of pelvie peritonitis, an oroid, boggy, fluctuating mass was found in the right pelvis about one-half ineh away from the uterus. Operation was urged at that time and repeatedly in the years that followed. The danger of a rupture of this sac being pointed out to the patient by other physicians and myselt, howerer, she steadfastly declined an operation. While there operation was urged, but, because of the rapid improvement while resting in bed, and, with the use of iehthyol tampons and hot donehes, she coneluded to wait until fall for the laparotomy, which she knew at last was ineritable. On Mareh 23 I ealled on her at her home, found her in excellent spirits and cutirely free from pain, but still haring an oroid, fluctuating mass in the pelvis, connected with the uterus. I slight menstruation had occurred and she was rery urgently entreated to have an immediate operation for fear of a rupture of the sac: however, she again refused. It $9: 30 \mathrm{a} . \mathrm{m}$. on Mareh 25. less than fortr-eight hours after this conversation. I was hastily called to ser this
patient and found her apparently about to die. She was cold, leer features pinched and drawn, and intense pain present in the right pelvic region, and no radial pulse could be detected. I hastily summoned an ambulance, but waited an hour before removing her to Rcid Memorial Hospital, for fear she might perish on-the road. Recovering somewhat, I removed her, and the laparotomy revealed a chronic, inflamed tube, within which pregnancy had occurred and progressed to about the sixth week, and then the tube ruptured. The abdominal cavity contained an immense quantity of blood. The hemorrhage was immediately controlled by clamps: hot sponges were packed in the pelvis. She made an unerentful recorery. The intercutaneous stitch was removed on the tenth day, and two days later she returned home, without any elevation of temperature or other disagreeable symptoms following the operation. No more frightfully marked contrast could possibly exist than that which was present immediately before rupture of this tube and the condition of the patient directly afterward.

In describing the symptoms of a tubal abortion, such as this one was, J. Whitridge Williams, in his "Obstetrics," says:
"In many cases the first manifestation of the abnormal pregnancy is the sudden occurrence of intense, lancinating pain in one or other ovarian region, which is soon followed by faintness, the patient rapidly passing into a state of collapse. This indicates the occurrence of abortion or rupture. In the former case the patient usually rallies promptly, whereas, if rupture has occurred, the collapse deepens, the face becomes extremely pallid, and the patient complains of intense pains in the lower abdomen. The temperature is persistently subnormal, and an examination of the blood shows a marked diminution in the number of red corpuscles and in the amount of hemoglobin. Death may occur within a few hours, unless the hemorrhage is checked by operative means."

The third case came to my office on April 6. She had a history of irregular menses twice within two weeks, the last time the hemorrhage being rery profuse and exhausting in character. She also had serere backache, especially on the left side, and headache always more severe at night and when lying down or after being on her feet rery much.

On examination a fluctuating tumor, the size of a very large lemon, was found about one inch away from the uterus. This was free from pain on pressure. The danger of the case was explained and, the possibility of a pregnancy being
mentioned, an immediate operation was urged, which was agreed to and performed on April 9. On section a tubal cyst was found and removed, and the patient made a very satisfactory recovery, the intercutaneous stitch being removed on April 18, and she returned home ten days later.

In a recent letter from Dr. A. J. Ochsner on the treatment of fluctuating tumors of the female pelvis, he gives as his opinion that all such tumors must be removed surgically, and that such is his routine practice, after having observed them long enough to insure a good result.

## discession.

Dr. H. G. Nierman, Fort Wayne:-I think possibly the question as to whether thirty-pound tumors should be inmediately remored is a debatable one. Probably dividing the operation into two sittings will reduce the amount of shock and give the patient a little advantage in that respect. I offer this as a suggestion. There are cases with no complications. There are others with hemorrhage and shock that die as the result of the operation.
Dr. T. B. Noble, Indianapolis:-I wish to take the opposite riem, that in large multilocular ovarian cystoma tapping should be resorted to before remoral, in the way mentioned here. With local anesthesia, puncture is a matter directly under our observation. Two days ago I was compelled to do, under local anesthesia, a rery difficult and trying operation in a case of adenocystoma which had been tapped several times, to have the fluid recur, the leakage through the tapping producing a very widespread reaction in the peritoneum, in which the ovarian tumor was adherent to everything that it came in contact with. Under a local anesthetic and nothing else this tumor was remored. So that I am certain that with the experience I have had with local anesthesia we do not hare to contend with such a procedure as tapping or temporizing treatment. We can do radical, curative work by local anesthesia.

Dr. Nierman:-This was a thirty-pound tumor I was speaking of.

Dr. Noble:-Mine was a thirty-pound tumor also.

Dr. M. I. Rosenthal, Fort Wayne:-This is 1908. The way to remove a cyst is to take it out, and if you want to tap it at all tap it after it is out.
Dr. Goethe Link, Indianapolis:-I favor tapping in orarian cyst after the belly wall is opened and not until then. Yet if there is a case in which the patient is so exhansted that she can
not stand the eomplete operation we have another proeedure known as marsupialization, in which the edges of the crst may be tacked to the belly wall and left for later developments. This method of handling ovarian cysts does not hold good altogether in dealing with another fluctuating tumor of the pelvis mentioned in the paper. and that is large pelvic abseesses or even large pus tubes. I am very much in favor of dealing with large pus tubes where the patient is very ill by first opening them through the ragina and draining them and later on taking them out through the anterior abdominal wall. We must not, however, tell the patient that we expeet to cure them by this drainage operation, whieh is only to prepare them for later treatment. But in doing this we occasionally have a patient get so well that they will not submit to further procedure. This is especially true, as I have found, in cases in which the infeetion is due to something aside from gonorrheal infection. In gonorrheal infection there will be found different compartments in the pus tubes and we can easily demonstrate that they can not be drained through the vagina.

In closing the discussion, Dr. Grant said: "Regarding what has been said as to evacuating a pelvie abscess or an ovarian eyst by means of a troehar, or by aspiration, I heartily agree with Dr. Rosenthal.
"Beside thanking the Scetion for their attention, I beliere I have nothing more to say."

## TECHNIC OF HARE-LIP AND CLEET PALATE OPERATIONS.*

Josepir Rilus Eastaran, M.D. INDIANAPOLIS.

In the works of most writers upon this subject we find the statement that it is never wise to operate for cleft palate on a child under 3 years of age, and that the time of election is from this age up to the age of 6 years.

It is said that infants do not bear operations well. There is rery little support for this statement.

Brophy, of Chicago, who has had an enormous experience in this field, believes that there is less nerrous shoek after an operation on a child of a few weeks of age than when the babe is older,

[^37]that the bones are softer, that after operation the ehild will be better nourished, that the muscles of the palate are given an opportunity to develop instead of atrophy, and that the patient does not get into the habit of articulating through the eavern of the nose.

Lane, of London, whose work in this field is distingnished both for its fiber and volume, declares the best time for eleft palate operations to be the day after birth or as soon after that day as possible. I have an assured eonviction that the newborn child bears surgery mueh better than is generally imagincd. The capaeity of the tissues for repair at this time is at the best. Resisting power has not been redueed by the breathing in of eold air through a roofless mouth. Digestion has not been impaired by unsatisfactory feeding. Moreover, at this time the impression of pain is probably not so acute (Lane). The very cireumstance that the infant has just passed through the birth eanal with all the brutal mechanieal insults which may be incident to this excursion indicates the presence of a tolerance of traumatism whieh beeomes less in evidence as the infant grows older.

In Lane's operations during the first week the infant rarely eries or shows evidenee of being in prain. It is almost never sick after the anesthetie and takes its food within an hour or two after the operation with evident enjoyment.

Brophy says the baby weighs more just after birth and has greater vital resistance than for months later.

In an ordinary cleft palate operation at this fime the loss of blood should be trivial, but, how(rer this may be, the danger from loss of blood is no greater than at a later period. Our experience has never suggested that young infants do not bear the loss of blood well. If there is any reliable eridence to the effeet that a very young infant does not bear the loss of a given proportion of its blood as bravely as an older individual we have no knowledge of it.

We must not forget Lane's injunetion that the suceess which attends these operations, so far as the perfection of speeeh is eoneerned, varies direetly with the degree of possibility of development of the nasopharynx at the time of operation and with the freedom of the passage of air through it.
"When, as in cleft palate, the septum between the nasopharyx and the mouth is incomplete, the mechanieal faetor upon which the nasal carities
depend for their development is in abeyance and, therefore, they do not increase proportionately in size. In consequence, the sides of the alveolar arch become approximated, as do the edges of the cleft, and the portions of the roof on either side become more rertical and extensire."

Many surgeons use as an argument in favor of delaying the operation the statement that the changes in the roof of the mouth which take place in time render surgical interference more simple at a later date. In other words, they say "the less developed the nose, the more easy the operation for the closure of a deficiency in its floor."

Lane, however, contends that "since the caliber of the nasal cavities bears an inverse proportion to the height of the palate and as the lower part of the nasal fossa is that through which air is chiefly transmitted, this is especially encroached upon by any abnormal increase in the height of the palate. Being aware of the mechanies of the nasopharyns, it will be easy to recognize the immense importance of separating the mouth from the nose as early in life as possible so that the pressure exerted by the air as it passes through the former can be brought to bear upon the walls of the space and the nasal carities and the adjacent bones influenced by normal derelopmental factors.
"The conclusion that closure of the cleft in no wise remedies defective articulation was formulated after observation of cases operated too late. A closure of the cleft does remedy defective speech if the operation is performed early in the period of growth. The peculiar intonation of the cleft palate child, the miscalled nasal tone, is due to the circumstance that the outgoing air does not pass through the nose at all, and when the cleft is elosed at the usual late time, there is in the extremely underdeveloped nose very little space through which air can be transmitted and, of course, there is rery little good in trying to derelop this space after such a late operation."

Brophy says: "The later the operation the weaker the lungs, the narrower the nasal passages, the more abundant the adenoids and the more difficult the operation for the closure of the palate cleft from the technical standpoint."

Brophy adrises against closing of the palate cleft and that of the hare-lip at the same time; that is, he waits until the palate has completely closed and the patient has recovered before deroting any attention to the lip. It is needless to say that when both operations are done at the same seance the palate should be treated first, for the reason that the existence of the hare-lip gives more room in which to work, but in the contro-
versy as to whether the lip should be operated with the palate I have preferred to follow the teachings of Lane, who operates the lip and the palate at the same time. He does this for three reasons.
The first and most important is that the soft parts which are removed neeessarily from the margins of the lip may be of the greatest service in completing the closure of the anterior part of the cleft of the palate. "Indeed," he says, "to one unfamiliar with the employment of these portions of the lip in this manner the large area of cleft which the pieces of lip can be made to close is most striking. They have a remarkable ritality and bear an extraordinary amount of handling and suturing with safety."

The second reason is that postponing the harelip operation for a time reduces the chances of union.

The third reason is that the sooner the pressure of the complete lip is brought to bear upon the segments of the upper jaw as well as upon a displaced premaxilla, should it exist, the more rapid is the approximation of the bones forming the front of the cleft and the restoration of the premaxilla to its normal relationship. The inueoperiostemm covering the premaxilla is also usciul in helping to close the eleft.

The pressure whieh is exerted upon a protruding premaxilla by the lip after its continuity has beell effected is, in the opinion of some surgenns. sufficient to bring about its backward displacement into the interral betreen the two maxille. If the hare-lip is closed very early, this takes place with rapidity, but if the hare-lip and cleft palate are ignored for months or years it will be necessary to free the premaxilla with : chisel or a stout knife before it can be pushed back into the interval between the two maxilla inl front. It is needless to say that the prolabium and the premaxilla should never be cut away, but always used to elose in the gap in front where the cleft of the lip is bilateral or that of the palate is complete. Surgeons to whom these cases come frequently have all been informed at some time that a rolled up piece of tissue hanging from the septum of the nose had been promptly and confidently eut away, the family physician either being ignorant of the ralue of the prolabiun in closing the defect of the lip or perhaps being unable to understand at all the meaning of the presence of this centrally developing portion of the lip.

After early operations upon the lip and palate the nose is gradually pushed forward by the growth of the septum.

In Lanes technic for narrow cleft, if the soft parts overlying the edges of the cleft are thick and vascular, a flap is cut from the mucous membrane. submucous tissue and periosteum of one side, having its attachment or base along the frce margin of the cleft. The palatine vascular supply is divided while the flap is being reflceted inwards and it depends for its blood supply on vessels entering its attached margin.

The mucous membrane, submucous tissue and periosteum are raised from the opposing margin of the eleft by an elevator, an incision being made along the length of the edge of the cleft.

The reflected flap with its scanty supply of blood derived from small vessels in its attached margin is then placed bencath the elevated flap whose blood supply is ample and it is fixed in position by a double row of sutures. In this manner two extensive raw surfaces, well supplied with blood and uninfluenced by any tension whatever, are retained in accurate apposition.

If a wide gap is found to exist in soft palate, Lane dissects up a flap, eonsisting partly of mucoperiosteum from over the hard palate and partly of oral layers of the soft palate. He turns this flap over, doorlike, it having been dissected free down to the edge of the cleft, and sutures it to the freshened edge upon the opposite side of the defect.

In many cases of wide defect, after dissecting up a flap in this manner on one side upon the oral surface of the soft palate, a similar flap is dissected free from the upper or nasopharyngeal surface of the soft palate so that it is then possible to fill in the defect by applying these flaps to cach other, raw surface to raw surface, so that the tissue bridging the defect is covered both above and below by mucous membrane.

The Brophy uranoplasty is often the one of choice after the age of six months. After seizing the tip of one of the divided halves of the uvula with fine forceps, a sliarp tenotome is introduced at the uvular end and a narrow strip is split off all the way around the edge of the cleft. The strip should come off in one picce and cut with the knife introduced obliquely so that more mucosa is cut from the oral than from the nasal side. When the suturing is begun, it will be seen that this bereled edge is an important factor in precise coaptation.

By incising parallel to the edge of the cleft the soft palate is split and all the mucoperiosteum is raised from the hard palate, being left attached in front and behind. Through the incision thus made in the oral mucous membrane, the nasal mucous membrane and the tissues at-
tached to the posterior edge of the hard palate on cach side are divided with sciszors.

In practice it will be possible almost invariably now to bring the edges of the cleft together without division of the hamular process, as in Billroth's procedure. For in high palatal arches the two mucoperiosteal flaps will fall together after laving been loosencd, like the two halves of a cantalever draw bridgc.

Incisions dividing the muscles of the soft palate are quite unnecessary and misehierous in many cascs.
'The use of Brophy's wire and lead plates in his simple uranoplasty is likewise unnccessary. The wire and plates frequently slough and cut out, eren in Brophy's hands.
C. H. Mayo, after having prepared the parts for the insertion of sutures and having made two lateral incisions close to the alveoli, introduces a narrow tape which surrounds the right and left mucoperiosteal flaps. Traction on the ends of the tape brings the flaps towards the operator, steadies them and facilitates the introduction of the ordinary sutures. When the sutures are in place and tied, Mayo crosses the free ends of the tape and fixes them by tying a ligature around them at this point, cuts off the superfluous portions of the tape and, lastly, slides the whole tape until that part fastened by the ligature lies in the nasal instead of in the oral cavity. The tape fastened as above, it was claimed, acts as an efficient relaxation suture or support; it also drains secretions from the nasal cavity into the mouth. Into the lateral incisions Mayo packs iodoform gauze to "splint" the flaps.

In our experience, the use of Mayo's tape has proven very disappointing. It is true that with the tapes passed through the lateral incisions around the flaps, the edges of the flaps may be held easily in apposition and the introduction of sutures thus facilitated. However, the practice of tying the tape and leaving it in as a sort of support or relaxation suture is somewhat dangerous. If it is tied tightly enough to give any additional support whatever, it must be tied tightly enough to strangulate the slender flaps in some degree. We have used the tape several times and believe that its presence has always interfered somewhat with union. The results have been better since it was discarded. Sherman, of San Francisco, prefers waxed tape, which he says does not become infected.

In suturing together the edges of the cleft in ordinary uranoplasty, there is no better suture material than fine ehromic or iodin catgut. After using silk. linen, celloidin hemp and Lane's Chi-
nese twist, we find simple chromic catgut the best of all. The sutures should, as advised by Sherman, be mattressed to the end that the greatest extent of raw surfaces be coapted.

We think that many of the special instruments are unnecessary.

Many gags have been presented, but it is difflcut to appreciate their superiority over the Whitehead. Small French needles serve admirably, and for this work there is no better needle holder than a good Halsted artery clamp, the cerations upon whose jaws have been filed down a bit.

The anesthetic employed should be ether, administcred in the form of vapor through a curved tube passed into one naris and attached to a double Junker bottle or to the double bottle of Brophy devised for this purpose.

We confess we have had no expericnce with Brophy's compression operation, belicving, perhaps with insufficient reason, that, though ideal in the first week, it should be employed in such selceted instances only for the reason that it involves forcibly pressing together the tro sides of the upper maxillary arch with consequent narrowing of the nasopharynx and vault of the mouth. Brophy occasionally divides the malar process to the and that the edges of the cleft may be forced together. If the operation is done in a very young infant, subsequent growth and development may overcome the narrowing of the channels consequent upon this compression, but perhaps not.

In the Brophy opcration, with a stout needle threaded with silk or celloidin hemp, strong silver wire is passed through the superior maxilla just back of the malar process and high enough to be above the palate. In other words, the wire passes from the outer surface of one alveolar process through both sides of the upper jaw to the outer surface of the other. One or two additional wircs are passed through both superior maxilla and in front of the first. The ends upon tach side are twisted together over lead plates after the cdges of the cleft have becu forced together by powerful compression of the two superior maxillary bones between the operator's thumbs.

In every operation for complete hare-lip it will be observed that the ala of the nose is pulled to one side and the nostril much widened. To the end that there may be no tension upon the sutures and that the nostril may not be too broad, it is important that the nose be scparated from its deep connections upon the side concerned. This is readily done by passing a pair of scissors between the lip and the superior maxilla
and completely severing the soft tissues from the bone over an arca approximately as large as a 25 cent piece.
"The upper lip is everted and pulled upwards and outwards by the finger and thumb of the left hand. The mucous membrane is incised at its reflection from gum to lip and divided from the premolar region on one side to the premolar region on the other side, if necessary. Through this incision, with knife and scissors, one separates the soft parts from the bones (keeping the instrument close to the bone). Particular at. tention must be paid to the separation of the ala of the nose from the bone."

To what extent must the soft parts be separated from the bone? Binnie answers: "Until the edges of the cleft of the lip, when placed together, show a tendency to lie in apposition so that the sntures when introduced may be tied without giving rise to tension."

After trying most of the suture materials for harc-lip, we are convinced of the superiority of horse hair sutures alone, unless there be considerable inevitable tension, in which case silver wire may be used.

When silver wire is used for suturing, it is usually attached to a straight or curved needle by simply bending back one end of the wire after it is passed through the eye. It may be introduced somewhat more easily by using a needle armed with a loop of silk thread with which the wire suture is drawn into position. The free ends of the sutures are then twisted, quilled or shotted or secured by glass beads, according to the degree of tension and the character and location of the wound.

If thick wire be threaded indirectly through the eye and doubled backward upon itself, there will be formed at the necessarily broad butt-end of the ncedle an awkward lump. 'To jerkily draw this hump through delicate tissues, like those of the soft palate or the lip of a young infant, must, in the nature of things, cause tearing and contusion which detract from the usefulness of the suture. The jerking of the lump of wire through the tissues becomes especially disagreeable after one or more sutures have been introduced and secured, the likelihood of loosening or displacing such already adjusted sutures being considerable. The entrance and erratic excursions of the loop of wire produce an unnecessarily large skin opening and stitch canal and predispose to infection and consequent "cutting out" of the suture.

To obviate these difficulties, we have used in hare-lip operations a No. 24 standard gauge sil-
rer wire suture, eighteen inches in length, to one end of which is attached with silver solder, after annealing of both metals, a full or half-curved steel needle. 'This gives a perfectly smooth joint which may be drawn through delicate tissues without adding unnecessary laccration to that produced by the necdle point and whieh does not catch abruptly at the skin. In most cases, reightecn inches of wire will suffice for a halfdozen sutures, a picee of the desired lengtlo being cut from the distal end of the wire after each introduction of the needle. The ncedle, after the sutures have been thus cut away, may be rearmed with wire or discarded.

Some years ago there was introduced to the profession a silver wire needle with a hollow threaded butt, into which a wire suture might be screwed and fastencd. This needle has not come into general use, for the reason that its butt. though beveled in both dircctions, is much larger in diameter than the wire it admits and its attachment to the wire is insecure.
silver wire is generally reeognized as a useful suture material. It is easily sterilizable. Moreorer, it has been repeatedly demonstrated that metallic silver has an inhibitory effeet upon the growth of bacteria. A properly prepared silver wire suture is, therefore, not simply aseptic, but more or less "antiseptic."

Silver wire is unirritating and strong. If it is sterilized by heat, as by boiling in soda solution -with instruments- the metal becomes annealed and is thus rendered soft and pliable and less liable to break when twisted.

I shottcd wire suture is easily remorable, since the shot is not apt to be obscured by the swollen dissues and is easily seized with foreeps and cut from the wire. Ifter the suture has been introduced and cut off to the desired length, the ends are passed each through a perforated shot. One shot is elamped and the other is "shirred" or" drawn along the wire to the skin with moderate firmness, to bring the wound edges together, and then compressed. The ends of the wire suture shoukd be cut "flush" with the surface of the shot. The malleability of silver enables the surgeon to give to the wire suture any desired bend. This is impossible with a silk wormgut suture which, wherever possible, assumes the form of a ring. This disposition of silkworm gut to shape itself, owing to its "springiness," into a ring, is not infrequently responsible for the first laeeration of the tissues, which results in complete "cutting out" of the suture.

It will. however, be rarely neeessary to use a suture of the character of wire. In almost every
case of incomplete hare-lip, strong horse hair is in every way satisfactory. The elastieity of horse lair and its possibility of almost eomplete sterilization, together with its relatively small diameter, militate against scar formation. It is the only suture material in use whieh grows naturally in the skin. It is construeted of epithelium, is non-irritating and, if properly prepared. is the best possible suture material for use in the skin.

The writer's more or less original method of arranging the hair sutures is as follows:

After freshening the edges of the cleft aceording to the best method suitable in the partieular case, the first horse hair suture is introdueed at the top of the eleft, penctrating the skin about one-eighth of an ineh from the edge of the cleft on one side and emerging at the mucous border. It is then passed through the flap on the opposite side in the same way, except in the opposite direction. This top suture is tied and the ends left long. Then at the vermilion mucous border a similar horse hair suture is passed, precisely coapting the mucosa. It is tied and the ends left long. Traction upon the ends of these two sutures eoapts the freshened edges of the cleft so that intervening sutures may be put in with remarkable faeility. Especially is this true of the horse hair sutures upon the mueous surface. the upper lip being everted and pulled upwards by traetion upon the lower suture, the entire length of the freshened edges of the mucosa being exposed.

In order to aroid the occurrence of a notch on the lip after the wound has slırunk, the freshening is done after one of the classie methods which are legion. But in order to make assurance doubly sure in this instance, a little roll of gauze about the size of the distal phalanx of one's little finger is fixed with its long axis transversely across the plane of suture and the long ends of the uppermost and lowest horse hair suture are tied over the little gauze roll so that the line of suture is wrapped, so to speak, around the gauze for about two-thirds of its eircumference. This simple plan will effectively prevent notching aftcr healing is complete and, moreover, it keeps the dressing in place, a matter of no slight importance. A good many surgeons use relaxation sutures. For example, Lane almost invariably introduees two relaxation sutures as follows:

He starts the needle upon the mucous side about a third of an inch from the edge of the cleft. passes straight through the lip and out upon the skin side. He then introduees the needle at its minute aperture of exit and passes
across the plane of suture to the opposite side, keeping the needle just under the skin and emerging again about one-third of an inch from the line of suturing. He then passes the needle back through this second opening in the skin, penetrating all of the tissues of the lip, including the mucosa. The suture is tied upon the mucous surface, an objection being that the knot is left upon the mucous surface where the infant will instinctively poke at it with the tongue. Such sutures should be omitted, if possible.

Binnie's suggestions in this connection are rery sensible. "Should tension on the suture be feared, a strip of adhesive plaster cut dumb-bell shape may be placed from cheek to cheek with the narrow part across the upper lip in such a way as to relieve tension. If, however, the soft parts of the lip and cheeks have been sufficiently separated from the bones at the beginning of the operation, then such a measure is unnecssary and undesirable, as it simply irritates the already irritable patient. It is not necessary to apply any dressing to the wound, as Nature soon seals it with dried blood-clot. Until the sutures are remored there should be as little interferenee with the wound as possible. If it is going to heal, it will heal under the scab, and the best intentioned endeavors to clean the wound will merely interfere with Nature's work and do no good. as cleanliness can never be attained in such case. Care must be taken so to fix the little patient's arms that scratching of the wound is rendered impossible."

All of these operations should be done with the patient in Rose's position in order that breathing may not be obstructed by blood gravitating into the air passages. In the ease of a small infant, this simply means the placing of the baby in the dorsal recumbent posture and allowing the head to lang down orer the edge of the rubber pillow.

## DISCUSSION.

Dr. J. II. Oliver, Indianapolis:-At the present time the controversy in regard to these operations seems to be between an absolute bony apposition of the divided parts, as adrocated by Brophy; and the plastic methods of Lane. Until the last year I have been rather arerse to Brophy's method, because it seemed to me the operation was extremely radical for so young a subject. I had been taught that the tro extremes of life bore operations badly. I now believe the two extremes bear surgical procedures remarkably well. Within the last two years, after risiting Brophy’s clinic and watching him operate, I hare
been won over to the belief that absolute bony apposition of these parts in early infancy is the proper thing. Infants stand this operation very well. I have reference now solely to the hard palate. I believe that Brophy substantiates his claim that the cleft in the palate makes the superior maxillary bone just that much wider than the inferior, and to get total occlusion we must bring these bones together in order that the teeth may properly touch. Now if this be true. the plastic operations so definitely and brilliantly laid down by Lane will not be necessary on the hard palate. Within the last two or three days I read an extremely interesting paper by Sherman, of San Francisco, a master in the art, who frank1r admits he has never had the nerve to perform the operation and does not believe it is a justifiable procedure. Why? Because the bones after being held together three or four weeks by silver wire sutures would certainly spring apart. Within the past six months in one of my eases the bones did spring apart. But we should leave the sutures longer. I not infrequently tighten my silver sutures from time to time until I get union, fibrous though it may be. I am beginning to bewith Lane that the operation should be done within the first forty-eight hours. The parts are soft. infants stand hemorrlage very well, and there is rery little of it.

As to the delayed operation, the operation on the soft palate, after eighty-fire months, when Brophys operation is no longer arailable, we are still a little at variance, although we are pretty well agreed upon the hard palate operation. I am at present using lead plates without the latcral incisions. I am going to do a ferr more before I come to any conclusion concerning it. There is certainly danger of sloughing. Brophy uses horse hair in the palate operations just as in the lip. I do not think Dr. Eastman's external applications in hare-lip are justifiable. Dr. Allen's appliance is very ingenious, just as all his appliances are, but I must say, after trying it and the plaster and rarious forms of retention sutnre, I do not use any retention suture at all. 1 use horsehair and nothing else. I do not think retention sutures are necessary.

Dr. H. R. Allen, Indianapolis:-In cleft palate work there are two stages-the early infant stage and the adult or neglected stage. The reason we have so many methods of treatment of this defect is because we have a big variety of clefts in the palate and lip to meet. Dr. Oliver quotes Brophy, that the upper jaw in these cases is wider by the width of the cleft in the palate than the lower jaw. This is and is not true. I
believe Dr. Oliver has seen cases in which the upper teeth corresponded with the lower, and then again the spread ones where the lower jaw will slut up inside the upper. In a body a day old strong fingers will pinch the cleft together, as is shown in the head of the fetus passed around, and up to six months we will hare an easy job to press the cleft together, and after you have pulled it together the ideal cure is to get bony union. It is, as the Doctor has said, a spring under tension, and when we take the support away they may separate. But let them separate. You lave union of the soft parts and all you want is to separate the nose from the mouth.
Now as to the later operation, after six months, it is certain that if you send a case to Brophy he will do the Brophy operation, but his operation is somewhat limited, and he admits that it is sometimes unsuccessful. The Brophy lead plates do not set horizontally and all the support you get is from the wires.
(Dr. Allen exhibited some cuts of the DaviesColley operation and described the operation, and then continued:)

As to the hare-lip operation, they do not all require the same operation. It is a matter of sculpture in liuman flesh. It is a matter of artistic work. It is said liare-lip pins must be taken out within a fert days. I hare left them in two weeks. The adhesire plaster strip for taking off tension is of no use. You might as well tattoo the patient or paint him green. This cleat of mine they can not get away from.

Dr. Darid Ross, Indianapolis:-There is not so much difference in the treatment of hare-lip as in cleft palate, and certainly not as many absolute failures, because we deal with tissues in the lip where the resistance is better and they have a tendency to unite without trouble. But when $\pi e$ come to operations on the palate we deal with tissues that do not stand pressure. The tendency at present is to discard the lateral incisions to reliere tension in this line of work, and I beliere in the main it is right, but we must bear in mind that we have not yet attained an ideal method of reliering tension where it is necessary. My objection to the Brophy plates is that they make pressure orer a great deal larger area than is necessary, and that pressure does harm. In the second place is the objection Dr. Allen has raised, that we get the pressure only at an angle, and we hare seen where they cut through and do harm and leave the condition worse than at first. What we want to do is
to relieve the tension well back where we have the separation, and the Brophy plate does not do it to our satisfaction. Certainly those of us who have not had such a large experience lave not been entirely successful.

Dr. J. F. Barnhill, Indianapolis:-There are two things that are intended to be done in cleft palate and hare-lip. First is the esthetic result, and I think especially in the performance of the cleft palate operation the surgeon is too careful to get that esthetic result and hinders or damages the roice that may result, for the surgeon, of course, wants to show that the closure is perfect. All of these operations, to a certain extent at least, interfere with muscular action of the soft palate, and to the extent of this interference will there also be interference with the voice. Consequently nearly all plastic operations will not give a perfect roice. The less the interference with the levator palati and tensor palati muscles the better will be the result. Hence the Brophy operation is the ideal one and I can not help but believe it is correct in principle. Certainly all the cases I hare seen have had this widening of the superior maxilla, this lack of union and not lack of derelopment, as he maintains, and if you put these parts together without interference with the muscular derelopment of the parts you will get this almost perfect roice of which Brophy tells us. Brophy does two operations, the one Dr. Eastman illustrates, and the other, the infantile. The Lane procedures, I believe, are the best that can be used in adults and children past the Brophy operation age. But if one expects from these operations that the roice is going to be what it should be he is going to be disappointed. The esthetic result will be good. but not the roice.

Dr. IV. H. Gilbert, Eransrille:-Wre all must concede Brophy has taught us a great deal about cleft palate. In fact, he has been the pioneer in successful hard and soft palate surgery. One thing he has taught us is the absolute necessity of infantile operation. It is impossible in any but the rery young cases to achiere ideal results, and general practitioners should be so taught. My experience with the Brophy operation has been most excellent, with the exception of one case where there was some leak. Too many times sentiment stands in the way of good results in these operations, and the family is told by the physician to wait till the child is a year old. This is wrong. I am conrinced that the first forty-eight hours is the best time, when, as Dr. Allen has stated, the cleft can be closed with
the fingers. Brophy tells us it is not caused by lack of derelopment, but by the lower jaw pressing against the upper jaw in embryonic life, thus pressing it apart.

Dr. B. D. Myers, Bloomington, called attention to the low degree of sensitiveness of the child at birth, which is also true in the lower animals. A baby rabbit can be operated on up to twelve hours after birth and not need an anesthetie at all, even such an operation as an enucleation of the eye, and it will make no outcry; but eighteen hours after birth he sets up an awful howl. The reason is that at tine time of birth the sensory nerves are in an imperfect state of medullation and are, therefore, not good conductors. The same holds true in the human, although it is not known at what time the medullation of the sensory nerves becomes more complete. Osmic acid is found to blacken medullated nerves, but they do not blacken with this agent up to fourteen hours after birth. Another experiment in this line is that the heart of a rabbit, if taken out and placed on a platter within twelve hours after birth, will continue to beat for a half hour, but if taken after twenty-four hours old it will cease immediately, showing the different stages of vitality and sensitiveness to external influences, and this may be taken adrantage of in the operations referred to.

Dr. J. R. Eastman, Indianapolis (closing) :The compression treatment of cleft palate is not original with Brophy'. I agree with the other gentlemen that the use of the lead plates is founded on a very faulty principle, because undoubtedly we have wire traction and nothing else. I think Dr. Allen is wrong in his statement that the use of this plaster strip does not interfere with the contractions of the risorii and orbicularis oris. IIe will find in practice that if the plaster be drawn backward toward the ear and twisted across the nose you can so draw the tissues of the cheek together that the child can do little crying or laughing. Dr. Allen's deriee, which in his hands gives good service, also has the fault that it makes pressure on the two sides, which might interfere with the blood supply to the wound.

## THE EARLY DIAGNOSIS OF INGUINAL HERNIA.

## B. Van Sweringen, M.D. FORT WAYNE, IND.

It would seem that nothing could be added to what has already been written on the subject of hernia which would give any further aid to its
thorough understanding by student or practitioner, and yet one meets with cases in which it seems difficult, if not impossible, to say whether or not a hernia exists. If one now turns to his "mass of material" on hernia for help on the question of diagnosis he will be rewarded by several very commonplace observations and find that the subject of diagnosis is dismissed as though it were the least important or the most obvious of the whole subject.

That it is not always a simple matter to diagnose hernia was illustrated by the following ease: Mrs. D., a young married woman, was seen by me on account of a persistent vomiting. She had had a "stomach trouble" for several years which manifested itself by sudden attacks of vomiting associated with an illy-defined pain in the lower abdomen on the right side. These attacks came on at irregular intervals and would last for varying lengths of time, but would pass away finally after resuming the recumbent posture. When I was asked to see her, she had been much worse as far as the nausea and vomiting were concerned and was then under the care of a stomach specialist who was using lavage, diet, etc., to no effect. Upon examination pregnancy was suspected to be responsible for the aggravated condition, and no diagnosis made of the underlying trouble, although it was thought that the stomach symptoms were reflex. Time proved the suspicion of pregnancy to be well founded, and the nausea and vomiting subsided largely after a few wceks' confinement to bed on a liguid diet.

She noticed a swelling in the right groin when three months advanced in pregnancy, which appeared during the act of vomiting and which I found to be a bubonocele, although it was not down at the time the examination was made. She was very negligent about her truss and continued to have her "stomach spells" even after her delivery. Finally the rupture made its appearance, and I was successful in gaining her consent to an operation. The hernial sae was found intimately connected with the round ligament. It was obliterated, a new inguinal canal was formed and a perfect recovery and result obtained.

The symptoms that led to the operation were those which were not recognized by the patient to be in any way eonnected with the rupture, namely, the nausea and vomiting and the occasional pain in the side. Of course, the fact that a swelling was known to have been present on several occasions was a great help in the diagnosis in this case, although twice the attack looked very much like a beginning appendicitis on ac-
count of rigidity and tenderness being added to the other symptoms, and the fact that at these times no tumor was discovered. The demonstration of the relation between these symptoms and rupture is proven, it seems to me, by the length of time which has elapsed since the operation (four months) without their recurrence. Formerly she would have had a great number of attacks in that time.

The symptoms usually given in text-books as indicating incipient hernia are pain, reflex disturbances and impulse on coughing.

Pain as a symptom of hernia is present in varying degrees. It may be totally absent. It may be rery slight and referred to merely as a sense of weakuess or discomfort which appears gradually and grows worse as time goes by, being brought on by any act which increases intraabdominal tension, as coughing, sneezing or lifting. It may eren be described as a griping pain. It may be very acute. The milder grades may be referred to parts more or less remote from the internal ring, as the back, the epigastric region or the appendix region. The more severe attacks are usmally located properly.

Reflex disturbances may or may not accompany the pain. Of these, nansea and vomiting are the most frequent. One of my patients suffered attacks of nausea and romiting at irregular interrals, often after a full meal, and she had learned by experience that she was obliged to assume the recumbent posture to secure relief, withont the knowledge of the presence of a beginning hernia.

Impulse on conghing is spoken of as the most reliable sign, and when it is well developed and ummistakable it is pathognomonic. One is directed to invaginate the scrotum or labimm on the finger pressed into the external ring and then ask the patient to cough, when the bowel will be felt to touch the finger. In relation to this test a word of cantion should be uttered, for under the conditions abore mentioned there will almost always be felt an impulse when the patient coughs. And if one be too enthusiastic about early operations for hernia he may find an expected congenital hernia absent. The difference bctween one impulse and the other is that in the case of an incipient hernia the impulse is decisive, the bowel hits the finger in an unmistakable way. The other impulse is less distinct and seems to be more the result of a general increase in tension than a local impairment of the abdominal wall.

[^38]
## THE PUERPERAL PERLNEUM; ITS IROTEC'IION AND REPAIR.*

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As this subject is of general interest, and since it is the experience of very excellent obstetricians that results from primary repair of lacerated perinei are more or less disappointing, I take this opportunity of presenting this subject for your consideration and discussion. I will confine myself to primary lacerations, prevention and repair. I have used all manner of suture material under most farorable conditions, where the patients in the institutions were placed on the operating table and all sloughing parts or apparently deritalized parts carefully trimmed away, and yet I was never surprised to find, after forty-eight hours, more or less, that the stitches were loose or the wound gaping. I think frequently very little more is accomplished than the natural tendency to repair. I have occasionally been surprised to find what appeared to be a serions laceration unite spontaneously.

In my surgical practice, as a rule, at least for a number of years, most of the perineorrhaphies which I have been doing were preceded by an attempt at primary suture. (By the way, the practitioner who never has a laceration in his obstetrical practice either never has many cases or never looks to see.) There are local conditions just postpartum which are inimical to primary union by suture; to these we will refer in a fer moments. While resident at the Gebehr Anstalt in Prague I lad ample opportunity to give this subject especial study, nake some observations and arrive at some conclusions which I think in the main are correct and are borne out by experience in private practice.

As previously stated, conditions inimical to wound repair must be considered. In the early months of pregnancy the raginal mucosa (and submucosa) is in a state of vascular stasis, assumes a bluish color and is hypertrophic and thickened so that it has a peculiar soft velvety feel-in fact, it is in a state which we might term a physiological edema. In the course of delivery this mucosa as well as the underlying tissues is subjected to contusion, not by sudden impact, but by prolonged pressure, and finally these tissues give way, leaving a ragged, torn wound through the mucosa, muscles and faicia. through any one of these tissues, or through all of them, depending upon the extent and depth

[^39]of the tear. This is followed during the next few days by necrosis and sloughing and by marked swelling and edema. The edema finally subsides and, as a rule, at least the edges of the wound undergo necrobiosis. The deeper structures are somewhat protected by the soft and thickened mucosa, and the reaction in the muscle and fascia is consequently much less, although there is always discharge of fluid mixed with thrown-off cells from these deeper structures.

In Prague, in the Gebehr Anstalt, after delivery, in some cases immediately. and others the next day, the patients were placed upon the operating table, sloughing or excessively traumatized parts pared away under most favorable circumstances, and practically every rent in mucosa and muscle carefully sutured; yet I lad to admit that results on subsequent examination were not what might be expected. I could not help but notice that the maximum edema was in the mucosa and that as a result, if the stitches were made reasonably tiglit, in a few days the swelling would cause them to cut through so that the wound would gap with the stitches hanging loose, or if the stitches were placed loosely the disappearing edema would leave them so loose as to render them practically useless. In that the same condition presented. regardless of the suture material (catgut, silk or silkworm gut), the natural conclusion was that the fault lay in the placing of the suture. For some time I obtained better results from a single purse-string suture introduced through the skin at the rulvar margin, passing under the raginal mucosa along the border of the rent and tied, allowing some drainage below and locking out the discharge above. While the results are better, yct the pelric fascia and muscles were not brought into their proper surgical apposition.

The following method of primary repair is rational and surgical and overcomes the objections of the ordinary througli-and-through method as before mentioned. All the sutures are introduced in the ragina and of catgut (ten day). The needle is entered through the muscle and fascia, aroiding the mucosa, care being taken that the ueedle enters deep laterally and picks up a good hold in the muscle. The more muscle included in the stitch the less the tendency to strangulation when the same is tied. The stitches may be introduced, interrupted or continuous, beginning above, and the last onc knotted in the ragina, including the sphincter vaginæ, but not transfixing either the mucosa or skin. If the
levator and sphincter are broaḍly coapted with deep sutures, these elastic and stretched muscles will dilate without damage to the sutures. The stitches should be introduced before the placenta is delivered. The structures under the mucosa are rery readily picked up so that these stitches in the raginal canal, placed from above downward, re-establish the continuity of the dirided structures, which is all that need be accomplished by any operation for lacerated perineum. The introduction of the stitches in this manner has the additional advantage of not being painful. The mental anguish which surgical interference always produces when the woman thinks everything is or should be happily over with is aroided when our manipulations are at an end with the delivery of the placenta. The placenta acts as a great sponge passing orer the sutured area, and, if the sutures are properly placed. in no way interferes with their efficiency.

In lacerations of the third degree much the same condition that is found in the raginal mucosa is found in the rectal mucosa, where prerious congestion with hemorrhoids and dilated ressels have precedel a division of the mucosa by dirulsion. In these lacerations the first stitch, a purse-string, entering at the anal border, following parallel to the rent in the submucosa of the rectum and anus, is placed and tied, thus locking oft the rectum. A second buried stitch (catgut) is placed above this, including muscle as an additional support to the first stitch. Now a buried gut suture unites the sphincter, and the skin is sutured over these two stitches. The laceration is now reduced to a tear of the second degree and repaired as above described in one or two layers of stitches.

Now a word as to the protection of perineum against laceration. Laceration may be due to some dcfect, anatomical or histological, in the perineal structures themselves; may be caused by excessive size of the presenting part ; may be caused by precipitate passage of the fetal parts through the outlet, not giving time for the gradual stretching and distension, or may be caused by too early extension of the head, so that the lead presents a longer diameter while making extension, instead of the lesser diameters as occurs when the occiput has passed well under the pubic arch. Lacerations frequently occur just as the chin is passing orer the fourchette, or perineal raphe, since it presents its most angular contour at the most vulnerable part of the perineal body. The shoulders may also cause material lacerations, especially if they extend with
their most angular surface over the perinem in the median line. Frequent examinations, espeGially with the ungloved land, and insuffieiently lubricated, as well as douches which wash away the natural lubricants, may also be predisposing factors.

Support of the perineum by external pressure, Se usually adrised, can eertainly do no good, except by way of retarding a rapidly advancing head. Idditional pressure externally can only add to the contusion of the parts. Toward the termination of the seeond stage of labor the expulsive pains become more continuous and meeting with a lesser resistance than when the presenting part is passing through the bony structure higher up, they beeonse more efficient. hence the head does not adrance and recede as it does higher up, lut has a tendeney to rapidly adrance througl the parts. In the upper maternal diameters. before the head engages under the pubic arch. the head advances with the pain and recerles in the interim, allowing a restoration of circulation, a stretching gradual and repeated with the least inerease of vulnerability of the parts. To seeure this advantage for the perineum, control of the patient must be had at this critical time and usually this ean be secured, assisted with mixed anesthesia (morphin-atropinether). By explaining the danger to the parts the patient can be urged not to bear down during the pains, and when the head is about to be born it can be deliberately brought through between uterine contractions by voluntary effort on the part of the mother. As the head reaches the perineum the gradual distention may be antieipated and assisted by the introduetion of two or thrce gloved fingers well lubrieated, the parts gradually and forcibly distended during the pain. The head should be retarded and precipitate delivery over the perineum prevented by manual pressure upon the presenting head, not upon the perineum. Too early extension should also be carefully prevented. This is probably one of the most important steps in preserving the perineum. The head should be kept in flexion manually until the oceiput is well passed under the pubic arel, thus presenting lesser diameters to the outlet when extension takes place. When extension begins, lateral rotation of the head ean be secured so that the chin in delivery is made to extend laterally rather than over the median line. Very frequently, if this is not done, all having gone well up to this time, the impinging angular part starts a tear in thic fourchette which rapidly extends into the deeper structures. The shoulders, as before stated, should also be carried over the
perineum obliquely by two fingers inserted under the presenting sloulder and carrying it laterally: so that its most angular parts shall not engage the most rulnerable part of the perineum.

The second stage completed, careful inspection should be made and all laeerations repaired as above mentioned. Extensive rents in the mueosa should be closed by a submueous stitcli placed like ordinary subcuticular stitch. Tubber gloves should always be worn in obstetrical operations. They are a protection to the mother and in many instanees are also a protection to the obstetrician.

## discussion.

Dr. David F. Lee, Indianapolis:-I thank Dr. Rosenthal for this most excellent paper and the practieal manner in which he has handled the subject. I admire very much the technie he suggests for the repair of the perineum and quite as much his suggestions for protecting the perineum.

Dr. C. H. English, Fort Wayne:-In reeent years I have been using for suture material the ten- to twenty-day chromicized kangaroo tendon. I think it is more elastie and is better in every particular for this repair work than any other material I have used. In regard to eatching up the lateral pelric faseia, we do not appreciate the importance of proper apposition and care of the pelvic faseia, as well as the muscle. As Dr. Rosenthal has said, these lateral sutures should be deep and the tissues should be earefully coapted. There should be no neeessity for hurry, and we should draw every stiteh just so tight and no lighter and we will have better results.

Dr. H. R. Allen. Indianapolis:-I have had the opportunity in Fort Wayne of seeing some of Dr. Rosenthal's cases. He is certainly most skilful in his manipulations and plastic work and his results are ideal, and from the standpoint of manipulation and the beautiful way he expresses himself in the paper I want to eongratulate him.

Dr. Holland, Bloomington:-The paper of Dr. Rosenthal is thorough and gives us what can not be found in the text-books. The introduetion of sutures is essential in all eases torn, exeept perhaps cardiac and nephritic cases, which I think present such a variation as to make it advisable to wait for the secondary operation period. I have had a few cases like that. In general practice we are often confronted by lack of hospital facilities, proper assistants, ete., and being a great distance from headquarters, and if these sutures are introduced they almost always pull out. We can not make them tight enough to get apposition, and failure is more frequent than a good result. The question of suture material would
rary according to the results obtained with that material. Chromicized catgut seems to be the prevailing material. The position the ehild assumes in delivery can be controlled by the operator, and I think that has never been sufficiently accentuated by the text-books. The head can he slightly rotated so that the chin and angular presenting parts present laterally on the perineum rather than in the median position. The fourchette presents another easily torn part, and having once begun to tear it continues very easily, as Dr. Rosenthal has told us. The shoulders and clbow are frequently guilty of beginning a tear which is completed by the breech, if it be large. The shoulder in being rotated so as to make it present laterally, puts the other shoulder in a more anterior position to the ehild's body, decreasing somewhat the diameter of the shoulders.

Dr. Jane Ketcham, Indianapolis:--I like Dr. Rosenthal's point about the support of the perineum. When you support the perineum the force is directed at a tangent with the force from the head and the force is rather in the line of least resistance rather than the way you want it to be. The method of Dr. Varman, of Berlin, is a good one. By simply pushing the head down with the thumb on the occiput as it passes under the symplisis, and when it comes to extension pull up with the fingers. The force is just exactly where you want it to be and can be easily controlled with mueh less effort on your part, and it has the advantage that the mother has no conception that the labor is being delayed, which is always the impression they get. The perineum does not necessarily have to be touched at all. The hand, also, does not have to go into the ragina and there is less danger of infection.

Dr. T. B. Noble, Indianapolis:- Oftentimes the ill results that come from operative procedures at this time are due to faulty light. I have heell using for some time one of those single dry cell hand electrie lights, which can be snapped in connection and brought directly to bear upon the field of operation. It is ample and sufficient and helps out in a practical way very materially.

Dr. G. Link, Indianapolis:-I slould like to add the suggestion that all women who are childbearing should be examined before labor in order to determine the size and strength of the levator ani muscle, and especially with regard to the thickness of the so-called pubo-raginal levator. There are two reasons for this:. In those with heary pubo-levatores we may expect to have bad lears. Examining it after the labor has been finished, if we do not find it in the condition it was before, even though we do have a very slight lear of the skin, we should repair this minscle, for
therein lies the trouble, and not in the large. gaping skin and mucous membrane wound.

Dr. M. I. Rosenthal, Fort Wayne (closing) :I only again emphasize the importance of securing union after primary operation for laceration of the perineum. The fact that one has a deformity, a large lacerated tube where the vagina ought to be, is a secondary matter, as the consequent increasing pathological conditions whieh will follow the destruction of the musculo-fascial diaphragm of the pelvis, prolapse of the uterus. subinvolution, tubal disease, prolapse of the rectum, of the bladder, with consequent cystitis and pyelitis, ete., can be prevented by a properly executed seeondary operation, but the straightening of the rectum with the consequent danger of infection of open tears in the vagina as well as the nterus and the periuterine vascular areas, is a matter of immediate importance. It is this necessity for immediately restoring the normal backward direction of the rectum to which I also desire to draw attention in this paper.

## REASONS FOR THE RADICAL OPERATION IN INGUINAL HERNIA.*

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## INDLANAPOLIS.

There are few abdominal conditions wherein prompt and efficient interrention promises so much ; few in which the dilatory makeshift methods of the past promise so little, as in the rarions forms of incarcerated or of strangulated hernia of the inguinal region.

The refinements of modern aseptic surgery have brought to the truss wearer a release from the annoyance and uncertainty of this artifieial support which will eventually be relegated to oblivion along with many other devices whose only recommendation is the very doubtful one that they aroid a surgical operation.

At the time when the peritoneum was a noli metangere and before herniotomy was brought to a point of approximate surgical perfection, both in its technic and results, the truss, doubtless, served a useful purpose. but it is no longer a device either of necessity or of election. Furthermore. it often lends a sense of security not to be depended upon, for not rarely have cases come to the notice of surgeons in which the incarceration of the intestine occurred after the patient, after having removed the truss, had retired.

[^40]In point are the cases of two farmers of adranced age, who laring retired after the ingestion of a heary meal somewhat distressed by the accumulation of gas in the intestines, were awakened during the night to find the scrotum distended and themselves unable to reduce the hernia for the first time in many years.

Again, the truss used over a long period of time without doubt tends to increase the hernial opening, since in the very nature of things any pressure on the ring sufficiently firm to retain the riscera within the abdominal cavity will stretch the already more or less relaxed pillars after a period of time.

Nor is this all. No man wearing a miserable truss is capable of work up to his full efficiency. If he attempts any particularly heavy work. he does so at the risk of his life, particularly if having had an irreducible descent he falls into the hands of such members of our profession as believe that taxis should be employed even to the death of the git from assault and battery.

Dr. G. Paul La Roque, of Richnond, Ta.. in a paper published in the Virginia Medical SemiMonthly of Dec. 26. 190~, says: "A certain amount of enteroptosis is a part of the pathology of the affection, and in many cases a distorted structure and position of the enteric canal are present and progressive in severity.
"The recurrent colic, indigestion and other functional disturbances forming a part of the symptom-complex of most hernias are attended by the same impairment of health and danger of gastroenteric catarrl due to other causes, in addition to the menacing effects of the hernia itself.
"The recurrent, often constant. backache and general fatigne incident to complete and often incomplete hernia caused by irritation, traction upon and distortion of the delicate, highly organized nerrous structures within the peritoneal carity, are often debilitating and causative of semi-invalidism.
"It is difficult to estimate even approximately the number of vague cases of indigestion, obscure backache, and other such common and generally miscrable complaints due to this cause."

Naturally the question arises as to the province of the truss in children. Perhaps in children the truss treatment, as a routine practice, may be seriously considered, since perhaps two-thirds of all cases of inguinal hernia in children under 4 years of age get well under treatment by the truss. This, however, in the very large majority of such cases, should be regarded as spontaneous cure and not as truss cure. The best that can be said in behalf of the truss in such cases is that it arrests the descent of the hernia at the external
abdominal ring, thus possibly preventing an increase in the size of this opening and, in addition, protecting the individual, no doubt, to some slight degrec against strangulation.

It should be noted, however, that a large mumber of surgeons, both in this country and abroad. are now adrocating operation as the primary method of treatment in infants. Coley, who adrocates truss treatment in children, enumerates the following important exceptions. He says. first: "If there is a history of strangulation that has become reduced by taxis, I believe that an operation is indicated, no matter how roung the child.
"Sccond, in cases in which, despite carefully directed truss treatment, the hernia has become irreducible, I think early operation should be advised.
"Third, in cases in which the rupture can not be controlled by a truss, and as a consequence is gradually increasing in size.
"Fourth, in all cases of femoral hernia, the reason for prompt operation in this class being that a cure by persistent truss treatment is practically unknown at any age.
"Fifth, immediate operation is indicated in all cases of hernia associated with reducible hydrocele or fluid in the hernial sac, inasmuch as it is impossible to control the rupture by means of a truss, and there is, hence, nothing to be gained by waiting."

A careful perusual of Coley's exceptions leads one to the conclusion that they include practically all cases.

Likewise, taxis along with its associate, the truss, must pass to the museum of surgical antiquities, except as it is used by the old truss wearer. Its employment should rarely be made by the physician or surgeon except most briefly and most delicately.

If taxis will safely reduce an incarcerated intestine, it will do it quickly. And even though the intestine after prolonged manipulation with its necessarily ensuing trauma be replaced, the question as to whether the intestine will be restored to normal becomes a serious one. Indeed. who can say whether it ought to be replaced or not.

The condition of the intestine will depend more upon the amount of constriction it has suffered than upon the length of time it has been incarcerated.

Frequently, with the tissues incised down to the intestine and the ring and with the former directly in the grasp of the fingers, it is difficult or even impossible to replace the intestine without cnlarging the ring ; then how can one expect
successfully to carry out the manipulation with the skin, fat and other tissue intervening between the fingers and the involved gut?

In short, the hernia that can be redueed by taxis is in no dire need of reduction.

It is not the intestine which descends through the large ring in the old truss wearer that gives rise to grave symptoms, as illustrated in one of the cases meritioned above, in which the intestine had been incarcerated for eight days and at operation seemed but little the worse for its excursion to parts without the abdomen. Far more grave are those cases in which the intestine descends through a small ring known to exist or where the patient, formerly sound, strains humself by great muscular effort and finds his scrotum filled with abdominal viscera. In such a case as the latter, so rapidly did sphacellation ensue that at operation twelve hours later the intestine could be picked to pieces with the finger.

Occasionally there appears a case in which the history is to the effect that the patient had a lump in the groin for a period of months or years without symptoms. Later, after some museular effort. distressing symptoms come on with evidences of intestinal obstruction, although there is but little depression, a temperature not subnormal and a good pulse. In three such cases the writer found the omentum densely adlerent around the entire circumference of the ring, the intestine which had distended being so proteeted by its cushion as to give rise to few serious symptoms and, upon operation, to seem little injured.

If after very gentle and very brief manipulation the intestine can not be returned to the abdominal cavity, it beeomes the plain duty of the attending physician to resort to surgery either at his own hauds or that of a competent surgeon. He must decide at once to do away with brute foree and brook no delay. If resort to surgery is had promptly, it will often decide whether the physieian continues or gives way to him who is pleased to eall himself a funeral director.

Done promptly, the operation is a simple one. It is nearly always necessary to enlarge the ring by ineision, and in this neeessity we have added proof of the futility of attempting to reduee through skin and subjacent tissues what we ean not reduce short of a considerable enlargement of the ring.

But if for various reasons the doctrine of proerastination has prevailed until upon operation the intestine is found black, friable, its luster gone, then reseetion is demanded. And here it may be said that it is better to err in resecting an intestine which might have restored itself than to return one which is not viable, sinee by
the commission of the former error the patient has a chance for life; by the latter error, none whatever.

Haring determined upon resection, our experience has led us to believe that the Murphy button affords the greatest opportunity for success.

Frequently these operations must be made in eountry houses after nightfall and with surroundings far from ideal and our patients ofttimes in extremis. And while using suture methods in other forms of intestinal surgery, the button gives us a method by which the work can be lone quickly and, so far as our experience goes, in a large percentage of cases suecessfully.

If the writer has made upon his hearers some small impression as to the paucity of those cases of strangulated or incarcerated hernia which are amenable to reduction by manipulation, he las accomplished his purpose in reading his paper.

## discussion.

I) P. Darid F. Lee, Indianapolis:-I fully concur in the many good things Dr. Eastman has said and believe, as he says, that the time will come when the dangerous instrument known as the truss will be relegated to the past. In this day of clean surgery, of perfect technic, this day when we recognize deformities and eorrect them, to advocate, as I have in my paper, the examination of the region of hernia in childien the same as we do the eyes and nose, and, inasmuch as hernia is always due to congenital defects, correct them in infancy or early childhood at least, is the proper procedure. As the wearer of a truss hecomes older he becomes more indifferent about his condition, and the first thing he knows he comes down with a strangulated hernia. Many times there are contraindications for operation and he dies. I firmly believe it is our duty to correct in childhood eongenital hernia the same as clubfoot. The truss is at best a makeshift, and many times at operation we find evidences that the wearing of a truss has complicated conditions and farored strangulation.

Dr. J. H. Oliver, Indianapolis:-There are a few surgical emergencies for which every medical practitioner should fit himsclf, however much he may be opposed to surgical procedures in the main, and one of them is strangulated hernia. I have recently been ealled to operate one of these cases in the very center of another state, and when I asked why a local man was not employed was assured that there was not a man in that ricinity who would think of doing the operation. I am pleased to say this did not occur in Indiana. A couple of English surgeons have recently called the attention of the profession to the danger of
redueing hernial masses en bloc. Nearly 200 of these eases have been studied. The word taxis eauses eold shivers along my spine. I beliere thoroughly that a hernia that ean be redueed is in no partieular danger and will reduce itself if let alone long enough. But taxis is something that should be obliterated. In a ease operated within the last ferr weeks the gut had sloughed off and dropped baek in the abdominal eavity after four days of waiting.

I do not look upon reseetion of the bowel with that lasting hope that the author of the paper seems to express. Operating anywhere in the middle of the night with artifieial light does not give me results in resection of the bowel that I consider ideal. Now while I do not wish to be understood as adroeating the replacing in the abdomen of gangrenous bowel, yet there is a little bit of teehnie that I have used for some years that has resulted well. In operating a ease ten or fifteen years ago there were suspieiouslooking spots in the bowel. I took a piece of iodoform gauze and with a No. 0 eatgut took two or three stitehes in the omentum superiorly and inferiorly and brought the whole thing out through the opening. Seven days afterward it let loose and I had a beautiful feeal fistula. Three or four weeks afterward the man was sound and well and went baek to work. On a hunting trip afterward the fistula opened again, but under rest in bed promptly healed and he has been well ever sinee. I have employed this a goodly number of times, and only reeently in a man is years old. Slipping the suspieious gut, enveloped in a bit of gauze, back into its natural habitat a fistula opened on the sixth day. In three weeks he was out at work on his farm, showing that this is a safe proeedure. During this time I have both reseeted the bowel and used the Murphy button, and they have died. Erery ease in whieh I have used this proeedure has gotten well, and I think it is worthy of consideration.

Dr. E. D. Clark, Indianapolis:-Agreeing with Dr. Eastman, my idea is that strangulated hernia should be operated before it beeomes strangulated. As soon as tre have made a diagnosis of hernia we have a surgieal ease, and the more quiekly and the more strongly we adroeate this the better it will be for humanity at large. A ease I had about three weeks ago illustrates one danger not mentioned here. A part of the strangulated mass had been reduced and a part of it left in the sae and had been there for two years, and when I opened the sac I found the omentum had undergone a change whieh appeared to be either tubereulous or malignant. Examination proved it to be an endothelioma.

So there is danger of allowing even omentun to remain unredueed on account of the pathologieal change that may take place.

Dr. M. I. Rosenthal, Fort Wayne:-Ferguson has indieated that the pathology of inguinal hernia, at least, is due to the faulty attachment of the transversalis and internal oblique tendon. The proper treatment, therefore, is to restore the normal attaehment. The question of operating young ehildren has long been a debatable one. I have seen patients in my praetiee upon whom I placed a truss in infancy grow to manhood and they have no hernia. In the faee of this I can not say we should abandon the truss entirely; but I will say that in the last ten years I hare not placed a truss upon any individual who was not an infant in arms or had some disease of the lungs or heart which eontraindieated operation. In children I do the Ferguson operation. There is danger of atrophy in handling the cord in ehildren. In adults I do the Bassini. So far as the use of sutures or the button is eoneerned. that depends upon the habit of the operator and the speed with whieh he can work. In femoral hernia, however, where the ring is neeessarily small, you will find eonsiderable difficulty in returning the bowel through the ring in using the button. Personally I have been using the bitton less often. Now I ean see that the use of iodoform gauze for the purpose of draining a suspicious bowel may at times be very good, and I may in the course of the next two weeks have oecasion to use it, but from the surgieal standpoint it is not ideal. In the first place resection is not difficult, and I have not found the mortality excessive, and it is probable that Dr. Oliver has un across an unusually unfarorable elass of cases. My experience has been most satisfaetory. and this includes, by the way, one ease reduced an bloc. The romiting and pain had ceased, but the inearceration was internal, and we found three feet and two inches of dead bowel beeause of embolism due to trauma eonsequent upon excessive taxis. This three feet and two inehes of bowel was resected with a perfect result. In ancther ease of umbilieal hernia redueed by taxis the romiting had ceased, the pain was gone, but the pulse stayed up and there was a condition approaching eollapse. Notwithstanding this the patient was brought from Columbia City to Fort Wayne, a distance of twenty miles, plaeed on the table and eighteen inches of absolutely gangrenous bowel reseeted, with a perfeet result. In another case of reduetion en bloc the pain and romiting had ceased. The bowel was brought out and was apparently devitalized. Sponging with saline solution for a time, the eirculation re-
turned, the bowel returned and a perfect result was had there. So far as old people are concerned, I should like to lave the opinion of the essayist. I have been surprised to find how nicely they stand operation.

Dr. H. G. Nierman, Fort Wayne:-It is important in these cases that the healthy portion of the bowel and the stomaeh should be cleaned and drained. If necessary it should be drained by any method, sueh as putting in a catheter. The poisons created by the bowel eontents is what may kill the patient even after you have operated and think they are going to return to their normal selves.
Dr. T. B. Noble, Indianapolis:-As long as we have hernia I believe we will have to contend with the truss. I have no doubt there are men in this room who know all about the dangers of hernia and truss, but who are wearing trusees. Personally I am opposed to the truss and agree with everything that has been said against it and against taxis, and would suggest this idea relative to taxis. We have eases many times in which we are refused operation. The doctor is compelled to do something. In such cases I would suggest that taxis be refused and that operation be urged. It is a good time to drive home the arguments in favor of operative procedures. As to technie, these cases present a wide field of difference in management. While I think the Murphy button is one of the most ingenious devices ever presented to modern surgery, yet for myself I would rather use the suture method, because I believe I can do an end-to-end anastomosis about as quickly as I ean put in a Murphy button, and I feel a good deal easier to know there is no foreign body in the intestinal tract which must pass at some future time and may eause further trouble.

Dr. J. R. Eastman, Indianapolis:-As Dr. Lee says, we still have saloons, but not so many as formerly, and so we may continue to have the iruss, but we have not as many as ten or fifteen years ago. I have had to deal with more than 200 cases of hernia and I have never put a truss on anybody. I have always been able to persuade my patients that the proper thing to do was to have the parts restored to their normal anatomic relationships. I believe to put a truss on a hernia is about like stuffing an old pair of overalls through a pane of glass, whereas to operate radically is to reglaze the window. The truss is a poor makeshift at any rate. The truss belongs to the preaseptie era, and the time is not far distant when it will be consigned to the lumberyard and the museum of antiquities. I subscribe to the statement of Dr. Clark that every strangulated
hernia should be operated before it becomes strangulated. This is driven deeply into the minds of every surgeon who has to deal with them. I have never had any trouble with children. I believe they stand it well. We do the Czerny operation in which the sutures are passed througlt all the layers. The child bears the operation well and is relieved of the awful possibilities that hang over the patient like a Damoelesian sword, ready to cut his head off. I saw a ease of strangulated hernia day before yestcrday, in a city in Indiana, whieh had been diagnosticated obstruction of the bowel. Here was a wroman with a tumor the sizc of the butt end of an egg at the femoral opening, with all the symptoms of ileus. She was in the hands of two prominent physicians, one of whom had recognized it and the other had completely overlooked the hernia as the eause of the obstruction. We vould not believe a competent man would overlook so important a landmark. The woman said there was no pain, the lump did not change in size when standing or lying down and there was 110 fluctuation, there was nothing peculiar about the percussion note. It felt like a fatty tumor, a lipoma, and I am sure I felt very donbtful about it being a case of obstruetion. On opening the abdominal wall in the median line, which should always be done, here was the gut jammed down through the ring, and blaek. I think the patient is dying. I wish to put myself on record as saying that bcfore a dozen years roll around we will look with a good deal of eondemnation upon the truss. There is no age limit for operation. If the patient is so ill that he can not stand any surgical operation, of course, he will not stand this operation, but that is rare. But those that have been megleeted so long must keep the truss on. They :hould have been operated fifty years ago.
Dr. C. IH. McCully, Logansport:-Two points I wish to emphasize. One is the statement made by Dr. Eastman as to the age limit. Two of my most satisfaetory cases of operative interferenee were at the extremes of life. The other point I wish to emplasize was brought out by Dr. Nierman, the flushing of the bowel and clearing it of all toxins as early as possible. The fatal cases die from toxemia and not from peritonitis.

Dr. T. B. Eastman (closing) :-So far as Dr. Rosenthal's question as to the way in which old persons stand these operations, my experience is that they stand it surprisingly well. There has been some discussion as to pain in these eases of strangulation. I simply wish to say this and try to impress it upon you, that dead guts tell no tales, and it is a very good thing to remember.

# THE JOURNAL <br> OF THE INDIANA STATE MEDICAL ASSOCIATION 

Devoted to the Interests of the Medica! Profession of Indiana

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## EDITORIAL

## TIIE FRENCII LICK SESSION.

The 1908 session of the Indiana State Medieal Association, held at Freneh Liek June 18 and 19 , can be said to hare been fairly sueeessful notwithstanding numcrous drawbaeks. The attendanee was not as large as usual, but this was to be expected, considcring the fact that the session followed so closely the Chicago session of the Ameriean Medieal Association, whieh Indiana medical men attended in large numbers. No doubt many physicians felt that they could not afford the time and expense required to attend two sessions so elose together, and, therefore, chose to attend the A. M. A. session as offering the greater benefit. Then, too, Freneh Lick is not easily reached, espeeially by those living in the northern part of the state, and many no doubt remained at home rather than make the long and tiresome trip, with numerous ehanges of cars, during one of the hottest weeks we have had this year. But Frenelı Liek is a delightful place for a meeting, and the Association lacked nothing in the way of splendid accommodations and excellent entertaimment at the hands of Mr. Taggart, who was the real host for the Assoeiation at its French Liek session.

The seientifie program was above the average, and it is regretted that some of the exeellent papers were presented to small audienees or read by title owing to excessive heat which drove the nembers to seek eool places in the park rather than confinement indoors to listen to papers and discussions. The addresses of the guest of honor, Dr. J. Mr. Anders, of Philadelphia, and the president of the Association, Dr. D. C. Peyton, of Jeffersonville, printed in the July number of Tiae Journal, were of exeeptional merit and greatly appreeiated by the members. Numerous other valuable contributions were worthy of note, and particularly the papers forming the two or three symposia on the program, all of whieh will appear in future numbers of The Journal.

An unfortunate arrangement, and one whieh we hope ean be changed at future sessions, was the confliet of the meetings of the House of Delegates and the meetings of the sessions. The resolution passed by the House of Delegates re'quiring the printing of the reports of all offiecrs and eommittees in adrance of the session, thus cioing away with the reading of such reports at the session, will materially shorten the time required by the House of Delegates to transact the business of the Assoeiation.

The amendment to the by-laws, making the fiseal year of the Association the period between January 1 and December 31, and requiring the payment of all dues on January 1 of eaeh year. will greatly aid in the proper business management of the Association and do away with the misunderstanding heretofore existing as to when dues are payable. It also greatly faeilitates the work of keeping a reeord of the subscriptions for The Journal, aṡ a provision of the amendment requires that dues, which inelude a subseription for 'The Journal, shall be paid in advanee for the year, and any member failing to pay the dues by February 1 stands suspended and is not entitled to the rights and benefits of the Assoeiation.

Another important aetion of the House of Delegates was the change of season for holding the annual session, it being unanimously decided to hold the next session in the fall of 1909 , preferably the last week in September or the first week in Oetober, the exact dates to be decided by the officers and the committee on arrangement. It is thought that this ehange will result in a larger attendance and inereascd interest and enthusiasm in the seientifie work. It certainly will be a distinct adrantage to have the session at a time when it does not eonflict with the annual session of the A. M. A., and, as the fall is one of the most delightful seasons in Indiana, the attendanee ought to be larger than cver before.
'The new president of the Association, Dr. Geo. D. Kahlo, of Freneh Liek, is well known and popular all over the state, and for many years he has been an active and influential worker in the Ascoeiation. He was formerly dean of the Central college of Physicians and Surgeons of Indianapolis, and now holds the chair of professor of medieine in the medieal department of Indiana University.

The selection of Terre Haute as the place for holding the next session gave general satisfaction. Vigo County has a large and progressive medieal society, and no doubt the physicians of that county and of the eity of Terre Haute in particular will entertain the Assoeiation in a highly areditable manner.

RECENT STUDIES ON SCARLET FEVER.
In the July number of the American Journal of Obstetrics occurs an article of the above title by Dr. Amna IV. Williams, of New York City, based upon studies carried on at the Research Laboratory of the IIealth Department for the last five years. During the past year an increase of about 200 per cent. in the number of cases of scarlet ferer has been observed in their contagious disease hospitals and the majority have been of the moderately severe type with marked streptococcermic sequelx. deaths occurring late and apparently as a result of the secondary lesions, the total death rate being about 7 per cent.

Despite the early recognition of the disease (Sydenham, 1685) definite knowledge is still lacking upon many points, such as the chicf site of the rirus and source of infection, the duration of infectivity of the virus, the exact period of incubation, the pathognomonic symptoms, the only one of which may be said to be the enlargement of the papilla at the tip and sides of the tongue. and lastly the minute pathology of the disease. The only constant change found is a universal hyperplasia of the lymphatic tissue and the only characteristie change reported is the appearance of the bodies described in 1903 by Mallory, who found in four scarlet ferer antopsies, bodies resembling protozoa. He found none of these bodies in the skin of living cases. The name cyclasterion scarlatinale was given because of the more common radiate forms. In the above-named laboratory, Field, after an examination of the skin from twenty liring cases and ten autopsies, with a number of controls, concluded that practically all of the bodies were degenerations of the cytoplasm of the host cells. From a further examination of the skin from seventeen living cases, thirty-three autopsies and nine controls, the same conclusion was reached, viz., that the bodies were not organisms, the same cycloplasmic change being found in the skin of a control whose death had oceurred from a serere burn. Nor was the tiny organism described by Prowazek isolated in any case. More promising results seem to offer from a minute histologic examination of the exudates and superficial tissues of the mouth and nose, and perhaps the general lymphatie system.

Although the streptococcus pyogenes can not be assigned as the real cause of the disease, yet there is no question as to its rôle in the secondary lesions and sequelre. And yet Park's observations in the Viemna clinics on the use of antistreptoenccie serum were disappointing. In certain gland and joint cascs, where the prognosis was
bad, Wilson, of the Contagious Disease Hospital, ha- made use of streptococcus vaccines, with encouraging results, although the number of cases so treated has been too few for positive conclusion.

The failure of the antistreptococcic serum and the apparently successful use of the streptococcus vaccine bring up once more the question of the importance of using autogenous raccines rather than depending upon an unknown strain of the infecting organism for an immunizing or antibacterial effect.

But as far as the true etiologic factor of the disease itself is concerned, we seem about as far away as was Sydenham. Therefore let it be hoped that the work will go on until the second commonest infectious disease will be as clearly elucidated as that caused by the Klebs-Loeffer and Koch bacilli.

## WHEN TO OPERITE FOR INTRA-ARDOMINAL HEMORRHAGE DUE TO TUBAL PREGNANCE.

The above was the subject for a most interesting symposium at the recent meeting of the American Gynecological Socicty, and as was remarked by Dr. Joseph Taber Johnson, "one was struck with the differences of opinion that had been expressed by the fellows as well as with the difficulty of attempting to decide why so many doctors disagree."

It was generally conceded that there were only about 5 per cent. of these cases that were of the "tragic" or so-called "cataclysmic" type, inl which the life of the patient was in immediate danger from the acute hemorrlage. So that in 95 per cent. of the cases the first hemorrhage will ccase with the depression of the hcart's action from the actual loss of blood. In this latter class some surgeons advise waiting until the symptoms of collapse have subsided and the patient given time to react and be brought into a better operative condition. Pari passu, who can say whethei a case is to be of the fulminating type and end like the 5 per cent. of "tragie" cases or whether it will fall under the larger group of 95 per cent. that will seem to recover from the first hemorrhage, or what right have we to expect that, once the patient comes out of the collapse attendant npon the initial hemorrhage and the heart regains some of its lost vigor. the eroded vessels will not again begin to bleed? And, too, even though a woman with a ruptured tube be for-
tunate enough to suffer but the one hemorrhage there is the liability to infection awaiting the extensive abdominal or pelvic hematocele, the suffering attendant upon adherent pelvic structures or perhaps a fate similar to the case reported by Robb in which the patient died on the tenth day after a deferred operation from rolvulus due to intestinal adhesions. Given a dextrous operator with experience and celerity, and it seems reasonable to suppose that there is a greater chance of obriating these latter complications by a quick remoral of the clots, placenta and fetus, if found, together with the ligation and remoral of the lacerated tube, a gallon of warm saline left in the belly, and a rapid closure of the belly, further shock to be combated by intravenous or subcutaneous injection of a saline solution, than by deferring the operation until the patient is either dead or a chronic invalid. And this opinion was shared by a goodly number of the contributors to the symposium, among them Janvrin, Vineberg, Montgomery, Frederick. Grandin, Manton, A. Lajthorn Smith, Borée. Currier, Ehrenfest. P'fannenstiel, Brooks Wells and J. T. Johnson. Krug belicres in a happy medium. neither delaying operation as long as has lately been adrocated by some, nor yet subjecting the patient to a precipitate laparotomy. Among those who seem inclined to wait are Simpson, Boldt, August Martin, Gordon and Robb.

Lawson Tait, of Birmingham. the pioneer of ectopic pregnancy; who, in 1883 , performed the first laparotomy for a fully ruptured tubal pregnancy, did well when he pointed out that tubal pregnaney was never a medical, but always a surgical disease. And in the light of our present knowledge on the subject, how utterly fallacious does the old time galvanic therapy appear! Although Tait beliered that it was impossible to diagnose unruptured tubal pregnancy and once declared that "no living man had ever made a diagnosis of extrauterine pregnancy before rupture." yet so fully convinced was he of the possible danger to the patient that he afterwards declared that "if there be any reasonable :nispicion that there was a tubal pregnancy which had not ret ruptured, I should recommend operation." Fortunately Tait's teaching las by now been so greatly improred upon that many cases of the unruptured variety have been diagnosed, operatcd upon, and reported. As far back as 185\%, Janvrin pertinently remarked, "in any case in which from the rational and physical symptoms I became convinced that I had to deal with a tubal pregnancy, even before symptoms of a rup-
ture in the peritoneal coverings of the tube occurred, I should most earnestly urge laparotomy and perform it if I could obtain the consent of the patient. Even if mistaken in my diagnosis, I should find something which ought to be treated surgically." And again our knowledge of the etiology and pathology of extra-uterine pregnancy teaches us the wisdom of such a policy. By the remoral of an offending pus tube in such a case, many a woman would be saved the risk of a future extrauterine conception with its certain termination. Hence we are constrained to conclude that the time to operate for intra-abdominal hemorrhage due to tubal pregnancy is nut one day or one week after it has occurred, nor the same day nor hour, but to urge upon our patients with old inflammatory conditions of the tubes the danger of allowing them to remain dormant. ready to start a fire at any moment, or in other words, operate before extrautcrine conception has taken place, just as we would remove an appendix which has given signs of inflammation, before it becomes the seat of a pathologic condition that actually threatens the life of the patient.

## EDITORIAL NOTES

Terre Halte in the fall of 1909.

We hope and pray for reasonably cool weather in Terre Haute.

It was oppressively hot at French Lick during the annual session, but we learn it was hot everywhere else in Indiana at that time.

We have a few back numbers of The Jourisal which we will be pleased to send members for completing their files if request and statement as to numbers desired is made.

Every physician in Indiana who is not a member of any medical society, but eligible to membership, should be induced to join the medical society in the county in which he lives. If our county medical society secretaries will put forth a little effort applications for membership can be secured from a large number of these eligibles. To aid in the work we will send sample copies of The Jourial to all cligibles whose names and addreses are furnished us.

The two leading nolitical parties have placed "health planks" in their platforms. The Democrats hare gone a little further than the Repul)licans in their adrocacy of measures for the promotion of public health interests, but both parties have taken steps in adrance. which promise much for the common good if the measures adrocated by either party are carried out. Considerable reedit is due Dr. Geo. D. Kahlo, president of the Indiana State Medical Aisociation, for his work and influence with the committee on platform at the Denver convention, as he personally appeared before the committee and urged the adoption of such a plank as has been placed in the Democratic platform.

Hos: Thomer R. Marshald, the Democratic candidate for Governor of Indiana, has publicly placed himself on record as faroring an increase? appropriation for the State Board of Health. and an increased salary for the Secretary of the board. Who is one of the most capable, energetic and efficient health officers in the United States. Mr. Marshall has always appreciated the real value of public health work, as he has always been a consistent friend and supporter of the medical profession. Perhaps this is due to the fact that he is a son of a medical man, though we are more inclined to beliere that it is due to that broadmindedness and logical reasoning which always leads to the recognition of those things which are good for the public welfare.

The nostrmm manufacturers are making frantic efforts to orercome the injury done them by the work of the Council on Pharmacy and Chemistry of the A. M. A., and physicians are more frequently than ever risited by the detail man and showered with samples and literature. The most effectual way to suppress the nostrum business is to refuse to use or prescribe nostrums. and the detail man from the nostrum manufacturer should be politely but firmly informed that he wastes his time in talking to you, and that his samples will not be accepted. Any firm that can not obtain approval of its pharmaceutical preparations by the Council on Pharmacy and Chemistry of the A. M. A. is unworthy of patronage either directly or indirectly by any physician who desires to prescribe for his patients in an intelligent manner.

Some of the medical directors of Indiana life insurance companies were at French Lick with their war paint on trying to head off any action
of the Indiana state Medical Issociation on the ${ }_{\mathrm{j}}{ }^{\mathrm{j}}$ uestion of reasonable and jnst fees for life insurance examinations. For their benefit we desire to say that the Association has already put itscle on record as favoring the $\$ 5$ fee and urging its members to secure such fee for all complete life insurance examinations. But aside from this do the medical gentlemen who are doing their best (or worst) to keep their fellow practitioners from securing adequate compensation for professional -errices rendered feel particularly proud of the stand ther are taking? Would it not look a little better to let the medical profession fight ont this question of fees with the insurance companies without encountering the unwarranted and unprofessional opposition of a few medical men who ought to be willing to assist their medical brethren in obtaining what is reasonable and right?

Tile Board of Mentil for the City of Fort Wayne, headed by its efficient secretary. Dr. H. OBruggeman, is actively engaged in not only enforcing city ordinances and state laws pertaining to public health, but in efforts to educate the public concerning the prevention of disease and the preservation of health. At this writing the board has caused the arrest of sereral milk dealers for delivering milk and cream not up to standard in quality or of the temperature reqnired by law, and through newspaper articles and circulars the public is kept adrised as to the requirements of the lam, the reasons therefor, and a plea made for the support of the regulations in the interest of the public good. The secretary of the board has recently caused to be printed in the daily papers of Fort Wayne a plain but forcible article on the feeding of babies in hot weather, with instructions concerning the proper preparation and care of the food for the baby. The information given ought to go a long way toward aiding in the lessening of the morbidity and mortality among children. The example could with profit be followed by municipal and county boards of health all orer the state, for the enforcement of public health laws and the education of the public concerning rules of health must come from public health officers, encouraged and aided by the members of the medical profes. sion, individually and collectively.

## DEATHS

Dr. Noble P. Howard died at his home in Greenfield Tuesday morning. May 26. He had suffered for the last four weeks from pneumonia.

Dr. Homer S. Shaw, of Gaston, was accidentally drowned in Tipperanoc Lake, Kosciusko County, Indiana, Sunday afternoon, June 7. At the time of his death he was a member of the Delaware County Medical Soeiety. He was 30 years of age.

Dr. L. M. Black of Greencastle, died at his home Thursday, Inly 18 , of gastro-enteritis. He was born in Lawrenee County, Ind., Feb. 5, 1843, and graduated from the Miani Medical College in 18i1. He has been a secretary of the Board of Health of Greencastle, T'nited States pension examining surgeon, and member of the city council.

Dr. II. T. Willianson died at his home in Fort Branch, Ind., July 22, 1908, from premia resulting from a carbmele on his neck. He was born in Crowland, Lincolnshire, England, in 1844, and graduated from the American Medieal Collcge (Eclectic), of St. Louis, in 18i9. He practiced in Hazleton, Ind., for three ycars, in Olncy, Ill., for four years, and in Fort Branch for twenty-two years. IIc was a member of the Gibson County Medieal Society and of the Indiana State Medical Association at the time of hs deati.
1)r. J. C. F. Thorxe, for many years one of Kokomo's foremost practitioners and a former mayor of that city, dicd at his home in Kokomo Sunday, May 24. Death resulted from an illness of three ycars, following a street-ear aecident in February, 1905. While driving to his office his buggy was struck by a strcet car, and in the erash lie received an injury to the head, which resulted in gencral paresis. He was born near Alto, Ind., sept. 26, 185\%, and graduated from Rush Medical College in 1883, soon legimning the practice ef medicine in Kokomo.

Dr. M. O. Lower, of North Manchester, died at his home Sunday morning, May 24, from diabetes and a complieation of diseases. He was one of the best known and most highly respected physicians of Wabash County, where he had practiced for many years. For many years he had known the nature of his malady and that he could not long survive, yet he continucd his large practice almost to the day of his death, and at the same time continued to be an active and progressive student. Even during the last few months of his life he began a thorough and painstaking study of electrical therapentics, work that was continued up to the day of his death. He was an cx-president of the Wabash County Medical

Socicty, scerctary of the North Manchester Board of Health and for a number of years was a member of the North Manchester School Board. He was a member of his county and state medieal associations, as well as of the American Medical Issociation.

## PERSONALS

Dr. O. P. Kemp, of Center, has moved to Kokomo.
Dr. IV. C. Black, of Marion, has located at Okmulgee, Oklahoma.

Dr. G. W. II. Kemper, of Muneie, is recovering from a surgical operation.

Dr. Lorre W. Smithe of Wabash, has recently returned from a risit in Pennsylrania.

Dr. and Mrs. Edifard Aegest Willis, of Indianapolis, announce the birth of a son.

Dr. F. W. Cregor, who has been practicing at Carthage, Ind., has located at Greenfield, Ind.

Dr. Earle S. Green and Miss Mary Kinert, of Muncie, were united in marriage May 2i, 1908.

Dr. L. A. Sinmoses and family, of Kokomo, who spent the winter in Florida, have returned home.

Dr. Herman S. Bowles and Miss Margaret Scott, of Muneie, were united in marriage June 10, 1908.

Dr. J. H. Ross and family, of Kokomo, have returned home from Winter Hasen, Fla., where they spent the winter.

Dr. William F. Cleteyger announces removal of offices to $\overline{44-i \pm i}$ Newton Claypool Building, Indianapolis.

Dr. Charles J. Storer, of Eaton, Ind., and Miss Anna G. Carroll, of Hartford City, Ind., were united in marriage June 2t, 1908.

Dr. Hermin Botrles and Mizs Margaret Scott, both of Muncie, were united in marriage June 10. Dr. Bowles is associated with his father in the practice of medicine.

Dr. Join F. Barvifill, of Indianapolis, read a paper, by special invitation, before the Section on Laryngology and Thinology of the New York Academy of Medicine on Saturday, May 23.

Charles S. Griffis, son of Dr. L. B. Griffin, of Greenfield, who has been at Asheville, N. C., for the past eight months, for pulmonary tuberculosis, returned home June 2, practically cured.

Dr. F. C. McBride, assistant surgeon, Soldier's Home, has resigned and will practice medicine at his home, Sullivan, Ind. Dr. L. B. Campbell of Birmingham, Mich., will fill his place.

Mrs. Cifas. Sellers, wife of Dr. Chas. Sellers, of Montpelier, Ind., aged $3 \pm$ years, died at Hope Hospital, Fort Wayne, Monday morning, June 15, from cardiac thrombosis, five days following confinement.

Dr. Earle S. Green and Miss Mary Kinert, of Muncie, were united in marriage May 2\%. Dr. and Mrs. Green left at once for a three weeks' tour of the East. Dr. Green graduated from the Indiana Merlical College in the class of 190\%, and for the past year has been acting assistant surgeon in the Public Health and Marine-Hospital Service, stationed at Fort Stanton, New Mexico. He will be associated with his father and brother in practice in Muncie in the future.

## NEWS, NOTES AND COMMENTS

The Philadelphia Academy of Surgery offers the Samuel D. Gross prize of $\$ 1,500$ for the best original essay, not exceeding 150 pages, octavo, iu length, illustrative of some subject in surgical pathology or surgical practice, founded upon criginal investigations, the candidates for the prize to be American citizens. Essays will be received not later than Jan. 1, 1910. Applicants may secure further information regarding the prize by writing the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 South Thirteenth Street, Philadelplia."

At a meeting of the board of trustees of the Indiana University, held in Bloomington June 23 , the following officers and faculty for the school of medicine were selected:

Dr. Allison Maxwell, dean; Dr. Edward F. Hodges, vice-dean; Dr. Edmund D. Clark, secretary; Dr. Tohn S. Barnhill, treasurer, and B. D. Myers, secretary of the medical department. Drs. Henry Jameson, Allison Maxwell and George IV. McCaskey, professors of medicine; Drs. Louis Burkhart, Samuel E. Earp, George D. Kahlo, Theodore Potter and Albert C. Kimberlin, clinical professors of medicine; Drs. Francis D. Dorsey and Robert II. Ritter, associate professors of medicine ; Dr. Frank B. Wynn, professor of medi-(-al diagnosis; Dr. William T. S. Dodds, associate professor of clinical diagnosis; Dr. Simon P. Shearer, professor of gastrointestinal diseases; Dr. L. Park Drayer, professor of pediatrics; Drs. James H. Taylor and John A. Lambert, clinical professors of pediatrics; Dr. Amelia R. Keller and Dr. Oscar N. Torian, associate professors of pediatrics; Drs. Frank F. Hutchins, Ernest C. Reyer and Albert E. Sterne, professors of mental and nerrous diseases; Drs. Charles S. Neu and Robert N. Todd, associate professors of nervous and mental diseases: Drs. William H. Foreman and C. Richard Schaefer, professors of therapeutics; Dr. Thomas IV. Haas, associate professor of therapeutics; Dr. John N. Hurty, professor of hygiene and sanitary science; Dr. Samuel C. Norris, associate professor of hygiene and sanitary science; Drs. James H. Ford, John H. Oliver and Miles F. Porter, professors of surgery; Drs. Edmund D. Clark, J. Rilus Eastman and George M. Wells, professors of clinical surgery; Drs. Maynard A. Austen and David Ross, associate professors of surgery; Dr. Horace R. Allen, professor of orthopedic surgery; Drs. William N. Wishard and John A. Sutcliffe, professors of genitourinary surgery; Drs. Frederic R. Charlton and Harvey A. Moore, clinical professors of genitourinary surgery; Drs. George J. Cook and John C. Sexton, professors of gastrointestinal surgery; Dr. Alois B. Graham and Thomas C. Kennedy, clinical professors of gastrointestinal surgery; Drs. Walter S. Given and Homer H. Wheeler. associate professors of gastrointestinal surgery; Dr. Alembert W. Brayton, professor of dermatology and syphilology; Drs. Albert M. Cole and E. Oscar Lindermuth, professors of electrotherapeutics and dermatology ; Drs. Albert E. Bulson, Jr., Thomas C. Hood and Frank A. Morrison. professors of ophthalmology; Drs. Harry C. Parker and Frederick C. Heath, clinical professors of ophthalmology ; Drs. John S. Barnhill, Lewis C. Cline, John I. Kyle and Kent K. Wheelock, professors of otology, laryngology and rhinology; Drs. John L. Masters, Lafayette Page and Ernest DeIT. Wales, clinical professors of otology, laryn-

Eology and rhinology ; Dr. Orange G. Pfaff, professor of gyncology; Drs. Thomas E. Eastman, Thomas B. Noble and Hugo T'antzer. clinical professors of gynecology; Drs. Bernays Kennedy and Robert O. McAlexander, associate professors of grnecology: Drs. John T. Davis, Sidney J. Hatficld, David Tahn, Goethe Link and John Pfatf, associate professors of gynecology: Dr. Edward F. Hodges, professor of obstetrics: Dr. ('harles E. Ferguson, clinical professor of obstetrics: Dr. Henry F. Beckman, associate professor of ob-tetrics; Dr. Charles S. Neu, professor of pathology; Dr. John IV. Fluss, professor of anatomy: Drs. John Morris, Norman E. Joncs, Walter II. Barnert. W. B. Robinson and Charles 0. 1)urham, associate professors of anatony; Drs. Gustare A. Petersdorf and Charles S. Woods, professors of chemistry, and Dr. William 0 . (irose, professor of toxicology.

Dr. .J. N. Herty, Secretary of the Indiana State Board of Health, in a letter written to Dr. ( . Norman Howard, of Warsaw: Secretary of the Kosciusko County Merlical Society, makes the following pertinent remarks concerning the warfare against consumption:
"The people do not appreciate, and very likely we of the profession do not fully appreciate, the colossal importance of the combat against "the great white plague.' It is true that if this arch (nemy were defeated the people of Indiana would be saved $\$ 10,000,000$ annually. I have submitted this estimate of the annual loss to Indiana by tuberculosis to several bankers and business men, and all have said it is too low. One bank president gave two hours to going over the figures and the basis of figuring, and said he was astounded, and the estimate was below rather than above the truth. He is now warmly interested in the anticonsumption fight and says it is the most important economic question before the people to-day. In this opinion he agrees with the New York Board of Trade, which, after referring the matter to a committee and discussing the subject from all sides, passed the following resolutions covering not only the prevention of consumption, but the general subject of the preservation of the public health:
". Thereas, Health is the basis of happinese, wealth and power; therefore, be it
" 'Resolved, by the New York Board of Trade, That the preservation and promotion of the public health is of paramount importance to the nation. and is of more importance than the bnilding of the Panama Canal, the building of a nary:
the construction of public works, or the promotion of finance or business; and be it further
"'Resolved, That this business organization recommends to the people that such legislation be speedily adopted as will lead to the education of the masses in the laws of health and to the practical application of said laws to every-day life.'
"The business men of your city wonld certainly do wisely to follow the lead of the practical and successful New York Board of Trade and heartily endorse the work of disease prevention. You should try to induce the business men of Warsaw to attend your meeting. Of course, only a very few will come. They will say they 'have not time.' This is because they do not understand that they can lower taxes and make money and increase their happiness by fighting such a seemingly intangible evil force as consumption. It is the duty of the medical profession to keep at the business men until they understand this great economic movement, and then keep after them until they act.
"Warsaw should have an anti-tuberculosis society, and its highly economic work of preventing tuberculosis and saving the lives of those stricken with the disease should have liberal private and public support. The city authorities should take hold of the matter and the city board of health should lead.
"The medical profession is the repository of the knowledge that consumption is not hereditary, and that it is always preventable and that it is curable in its early stages. Being such repository, it is the duty of its members to continually cry forth the facts from the housetops until the so-called practical men hear and act. They will be practical when they act and impractical until they do.
"To make plain to the people the awful havoc wrought annually by consumption, permit us to give the following table from the actual records in the office of the State Board of Health for 190?:
"Total consumption deaths, 4,456; males, $1,6 i 5$; females, $2, i \div 1$; mothers, age 18 to 40 , the prime of life, 927 ; fathers, age 18 to 40 , the prime of life, 255 ; orphans made under 12 years of age, 2,553; homes invaded, 3,483; actual cost to the people, $\$ 10,000,000$.
"That the fight against tuberculosis is an economic proposition appears when we know and understand that this awful loss of life and money can be saved. When will the saving begin?"

## SOCIETY PROCEEDINGS

## ALLEN COUNTY. <br> FORT WAYNE MEDICAL SOCIETY. <br> (Meeting of June 9, 1908.)

Society met in regular session in the Assembly room with twenty-six members present. Minutes of previous meeting read and approved.

The first paper of the evening was by Dr. Chas. G. Beall, on "The Physiology of Respiration." His talk was illustrated with charts and apparatus.

Reports from the meeting of the A. M. A. were heard as follows: Dr. L. P. Drayer, pediatrics; Dr. Albert E. Bulson, Jr., ophthalmology; Dr. B. Van Sweringen, surgery; Dr. G. Van Sweringen, dermatology and genitourinary surgery; Dr. C. E. Barnett, American Urologic Association; Dr. C. H. English, obstetries and diseases of women; and Dr. B. W. Rhamy, pathology.

Motion made and carried that the matter of resolutions concerning discontinuing postgraduate program after June 30, 190s, be taken up. Motion made by Dr. Drayer and carried, that the resolutions be adopted.

Motion made and carried that a committee be appointed to arrange for the meeting of June 30th. The chair appointed Drs. Beall, G. Yan Sweringen and Kane.

Dr. Buchman brought up a question concerning the serving of an injunction on the Board of Health to stop it from enforcing the milk ordinance. Dr. Bulson made a motion that it is the sense of the Fort Waync Medical Society that the Board of Health is pursuing the proper course in enforcing the milk ordinance and that this society pledges itself to furnish all the support possible. Motion seconded. The motion was amendel that the publication committee acquaint the papers with the facts for publication. Motion as amended carried.

Dr. Bulson moved that the society instruct their delegate to vote for a resolution to have the state society mect in the fall. Motion seconded and carried.

Adjourned.
J. C. Wallace, Sec.

## (Meeting of June $16,1908$.

Socicty met in regular session in the Assembly room with sixteen members present. Meeting ealled to order by President IV. D. Calvin. Minutes of previous meeting read and approved.

Round Celled Sarcoma.-Clinical case report by Dr. M. F. Porter. Case was supposed to be one of floating cartilage of the knec following injury. The patient waoperated and the growth removed; and instead of white cartilage was found a bluish mass having a pedicle. Microscopical examination proved the growth to be a round-celled sarcoma. A radical operation was necessary.

Cancer of the Lip.-The technic of the operation was given by Dr. Porter.

Dr. Wheelock reported three cases of headache relieved by tonsillotomy.

Dr. W. D. Calvin reported a case of typhoid fever with purpura hemorrhagica.

In discussing this case, Dr. Porter gave the therapy of purpura.

Bronchitis, Chronic, Pathology and Symptoms, was the title of a paper by Dr. W. W. Carey.

In opening the discussion Dr. Nierman said that the author ought to have emphasized home treatment.

Dr. Rhamy, in discussing the subject of sputum, said that one form of the sputum showed an abundance of eosinophiles. In another form the sputum has the appearance of coagulated milk; microscope shows fibrin and fat globules, but no leucocytes.

Dr. G. Van Sweringen called attention to the frequent exacerbations in chronic bronchitis. The Diazo reaction never occurs in acute bronchitis.

The discussion was closed by Dr. Carey.
Drs. Henderson and Moser were elected to member. ship in the society.
Dr. Porter made a motion that a committee be appointed to draft resolutions and procure flowers for Mrs. Dr. Charles Sellers. Motion carried and the chair appointed Drs, Porter, Wheelock and Beall.
Dr. C. H. English presented the following resolutions concerning Fourth of July celebrations, and motion was made and carried that they be adopted:
Resolved, That the Fort Wayne Medical Society extends its thanks and appreciation to Martin H. Ankenbruck. chief of police, for the order forbidding the shooting of firecrackers before the Fourth of July, and that in so doing he not only conserves the comforts of the sick and suffering, hut also the safety of the general public. And, be it further

Resolved, That owing to the great danger of tetanus or lockjaw resulting from wounds inflicted by the blank cartridge and giant firecracker, that every means possible be employed to prevent their use on the Fourth of July.

Adjourned.
J. C. Wallace, Sce.

## ADAMS COUNTY.

The Adams Countr Medical Society met in regulur session June 19. Minutes of the last two meeting= read and approved. The paper of the evening was by Dr: MeMillen, on "Diseaces of the Abdomen." in which the essayist said that the diseases of the adrdominal cavity cover a wide field-entirely too wide for the scope of a single paper. He said that the discases of the abdominal cavity are far reaching in their effects. The author refeired to the recent theory that tuberculosis is never a primary disease of the lungs but that the bacilli first enter the alimentary tract and finally reach the lungs through the blood. The author also discussed the subject, "Acute Catarrhal Gastritis," saying that it may occur at all ages, and is commonly due to the irritative effects of indigestible food, or food in a state of incipient decay or fermentation. Overloading the stomach with wholesome food may also be a cause. The symptoms produced by the different causes were clearly stated. As treatment. he said the bowels should be unloaded, and the sristem flushed with good, pure drinking water. A diet of milk, buttermilk, starches and cereals should then be inangurated, and sane and simple ways of living insisted upon.

In the discussion Dr. Bearers said that he would give intestinal antiseptics after eliminants, and then follow with tonics.

Dr. Costello said that too many cascs are treated for typhoid which are auto-infection cases. He said that the system should first be cleansed thoroughly and then antiseptics given, such as calomel, the sulphocarbolates, and the salicylate and arsenate of soda.

Dr. Boyers said he thought too much emphasis is placed on intestinal antisepsis. He thinks elimination. is sufficient.

Dr．Beavers uses＂iodalbin＂and thinks he has an ideal antiseptic，especially in old cascs．

After this ruecting the Adams County Medical So－ ciety takes a racation until the sccond Friday in Octo－ ber，when the following papers will be presented： ＂Fetal Cireulation．＂by Dr．D．D．Clark，and＂Chemical Incompatibilities in Ordinary Prescription Work，＂by Dr．J．M．Miller．

Adjourned．

## Marie L．Molloway，Scc．

## CLAY COUNTY．

The Clay County Medical Socicty met at Bowling Green，July 19．The papers were by Dr．Cook of Bowling Green，on＂The Heart in Tuberculosis；＂Dr． Dilly of Brazil，on＂Detection of Tuberculosis in Dairy Cattle，＂and Dr．Finley of Bazil，on＂Gastrocnteritis．＂ Adjourned．

G．IV．Finlet，Nec．

## DELAWARE COUNTY．

The regular meeting of the Delaware Countr Medical Society was held June 12，the date of meeting being postponed one week to allow members so desiring to attend the meeting of the A．M．A．Neinbers present， twentr－four．
The attention of the societr was called to the death of Dr．Homer M．Shaw of Gaston，Ind．，and the fol－ lowing resolution was passed：

Whereas．It has fallen to us to lose one of our num－ ber．Dr．Homer M．Shaw，by the hand of death ：be it
Resolved．That while we bow in humble submission to the divine will．we deeply deplore our loss，and desire to extend to the bereaved family our srmpathy in their time of trouble：and that a copy of these resolutions be forwarded under the seal of this societr to the sor－ rowing wife and father of the deceased．
The board of censors reported favorably upon the following applicants，and ther were unanimously clected to membership in the society：Drs．Earle $\dot{\mathrm{S}}$ ． Green，Noah D．Berry，both of Muncie，and U．G． Powers，Albany．

My．L．D．Clark，president of the Delaware Countr Hospital Association，appeared before the society in the interest of the hospital association，forcibly presenting the need of a countr hospital，and the reasons why same should be secured，and appealing to the medical society to lend their aid and influence in assisting the asiociation to secure same．

Dr．A．H．Good read the first paper of the afternoon on＂Puerperal Peritonitis，＂in which he particularly＂ emphasized the value of serum theraps．The paper elicited an excellent and general arscussion by the members，Dr．O．W．Owens leading．Particular men－ tion was made of the danger of sepsis from the par－ turient woman examining herself prior to delivery． Protest was made against the tendency to handle peri－ tonitis，septicemia，cte．，differently when they appear during the puerperium，and an appeal was made to treat the patient rather than the disease．Stress was laid upon the extreme necessity of prophylaxis．
Adjourned．
H．S．Bowles，Sec．

## ELKHART COUNTY．

The Elkhart County Medical Society met in the office of Dr．I．J．Becknell．Goshen，Mar 2s．The min utes of the previous meeting were read and approved． There were 26 in attendance．So many of the member＝
desired to attend the American Medical Association meeting in Chicago that the meeting was held one week earlier than the regular time．
Distortion of the Foot，with Paralysis of the Affected Part．Clinical case report and patient exhibited by Dr．I．J．Bceknell．Patient，male，with goou history． aged 30．He was in splendid condition with the ex－ ception of the left leg and foot．He had the whooping cough when but two years of age，and soon after his foot began to bother him．He has a distortion of the foot，almost the opposite of talipes；there being paralrsis of the affected region．The case was discussed by rarious members of the socicty．The majority seemed to think that a tenotomy of the tendon of Achilles and treatment with clectricity and massage would be of much benefit to the case．
Puerperal Albuminuria was the title of a paper by Dr．I．J．Becknell，in which he said that this disease was little known to medical science a little more than a half a century ago，but it is now conceded to be one of the most frequent of all the puerperal diseases Albuminuria is no longer believed to be a symptom of Bright＇s disease only．In fact，nine cases out of ten do not show the structural lesions of the kidners，such as are found in Bright＇s disease．Albuminuria and uremia are not identical terms，the one may exist and the other be absent．It is now fully conceded by all advanced men that albuminuria has an immediate bearing on a great variety of pathological conditions other than conrulsions；that it often exists in its fullest development without causing convulsions；that dangerous and even fatal convulsions may occur when albuminuria is wholly absent．and still further that the nerrous perturbations which cause the convul－ sions may also be the cause of albuminuria．The albumen of Bright＇s disease differs，essentially from that occurring in the temporary albuminuria of preg． nancy，as can easily be shown by its chemical reaction． The causes of puerperal albuminuria are not yet fully understood，though it is an accepted fact that，in a large number of cases，gestation develops a temporary albuminuria which may disappear during or soon after puerperal convalescence．It has been fully demon－ strated that conrulsions，the various phlegmasix incident to the puerperal condition，the premie diathesis，septic absorption，and puerperal fever，or any of these causes，may develop albuminuria．Albu－ men in the urine is not the disease，but it is the aggregation of symptoms，if which this is one，that constitutes the diseasc we call albuminuria．The most frequent of the nerrous symptoms is headache，and this is rery significant，especially when associated with insomnia，impaired rision，and nervous irri－ tabilitr．
Glycosuria was the title of a paper presented by Dr．W．A．Stauffer．He divided his subject into three divisions．namely：＂Physiologieal glycosuria，patho－ logieal glycosiria，and alimentary or induced gly－ cosuria．＂
In opening the discussion Dr．I．IT．Short said that he has had a number of cases that had no special symp－ toms，and yet the albumen was often more than 25 per cent．He reported one case that had no albumen in the urine up to the fifth month when she aborted in convulsions．With the catheter he obtained a little urine that was $\overline{5} 0$ per cent．albumen．She made a gool recover：but had albumen in the urine for two month．

Dr. Sammel Wagner says that the examination of the urine is not always reliable. In some cases with the ordinary symptoms of edema, frontal headaches, nausea and vomiting, where one expects to find albumen, none can be found. But in this class of cases there has always been an unusual amount of urea. He reported one case where he suspected albumen, that miscarried at five months. The urine cleared up soon after and she has had no trouble since.

Dr. J. A. Work, Sen., said that the subject of albuminuria of pregnancy is very important and should be understood by every physician. He said: "I always make it a rule to examine the urine every two wecks, and many times oftener if I suspect any serious trouble. I realize that we can not be so careful in all of our cases, because some do not engage a physician until the time of confinement. I have found that as the symptoms grow worse the albumen increases in the urine. As to the treatment much can be done with the proper diet and climination. I remember one case of mine which was relieved with careful living, good climination and as a tonic I gave her nothing but iron and strychnin."

Dr. James Mathews said that "the great majority of these cases that I see have convulsions when I am called. Situated in the country as I am, we can not do as our city brethren. We are often obliged to resort to means and methods that tax our ingenuity."

Dr: M. K. Kreider said: "I was very much interested in both papers. I well remember one case of mine that had no trouble during the gestation or during labor, but afterward she had sugar in the wrine that worried me somewhat. After a careful examination of the urine I found that it was a case of lactosuria instead of glycosuria."

Dr. W. B. Freider said: "The oculist is interested in these cases, especially in glycosuria. The rapidly developed cataracts that are frequently seen in connection with sugar in the urine are not hopeless cases. Many of these cases can be relieved and good vision restorcd. Cases of albuminuric retinitis are sometimes recognized when there is no aloumen in the urine."

Dr. H. K. Lemon said that as to the pathology in glycosuria, lesions are found in the liver. The essayist also spoke of the involvement of the pancreas and that the prognosis was bad. He did not mention that if the tail of the pancreas was involved, as it often is, the condition was unfarorable.

Dr. I. J. Becknell reported a case, primipara, seven months gestation, pulse 120, edema upper and lower extremities, labia swollen in extremis, tongue swollen, headaehes, nausea, vomiting, urine scanty. She had retinitis for two months. The case aborted and the urine increased soon after. She recovered entirely from her retinitis but not for a number of months. It is a question. still disputed, as to whether an abortion should be produced in these eases. There is argument on both sides and many able men oppose it.

Dr. George W. Spohn said: "I agree with Dr. W. B. Kreider that more emphasis should be put upon these cases. It is a fact that cases of albuminuria were not diagnosed until the ophthalmologist recog. nized the retinitis in the dark room. When a pregmant woman complains of failing vision it should aronse the suspicion of the attending physician. The retinitis in these eases eomes on slowly and generally does much mischief in a short time. A number of
cases have been reported who have recovered their normal vision, but sueh is not the rule. The prognosias to vision is always bad. The prognosis in retinitis depends upon the period of gestation. If it comes on at labor or a few weeks previous, the prognosis is good, but if it comes on before the fifth month the chances for vision are bad. I can not agrec with Dr. Becknell, unless it be near the end of gestation, an abortion should be produced, and delivery should be as early as possible.
The applications for membership of Drs. C. A. Ink= and F. H. Ferguson, of Nappance, were received.
Dr. J. C. Bateson, of Scranton, Pa., one of the A. M. A. organizers, being present, was asked to give a short talk. He spoke of the advantages of organization. IIe said that the better organized the medical society is the better work it is doing. The greatesi discord in the profession exists in those counties where there is no organization. They never learn to know each other. An organized society cultivates fraternalism, and physicians become scientific in their work, more thorough in every way, and they do better work for their patients and hence can ask more mones. for their services. It has been proven that the union of the various medical schools has been a great benefit to the profession. The profession should get closer to the people. He suggests that a society have one of two open meetings each year. In these special meetings invite people of all classes to meet with you and discuss such subjects as will intcrest all. When the publie once learn to know the profession they will have more confidence in physicians. The public generally has a wrong impresion of physician-. This can be overcome by mingling with each other and br cducation.

Many questions were asked the speaker, such as the standard of medieal selools, legislation, pharmacy board, public health and the clinic material of some of our medical schools. The doctor conceded that the private physician has a just grievance in the way many of our medical schools acecpt clinieal material from many people that are perfectly able to pay for scrvices. In fact, some schools advertise that if patients pay the hospital expense the medical services will be free. This takes from every city a goodly number of patients each year, who are able to pay good fees to their home physicians. It is an injustice to the private physician. Such a medical school should be boycotted by the profession. If the county societic $=$ would take up this question it would be handled soon. It will be oniy a short time until a movement will be in motion that will stop the evil or some of the schools will lose numerically by their practices.
Adjourned. George W. Spohs, Sec.

## FRANKLIN COUNTY.

The Franklin County Medical Society met in regular session June 1, at Brookville, with an attendance of two-thirds of the membership. Dr. S. A. Gifford, of Laurel, read a very interesting paper on "Chronic Rhinitis, Its Complications and Treatment, from the Standpoint of the General Practitioner." Dr. J. C. Clawson, of Cedar Grove, also read a paper on "Exophthalmie Goitre," treating the subject in a rery clear and concise manner. Discussions of both papers were entered into by all present, and some very interesting and instructive experiences were presented.

The application of Dr. John IV. Lucas, of Mt. Carmel, was presented for membership and he was unanimously elected. The question as to the proper procedure in regard to the case of the fake "cancer cure" man, residing near New Point, Ind., after considerable discussion, was tabled until the next meeting.

Adjourned.
C. H. Mayfield, Sec.

## GRANT COUNTY.

The regular mecting of the Grant County Medical Society was lield July 28. Dr. E. O. Marrold read a paper on "The Prevention of Tuberculosis," and Dr. G. Gr. Richardson on "The Treatment of Tuberculosis."

The election of officers for the new year resulted as follows: President, G. R. Daniels; vice-president, E. O. Harrold; secretary, O. W. McQuown; treasurer, M. T. Shively; censor, Glen Henley; delegate, J. A. Mattison.

Adjourned. O. W. McQuows, Sce.

The Grant County Medical Society met Tuesday evening, Jume 23. The first paper of the evening was by Dr. Glen ITenley, on the subject of "The Doctor and His Records." The sccond paper was by Dr. Mattison, on "The Early Diagnosis of Pulmonary Tuberculosis."
Dr. Holliday presented a case of supposed colic, Which was due to the appendix.

Dr. IIarrold presented a casc of Charcot's knee.
Cretinism. Case report and patient exhibited by Dr. Loomis. The family history is negative, except a scare by the mother in pregnancy, and its paternal grandmother, having had a goiter from the age of 10 to about 16 years of agc, at which time it entirely disappeared and has not returned. When the patient was first seen three weeks previous to this date, it was a typical cretin; viz., a thick, short neek, large face, thick lips, short arms and legs, thick stubby hands and fingers, mouth open, tongue protruded, apathetic, would lie indefinitely in any position, non-expressive eye, mental impairment marked, large abdomen, skiu hard and apparently swollen, but not pitting on pressure. Patient was placed on thyroid extract one and onethird grains three times daily, and within three weeks it presents a very different picture, with all the symptems very much improved; in fact it would not be recognized as being the same child. It has lost several pounds in weight, skin has changed, and the mental condition is improved.

There seems to be an entire absence of the thyroid gland in this case. The important eriteria in making a diagnosis in a cretin, are the physiognomy, shape of face and head, stunted growth, especially of the long bones, and the condition of the connective tissue.

Adjourned.
O. IV. McQuown, Scc.

## GREENE COUNTY.

The Green County Medical Society met at Switz City, June 11, with twelve members present. The paper of the evening was by Dr. L. A. Hyde, on the subject of "Chorea, Associated with Endocarditis and Nephritis," report and presentation of case. Patient, child 9 years of age, had typhoid fever four years ago, uncomplicated as far as observed. Had nemrotic
heredity. All symptoms improved on exhibition of salicylates, but no history of rheumatism.

An amendment to the by-laws, making a violation of any resolution of the socicty punishable by reprimand. suspension or expulsion, was finally adopted unanimously.
1)rs. J. M. Harrah and L. A. Hyde will present the? subject of "Chorea" at the August meeting.

Adjourned.
F. A. Vax Sandt, Sce.

## HANCOCK COUNTY.

The Hancock County Medical Society held its regular monthly meeting May $\overline{7}, 190$, in the sinall courtroom, Greenfield. Meeting called to order by President Barnes. Minutes of previous mecting read and approved. The Board of Censors reported favorably on the applications of Drs. Benjaminc, Cook, Larrabee, McCord, Fisher, Hervey, Johnston and Collins. Motion made and carried that the report of the Board be accepted.

The prograin of the evening consisted in case reports by Drs. Bruner, Barnes and Trees. Dr. Bruner is has. ing fine success with trypsin in cancer of the breast. These cases were all freely discussed.

Adjourned.
Earl R. Gibbs, Sec.

The regular monthly mecting of the Haneock County Vedical Society was held at Greenfield. Ind.. Thursday, July 2. Meeting called to order by Vice-President Dr. C. K. Bruner. Dr. E. F. Sommers was elected to membership.

The first paper was by Dr. Joseph L. Allen of Charlottesville, on "Symptoms and Treatment of Typhoid Fever," in which he said that the symptoms are manifest during the period of incubation, which is usually given as from one to two weeks. A sense of weariness and fatigue on exertion is one of the common forms of onset. Peculiar, characteristic rosc-colored spots make their appearance about the seventh day of the discase, and their appearance is usually regarded as pathognomonie. The splcen is almost always enlarged and can usually be palpated. A slight bronchial cough may be noted. A very wide variety of symptoms present themselves in this fever. The disease rarely begins with a chill, but it may occur in consequence of hemorrhage of the bowels or nose, or perforation of the bowels. The tongue is at first furred with a heary white coat and, as the disease adrances, tends to become dry and brown, clearing at the edges and tip as the case improves. While diarrhea is the most common bowel disturbance, coustipation often proves even more troublesome. Perforation of the bowel may occur and is attended by sudden acute pain in the abdomen and symptoms of collapsc. The urine is always of a high color and high specific gravity and may contain albumin. For treatment the author presented the following outline: (1) Rest and diet; (2) The Brand or bath treatment; (3) The expectant symptomatic treatment; (4) The antiseptic treatment; (5) The eliminative and antiseptic treatment, and (6) The serum treatinent. In closing the author gave case reports of several cases of typhoid fever which had been treated by him.

The second paper was by Dr. Griffin. Both papers were freely discused by the members present.

Adjourned.
Earl R. Gibbs, Sec.

## JEFFERSON COUNTY.

The Jefferson County Medical Society met in regular session June 17, with nine members present. The subject for discussion was "Nephritis." The discussion was opened by Dr. J. II. Calvert, who said that in treatment the first thing to be done was to give a thorough purge of calomel and jalap, to be followed by a warm infusion of digitalis. If the skin is dry, give a warm saline bath, and if necessary give small doses of pilocarpin.

Dr. Christie said that in addition to the abore he received good results from nitroglycerin.

Dr. Cooperider said he had obtained good results from tea of water melon seed, with true sweet spirits of niter.

Dr. George E. Denny advised leaving off all food except milk, and give high saline injections with nitrate of soda as a diuretic.

In closing the discussion Dr. Copeland said that he thinks diuretics are of little value in this connection.

Adjourned.
J. Cooperider, Sec.

## KOSCIUSKO COUNTY.

The Kosciusko County Medical Society held its July mecting on the 7 th of the month.

Dr. T. J. Shackelford, Warsaw, read the first paper of the afternoon, entitled "Pathology, Prognosis and Treatment of Pulmonary Tuberculosis."

In the discussion which followed Dr. M. G. Focum, Mentone, spoke for the protection of other members of a family in which one or more were afflicted with tuberculosis.

Dr. Frank R. Foster, Warsaw, said that patients are apt to be shallow breathers. He spoke of the value of deep breathing, and demonstrated how full inspiration and expiration could be most thoroughly accomplished.

Dr. W. S. Leiter, Claypool, spoke of the necessity of disinfecting, renovating and admitting fresh air and sumlight into homes where tuberculosis has existed.

Dr. C. E. Thomas, Leesburg, said that, even if it does scare them at the time, patients were better off in the long run if they are told they had ruberculosis as soon as the diagnosis was made.
Di. Forrest J. Young, Leesburg, spoke of the x-ray as being of value in helping to make the diagnosis of pulmonary tuberculosis.

Dr. C. C. DuBois, Warsaw, presented a specimen of tubercular sputum, having brought a microseope to the meeting so that it might be examined. There were an enormous number of tubercle bacilli, being practically a pure culture. They covered a large part of the glass slide.

Dr. L. W. Ford, Syracuse, said that there should be a law permitting the health officer to look after familics in which there is consumption, and see that they live in a proper manner.

Dr. A. C. McDonald. Warsaw, spoke of the value of enrly diagnosis before the tubercle bacilli are found in
the sputum, laying special stress on dulness at the apex of the lungs as an carly objective symptom.
"Tuberculosis of Bone" was the subject of the next paper read by Dr. J. M. Bash. Warsaw.

In the discussion which followed Dr. C. W. Burket, Warsaw, stated that when the disease had not progressed to the extent of suppuration and the joint was simply enlarged, he had seen very good results from the injection of iodoform cmulsion.

Dr. Forrest J. Young said he belicved in the immolsilization of the joint and then letting the patient get out of doors into the fresh air. He spoke of the value of the bed-board on which a patient could be put out under a tree. He said that when cansties form they should be opened and curetted, then swabbed out with a solution of zine sulphate and packed with either iodoform gauze or plain gauzc. This gives a nice, clean, granulating surface which heals quickly. The joint should be put in the position in which it will be most useful if anklyosis occurs.
Dr. N. Austin Cary, Silver Lake, spoke of the value of the bed-board in tuberculosis of the lower cervical, dorsal and lumbar vertebræ. Dr. Cary also spoke of a patient under his care at the present time suffering from tuberculosis of bladder, ureters and kidneys, who was doing well under tuberculin therapy.
Dr. A. C. Dubois said that if the part is in poor position through muscular contraction the joint should first be inmobilized with a view to lessening the strain on these muscles. After that had been accomplished the joint could then be put into the best position for future use.

Dr. C. N. Howard, Warsaw, spoke of the diagnostic valne of the night cry of the little patients with beginning tubercular hip disease. The muscles around the joint relax after their day of tension.

Dr. P. G. Fermier, Leesburg, read the next paper, entitled "Tuberculosis of the Digestive System."

In the discussion which followed Dr. G. W. Anglin, Warsaw. spoke of the cases of chronic diarrhea which go on for years, the patient passing into a low condition before the diagnosis of tuberculosis is made.

Dr. Thomas said that there was at least palliative treatment for sufferers from tuberculosis of the digestive system whose prognosis was bad. We can treat the syinptoms of pain, diarrhea and tympanites.

Dr. Leiter said that Professor Martin of Germany had found in operating upon those suffering from tubercular peritonitis that the opening of the abdomen and admitting air had improved the patient. Dr. Leiter spoke of a patient of his suffering from tubercular peritonitis who had been operated upon some weeks ago. There had been particular attention paid to sunlight and fresh air since the operation. The patient is getting better.

A letter on the subject of tuberculosis from Dr. J. N. Hurty, Secretary of the State Board of Health, was read before the socicty. Dr. Hurty had kindly prepared the letter for this meeting.

- Idjourned to meet at 1 p. ms, Tuesday, August 18.
C. Norman Howard, Sec.


## LAWRENCE COUNTY.

The Lawrence County Medical Society met in regu lar acssion July 2 in Bedford. In the absence of both the president and vice-president, Dr. Andrews occupied the chair, by consent of the members.
"Cholera Infantum." Ca-e report- and paper presented bs Dr. McFarland. He said that the disease -hould be treated promptly; the stomach emptied and the buwel- wa-hed out. Do not wait for the action of cathartic-. Bathe. use ice by mouth, and morphin and atropin hypodermically.

- Mr Experience in London Clinic-" was the title of a very instructive paper by Dr. Perkins.
- Iritis."g Dr. Emery read a paper on this subject, in which he emphasized the importance of early diagnosis and treatment. He said that early recognition and proper treatment may save time and prevent -uffering and oiten low of vision. The tension of the eyeball should be te-ted in patients over 30 years of age, if not in evers case. before using a mydriatic, as carc must be taken not to confound iritis with acute glau'oma. Report, of a number of ca-e. showed that early diagnosis with prompt appropriate treatment gives uniformly good revults.

Dr. Freeland reported a ca-es of double ovariotomy, -howing multiple crst of both ovaries.

Dr-. W. H. -mitli and E. E. Mitchell were appointed a- a committee to arrange a program ior the remainder of the rear.

Adjourned.
Cladee Dollev: sicc.

## LA PORTE COUNIY.

The Laporte County Medical Society met in regular -…ion June 12, at Laporte. The first paper on the program was by Dr. B. C. Bowell, on the subject, "The Milk supply of Cities: which wa fill of valuable ideas. The paper was referred to the committee on publication, after being discused by almost all the member- present. Dr. J. IV. Milligan. secretary of the society, presented a paper on "The state Control of Tuberculosi-."

The next meeting of the society will be held in Michigan City, Aug. 14 .

Adjourned.
J. W. Milligan, Nere.

## MADISON COUNTY.

The Madion Countr Medical Society met Thursday, May 26 , at the county infirmary, with i? memlere and gue-t present, including the wises of the menbers.

Cretini-m." Case report and patient exhibited by Dr. Etta Charles. Patient. female, 14 rears of age, which had been exhibited berore the society at the November meeting, 190年, at which time a very careful examination was made by all the member; of the -ocietr. The child has been treated since with thyroid tablet- $\underline{21}_{2}$ grains three time- a dar, and the improrement is very marked. Picture- of the condition were taken at the November and Mar meetings.
"Trophic Joint Disea-e," paper and clinic by Dr. M. A. Austin.
"Locomotor Ataxia." Case report and patient exhibited by Dr. Benjamin H. Perse. He has been in the practice of medicine over forty years, and yet is modern in his dianno-is and treatment of this divea=e.
"Fracture of the Hip. Joint," was the title of a lecture br Dr. Thomas M. Jones with exhibition of patient. Patient, aged lady with impacted fracture of one year's standing. She now walks. but with much -hortened limb. In his lecture he laid great emphasion the point that in the aged great care thould be
exercised in not breaking up an impacted fracture in an effort to make sure of the diagnosis.

President appointed two delegates to attend the National Congress on Tuberculosi-, to meet at Washington, D. C.

At the close of the meeting reireshments were served by Mr:. Meagy, Arsistant Superintendent.

Adjourned.
Benj. H. Cook, sic.

## PUTNAM COUNTY.

The Putnam Countr Medical Society met April 30, in the office of Dr. Charles Sudranski, Greencastle. The principal speakers oi the evening were Drs. Kimberlin, McDonald and Brayton of Inulanapolis.

Dr. A. C. Kimberlin presented a very interesting paper. in which he brought out many nerr points in the diagnosis of "Pleuritic Effusions," urging examination and carly diagnosis, and the institution of a proper course of treatment.

Dr. J. C. McDonald discussed the subject of "'Pheu-mati-m:" while Dr. A. W. Bravton delivered a most interesting heart to heart talk to the elder as well as the rounger members oi the profession. Besides the abore named doctors, the following were also quests ri the evening: Drs. Williams, Hunt and Hope. of Coatsville: Collins, of Rochidale; Mercer, of Reelsville, and O'Brien, of Fillmore.

It the conclusion of the meeting the doctor; repaired to the dining room of the Palace restaurant, where a feast wa--pread, to which one and all did justice

Adjourned.
J. V. Bastis, $\mathrm{S} \in \mathrm{c}$.

The Society again met May 4 with Dr. Eugene Hawkins, who. with Dr. Jerome King, were elected deleqates to the State meeting to be held at French Lick June is and 19.

The paper of the evening were br Dr. McGaugher on "Anatomy of the Bones:" Dr. J. Mr. King on "Necrosis oi the Bones;" Dr. J. V. Bastin on "Osseous Tuberculosis," and Mr. Charles Tebb, representing the A. M. A., made a brief addres.

> Adjourned.
J. V. Bastin, Sec.

Society met May 21 at the oftice of Dr. W. W. Tucker. Drs. E. Hawkins and C. T. Zaring discussed the subject of "Fractures in General:" Dr. IT. W. Tucker, "Fractures at the Neck of the Femur and Pott's Fracture," and Dr. J. L. Pre-ton devoted his time to the proper reduction and treatment of "Colles" Fracture:"

Adjourned.
J. V. Bastin, Sec.

## SPENCER COUNTY.

The Spencer County Medical Society met in regular se-sion with Dr. H. G. Weiss. June 16. Meeting was called to order at 3 p. m., with Vice-President Dr. 1. P. Gwaltney in the chair. Minutes of April meeting read and approved.

The paper of the evening was by Dr. H. G. Teise. on "Precautions Against Ophthalmia Neonatorum," and howed careful preparation. He said that infection came on within three dars after birth, and that the condition of the towels and hands was largely respon-ible for infection. As treatment he prescribed a 1 per cent. solution of silver nitrate, chlorid of mer-
cury $1 / 4.000$. a 2 per cent. solution of boracic acid, tannin solution, and hot applications.

A case of eclampsia was reported by Dr. G. B. DeTor, of Lade P. O., three treeks beiore confinement. Treatment prescribed was chloroform and reratrum viride to control spasm. Prognosis good.

## Adjourned.

H. Q. White, Sec.

The Spencer Countr Medical Societs met at Richland, July 21 .

The first paper was by Dr. DeTar on "Acute Summer Diseases of Children." "In his paper he discussed the following: Acute intestinal indigestion, acute gastroenteritis, cholera infantum, and ileocolitis. He said that the majority were caused by over-feeding. As treatment he prescribed listerine, opium, capsicum, bismuth. castor oil, and flushing the colon.
"Infant Feeding" mas the title of a paper by Dr. S. C. Long. in. which he said that the first essential was cleanliness of the nipple and bottles. The mother's anilk is alwars considered best. In the discussion cow = milk was ifcommended above artificial food.

Dr. J. C. Jolly of Lade was reinstated to membership and the applications of Drs. J. C. Glockman of Hatfield and J. R. Long of Pockport received and referred to the board of cencor-

The sociey will meet in joint session with the Warrick County Society in August.

Adjourned.
H. Q. White, sec.

## VIGO COUNTY.

The Vigo Counts Medical Societs met in reqular =ession May j, laris. Dr. Louks lectured on "Embrrclogr:" and Dr. Knowlton on "Multiple Pregnaney and Antenatal Pathologs:" The doctor showed with the lantern sections oi the ovaries of cats: in one showing fire orules in a single Graafian follicle-corpus luteum of pregnanes, sections showing the derelopment of the chick from one to fire davs. and a series of colored drawinge from Edgar"s Obstetrics on the different arrangements of fetal structures in superfetation. He exhibited fetuses of all ages, one of mummification of the fetus.

Dr. E. D. Thistun was received to membership br letter from the Sullivan Countr Medical Societs.

The following amendments to the Constitution and Br-Laws, haring been previousls submitted in $\pi$ riting, were voted upon and accepted unanimously: (1) Omit reference to exclusive srstems of medicine, making every legallo registered phrsician in the county eligible to membership. (2) Raise the dues from $\& 2$ to $\$ 5$. Secretary was ordered to have 200 copies of the revised Constitution and $B y-L a \pi=$ printed.

Adjourned.
Charles 1. Coombs, Sec.

Society met again in regular session May 26, 190. State Food Inspector Owens gave an interesting talk on milk inspection and the tuberculin test. A resolution was adopted by the society recommending that the city council pass the proposed ordinance requiring dairs products sold in Terre Haute to come from tuberculin tested cattle. Motion made and carried that the president appoint a committee to arrange for a public meeting to be addressed by Mr. Owens and Dr. Hurty, for the purpose of making a tuberculosis exhibit.

The Board of Censors reported favorably upon the applications of Drs. A. T. Parne and H. H. Thompson of Terre Haute; Harrs H. Ward and A. D. Ashbury of Coalmont; J. R. Wilson and W. F. Parne of Prairie Creek, and C. B. Collins of Clay Cits, and on the ballot thes were elected to membersmp.

Adjourned.
Charles N. Coombs, Sec.

## WABASH COUNTY.

The Wabash County Medical Society met May 27, in regular session at Memorial Hall. Dr. Charles E. Barnett of Fort Wayne, read a rers instructive paper on "Crstoscopr"," illustrated b5 original drawings and followed by a clinical demonstration.

Four new members were roted in at this meeting. being Dr:. George D. Balsbaugh. North Manchester: George L. Shoemaker, Jorth Manchester; John E. shipler. Laketon, and Anna Wilson, Mabash.

Adjourned.
L. E. Jewett, sec.

## THIRD COUNCILOR DISTRICT MEDICAL SOCIETY.

The -isth -emi-annual meeting of the Third Councilor District Medicai Societs was held at the Elks Home. Jeffer~ouville, April 30. Society was called to order by President Cook oi Vew Albany, with $\overline{5}$ members and guests present. The following officers were elected for the ensuing rear: President, Dr. W. L. McClain. -cottshurg : secretary; Dr. David Cohen. Jeffersonville. The address of welcome was delivered br Dr. H. C. -harp, Jeffersonville.

Dr. IT. J. Leach, councilor of the Third District. read a paper on "The Tonsil and $I t=$ Treatment." Jo healthr tonsil should be remored. No chronicalls dis. eased ton-il nor one which is irequentls acutels inflaned should be retained within the throat. The pathologr, clinical history, and condition must dictate the course in each case. No function of the tonsil has leen proven besond reasonable doubt. The histologic structure suggests an internal secretion. The picket suard theory is most prevalent. No ill effects are maniteseu from remoring even the healthy tonsil. Pathologic tonsils are responsible for many cases of middle ear diseases and deafness, br interference with drainage and rentilation of the trmpanum. Pathologic tonsils are always characterized by low resistance for such infections as tuberculosis, diphtheria. la grippe, scarlet fever, streptococcic and progenic bacteria, and probably rheumatism. Peritonsillar inflammation, the so-called quinse, is usually the result of an infected tonsil or a fragment of one. "The mushr. cramped roice is often caused by hypertrophy of the tousils. Caseous contents of the crypts are extremely potent in the cause of indigestion and fetid breath of some patients. For treatment he recommended, in non-operative cases, to empty and cleanse the digestive tract, and then give sodium salicrlate and aconite internally: using Loeffler's solution locallr, preceded by an abundance of hot alkaline washes. Always empty the crrpts. For surgical treatment he recommended not to remove an acutel? inflamed tonsil, but arrait the interval. The methods of remoral and instruments to be used depends upon the size, shape and surrounding structures of the tonsil, as well as the age and controlability of the patient. In all cases of submerged tonsils the tonsillotome is a failure. Tonsillectomy upon all patients over sixteen rears of age is best done under local anesthesia and the duethods
according to their order of cloice would be Robertson's seissors, electrie cautery, and cold snarc. Cautery operation is aseptic and bloodless, which is quite advantageous for patients advanced in years, as age is conducive to hemorrhage. With the scissors, the eap--ular cleavage is easier sought out and followed, whieh is necessary to perfeet removal of the whole tonsil. The partial removal of the tonsil is a surgieal failure.

The paper was diseussed by Drs. Emery, Sharp, Duncan, Flynn, Wileox, Shelby, Samuels and Starr.

Dr. Wayne Crum, of Scllersburg, read a paper on "Neuralgia," which was diseussed by Drs. Ruddell, MeClain, Duncan, Graham and Samuels.

Mr. J. H. ., alker, of Henryville, presented a paper on the subject. "Chronic Bright's Discase." This paper was discussed by Drs. Peyton, Ruddell, Leach, Crum, Meclain and Samuels.
"Autotoxemia in Ileocolitis in Children" was the title of a paper by Dr. J. B. Duncan, of Bedford, in which he said that successful management requires constant endeavors to prevent decomposition of foods and to minimize the imount of antotoxic products absorlsed. Prepared foods are always a disappointment. The use of intestinal antiseptics is correct in theory but immeasurably disappointing in practice, as it is impossible to prevent by their use the absorption of streptococei. The disease is managed more successfuly by mechanical than by medieinal means.

The discussion was opened by Dr. Harris, followed by Drs. Sharp, Kahlo, Ruddell and Crum.
Dr. W. L. MeClain, of Scottsburg, next read a paper on "Opsonins and Opsonie Index." He said that the teehnique of detcrmining the opsonic index is long and difficult and none but those who have access to a laboratory and have had much laboratory experience can hope to get consistent results. It is to he hoped that simpler methods of teehnique will be discovered in the near future so that the general practitioner can apply it in his practice, for in the diseovery of a method of determining the opsonic index and its application to the vaccination method of treating certain infeetions diseases, we have a new and valuable therapentic agent.

The paper was diseussed by Drs. Crum, Sharp and Flynn.

Dr. C. H. Emery, of Bedford, presented a paper on "Iritis; Importance of Early Diagnosis and Treatment," whieh was discussed by Drs. Leach, Stalker, Graham and Gatterer.

Dr. George D. Kahlo, of Freneh Lick, read a paper on "Diabetes." Discussion was opened by Dr. Walker, followed by Drs. MeClain, Sharp, Peyton, Duncan, Leaeh and Cohen.

Ifter a short address by Dr. J. Nathen, of Louisville, Kentucky, the mecting adjourned, the next session to be held at French Liek.

Adjourned.
David Cohex, Sec.

## EIGHTH COUNCILOR DISTRICT.

The semi-annual meeting of the Eightl Councilor District Medical Soeicty was held in Portland on Thursday, April 16. The meeting was to have been held in the Methodist Church but on account of the ligh waters whieh flooded the basement it was necessary to hold the meeting in the Presbyterian Church, and this being a smaller building, was taxed to its utmost to accommodate the visitors. The meeting was a little out of the ordinary in that the doctors' wives were invited.

The husiness session concluded with the election of
oflicers for the coming rear, and Dr. Granville Reynard, of Union City, was elosen president; 1)r. M. M. Clapper, of Hartford City, vice-president; and Dr. M. d. Austin, of Anderson, was re-clected for a third term as secretary-treasurer.

The morning session was devoted to a symposium on the question of "Race Suicide." The Hon. Enerson McGriff, of Portland, introduced the topic witi an exfrmely interesting paper covering the ponomic quesiicus involved, considering quality mather than quantity the desideratum to be striven for. Its lone was so helpful and full of truth that the paper was imme. diately recommended for publication in The Journal of tie: Indiana State Medical Associatiu:. Dr. WV. W. Wadsworth, of Muncie, took up the question from the practitioner's viewpoint, and Dr. Etta Charles, of Summitville, diseussed the mother's side of the question. These last two papers gave a review of the everyday experiences of the average doetor. The Hon. Frank L. Snyder, of Portland, had prepared a paper covering the medico-legal questions involved, but was called out of the eity and could not give the excellent paper he had prepared. All these papers were commended for their careful and honest presentation of facts, and a motion made that The Jourval of the Indiana State Medical Association be requested to publish the papers as given in the symposium, and that reprints be secured for more general distribution, especially to teachers. Dr. Charles was requested to return to Portland as the guest of the high school and give the girls a leeture on sexual hygiene.

The society, on the motion of Dr. Garber, voted to have a committee appointed who should formulate resolutions eovering the following points:

1. The necessity of teaching, by competent instruetors, a thorougl knowledge of self and scx to the students in the higher grades of the publie sehools.
2. The desirability of a better dissemination of vital facts among the laity.
3. The suppression of the advertisements in secular and lay journals and the newspapers, offering relief for real and imagined sexual conditions, and especially those offering relief for sexual indiscretions.
4. Commending suitable instruction making quality rather than quantity the desideratum in family production.
5. Commending the present laws whieh have to do with the prevention of disease, marriage restrictions, and compulsory sterilization of the incurably insane, idiots and the habitual eriminal.

The next meeting will be held in Anderson, in October.

The ladies of the Presbyterian Chureh furnished a banquet, after which, Dr. Schwartz, acting as toastmaster, called for responses from the following doctors: Dr. W. W. Root, of Parker, spoke on "The Fee Bill." Dr. L. F. Sehmauss, of Alexandria, told of the advantages and disadvantages in going to Europe. Dr. H. R. Spikerman, of Muncie, told of the doctor's trials and troubles and how to get rid of them. Dr. S. E. Earp, of Indianapolis, spoke on some things which the doctor ouglit to do in a political way. Dr. Sanuel Hollis, of Hartford City, spoke of the good that an active soeiety ean do, and the necessity for their continnance and improvement. Dr. Albert E. Bulson, Jr., of Fort Wayne, did not arrive until too late to enjoy the festivities. However, he made a few remarks on "Medicine as a Side Line."

Adjonrned.
M. A. Austin, Sce.

# THE JOURNAL <br> of THE <br> Indiana State Medical Association 

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| :---: | :---: | :---: |

## ORIGINAL ARTICLES

RAYNAUDS DLSEASE: WITH REPORT OF A CASE.*<br>John Kolmer, M.D. indianapolis, ind.

In 1862 Raynaud published a thesis, calling special attention to a peculiar affection, usually symmetrical and affecting the extremities, characterized by loeal ischemia and loral asphyxia and frequently terminating in local death.

Before Raynaud's time there had been reeognized many obscure cases of spontaneous gangrene in which no occluaion of blood vessels or other tangible cause could be ascertained. Such cases were noted to be apparently idiopathic and others symptomatie in origin and it was even suggesed that the caluse might be a lesion of the nerrous system. Raynand collected and attempted to elassify such cases and advanced a theory of causation. While further olservations and some research, especially on peripheral neuritis, modify somewhat his conception of a few cases, set in a true case of Raynaud's disease his theory of its causation stands practically unaltered.

## I:TIOLOGY:

The disease is believed to be of a troplic nature, a profound rasomotor disturlance, manifested as a rasomotor spasm. This vasomotor element is not a distinct entity, it is often a symptom of some underlying affection and consequently the supposed causes are mary and varied. A very marked proportion of cases affect the femate sex, as: women are more susceptible to functional nervous disorders. Age also

[^41]las an impoltant influence, for the ereat majority of cases appear between the ages of eighteen and thirty rears, although a few eases are seen in childhood and old age. One would naturatly expect the weak and puny individual to be predisposed, but on the contrary the great proportion of cases enjor gool health up to the epoch of the invasion. Although idiosyneracy is a pernicions term, serving in reality to hide our iguorance, yet in the present state of our knowledge it must be nsed to designate a peculiar morbid susceptibility of some individuals with regate to the extremities. Many cases are fomen in person* in whom the extremities anl casily. with chilblains frequently occurring in winter and with other seemingly insignificant symptoms which become important when the malady in question becomes manifest. One would think that eold, hy lowering tissue resistance and as a direct stimulant of vasomotor irritability producing apasm. may be an exciting callse. Many cases are apparently caused by serere cold, but, on the other hand. in more cases an imperceptible change of temperature was suffieient. The disease generally commences in autumn and spring and especially during the month of November. laynaud thought that suppression of the menses was a cause, but this seems to be only a coincidence.

I thought it would be of interest to study the relation of the ordinary pus producing bacteria to the disease and determine if an infective gangrene were present. Two methods of examination presented themselves. First, to make deep punctures and aspirate some fluid from the tissues and make eultures; second, to determine the opsonic indices. The latter method seemed the most promising of results and the use of the cpsonic index as a diagnostie measure has been reported many times and is a standard recog-
nized procedure. I am indebted to Dr. Victor licene for the technic and work of this examinaion. Prehminary counts showed an unnsuaily large number of erythrocytes. 6.800 .000 per c.m., with a slight decrease in the number of cosinophiles. $11_{2}$ per cent. Technie: Fire drops of blood were obtained from each of four apparently healthy persons, mixed and taken as normal. The opsonic index of this blood was taken with a suspension of staphylococens aureus, one of staph-albus, one of staph-citrelis. and one of streptococcus progenes. The opsonic index obtained from the normal serum was carefully calculated and then the index of the pa1ient:s serum was taken. In the cases of the staph-progenes aureus, albus, and streptococeus the patient's serum had practically the same index as the normal serum. In the case of the staph-citreus the patient:s scrum showed an index nearly s per cent. higher than the "normal" sermm. Wre can infer that in this case the process was not associated with any of the ordinary pus producing bacteria.

## PATHOLOGY.

This may be considered in few words. Many theories have been adranced. It was thought to be caused by a peripheral neuritis or an endarteritis obliterans. 'The intermittent nature of the disease and megative microseopical examination of the ressels do not substantiate the latter riew. Raynaud himself considered it the result of lascular spasm. Its frequent oecurrence among women and under the influence of cold. the frequent dimness of vision, the occasional preence of a chill and the phenomena of hemoglobinuria all go to show the probability of rasoinotor spasm. The exact cause of this razomotor spasm is not known. Whether it be due to irritation of the intrinsie nerrous mechanism of the ressel walls by a circnlating irritant. or by a direct consequence of the sclerosis, or merely an independent nemrosis. is still speculative. Osler thinks that the "kidney symptoms, brain sympfoms and eye symptoms, etc., are due to angiospasm." There occurs first, a contraction of the arterioles and capillaries. which explains the first stage; this is followed by dilatation and paralysis of the resels. giving rise to the livid or blue color.

## SYMPTOMATOLOGY.

The patient is most frequently a woman and of roung adnlt age and may give a suggestive history of pecnliar susceptibility to changes in temperature. The disease is usnally symmetrical,
attacks the extremities and may be divided clinically into three more or lese well detined stages. The first phenomenon noted has been termmed local sincope because the ressels are in spasm and the parts are of an umnsual pallor with resulting marble whiteness and loss of sensation. Local asphyxia, which usually succeeds local syneope or may occur independently of it, now comes on, in which state the ressels are dilated and eapillary circulation is quite stagn:nt. With resulting lardness and dark purplish mottling of the parts. The change from pallor to purplish discoloration does not oceur simultanenously in all fingers and toes or whaterer parts affected. This produces a peculiar and striking mottling as the shades of purple (asphyxia) intervene with lighter spaces (syneope). There are aloo swelling, resulting stiffness and pain. the latter being ofton extreme and associated with an intense itching, More frequently there is anestheria than pain. Tnder warmth and proper treatment these symptoms may pass away reaction takes place ant congestion is replaced by actice circulation. sueh attacks may recur for lears without effect, though in extreme cases there may be slight loss of substance. The third stage or local gangrene is reached only in a few cases. It is due to permanent asphyxia and is simply dry gangrene. The affected part becomes dry, black and cold, while gangrenous blebs appear in the parts adjacent to sound tissue. I linc of demarcation appears and the dead part slough= away, but less extensively than at first secmed likely to be the case. This is important when the question of operative interference is considered. Rarely and only in cases occurring in young children does a fatal termination occur. - Imong more umsual symptoms of clinical ralue are hemoglobinuria and associated albuminuria. Dimness of vision. due to retinal syncope. is frequently encountered. It times cerebral symptoms. including torpor and partial loss of consciousness are present. also epilepsy, mania, delnsion and even temporary hemiplegia. Peripheral neuritis and arthritic swelling may be present.

## DIAGNOOSIS.

I typical case of Raynaud's disease presents !ittle difficulty in diagnosis. But in an elderly patient it may be mistaken for senile gangrene.

Embolic gangrene usually affects but one extremity and has other associated symptoms conrected with the primary condition. Embolism and thrombosis of the aorta do not gire much donbt in a trpical case. Only chronic cases
might, at some stages, suggest Raymonds disease, but the faet that only the lower extremities are affected, the progressive character of the lesion and lack of arterial pulsation should rule this out (Keen's System of Surgery).

The following table is taken from the Ameriean Practiee of Surgery:

|  | Senile Gangrene. | Raynaud's Di |
| :---: | :---: | :---: |
| Distribution | One limb aione, or first one iimb and then the other; us uaiiy the lower. | Corresponding parts usualiy. |
| Extent | Affecting whole part. | Limited to skin and subcutaneous tissues. |
| Progress | Begins at one point; <br> apt to be serpiginous. | Definite; several digits on both sides; does not spread. |
| Arteries | \|Atheroma. | No change. |
| Age | lold. | Young: any age. |

## PROGNOSIS.

Raynaud wrote: "In the presence of these atrocious and persistent pains, of this deep blaek diseoloration invading at the same time the hands up to the base of eaeh digit; the feet up to the tarsus; the nose up to the root; I ask what well informed doetor, who, seeing, so to speak, his patient die at all extromities at the same time would not give a most gloomy prognosis?" The outlook for permanent reeovery is not very favorable, although it is quite possible under favorable cireumstanees to outgrow the tendeney, espeeially if the etiologic factor ean be removed. The progress of the disease serves somewhat as a guide in the prognosis. Paradoxieal as it seems, early gangrene, as when blaek dry sloughs form in from ten to twelve days after the invasion of severe symptoms, is quite likely to be arrested and cure results after four to five months of elimination. On the other hand, where milder symptoms persist, as cooling and eyanosis reeurring from time to time, a more prolonged course of misery and suffering may be expeeted.

## TREATMENT.

Persons very suseeptible to changes in temperature and presenting mild symptoms of Raynaud's disease, should be advised to maintain their health up to a high standard by appropriate exereise and nourishing food, and they should proteet themselves by woolen elothing. When the attaek eomes on, the parts should be earefully massaged, wrapped in wool and artificial heat applied. These prophylaetie measures are very important, beeause when the disease is well started the treatment is far from being satisfactory. There is no eourse of treatment known which will remove the vasomotor irritability. At best, we ean hope to retard the onward progress of the disease, improve the nutrition of the parts and restore general health. The nitrites
have done good in some eases. The eonstant galvanic current may be used aecording to the eonvenient method of Barlow: immerse the asphyxiated parts in a large basin eontaining warm salt solution. Apply one pole of a constant eurrent battery to upper part of the linb, thus eonverting the salt and water into an electrode. Apply eurrent as strongly as patient can eomfortably bear and it is well to make and break the eurrent freely, so as to get repeated moderate eontractions of the limb. The patient should be instrueted to make voluntary movements of the digits while galvanism is applied. Oecasional applieations of the faradic current to the affeeted parts is well recommended. In chronic eases espeeially, galvanism does most good, and when applied along with daily massage and Swedish movements, nutrition of the limb is mueh favored and gangrene staved off for a long time. When pain is severe it may be neeessary to use opium. The gangrene is benign and simple protection and rest is all that is needed. Severe eases must be treated on surgical prineiples. Amputation should not be performed until the line of demareation is definite. The outlook after amputation is more hopeful and better than in ease of extensive atheroma of the vessels or in diabetic gangrene.

Case 1.-History of A. T. Oceupation, bookkeeper; age, 35 ; nationality, German deseent; married, and the father of three healthy elildren.

Family History.-Father living, apparently healthy at 00 ; his parents died, one at 82 , one at i\%. Father had a brother who was troubled greatly with his feet, supposedly rheumatism, and whose physicians were at one time eonsidering amputation. This man died suddenly at 48 years. Mother healthy at 69 years; her parents died, one at 50 , of abdominal trouble, and one at 45, from throat trouble.

Personal History.-Is seventh ehild. No eomlication at birth. Breast-fed infant. All other ehildren that survived childlood are healthy.

Previous Illness.-Summer eomplaint at 2 years; rapid reeovery; searlet fever at 3 years, followed by prolonged convaleseence. Physieian said kidneys were affeeted. Child was stiff iu legs for several months. Measles at 16 years. Rapid reeovery.

Present Illness.-In July, 1901, while bathing in a lake, patient cut plantar surface of left foot at third toe. This healed in about four weeks. However, pain continued and in about four months area broke open and discharged for perhaps one month, when it healed by use of loeal applieations. Patient has suffered sinee that time with sharp, slooting pains radiating through both feet to leg above ankle.

In 1903, patient was troubled greatly with these pains, aud small areas of neerosis appeared
on both feet. Healed withont patient losing time fron? work.

In February. 1906, skin on third toe of right foot begran sloughing along border of nail. necrosis continued until toe fractured and was amputated in June and healed after about four week: lỵ granulation.

In Febrary. 190. fourth toe of riglat foot became involved. but healed in about cight weeks by topical applications. In July of same rear fourth toe again began to slough. followed in four weeks by first toe. then fifth toe, then scar of former amputation. and then second toe; sloughing continued to spread until February, 1908, when leg was amputated.

The extencion of the slongh was always preceled for perhaps two weeks by period of intense pain, "tarting in toe and radiating well into lower portion of leg. The reins of entire foot were rery prominent, but during extreme pain would diminish in size by contraction.

Area about necrosis would hecome deep purple and swollen, then skin would rise and serum and then pus form under skin, and area would break down, extending to deeper tissues and to spon-taneon- amputation in cate of fomrth toe.

Repeated mine examination showed a trace of allmmin of transitory appearance. Lrea diminished. Otherwise normal.

On my visit Fobruary 4, 190:. I found patient in bed. presenting a clinical picture of great suffering. The only pulsation found of any artery was over femoral in scarper"s triangle. On convultation with his former family physi(cian. 1)r. H. F. Beckman, we conchnded that amputation was the only possible chance for prolongation of life. To this the patient consented. and on February 6. 190s, we amputated at junction of middle and lower third of thigh. At the end of first week there was quite a discharge. which was readily controlled br local antiseptice. and patient left hospital after third week. He is using artificial limb at the present writing and $i$ s apparently in grood enndition.

## DISCESSION.

Dr. .J. . M. M(I)onald. Indianapolis: This disease. to mw mind. belongs to the great gromp of diseases or sydromes which are becoming gradnally hetter understood or more frequently recugnized. They are that class characterized by local manifestations of disturbed circulation, the ischemias and local plethoras with or without cdema. a group attracting a great deal of attention. and where not recornized is capable of causing swions error and very unfortunate mistakes. For example, the gromp of local edemas, the infestinal intumescent colic which may canse a symptom complex which certainly can not be pasily and sometimes not at all differentiated
from intestinal obstruction and intussusception. whith only on careful study of the history may. he recognized: local disturbances in the fingers or hands or in the brain, which bring me to local cdemas of the brain. I have recently seen a case diagnosticated as hemiplegia wherein the postmortem showed disturbance of the kidney. Within the same week another case diagnosed as probably memia, with local apoplectic manifetations. prored to be an actual apoplexy. What probahly happened in the first case. which was diagnosticated hemiplegia, was a local edema. preceded by headaches. a sudden. sharp attack following. being altogether characteristic of apoplexy being pither meningitic or edema of the cortex, and no doubt belonged to this gronp of cases. Following them came peripheral manifestations, as local manifestations or local erlen:a and peripheral angioneurotic disturbances. particonlarly spasm. I shall not go into it further except to call attention to the possibility of error in cervico-pachy- or leptomeningitis. The sole manifestation is pain in the fingers. continuing for hours and lours, perhaps for days. But it is paroxymal. as it passes off. This may also necur in lumhar pachemeningitis. There is a gromp of crythemas coming in children which belong to this class but they are not at present properly elncidater?. Heredity is probably the most important factor. a vicions heredity producing unstable splanchnic or vasonotor conditions which precipitates the attack.

Irr. John Kolmer. Indianapolis: I do not believe any medical treatment whatever will benefit a genuine case of Raynaud": disease. Opium is adrocated for pain. nitroglycerin is also adrocated, and all the other drugs that have effect upon the peripheral blood ressels by dilating $0^{-}$ contracting them, hut a gemine case will result in gangrene. sloughing and amputation. I have here the history of a case under obserration last winter, and which has been in progress since 1901. The case was sent to Chicago and Was under the olservation of Dr. Beran and Dr. Billings. After two weeks" consideration the patient was sent home as incurable and was refused amputation. I do not wish to state this to you in any bragging way at all, but we mu:t as physicians and surgeons never give up, no matter how little the chance may be. We must give the patient the last chance. like the drowning man who grasps at the straw. He came to me on the pighth day of Febrnary. I was impressed that something should be done for the patient and I said to him I believed it to be rational surgery to remore the offencling part.

The urine was loaded with pas and tube easts. They consented, but were told beforehand of the possibility of death. I amputated at the junetion of the middle and lower thirds of the femur. The patient made an merentful recovery and I am happr to say is to-day able to wear an artificial limb) and pursue his work.

## Symposium on Obs'etrics.

## THE MANAGEMENT OF NORMAL LABOR.*

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In the management of all labor cases a thorough and an carly appreciation of the ease is of the greatest value. There are some procedures which should be routine before the onset of labor. The measurement of the pelvis is very important. but much ean be learned by simple inspection. Short women often have unnsually broad pelves and may have precipitate deliveries, but on the other hami, a generally small stature may suggest a general contraction of the pelvis. In aeute pubic angle means a similarity to the male pelris, and in such cases dystocia may be expected. Pelvie deformitics may be suggested if in primipare during the last month before the onset of labor the abdomen is prominent and pendulous. there being probably a discrepancy between the size of the head and the inlet. Also if the woman stands with one hip elerated there may be some deformity due to tilting of the pelvis,

The history of rickets should be inguired into carefully. The variations in the lozenge or rhomboid of Miehaclis, the four points of whieh are formed by the spine of the last lumbar vertebra ahove, the tip of the saerum below, and the posterior spines of the ileum or either side are very Fliggestivc. The lozenge is diamond shaped in normal women. The upper point sinks towards the level of the line hetween the spines in rachitic conditions. spondylolisthesis and justo-minor pelvis are both suggested respeetively by asmmetry and a generally contracted lozenge. Howerer, at hest, these impressions are only suggestive and all primipara and such multiparae as give a listory of previous hard labors should be earefinlly measured. The three measures which should be routine are the intercristal, interapinal and the external conjugate. If there is auy sug-

[^42]gestion of deformity the internal measurements should also be taken.

Nothing is of more importance than the repeated examination of the urine. It should be examined at regular intervals thronghout the last three months with especial attention to fruantity, reaction, sugar and the relations of albumin and urea. Eclampsia, one of the gravest situations of the lying-in room, can either be aroiled, or at least prepared for. if repeated examination of the urine has given warning.

A third and obrious ennsideration is the eorreetion of any mal-position. If due to the presence of constrieting clothing. the abandomment of such may produee a spontaneous version.

When you are called at the onset of labor, the abdominal examination, being by far the most important. should be made first. The four maneurers of Leopold should be used. The patient having been prepared. lies flat on her back on a hard and even bed. During the first three morements the physician faces the patient.

First Maneurer:-The fundus is: first palpaterl to ascertain its height and which pole of the fetus: it contains. The head will be hard and rounded and much more freely ballottable than lhe breech. The breech is softer and more irregular and less freely morable. Inspection will -how from the contour of the oroid whether or not the long axis of the child is with the long axis of the mother.

Second Mrneuter:-The hands are placed fiat against either side of patient's :abolomen: gentle presenre will reveal a hard resistant surface on one side the back: and irregular nodulations on the other, the small parts. If there is much flnich or the woman is fat it may be necessiry for an insistant to maintain deep pressure on one side white you palpate the other. Haring azcertained the position of the back you next discorer its direction and general outline. These two manipulations give you your conclusion as to the position and presentation of the ehild.

Third Manctater.-If labor has not set in and the neeiput not engaged, the third maneuser will complete your examination. You grasp the lower part of the abdomen between the thumb and fingers of one hand. depressing your elbow to a level with four hand. If the part has not engaged it will be found to be freely movable. l'alpation will iudicate upon what side the greatest prominence is felt in head presentation: if an a side with the small parts the head is well tlexed and the rertex presents. If on a line with the back. the head is extended and you have a face or brow presentation.

Fourth Maneuver.-The fourth maneuver is necessary if the head is engaged. You face the patient's feet, and with the hands almost directly towards the bet, make deep pressure in the pelvis. The degree of flexion is determined in the same manner as in the third mancuver. The depth that your hands take will indicate how far the head is engaged.

Auscultation will confirm your diagnosis as to position. In rertex cases the fetal heart will be heard below the line of the navel and above in breech cases, and will be transmitted through the back. In face cases, the sound will be transmitted through the anterior chest wall and will be less distinct.

An abdominal examination can be made between pains without inconveniencing the patient and has the great advantage that the danger is qreatly lessened of infeeting her, either by your hand or from her own discharges. To repeat: The points to be learned from an abdominal examination are the presentation and position of the child and its general condition as evidenced by the heart tone; the comparative size of the engaging part and the inlet; the degree of engagement and flexion of the presenting part; and, other things being equal, the probable course of labor.

The examination of the vulva is the next to consider. Suspicion of infection will demand especial precantion in aseptic measures. Varicose veins will indicate a frequent cause of hemorrhage, usually minor in quantity. Edema and swelling from long pressure means that there is more resistance from below than the advancing part is able to overcome, and almost always indicates that sooner or later forceps will be necessary.

The character of the perinem is important. If previously torn, has it been repaired? Scar tissue offers but little resistance and a fresh tear is hard to aroid. A relaxed perineum may mean a precipitate delivery. A short perineum ineans an easy one, and a long, tight perincum means a long, hard delivery with much advancing and retreating of the head before sufficient relaxation will permit the expressing of the head.

The anterior fourchette demands especial care. It should be examined for abnormality, and care must be taken in delivery to preserve it intact. A laceration into the rectum may offer many difficulties, but an anterior laceration of any extent is far worse.

The internal examination demands especial precaution. It should invariably be a rule that the pubic hair should be shaved and the parts scrubbed and prepared as for a surgical opera-
tion. Also, it has been my custom to have within easy reach a basin of antiseptic solution, preferably lysol, with which, as the case progresses, I can do the necessary sponging. The scrupulous maintenance of asepsis is equally as important as the original attainment of asepsis.

In making a vaginal examination there are three things to be learned: 1. The condition of the passages, which includes the bony and the soft parts. 2. The condition of and the degree of dilatation of the cerrix. 3. The presentation.

In examining for the presentation you should confine your manipulation to that part of the presenting part which is exposed. Do not slip your finger inside of the os. In doing so your hand has entered the uterine cavity and thereby has greatly increased the danger of infection.

If the labor is dry and the head fixed, a thinned uterine segment may present an obstacle in diagnosis by being so tightly stretched over the head that the fontanelles and sutures are felt without difficulty, thus giving the impression that dilatation is complete, and only further search will reveal the tight, knife-like edge of the barely obliterated cervix up and behind the advancing part.

Moreover, when dilatation is further advanced the presence of a caput succedancum is very confusing, the fluctuating tumor being taken for the face, and the swollen face for the breech, differentiation being made through the abdomen.

The management of the first stage of labor in multipare is very different from that of primipare, owing to the essential difference in the relaxation of the cervix. In multipare so little is the resistance that two hours is often sufficient for complete dilatation, whereas in primipare from one to three days is commonly consumed in dilating the rigid and unyielding cervix. Unless some sudden emergency presents, interference is not permissible. If the patient becomes exhausted she can be given narcotics and allowed to rest. Codein in three-fourths grain doses and repeated in half an hour is often given. I like to give thirty to fifty grains of chloral by rectum. Morphin and hyoscin have also been reported upon favorably. I have not used them myself. It will be found that after the patient lias had some rest that the pains which had probably become nagging in character will once more become active and dilatation proceed without further delay.

Usually the patient feels better during this stage if she is allowed to be on her feet the greater part of the time. Such a position allows the force of gravity to act upon the presenting part and assists in its fixation in the pelvis.

If there is an excess of fluid in the uterus or the head is large, there may be some delay in the engagement of the head. This can be helped by allowing the woman to lie upon the side to which the occiput is supposed to engage, the right side for right positions, and vice versa. It often happens towards the end of this stage that labor is delayed by the presence of a full bladder, and this point is often orcrlooked. If the occiput has been down for some time the patient may have no sensation herself. A bulging over the pubis will indicate the condition, and if the patient is not able to void, resort must be made to the catheter. The condition is obviously important. Another condition which will in time remedy itself is the presence, when dilatation is practically complete, of an enlarged and cdematous anterior lip of the cervix caught between the advancing part and the symphysis. If left to Nature, it may take hours to overcome this obstacle, whereas it is a very simple thing to strip it back before the advancing part. If the head presents, it will usually suffice to strip it up once, but if the breech presents, it may be necessary to replace it many times and to hold it during the pain, since the breech in itself is not sufficiently resistant to prevent its coming down again.

The presence of a show will indicate a rapidly dilating cervix and of the approach of the second stage. Do not ask the patient to bear down at this time. She will give you abundant warning, and a premature effort on her part may result in torn cervix, and, if for no other reason, such an effort unnecessarily exhausts the patient. She will not be able to resist the bearing down pains when they do finally come, and will voluntarily assist herself.

If the patient is not very phlegmatic she should be given, during the sccond stage, a few dirops of chloroform at the beginning of each pain, and just at the end anesthesia must be deepened in order to control all voluntary movement. You do not want to have the head forced through the cutlet in a hurry.

After the head has appeared at the vulva, the obstetrician must take his place at the bedside. In multiparæ he will not again remove his hand from the advancing part. In primiparæ it will be sufficient for him to watch the advance until the outlet has been slightly distended. After which, at the beginning of each pain he will push the head down against the perineum so that the perineum is stretched tightly up over the head and artificially dilated. When dilatation of the outlet is about two-thirds complete, the patient is turned on her right side and her left leg elerated, the obstetrician sitting at the patient's
back. (It will be remembered that flcxion of the legs tends to tighten the perineum, therefore the legs must be extended as much as possible.) The advance of the licad is controlled in the same way until the tight cord-like feel of the anterior fourchette has been softened and the occiput well under the symphysis. Anesthesia is then dcepened to narcosis and the head expressed between pains. I say between pains, for the outlet will then be relaxed and will offer less resistance. With one hand on the occiput, the head is crowded well up toward the symphysis, while the other hand pushes the chin up, the chin being plainly felt through the now tightly stretched perincum. The head should be expressed rery slowly, the advance being watched with the greatest care. The brows will indicate the presence of the longcst diameter, and if they are expressed successfully the danger of laceration is then fairly passed. Too great force should not be used in crowding the head up against the symphysis because of the danger of an anterior tear.

It will require considerable judgment to know just when to dcliver the head. Too early delivery means laceration, and too great retardation means discomfort after the delivery from swelling and contusion of the parts induced by too long pressure, the condition being often so aggravated as to require repeated use of the catheter during the thrce or four days after labor.

As soon as the head is born the woman can be turned on her back and anesthesia stopped. You next examine to see if the cord is around the neck. This condition is very frequently found and is suggested before delivery by pain over the site of the placenta, and also when, after a good advance, the head will make a long retreat a number of times before it can be delivered. If such a condition is present and the cord can be looped over the head or slipped back over the shoulder, well and good; if not, it must be clamped and cut and delivery hastencd.

The eyes and mouth are now sponged with boracic acid solution, and internal rotation of the shoulder having taken place, the head is grasper between the hands and firmly depressed toward the bed until the anterior shoulder appears from under the symphysis. The child is then lifted up well away from the perineum and the posterior shoulder slowly withdrawn. If, however, the head has torn the perineum it may be possible to prevent a further tear by pushing the anterior shoulder well up under the symphysis and withdrawing the posterior shoulder first.

Some authorities claim that it is best to wait for the next uterine contraction to deliver the body, and that a premature withdrawal of the
aterine content opens the way for a postparten hemorrhage. This can be avoided if your assistfint grasp the uterus firmly and exert- pressure from abote as you slowly withdraw the child.

The cord is tied about two inches from the child's aldomen and looped back to the umbilieus and tied again and eut. This methed offers slightly more resistance to infection. Any time within an honr will do for the Crede treatment of the eves. which I make as routine practice.

In the interval before the third stage the patient should be examined for laceration of the porineum and if any is present it must he sewed up while the parts are still anesthetized from presure. A cervical tear will show itself by hemmrhage which can not be controlled by the usual abdominal manipulation of the uterus, but unless the hemorrhage is extensive and uneontrollable, an examination and repair may he made at a later time, preferably after involution is complete.

In the course of half an hour if the placenta is not spontanenusly delivered. the C'redé manipulation may be instituted; the ersential points to be remembered are to insure firm uterine contraction before you begin your attempt, and in grasping the uterns to direct it almont directly downward, otherwise the os is apt to be occluded bey being pushed against the ermphr:is. The placenta ond membranes must be examined as soon as deiiverect. for on their complete remoral almost mowe than anything else depends the future health of the woman. If any of the placenta is retainect and can not he delivered ly the Crede methol. the obstetrician is obliged to go up after it. If any of the membrane :- retainerf, the nurse may be instructed to watels for it in the lochia. If it is not expelled naturally, and especially if there is a rise of temperature in the next three or four days it may be washed out with an intra-uterine donelie.

The use of ergot after delivery of the placenta is a monted question. I have yet to see any ill effect from its administration. and I beliere that by hastening eontraction of the uterus aside from the question of hemorthage it leseens the danger of infection. It has been my eustom to give a drachm at this time, but in addition the uterus is held for an hours and at any sign of relaxation. of hemorrhage, is massaged.

The after-eare of the patient in uncomplicated cases is rery simple. The infant is put to the breast after six hons. The nipples must be watehed with the greatest care for the appearance of fireure and these must be treated at the time of their appearance. The use of the catheter after delivery must, if pos-ible, he aroidecI. many cases of profound erstiti= haring been reported.

Every effort must be made to induce the patien: 10 roid her urine. Hot applieations over the abdomen. external douche, hot water in the hed pan. rumning water and hot rectal enema must all be tried. the patient can he propped up in bed or turned on her face. All these failing, if there has ixeen no laceration nor tendeney to blect, the patient may be allowed to sit up. No cffort must be spared along this line, and if the patient is suceesful onee there will probably be no further trouble. On the second day the patient is given a dove of oil and after her lowels have moved well lier diet ean be increased. and on the third day. if there are no untoward symptoms, the patient can be given a full diet.

In conclusion, may I lay eapecial emplasis on the following points:

1. In the very large majority of eases the diagnosis must be made from the abdominal examination, preferably aroiding raginal examination.
?. The first stage is intended for dilatation of the os. and for moulding of the presenting part. There is no desent in the first stage.
2. Deliver the patient on her side to protect the perineum.
t. Ind lastly. follow natural laws as nearly as posible in the after care of the patient.

TOXEMLA OF PREGN゙ACNCY:*<br>Lote Burckhardt, M.D. INDIANIPOLIS, iND.

Toxemia, or autointoxication, mean- an atcumnlation of toxic substance in the hifood. Eelampria has been considered for a long time as due to such a condition of the blood. Of late. howerer, not only pernicious romiting, but most of the minor ailments of pregnanct. have been recognized as being due to the overloading of the maternal organism with the products of the maternal and fetal metabolism. Therefore, such symptoms as nalsea, continued romiting. dizzines. irritability. disturbances of rision, neuralgic pain. ete.. gain in importance av forewarning the advent of more serious complicatioms. If the organs destined to protect the organism sgain-t autointoxication are in a pathological condition at the onset of pregnaner, a rapid inerease of the existing toxemia is to be expected.

We must not overlonk the fact that the kidners are not the only organs which proteet a pregnant woman from the pathological autointoxication.

[^43]One portion of the toxins is eliminated by the kidners, intestines, skin, and lmags. The remainder, in fact, the largest part. is lestroyed by the lifer, and eventually be the thyroid gland. It is obrious, therefore, that among organs of defense the liver, next to the kidners, is most frequently damaged by fatty degeneration, hemorrhage, and acute vellow atrophy. Nlthough but rarely observed, cases of eclampsia terminate fatally, which never show any symptoms of kidney disease, neither elinically nor under postmortem findings. We must infer from that, as far as the destruction of the poison is concerned, that the liver proved insufficient to such an extent that the organism practically succumbed to the poison hefore secondary changes in the parenchyma of the kidueys could develop. It is the province of the liver to synthetize the lower nitrogenons products of catabolism to urea and uric acid. Its failure to do so is responsible for the accumulation of these substances in the blood, namely. aminoacids, ammonia, and the xanthin bases. Ouly one, carbaminic acid, is a chemical poison, and this is only found in non-toxic quantities in the blood.

In high degrees of toxemia, unsynthetized nitrogen compounds appear in the urine at the expense of the urea. Tot taking into account the nitrogen climinated in the form of albumen, a high ammonia coefficient (above ; per cent.) might make up for the low coefficient, so that the total nitrogen amount is seemingly normal. A low urea coetficient. therefore. neer not indicate a retention of nitrogen compounds in the system, bat only the inability of the liver to anabolize the lower nitrogenous compounds into the higher compounds, urea or uric acid. 'Theretore, a low percentage of urea must be considered as an indication of a disturbed function of the liver. Such a disturbance may be due to excessive work to be done by the hepatic tissues, owing to the increased amount of toxic substances to be destroyed, or to pathologic changes preventing the liver from doing its normal amount of work.

Hugo Ehrenfest ${ }^{1}$ says: $\cdot$ As soon as the equilibrium between the formation of poisonous material and its disposal is disturbed, either by a sudden orerwhelming of the maternal system with an excessive amount of toxic substances or on account of insufficient elimination, toxins begin to accumulate in the blood and a vicious circle is established. The blood laden with a pathologic quantity of poisons causes additional changes in the 'kidners of pregnancr,' and through these nephritis may develop. In this

[^44]way the renal function is no longer relatively but is absolntely inefficient. Other poisons are now retained, and these in turn begin to exert a deleterious effect upon the circulatory and nerrous srstems and the functions of the liver."

Whether secondary anatomical changes take place in the liver or the kidners depends on the severity of the matabolic disturbance or on the resistant power of the organs; a previnusly disturbed liser or kidney would naturally suecumb sooner than healthy ones. I younger individual, with a higher adaptability to sudden changes, will naturally be less exposed than older primiparas.

That the loss of a seemingly small quantity of albumen through the kidners should be accompanied by such extensire waste of tisue has always been a puzzle. In fact, it is, but in "higher cases." only an indication of a serious disturbance of metabolism. We have in the so-called kidney of prequance a temporary functional disturbance of that organ which is hardly ever followed by a pathological change in the parenchyma.

The adrent of casts-granular or hyalinmarks the begiming of a true inflammation. Inrersely, the amount of albumen might be exceedingly small. Howerer, easts may be found during the monthe following the acute attack, and we have to make the diagnosis of a chronie inflammatory proces lorought on by the overtaxing of the kidners in eliminating the toxie products of metabolism. The pre-existence of nephritis in pregnaner must be diagnosed, in order to realize in time the danger of threatened insufficient elimination. Extra demands that are made on the kidners. through an inereased amount of toxic substances, depend on the presence of unswhthetized lower nitrogenous products of catabolisin; the chemical analysis of these substances (amino-acids, ammonia, xanthin bases). if not difficult, demands so much time that a general practitioner could not possibly follow the course of events elosely enough to be of any practical value.

As I mentioned above the increased elimination of ammonia, amino-acirl, ete., is accompanied by a decreased elimination of urea. The urea. therefore, can be utilized as a valuable indicator as to the normal or insufficient action of the liver in anabolism of nitrogenous substances.

The presence of albumen in the urine should indieate a disturbance of the function of the kidners: a decreased amount of urea in the urine would indicate a disturbance of the function of the liver. The presence of albumen and a normal amount of urea indicate the cirenlation of
toxic substances in the blood in sufficient quantities to overtax the kidneys but not the liver.

A low amount of urea, with an absence of albumen, indicates an orer-taxing of the liver, the toxic substance, howerer, not affecting the kidners. A low percentage of urea and a high percentage of albumen indicate a functional insufficiency of liver and kidneys. Either one of the first two mentioned conditions is a warning that serious disturbances of metabolism exist, and I want to emphasize the fact that a low urea percentage is just as important a symptom as the presence of albumen. In a given case of albuminuria in pregnancy we are permitted to allow a case to go on uninterrupted as long as the percentage of urea does not diminish, eren if the amount of albumen should increase perceptibly. The time for interference (induction of labor and bleeding) has come as soon as the urea coefficient decreases and the percentage of albumen increases.

As the insufficiency of the liver precedes the insufficiency of the kidneys, the decrease of urea will be shown in the urine earlier than the increase of albumen. Frequent and careful examinations of the urine for urea and albumen must prove most raluable aids in determining our course of procedure in toxemia of pregnancy.
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## PUERPERAL INFECTION:*

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The dictum of Bumn, "Pucrpural ferer is wound fever; wound fever is wound infection," is a concise and comprehensive statement of the present status of our conception of "child bed fever," i. e., puerpural infection.

That it was, before the days of antisepsis and asepsis, the cause of death of 20 per cent. of women of child bearing age; that it constitutes almost three-fourths of the mortality of the puerperium to-day, to say nothing of the great amount of invalidism; finally, that it at the present time has a mortality of 6 per cent. of women dying between the ages of 20 and 50 years, this being in excess of that of any other disease-perhaps not excepting the great white plague itselfseem facts sufficient to account for our interest in the subject.

The cause and pathology of puerperal infection are essentially those of surgical wound fever

[^45]generally, qualified only by the peculiar conditions pertaining to the parturient canal in which the prerequisite wound is universally present. The superficial necrosis of the decidual surface, the underlying delicatc and spongy layer, the great rascularity of the parts and the inmediate proximity of the peritoneum are anatomic conditions which add greatly to the possibility of infection and also to the seriousness of its course. What then is the manner or source of this wound contamination?

Oliver Wendell Holmes in 1843, and Semmelweiss, of Vienna, in 1847, proclaimed it "contagious." To the present time their idea has prevailed with some doubt as to the rare occurrence of the exceptional auto-infection.

In order to determine the possibility of the latter occurrence much work has been undertaken upon the bacterial flora of the ragina of pregnant women. We can not go into the results of such observations here in detail excepting to say that they have been at great rariance-from those of Bumm and Sigwart, finding the streptococcus in it per cent., to those of Williams, who found it present in none with proper technic.

With such observations from many of our best workers we must concede the question as yet unsettled, though personally we do beliere with Williams the lochia to be normally sterile and non-infectious. Infection does occur through the blood current from distant foci-though very rarely-and also as a result of pre-existing gonorrhea. These latter are not, however, cases of auto-infection in the true sense, but rather of secondary implantation.

It is only necessary here to briefly enumerate some of the sources of this contact contamination; these are, first and most frequent, the examining finger or operating hand; then also instruments, bed clothes, hands of the puerpera herself, coitus, bath water, and, in short, any surgically unclean thing which may come in contact with the vulro-genital region of the puerpera.

The active agents in producing the disease are the following micro-organisms with their respective pathologic conditions:

Streptococcus Pyogenes.-As early as 1865 Mayerhofer demonstrated this organism in the tissues at postmortem examination of several puerpera. Pasteur and Doleris were the first to cultivate it from cases of puerperal infection and many later observers have substantiated their findings and established the streptococcus as the most frequent and most dangerous of all the organisms involved.

It occurs altogether in one-third and as the only offender (i.e., in pure culture) in one-fifth of all cascs. Zangemeister and Meissel have recently shown a relationship botween the many various strains from the saprophytic forms to the virulent ones inclusire. They believe, therefore, that any form may become pathogenic with widely varying virulency, and that a polyvalent specific serum should be possible of development.

Gonnet has suggested a marked difference between the pyogenic streptococcus and the streptococcus gracilis, which latter-saprophytic in character-he finds in the normal vagina; the former only in infected cases. The virulent form is said to give a black spot with white halo on a medium of blood serum and agar, not produced by the saprophyte.

The course of a streptococcus infection may manifest many different forms and vary greatly in its results. The process may remain local or may spread beyond the surface of implantation.

The localized infections may be limited to a perineal laceration, rulvo-vaginal or cervical wound, or the endometrium-one or more or all of these being involved. The infection is usually descending-in the latter instance being carried with the lochial flow to the wounds belowthough it may ascend in some cases from wounds in the lower traet to the endometrium by continuity.

The pathologic change in these surfaces is one of superfieial necrosis with or without a reactionary wall of granulation tissue-the so-ealled "wall of leukocytes"-below; this having been demonstrated to be absent or only slightly dereloped in many of the virulent cases and then permeated with the infectious microbes. The neerosis gives rise to the typieal pseudo-membranous investment which varies greatly in thick-ness-in rare instances amounting to gangrene involving even a part of the tunica muscularisand is of a grayish white color. These local infections give rise to an initial chill, fever and malaise without any local pain, as a rule.

Septie endometritis rarely remains a local infection. Beeause of the peculiar vulnerability of the plaeental site, the infection has a marked tendency to deeper or even generalized invasion resulting in thrombophlebitis, premia or septicemia, if the inrasion occurs through the vascular system; or in parametritis, perimetritis or peritonitis when spreading through the lymphatics. Pyometria, pyosalpinx and other loeal abscesses are also often met with. The description of the pathology of these lesions we can not go
minutely into, but shall touch upon them later in considering their diagnosis, prognosis and treatment.

The next organism in importance is the diplococcus of Neisser: (gonococcus). It is demonstrated in 10 to 15 per cent. of cases or more, Krönig having found it present in about 30 per cent. of febrile puerpera. More rarely the colon bacillus, gas bacillus of Welch. staphylococcus pyogenes aureus, the typhoid bacillus, pyocyaneus and others-some as yet unidentified-have been found in a causal relation.

The colon bacillus is in pure culture in about 5 per cent. of cases and in mixed infection more often. It is said to be quite virulent in combination with the streptoeoccus-as is also the gas hacillus combination, as shown in a recent report from the Johns Hopkins Hospital.

## didgnosis.

With a temperature above $100 . \pm \mathrm{F}$. for more than 24 hours after the bowels have been moved well, thus excluding intestinal auto-intoxication, and when such conditions as typhoid fever, acute miliary-tuberculosis, mastitis and malaria have also been eliminated by careful examination, we may safely presnme a ease of puerperal infection.
General Examination.-In attempting to differentiate the form of infection we must bear in mind that septic endometritis manifests itself by an initial chirl, usually early, and persistent temperature; the abdominal examination revcaling slight subinvolution of the uterus, which feels somewhat softer than it should be and which may be slightly tender to pressure.
The lochia is sanguino-purulent or somewhat serous, increased or diminished-in some virulent cases ceasing-and usually odorless. In putrid (ases there is an increase in amount of the lochia (unless retained), a foul odor and sometines frothy character due to gas production. There is, however, a growing tendency to doubt the oc-currence-or at any rate the very frequent occur-rence-of purely putrefaction processes; rather are they to be considered mixed infections in most instances-and the general condition one of toxemia rather than of sapremia.
Septicemia may be diagnosticated by the early onset with an initial ehill without a recurrence, a profound toxic condition with relatively increased rapidity and weakness of the pulse, and in very serere cases by involvement of the sensorium in a delirium, semicoma, and finally coma-without the signs of localization which charaeterize other forms of the infection. In the most virulent and rapidly fatal cases there being no local signs, excepting sometimes a suppression of the lochia.

The sensorimm mar, howerer, remain chear for a long time in some cases.

Perionitic, with its pain. pulse. trmpanitis, romiting and facies of great suffering, may form a part of the abowe pieture in less rapid and less virulent infections. or may ocrolr alone without septicemia. In verr serere cases there may be only a small amount of sermm in the abdomen. or there may be fibrin or erem pus. Other serous waties. as the plenta and the perieardium may be involved. with or without marked additional symptoms.

I'yemia. on the other land, minally has a later onset with recorvence of the chills and the hectio type of temperature and pulse colve involvement of the pelvie-and in some instances the peri-pheral-reins, joints and internal organs in the process. Depending upon the systemic rexistance and other factors. these foci may or may not suppurate. Vemenil considers the premie disease as a secondary infection of the remons thrombi in septicemia.

Thrombosis is msually a verry late occurrence and characterized by the marked increasing rapidity of the pulse (climhing ) . repeated chills, ant the petrie signs ( $V$. I.). Among these renous involyements may be mentioned the femoral, or "phlegmacia alba dolens." and I have seen an adema of the ere in one abs which I could explain in no other way than the occurrence of renous thrombosis. The pelvic involvements are of the ovarian, uterine. round ligament and hyogastric reins. We may mention that embolism sometimes oceurs here as in amy other thrombotic process-causing foci in the longs, kidners, liver and other tiswes, when progenie infection superreves. These thrombi. though septic. may not hecome purulent: on the other hand they may discharge pus directly into the circulation.

P'arametritis is better diagnostieated by the bimanual examination ( 1.1. ), but sometimes a distinct mas: around the fundus, posteriorly, laterally or bilaterally, may be felt in the abdomen with tenderness to toueh and manifesting spontaneous pain.

Perimetritis manifests a marked point of exeruciating tenderness and pain upon the surface of the uterus. withont the inflammatory tumefaction.

Finally. as a part of the general examination, blood coltures and a leukocrte count should be made. although not indispensable to our search for diagnostic or prognostic aids.

Our duty now becomes that of determining the condition of the genital tract and the bacteriologic canse of the lesions in order to guide our opinions as to prognosis and diecet our treatment.

For this local examination we mast have the patient in a favorable position at the edge of her bed or on a table and in the lithotomy position so that we can inspect the tract under a good light-the rulva and surroundings having been previonsly thoroughly cleansed and the hadder (mptied.
('areful inspection of the valrar region will reveal to one the condition of vulvar or perineal wombds. Ifter this inspection we introdnce a peccuhum and inspect the ragina up to the fornices. the condition of the wounds being thus (asily seem. 'The condition of the uterine cavity is now mate known by the appearances of the cervix on simple inspection, the imner cervical surface being a part and a counterpart of the surface of the whole endometrium.

If the rulvo-raginal wounds and the portio raginalis show a fresh red granulation surface, we mas have a sapremia-a putrefaction fererbut not an infection. The putrid malodorous Iochia of sapremia does not affeet the appearance of the wounds.

On the other hand, if the wombls and eervix do not appear clean and fresh, but show a grayish white, membranous coat, we recognize the neco rotic surface due to microbial infection.

On next routine step in the examination is that of oltaining cultures and smears for immediate examination from the wounds and uterinc contents. (Lochia.).
(Gönner and Döderlein introduced this step in acellate diagnosis some twenty years ago and it has gradually made its way into general nse. though even now some of our best workers disapprove of it, declaring it mseless.

The lochia is taken according to the procedure of Döderlein with any of the glass uterine collecting catheters which have been devised with (Ir without suction as the case may necessitate. (I have used a long, female eatheter when no other tube was arailable). Care in prerenting contamination of the tube and the usual technic of making cultures and smears most be observed.

The bimannal pelvic examination and a digital exploration of the uterine cavity-the latter only. in cases where we are not sure from previous examination of the "after birtl"" that the cavity is -lean and always preceding the bimanual-are now in order. The bimanual should discorer the presence of localized swellings or exudates in or around the uterus and the condition of the broad ligaments, tubes and oraries. Venous thrombi may also be felt as hard erlindrical masses in the ligaments.

Prosalpinx may be the result of the septie form of diseases, or, more usually of gonorrheal.
and I wi.h to take up briefly the diagnosis of the latter at this point.

Many cases of gomorrleal cervieitis cause no smptoms, and are, therefore. unsuspected until after labor, when the infection travels upward into the uterine carity and thence to the all-nexa-tubes especially-and the first smptom: of gonorrheal disease are produced.

The disease set. in late in the puerperium-it may be eren after the patient is up and aromelwith fever, severe pain in the lower abdomen on one or both sides and the appearance of a purulent flow from the uterus. in which the diplococci are plentiful.

In my limited experience this has been the most frequent form of infection in the puerperium and the one which we would naturally expect to find most often in institution work. where ail preeantions are taken against the occurrence of the contagious form.

I have on my records a case of gonortheal endometritis with a parametritis filling the lateral iliac regions: almost as high as the navel with repeated chills and lluctuation of temperature from 100 to 105.5 -the premic trpe. In this case the onset at the sixth day and the organism alone in smears of the lochia made the diagnosis and a farorable prognosis immediately posible.

Becaluse of prognosis and treatment the main questions of diagnosis are: 1. Hare we (a) simple retention with sapremia: (b) local or limited infection-septic-intoxication: or (c), septiecmia (or peemia)! ?. Are we dealing with (a) a gonosaccic or (b) streptecoccic or other rirulent infection?

## PROGNOSIK.

simple retention of lochia or of secundines with purely putrefactive changes are, when properly cared for, favorable conditions. (ionorrhea, even in its severest form with parametritis, salpingitis, pelvic peritonitis, chills. severe pain, high temperature, and, in short, the greatest signs of distress, gives a good prognosis for life though less farorable so far as future invalidism is concerned.

On the other hand, septic wounds, especially when the cervix and nterine cavity are involved, are to be seriously regarded-especially if the streptococens be demonstrated-though the eondition may remain toxemic. So much for the results of lochial examination.

Still more grave are septicemia or pyemia and septic peritonitis, the latter being usually eonsidered a mortal condition. I'sually the carlier the onset and the greater the constitutional symp)-
toms, especially the condition of the pulse, the graver the prognosis-gonorrhea here exerpted. Much, howerer. depends upon the close olservation and experience of the attendant. for, a- a rule. septicemia or premia are only clinically diagnosticatel, though the blood cultures may show the organism in some cases, which mmist then be considered grave.

## FROPIIYLAKIN。

As in all the realm of infections and contagions diseases, of which this is one of the rery grasestprevention is the most important concern of the physician. Depseis, through and with the aid of antieepsis, constitutes the key to suceess.
hemmelweiss, by having his students and nurses cleanse their hands with chlorin water, reduced the mortality of his clinic from 10 per cent. to 1 per cent.. this being the birth of antientic prophylaxis. It the present day the practice of prevention of intection should be succinetly stated, the "condnet of labor."

Briefly, the following points should ahways be borne in mind:

1. The reduction of raginal examinations to the minimum and then only with sterile rubber gloves and after pedantic preparation of the examiner"* hands and the patient's rulvar region. It seenls pertinent here to mention the raginal so-alled prophytactic douche only to condemm it.
?. Reduction of interference with natural labor to its minimum of absolute indications.
2. Prevention of retention of secundines and clots.
3. Immediate repair of womds-excepting slight cervical, the latter maturally remaining unohserved.
$\therefore$ The most eonsecientions aroidance on the part of the physician of exposure of his person to contact with highly infectious cases. (These matter* will doubtless he taken up in detail by Ir: Kietcham).

Dr. De Lee reports only one death in ores s. 1000 deliveries in an ontpatient dispensary practice from sepsis-this greatest of all records having been attained loy strict adherence to the above principles.

## TREATMENT.

The subject of the active or curative treatment of this condition is. I take it, one of the most confused and chantic at present before the profession. In the nature of the condition there is little hope of an absolute decision upon the many and perplexing problems, especially those of surgical interference.

Fortunately, howerer. we do have some strict indications for therapeutic activity. The first of these is the remoral or destruction of the attacking organisms at their points of entry, i. e., a local cleansing of all wounds, or pus carities, inrolred the second a systemic support of the patient. including, of coursc, promotion of immunity.

The first indieation is one for local treatment. Wounds of the rulro-raginal regions, and cerrix as well, are best treated by antiseptic applica-tions-tincture of iodin. carbolic acid, bichlorid or others-and the stitches of perineal wounds should be remored for the treatment if the wound be unclean. The uterns must be emptied if its earity is not already clean and free drainage obtained.
It is coneerning the method best adapted to this end that the storm of dissension is greatest. The Germans and many Americans adhere to the intra-uterine douche-adrised by Fritseh-the finger first clearing away retained particles.

In France, Vienna and by many in England. notably Sinclair, the curette is universally used. followed by various cleansing and antiseptic treatments. Most authorities agree that whatever of these methods is applied, it must be done carly to be of arail and is harmful and useless after the infection has penetrated through the uterine lining.

If the cxamination has revealed a smooth uterine carity I beliere the cleansing douche of sereral liters of sterile solution-salt, boric acid, or acetate of aluminum in rery weak solutionssufficient.

The argument of some workers that the uterine wound surface should be as thoroughly cleansed as the external wounds scems to me quite pertinent, but it is rery doubtful if strong antiseptics will sterilize the cavity with only a short period of contact and long periods are dangerous. Therefore, if bichlorid douches, or others of the stronger solutions, are used, they should he followed by sterile water or salt solution flushing.

If, howeter, there be rough masses, the finger or the curette must remore them. I eannot see any harm in the use of the curette in experienced. careful hands. and I believe with Sinelair that the sharp instrument is the one of choice, being more effective and less dangerous than the dull form. If subintolution is marked, the uterus rery spacious, the recesses difficult to reach and its lining membranous. I beliere the finger futile and the curette indieated-just as in superficial wounds. I make gonococeus infections and an inclined also to make streptococcus cases exceptions to this rule-as emphatically taught by

Bumm, Williams and others of the more conservative practitioners: believing that even the douche point may produce harm.

The first interference, whether douching alone or mechanical separation of eontents followed by the douche, should be done at the earliest possible moment and thoroughly once for all. A general or morphin and whiskey anesthesia-the latter highly recommended by Sinclair-may be necessary for the curetage. Alcohol suggested by Sitsinskr. Corossa, etc., for local application to the uterine carity in douches, packs, etc., has been lauded, but, as yet, there is not sufficient cridence for a conclusion.
Various antiseptic gauze packs hare been recmmended, both for their local bactericidal action and drainage. The bactericide which will not ingure living tissue has not yet been found, and local injury to tissue is the one thing we are attempting to avoid; nor do I believe that a gauze strip or pack will enhance drainage in this location.

## SURGIC.AL TREATMENTT.

Let us turn our attention to surgical procedures as they appear to be justified and indicated in the following conditions:

1. General septic peritonitis. 2. Abscesses. 3. Septic thrombosis.

Many reports of the farorable results following laporotonns, toilet of the peritoneum, flushing and drainage in these otherwise generally hopeless cases of septic peritonitis lead us to conelude that the attempt should alwars be made immediately upon diagnosis. It appears that almost if not quite one-half of these eases may thus be sared.

Laparotomy is also indicated for abscesses of the tubes and oraries as at any other time. Pelric peritonitic abscesses and abscesses of the uterus not readily accessible per raginam demand eracuation and drainage by laparotomy.

Hysterectomy seems to me to have a rery limited field of usefulness, being indicated when the uterus is so greatly incolred that its musculature is rendered almost useless and the abscesses seem doubtful of successful drainage ; and in gangrenous or neerotie myoma and carcinoma, as at any other time in life, they being distinctly surgical conditions.

Septic renous thrombosis in the pelris has also been successfully treatedbyexcision of the thrombotic areas and the section is indicated when a probable diagnosis is made. In this connection I am in full accord with Dr. Geo. H. Noble that "any puerperal case, with pelric lesions, variable temperature, and climbing pulse, of three or four
weeks' duration without signs of improvement. justifies an operation of some kind, especially if the uterus proves negative as the souree of trouble."

For, "if a mistake is made in diagnosis, and the loeus infectus is found in the tubes, or abseesses in other parts of the pelvis, no surgieal error is eommitted, for they, too, are in need of serious attention."

He elaims a mortality for excision of veins of $284 / 7$ per eent. as against $444 / 9$ per eent. in hystereetomy, and eoneludes that "early reeognition of septic thrombosis of the pelvic veins and prompt exeision is the best means of surgical relief whieh we ean offer our patients--until future experienee shall have worked out the solution of this problem."

It seems fairly generally eoneeded that in general streptoeoceemia surgery and local treatment are to be avoided and likewise in the acute stages of gonorrheal infeetions. Personally, I believe in prolonged rest and tonie treatment in gonor-rhea-with loeal treatment and surgery only as indieated later after aeute symptoms have subsided.

## GENERAL TREATMENT.

Support of the patient is first in order and demands liquid, easily digestible diet and alcohol in large amounts, in form of wine, whiskey, elampagne, ete. Rectal alimentation may be necessary in rare eases. Of drugs, I employ ergot if there be any sub-involution and stryehnia for the general neuro-museular system, including the heart. Iron is obviously valuable in late stages.

Pelvie pain is best controlled in early stages by the iee bag over the lower abdomen; later the hot bag or priesnitz (warm moist application) may be used. Morphin may be necessary in some cases and is indicated in general peritonitis.

Elimination is aided by inereased fluid ingestion and the uses of salt solution either hypoclermoelysis or per reetum. I make use of the latter means in almost all cases where the liquid intake i,y mouth is not sufficient beeause of anorexia or romiting. The bowel should be evaeuated thoroughly at the onset and daily thereafter, avoiding drastic purges.

Fever and nervous symptoms are best eontrolled and the skin elimination eneouraged by hydrotherapy. I usually employ tepid sponging with a dilute alcohol rub. If any antipyretie drug be needed, sodium salieylate seems to me the drug of ehoiee in moderate doses.

The attempts at systemie disinfeetion by means of the venous infusion of antiseptie solutions has
fallen into its merited disrepute. Likewise the organic silver salts.

As regards the serum treatment, many fairly favorable reports have been recorded by such observers as Fromme, Bumm and others. De Lee says that he has also seen a few cases in which he thought improvement due to the serum.

Howerer, ehanges are so sudden, so frequent and so marked in these eases, without the use of serum, that it will take longer observation upon a larger series of cases to determine its usefulness.

Recent observations make it elear that a polyvalent serum is to be chosen and given in doses of 40 c.e. repeated after eight hours and again 20 or 40 after the second intervening period of eight hours. It should be employed in all severe eases early. even before the baeteriologie report. and in all streptocoeeus infections, whether loeal or septicemic, including general peritonitis.

It is generally regarded harmless, but the recent work of Vaughan and Novy upon albuminous poisons might show this view to be erroneous, and the possibility of sensitizing a patient so that in later times-weeks or years-other antitoxin injeetions might be disastrous must be borne in mind until the question of such possibilities be definitely answered.

## SIA HUNDIED CASES OF LABOR IN PRIVATE PRACTICE.

## Hegit A. Comiag, M.D. muxcie, ind.

The obstretrical experienee reported in this paper covers a period of about-fffteen years, beginning with the year 1890 . The cases all oceurred in homes in or near Muncie, Ind. Consultation cases are not ineluded. During almost this entire period the writer served as countr health officer, and of necessity was frequently in attendance upon eontagion.

The desire to make the paper a clinieal one has led to the introduction of ease-book reports of some eomplieated eases. These are not pre-' sented because they represent ideal management and treatment, but are faithful records of expericnce.

## COMMENTS.

The physician who approaches the lying-in chamber should thoroughly understand his responsibilities, but he should not be depressed by them. He should earry with him sympathy, eonfidence and hope. Whaterer the trial, whaterer

[^46]the complication. he thould maintain his profer -ional poi-e. He should be umlisturbenl by the importunities of the patient or relative or atmendants. With all he slould lee firm, hut conciliatory: Quick to anticipate langer. Yet he -hould not be undnly apprehensive. He should be patient. and also resourceful. He fhould never hurre unle- haste means life.

During pregnance. lix advice and treatment. the plow-ician mat greatly eontribute to the suc-ce-- of the final iowe. Our people are not ret :ufficiently trained in the importance of securing profe-sinal advice early in presnancy. The nue death reported in thi- paper wa- due to conrul--inus. The writer learned of the patient's condition only at the beginning of labor. Reasonable
 but little life. All roffort- at resureitation fated.
 -entation. Chin forwarl. D'atin- hegan at 3:3n p.m. March 31. Arrived at $101: 311$ p. m. (). twothirddilated. Membranes ruptured -pontanerin-ly at 11
 a. m.. April 1. Child born 2 a. m. Face black and -wollen. Child eried at once and did well. The third day mothor had chill and temperature 10 . Had used creolin donche once or twice daily. (iave bri-k catlartic aud temperatmre 101 next day. A few chills atal - ome fever for three ur four days. This. dne apparently to leit ovarian abscess. Had been tender at times -ince first labor. About the reventh day aboco. div charged per vaginam. and tenclernes in left ovarian region disappeared and fever -ubsirled -mblenis. There was slight tear of perineum. One -titch at once aiter labor. Child male. 12 pounds.

| $\begin{aligned} & \frac{5}{y} \\ & = \\ & z \\ & z \\ & z \end{aligned}$ |  | Malliparm | $\frac{2}{\Xi}$ | $\begin{aligned} & \text { ed } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { 关 } \\ & \\ & \hline \end{aligned}$ | $\begin{aligned} & \bar{y} \\ & \bar{y} \\ & \vdots \end{aligned}$ | Illogilintat. |  | $\begin{aligned} & \text { Font nresen } \\ & \text { fution } \end{aligned}$ |  |  |  |  |  | $\frac{5}{3}$ | 域 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-20 | 5 | 15 | 9 | 11 |  | 1 |  |  | 1 |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| 21-40 | 15 | 14 | 10 | 11 | 1 |  |  |  | 2 |  |  |  |  |  | 1 | $\underline{2}$ |  |  |  |  |  |  |
| $1-60$ | 7 | 13 | 13 | 7 |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| 61-v9 | $\delta$ | 12 | 9 | 11 |  | 1 |  | 1 | 1 |  |  |  |  |  |  | 3 |  |  | 1 |  |  |  |
| -1-160 | 15 | 14 | * | 12 |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  | 1 |  |  |
| 101-120 | 6 | 14 | 11 | 9 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| 121-110 | - | 13 | 12 | - |  |  |  | 1 |  |  |  | 1 |  |  |  | 1 |  |  |  | 1 |  |  |
| 141-1*) | 11 | 9 | $\stackrel{1}{2}$ | 13 |  |  | , | 1 |  |  |  |  |  |  |  | 3 |  |  |  | 1 |  |  |
| 161-130 | 6 | 14 | 9 | 11 |  | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |
| 151-200 | 7 | 13 | 10 | 10 |  |  |  |  |  |  |  |  |  |  |  | $\underline{2}$ |  |  | 1 |  |  |  |
| 201-2? | 4 | 14 | 10 | 10 |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |
| 2-1-241 | 8 | 11 | 4 | 11 |  |  |  |  |  |  |  | x- |  |  |  | 1 |  | 1 |  |  |  |  |
| -41-26a | 8 12 | 12 | 10 | 10 |  | 1 | 1 | 1 |  |  |  |  | 1 |  |  | $\frac{2}{2}$ |  |  |  |  | 1 |  |
| 2¢1-302 | 12 | 8 | 12 | 1 |  | 1 | 1 | 1 |  |  |  |  |  |  |  | $\underline{1}$ |  | 1 |  |  |  |  |
| .301-3:0 | b | 14 | 10 | 12 | 2 | 1 |  |  |  |  |  |  | 2 |  | 2 | 1 |  |  |  |  |  |  |
| $321-340$ | 14 | 6 | 7 | 13 |  |  |  |  | 1 |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |
| 341-350 | 9 | 11 | 12 | 5 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| :561-3*1 | i | 13 | 14 | 6 |  |  |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |
| $341-100$ | 9 | 11 | 14 | 6 |  | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  |  | 1 |  |  |
| 401-420 | $=$ | 12 | 17 | 10 |  |  |  |  | 1 |  |  |  |  | 1 |  | 2 |  |  |  | 1 |  |  |
| 121140 | I | 13 | 19 | 2 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| 411-45) | 6 | 14 | 17 | 10 |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |
| 461-18) | 10 | 11 | $1)$ | 10 |  |  |  | 1 |  |  |  |  | $=$ |  |  |  |  | 3 |  |  |  |  |
| 4=1-5ir | 4 | 11 | 8 | 12 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 2 |  |  |  |  |
| 201-3:0 | 4 | 12 | $1 \frac{1}{8}$ | x 13 |  | 1 |  | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| 54]-5in | 8 | 12 | 10 | 10 |  | 1 |  |  |  |  |  |  |  |  | 1 | 2 | 1 |  |  |  |  |  |
| 5151-5\%0 | - | $1 \stackrel{3}{13}$ | 8 | 12 |  |  |  |  |  |  |  |  |  |  |  | $\overline{3}$ |  |  |  | 1 |  |  |
| $581-600$ | 3 | 1. | 9 | 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 235 | $3: 5$ | 310 | 235 | ; | 12 | $t$ | 9 | 6 | $\because$ | 1 | 1 | 12 | 1 | 4 | 10 | 1 | 9 | 3 | 8 | 1 | 1 |

a-eptic and antorptic precautions before, during and after labor amply repay the ply-ician in large returns of succes. After labor the perineum should be carefully inspected. If lacerated it -hould be promptly repaired.

## face prenentations.

Sis. 15: May 14. 1495. Age 20. Fir-t. Pain- be gan at 12 noon May 15 . Arrived at 1 p . m. Ds dilated 1 inch. Diagno-ed face preventation. Labor made good progre-s with no untoward srmptom. Endeavored to correct into vertex by manipulation, but withont -nceres. Membranes ruptured spontaneously about is p.m. The descent of the child was progresive and rapid. and I could see no indication for interference with forcep. Child born : p. m. Cord was

OCCIPITIO-POSTERIOR.
So. 3\%1. Aug. 25, 1399. Age 19. Fir-t. Vertex. ()ecipito-po-t. Pain- hegan i p. m., Augrlet 2t. Arrived at 4 a. m.. August 2.j. Os fully dilated. Nembranes ruptured at if a. n. Born at 9 a. m. Child -mall male: delicate but lived.

## FOOTLING.

ปo. 325. June 1\%. 1s9s. Age 19. Fir-t. Pain-began at 4 a. m. Arrived 10 a. nı. O- two-third= dilated. Footling. Clikd had probably been dead sereral days. Under chloroform asisted delivers. Child had ventral hernia which ruptured in delivery and feet deformed. Born 11:30 a. m.
No. 416. July 31. 1900. Age 33. First. Pains began at $\bar{i}$ a. m. Arrived at $9: 30$ a. m. O- two-third=
dilated．Footling．At $10: 30$ a．m．membranes mere ruptured．and l，rought down one foot．Cord protruded． pu－lied it back．Brought down second foot and made pre－aure on uteru－externally．l3orn 10：4．5 a．m．Child alive．small female．premature（about eight montho）． lived eight hours．

## BREECH PRESENTATION．

No．46．June 5．1592．Age 36i．Seventh．Called at 10：30 p．m．．the 4th．Ox－lightly dilated．Pains slight and very far apart．Returned at 11：30 a．m．．the 5 th． Pain－－trong and frequent．OF one－lialf dilated．Diag－ nowed breech．Right buttock presenting．Woman had fever．di－tressing cough．ireely expectorating purulent －puta．Pain－continued strong．Hip，hom at $2: 30$ p．m．． ruptured membranes at $1: 34 \mathrm{p} . \mathrm{m}$ ．lanly followed rapidly：some difficulte with shoulders and slight lac－ eration of perinem．With right iorefinger brought down riglit arm．which was posterior．and was slow to descend．the land being up near head．Other arm more ea－il？delivered．Brought abdomen of child for－ ward toward ablomen oi mother．and head was horn． Hu－band under my direction made presenre upon fun． du－during lirth of shoulders and head．Child．male． weight $1^{n^{2}}$ z pounds．Vigorous．
No．12－．March 13，ls！t．Are 20．First．Pains be－ gan at $1 \mathrm{a} . \mathrm{m}$ ．Sot serpre until toward noon．Nem－ branes ruptured soon atter beginning oî labor．Arrived at 1 p．m．We two－thirds dilated and pains strong． Felt breech of child．though still high．Could feel encery of the child distinctly．Labor progressed well． Called Dr．W．H．Kemper．who made external pres －ure．and I brought child upward to mother＇s aludo－ men（occiput to pubes）．Child required artificial ren piration．luut did well．

No．25s．June 15．1497．Age 24．Fir－t．Breech．La－ lor uneventiful．Child small．With hirtli of hips had woman in attendance make pre－oure on fundu－and head and arms were eazils delivered．

No．2ves．Sept．21．189\％．Age 31．Fir－t．Breech． Labor meventiul and of－even hour－duration．Child medium in size．same method as previous case．

## HAND PRESENTING．

No．4i．June ？1s． 2 ．Age 21 ．Seeond．Arrived at 4 p．m．Pain－had been strong since 12 p．m．Began at（f a．m．（la two－third－dilated．Nembranes unrup－ tured．Diagnosed hand presentation．Failed to turn lys manipulation．Pains continued strong．Aroided ripturing membranes．Had Dr．（ireen ealled at ；a．m． We re－nlved to now rupture membrane－and turn child． At $\bar{i}: 30$ ruptured membranes．much water escaping． 1）r．Fireen making prewure over fundus．I succeeded in seizing right foot．Which I drew out．Chloroform． Aiter drawing out right leg seized left foot which pre－ －ented．and soon hip－were delivered，but not without con－iderable traction．Eneountered difficulty with arms． Brought right arm．which wa－po－terior．down over chent．Leit was well up to face．Thi－was brought down also by hooking forefinger over humerus．and making considerable traction．Brought bods over ab－ domen．making traction，and head was lorn．Child （eyanowed．but re－u－citated in 5．）minutes．Cliild large． male．Woman and clild did well．

## PROLAPSE OF FLINIS．

No．123．Fell．T．1904．Age 29．Vertex．Third．Ar－ rived at $3 \mathrm{a} . \mathrm{m}$ ．O－dilated 3 inches．Could not ascertain prenentation．Nlembranes umruptured．Pain ineffective．

Retumed at \＆a．m．Pain－lave continued．but not much increa－e of dilatation．Membranes yet unrup． tured．（hilld not engaged in brim．Presentation likely． vertex．but－till ob－cure．Woman lost both children during previou－labor：Believing that councel woukd he be－t．reque－ted hu－band to telephone for Dr．（i．II H．Kemper．who came at 9 a．m．We waited upon re－ －ult－of pain－for an hour．when we ruptured mem－ branes and found that a prolapse of the cord had pre－ rented the head from engaging in the brim．fiter repeatedly attempting to replace the cord by manip． ulation and knee－elbow po－ition．we delivered child with forcep－u－ing chloroform．Child born $11 \mathrm{a} . \mathrm{m}$ ． Wa－－till at fir－t．hut wa－resuscitated in 10 or 1.5 minuten．Recovery oi both unerentiul．

## CONVLLSTONS．

No．－－May 31．1493．Age 22．First．Tertex． Pain－hegan at $4 \mathrm{a} . \mathrm{m}$ ．Arrived at $4: 30 \mathrm{a}$ ． m ．O－di－ lated me－half．and pain－strong and irequent．At $:: 30$ a．m．heall wa－well down upon perineum．Labor had been progrowive and there had boeen mo untoward －rmptome except a general edema．of which I had no previon－knowledge．Pain＝were growing more and more＂－tormy：＂the woman making bint little complaint． when without any warning the was roized with a mont violent convul－ion．fiave her at once a hypodermic oi morphin－ulph．one－half grain and atropin－ulph． 1．5 grain．With the husband administering chlorotorm under my direction．applied short forceps and easily de－ livered the dhild．The whole procedure from the be－ ginning of the convul－ion did not comsume more than twenty five minute：．The placenta wa－delivered in ten minutes．and hortly aiterward the woman awoke to complate con－ciou－nes．In the coure of an hour gave her another hepolermie of morphin one－fourth grain and enjoined perfect quiet．Leit B．of K．and morphin and atropin to adminiter per orum．No other consul－ion occurred．and her recovert waz pro－ gre－sive and eomplete．Child medium sized．female． Three fear－later attended this woman in her second lalor．Which was uneventiul．For a few month－he－ fore labor had examined urine and had given woman eliminative treatment．
No．104．Age 31．Third．Vertex．Pain－began at －p．m．．but were－light until nearly midnight．When child wa－born．Arrived about $1: 30$ and delivered placenta．Wroman had pain in her head．She stated that motion of child had cea－ed two days before．Left morphin and Dover powder－．Called next morning and found her complaining hitterly of her head．Swollen tace and twitching musele warned me of appoach of a convul－ion．liave her a hypodermic of morphin． Convul－ion followed in a few moments．She did not have a second me．Repeated hẹpodermic in an hour． Darkened the room．At－uggeation of Dr．Kemper， 1 gave one－halt ton－prontul of Engli－li calomel in melted butter．Received gooll morement of bowela． （iave hromid－．Child born dead．Nedium－ized，male． Woman promptly recovered．

No．13：．June 6．1s？4．Age 33．Sixth．Brow presentation．Pain－hegan at noon．Arrived at 3：311 p．m．l＇ain＊－trong and trequent．O－nearly dilated． Fuptured membranew at $4 \mathrm{p} . \mathrm{m}$ ．Woman wa＝quite nervous and thi－condition continued to increase until in a－hort time strong contractions of the limb－with rigidity followed pach pain．and there wa－a wan－ dering of the mind．Pupils widely dilated．Gave one－
fourth grain of morphin, $1 / 100$ atropin as these symptoms began to develop. Because of the violence of the symptoms and fearing a severe convulsion, had her inhale chloroform and delivered with short forceps. Child born at $4: 30 \mathrm{p}$. m. Child medium, female. After-treatment: Bromids and morphia for nervousness and cramps, which occasionally developed in limbs.

No. 397. April 16, 1900. First. Vertex. Membranes ruptured without pain $4 \mathrm{a} . \mathrm{m}$. Pains began at 5 a . m . Arrived at $9: 30 \mathrm{a} . \mathrm{m}$. Os fully dilated. Born at $1: 30$ p. m. Child medium sized, male. Woman scemed well. Had slight convulsion at 6:30 p. m. Arrived at 7 p. in. and gave hepodermie morphin one-half grain. Another convulsion at $\mathrm{i}: 30$. None afterward. Good recovery.

No. 419. Aug. 15. 1900. Age 23. First. Vertex. Pains began at 4 p . m., August 14. Arrived at 6:30 p. m. Os fully dilated. Membranes ruptured at $7: 30$ p. m. Born at $8 \mathrm{p} . \mathrm{m}$. On account of headache I was called at $1 \mathrm{a} . \mathrm{m}$. Gave morphin one-half grain, hypodermic. Convulsions at 5 a . m . Another at 6:30 a. m. and at $8: 30 \mathrm{a} . \mathrm{m}$. At 5:30 a. m. gave morphin one-half grain, pilocarpin one-eighth grain. At 8:30 morphin one-half grain. Trained nurse with her after first convulsion. No further convulsion. Good recovery: Child, healthy, male.

No. 507. Feb. 3, 1903. Age 26. First. Vertex. Pains began at 7 p. m., February 2. Much headache. O; slightly dilated. Arrived at 9 p. m. Gave chloral. Called Dr. G. R. Green. At 9:30 eonvulsion. Ruptured membranes at 10. Much water. Hypodermic morphin one-half grain at 11:15. At 11:30 Dr. Green gave ehloroform. O- two-thirds dilated. Applied long forceps. Born 1 a. m., February 3. Male, dead. Cord around neek. Convulsion at $1: 30$. Morphin one-half grain hypodermie. followed with pilocarpin. Much sweating. Placenta delivered about 1:20. Veratrum viride 30 drop- given from time to time. Rallied during the day. At 4 p. m. convulsions returned. Had seven in a few hours. Had 12 in all. Saline enema at $4 \mathrm{p} . \mathrm{m}$. Saline under breasts at $12 \mathrm{p} . \mathrm{m}$. Died in convulsions at 1 a. m., February 4. Had no previous opportunity to prescribe for this case.

No. 566. Feb. 24, 1905. Age 22. First. Pains began $3 \mathrm{a} . \mathrm{m}$. Arrived $2 \mathrm{p} . \mathrm{m}$. Os dilated one-half inch. Chloral (albumin in urine for two months). Had given treatment. Headaehe. Rigid os. Emetie. Membranes were ruptured about 5 p. m. Forceps 1 a. m., February 24. Born 2 a. 1m. Convulsion 10 minutes later. Morphin one-half grain and again one-fourth grain at 6 a. m. Norwood tincture. Veratrum 20 gtt . every two hours. foonl recovery. No more convulsions.

So. 569. March, 1905. Age 29. Third. Pains began $12 \mathrm{p} . \mathrm{m}$. Labor uneventful. About third day after some exposure woman developed severe headache and lecame comatose. Albumin in urine. Brisk cathartics. Gave pilocarpin for two dars, then sweating by heat for four or five days. Good recovery.

## THREATENED CONVCLSION.

No. 201. Dec. 12, 1905. Age 35. Nintl. Vertex. Child born in five hours with uneventful labor. This woman had convulsions in a previous labor. For ten days previous to this last confinement she had severe headaches, dizziness, eloudiness of vision. and in the day time, when she imagined the carpet tacks were upside down, endangering the children. and that imag-
inary neighbors were in the room. Urine; no albumin. At 11 a. m.. December 11, opened medial eephalie vein and drew off three pints of blood. There was immediate and permanent relief from all troublesome symptoms. Woman confined same night.

## PLACENTA PREVIA.

No. 5.53. Nor. 6, 1904. Age 26. Third. Vertex. Pains began 2 a. m. Arrived $6 \mathrm{a} . \mathrm{m}$. Os slightly dilated. Sudden and severe hemorrhage. Lateral placenta previa. Tamponed with cotton. Called Drs. Spickerman and Mann, who assisted. Chloroform. Removed cotton. Much hemorrhage. Os dilated about three inches. Manual dilatation. Ruptured membranes. Could not apply forceps because of insufficient dilatation. Turned child. bringing down foot, and soon delivered child, which was born at 9 a. m. Placenta quickly followed by Credés method. Child, male, dead. Woman did well.

## ADHEREXT PLACENTA.

No. 468. Dec. 1, 1901. Age 21. Second." Vertex. Arrived 5 a. m. Os dilated two inches. Had had pains all night. Had been taking viburnum componnd and Dover's powders as needed for pain for a week on account of threatened miscarriage. Returned at 10 a. m. Os two-thirds dilated. Pains ineffective because of hydramios. Ruptured membranes at 11:30 a.m. Born 12:30 p. m. Gave child attention, and delayed tying cord for half hour. Pulsation of eord continued unnsually long, due, no doubt, to adherent placenta. This was delivered in about an hour. Crede's method. Woman quite weak. Child female, small premature (about 8 months). Lived about six hours.
No. 472 . Jan. 11, 1902. Age 25. First. Vertex. Was sick with chills and fever for three days before child was born. Had slight pains 8 a. m., January 9 , when os dilated one inch. At $8 \mathrm{a} . \mathrm{m}$., January 10 , os dilated two inches, but no recent pains. Water broke at 9 a. m., January 11, without pain, but pains soon began. Os two-thirds dilated. Born 4 p. m. Male. weight 7 pounds. Placenta adherent. Removed by Credés method in 60 minutes.

No. 480. April 9, 1902. Age 26. First. Vertex. Pains began $8 \mathrm{p} . \mathrm{m}$. Membranes ruptured about $3 \mathrm{p} . \mathrm{m}$. Arrived $9: 30 \mathrm{p} . \mathrm{m}$. Os dilated one inch. Gave chloral. Returned 12 p. m. Os dilated three inches. Born 5 a. m. Placenta adherent. Credé's method. Placenta delivered $7 \mathrm{a} . \mathrm{m}$. Child, female, weight 8 pounds.

No. 484. June 28, 1902. Age 24. Seeond. Vertex. Pains began 6 p . m., June 27 . Slight during night. Arrived 7 a. m. Os dilated two inches. Membranes ruptured 9 a. m. Fully dilated 10 a. m. Born 12:30 p. m. Placenta adherent. Called Dr. Mann, who gave chloroform, and introduced my hand into uterus, removing placenta. Woman did well. Child, female, weight 8 pounds.

## POSTPARTLM HEMORRIIAGE.

No. 337. Sept. 29, 1898. Age 25. First. Vertex. Pains began 9 p. m., September 28. Woman small and delicate. Membranes ruptured at $10 \mathrm{p} . \mathrm{m}$. Arrived at 1 a. m, September 29. Os fully dilated. Pains continued quite severe. Head large and slow to mould. At 8:30 a. m. applied (Hodge) forceps, and brought hearl down to perineum, working slowly with each pain. Removed foreeps. Chloroform given by attendants
under mr direction. Woman unable to expel child. Applied short forceps at $9: 15$, bringing head partly past rulva without rupture of perineum. Born 9:30 a. $m$ Had attendant make compression over uterus while I tied cord. Placenta easily expelled in 15 min utes. Excessive hemorrhage. Passed hand up into uterus. Not contracting. Cleared out a few clots and made pressure externally, manipulating fundus. With the expulsion of placenta, had given two-thirds dram of normal liquid ergot. The hemorrhage being excessive within five minutes afterward, gave another dram of ergot, and uterus being slow to contract I held a piece of ice in uterus until nearly all had melted. Soon had contraction. Woman did well. Child. male, weight 9 pounds.
No. 422. Aug. 22, 1900. Age 25. First. Vertex. Pains began at $4 \mathrm{p} . \mathrm{m}$. Arrived at $7: 45 \mathrm{p} . \mathrm{m}$. 0 : nearly dilated. Pains regular every five minutes and strong. Membranes broke at $9 \mathrm{p} . \mathrm{m}$. Child born 11:30 p. m. No chloroform nor instruments were used. Child cried at once. Placenta away easily in twenty minutes. Had kept one hand externally constantly over uterus, kneading it occasionally. Gave two-thirds dram ergot as soon as placenta was expelled. Hemorrhage began at once. Was very profuse. Uterus refused to contract. Treatment.-Aseptic ergot hypodermically, first cleaning out clots from uterus with hand. Repeated this in a few moments as hemorrlage continued. No effect, so introduced ice in hand into uterus, kneading uterus externally. Some contraction after ten minutes. Woman nearly pulseless. Ergot with stryclınin for three or four hours. Child, male, weight S pounds. Woman did well.

## FORCEPS.

No. io. Jan. j, 1893. Age 26. First. Arrived 8 p. m.. January 4. Had strong pains since 11 a. m. Os but slightly dilated. Returned at 2 a. m. Os dilated one inch. Pains strong and frequent. Vertex. Labor gradually progressive. Os fully dilated at $10 \mathrm{a} . \mathrm{m}$. At $11 \mathrm{a} . \mathrm{m}$. head well engaged. Pains were stormy erery fire minutes. At $3 \mathrm{p} . \mathrm{m}$., as but slight progress had been made in the la-t three hours. applied Hodge forceps and delivered child in twentr-fire minutes. Placenta delivered in twentr minutes. Gave ergot. U'terus well contracted, but noticed some tendency to inertia and collection of clots. Remained for some time. Returned at $9 \mathrm{p} . \mathrm{m}$. and removed clots by Credés method. Perincum lacerated into rectum. On January 7 repaired it with silk sutures under chloroform. Good union resulted and woman made a satisfactory recorerr. Child medium size, female.

No. 90. June 15, 1893. Age 40. Second. First labor when she was 20. First saw her on evening of June 14 , when pains were slight and no dilatation. Returned at 8 a. m., June 15. Os dilated three inches. Vertex. Pains frequent and regular. Os dilated readily, but head remained upon perineum for about two hours. with but little progress. Applied short forceps at 12 noon, and slowle and cautiously made traction during each pain. Child delivered in about thirty minutes. Placenta delisered in twentr minutes. Child medium size. female.

No. 18s. Aug. 14. 1895. Age 25. First. Vertex. Pains began early in morning of August 13 and continued almost regularly during day and night. Arrived at 4:30 a. m., August 14, in country 6 miles. Os dilated two inches. Pains evers ten minutes. Os fully
dilated at $10 \mathrm{a} . \mathrm{m}$. Membranes ruptured $11 \mathrm{a} . \mathrm{m}$. La bor tedious. At $7 \mathrm{p} . \mathrm{m}$. os fully dilated and head engaged. At $7 \mathrm{p} . \mathrm{m}$. applied long forceps because of slow progress and uterine inertia. Brought down head from its entrance into strait on to the perineum and removed forceps. Labor was not hastened as to frequency or strength of pain. Woman unable to expel child. Completed labor with short forceps. Child, female, $91 / 2$ pounds.

## forceps.

No. 374. Sept. 22, 1899. Age 32. First. Vertex. Pains began evening of September 20. When I was called. Membranes had ruptured. No progress. Rested some during the night. Next dar had pains far apart. 0. slightly dilated at 8 p . m. Pains not effective. Gave chloral in the erening and through the night. Cersix rigid but dilating. At 9 a. m.. September 22 . os dilated three inches. Pains not very strong and evers fifteen minutes. At $2: 30 \mathrm{p} . \mathrm{m}$. full dilatation. Applied long forceps. Chloroform. Brought head down to perineum, then applied short forceps, bringing head under arch. Remored short forceps, and child born without rupture of perineum. Child, female, 3 pounds.
No 38.5. Nor. 30, 1899. Age 30. First. Vertex. Membranes broke without pain 11 p. m., Norember 29. Pains began $12 \mathrm{p} . \mathrm{m}$. Arrived $3 \mathrm{a} . \mathrm{m}$. Os dilated. Chloral. Returned 9 a. m. O- fully dilated. Long and slort forceps $11 \mathrm{a} . \mathrm{m}$. Born 12 noon. Child, male. 13 pounds.

No. 411. July 1, 1900. Age 26. Second. Pains began 1 a. m., 30th. Arrived $6 \mathrm{a} . \mathrm{m}$. Os dilated one inch. Gave Dover's powder. Returned 10 p. m. Os dilated at 6 a. m. Labor had been severe, progress slow and woman's strength failing. Called Dr. Mann. who gave chloroform at $7: 30$. Long forceps on head at brim. Slowly bronght head down to perineum. Finished with short forceps. Time of using forceps about an hour. Born 9 a. m. Child medium, male. Placenta thirty minutes.

## tediol s labors.

No. 593. Feb. 12, 1906. Age 34. First. Vertex. Membranes broke without pain at $10: 30$, February 10. Pains began 11 p. m. Arrived 5 a. m., Februars 11. Os dilated one inch. Returned 1 a. m., February 12. Os two-thirds dilated. Born $S$ a. m. Child, female, weight 10 pounds.

No. .3.3. March 9, 1904. Age 19. First. Vertex. Pains began at 9 a. m.. March S. Arrived 10 a. m. Slight pains. Os dilated one inch. Returned $7 \mathrm{p} . \mathrm{m}$. and gave chloral. Returned 1 a. m., March 9. Returned 5a. m. Returned $12 \mathrm{a} . \mathrm{m}$. Returned $3 \mathrm{p} . \mathrm{m}$. Os dilated two inches. Returned i p. m. Os nearly dilated. Membrane ruptured at $2: 30 \mathrm{p} . \mathrm{m}$. Born at $9: 30 \mathrm{p} . \mathrm{m}$. Child medinm, female. I attended another case and used forceps $10 \mathrm{a} . \mathrm{m}$. to 2:30 p. m., March 9.

No. 160. Jan. 23, 1905. Age 19. First. Vertex. Pains began morning of January 21. Called at $S$ p. m. Pains light and on not dilated and high. Left anodyne. Morphin and atropin. Next morning no progress. Gave chloral 15 grains every two hours and patient rested well between pains, sleeping some. Called two or three times during the day. At $8 \mathrm{p} . \mathrm{m}$. os dilated one inch. Made but little progress during the night, woman sleeping between pains. Returned home at 4 a. m. At 8 a. m. January 23 , os dilated three inches. At $10 \mathrm{a} . \mathrm{m}$. os fully dilated. Membranes broke. Child born $4 \mathrm{p} . \mathrm{m}$. This labor was quite tedious, but pro-
gressef the woman and family were patient, and at no time did I are any indication for the uee of forepps. (hild, mate, weight 8 pound . At my first visit, exeming of Jamary $2 l$. I foum this woman' father suflering from ersipela- of the face (in atjoining room). I callsed him to be remosed to a more distant part of the house and ordered his mures to refrain from coming into the woman's room. and intervening doors to be kept closed on fat as possible. The woman made a good recovery. The cane of erysipelas proted obstinate and severe, invading the entire surface of head, then the mions surfaces of the mouth, nose and ears. and finally producing a cereloral meningitis, from which he died. nearly three weeks after the birth of the chite.

No. 30s. Marcl2 1s. 190)s. Age 27. First. Vertex. Path- began 4 a. m.. Narch $1 \%$. and membrames soon ruptured. Arrived at 7 a. m. Os not dilated. Chloral 10 gr . ever hour from 10 a. m. mitil 5 p. in., when os dilated one incls. (alled two or three times during day. At 11 p. m. on was two-thirds dilated. Drstocia. Parts firm. Head large. Head on perineum (; a. m.. when I used short forceps. Born i a. m. Child. female, weight 12 pounds.

No. 441. Feb, i, 1901. Age 20. First. Vertex. Pains began at is p. m.. February 3. Arrived + a. m.. Fermuary 4. Os dilated one inch. Cave chloral. Returned three times during day. Pains continued every fifteen minutes except two hours in afternoon. when the slept. lieturned again 4 a. m.. February .5 , and remained. O- dilated two isches. Pains every five and ten minutes. At $10 \mathrm{a} . \mathrm{m}$. os fully dilated. Nembranes ruptured at 11 a. m. Born 1 p . m. Child. make. weight 9 pound.

## severe laceration.

No. 105. Sept. 16. 1593. Age 19. Second. Pains began $10 \mathrm{a} . \mathrm{m}$. Arrivel at $\geq \mathrm{p}$. m . Os one half inch dilated. Vertex. At 4 p. m. on fully dilated. Membrames mptmed. Pains very strong. Woman short. fleshy and quite muscular. Used some chloroform with good eflect. Perineum had evidently been lacerated during first labor. Endeavored but failed to present a complete laceration into rectum. Woman had a chill one hour after liith of child. which oceurred at 6 p. m. A fower followed lanting two days. Fonr days after labor. fever having sulsided, under chloroform. fa-tened edyen of torn perineal body and mited parts with silk sutures. Woman made speedy recovery. Child. female. weight 11 pounds.

## MEASIES.

No. lif. Felı. 22, 189.5. Age 24. Fourth. Vertex. Pains legan at 2 a. m. Arrived ! a. m. Os fully
dilated and pains strong. Ruptured membranes at !: 1.5. Child born at 10 a . m . With the birth of chikd there was a great gnantity of water. amd lifted the child out of it and had the mme hail it with a cup. The woman was broken ont with measles. which mont likely hastoned labor. Child, male, promature, ahont - monthis. Placenta delivered in fifteen minutes. Woman developed milk leg. lint made good recosery in alont two week:.

## harelip.

No. 11! Dee. 27, 1893. Nlrs. A. gave birth to fomale child with harelip.

No. 166. Narch 14. 1s! 5. Same woman gave hirth to female child with harelip more extensive than first child involving alseolar process. An operation in pach case gave rery gool result.

## I. I BGEST CHILI.

 Labor eang. Child weighed $131 / 2$ pounds.

## ANENCEPHALIC.

No. 61. Oct. S. 1892 . Age 30. Called at 1 a.m. Pains legan 12 midnight. Arrivel $1: 30$ a. m. Child was lom at $1 \mathrm{a} . \mathrm{m}$. Footling. Female. Prematmre and stillborn. loody and limbs of child well formed. but eyes lap above and close together on small fleshy elevation above shoulders. Anemephatic. Month very small. Ears small and stiff. Three vears before Dr. (i. IV. H. liemper attended same woman. when child was similarly deformed.

Health of the Canal Zone.-The report of Col. Will. iam C. (iorga-. [. S. A.. chief sanitary officer Canal Zone. for June. shows a reduction in the ileath rate for white employe for the month as compared with the rate of 190 of 1.21 per cent.: among colored employis f or the same periocl, a reduction of 20.50 per cent.. equivalent to a reduction in the death rate of all employes of 1.5 .15 per cent. Out of the total of 47 deaths during the month -2 were lue to accidental violence: . were due to malaria, as compared with $s$ in the corre--ponding period of last rear: ᄅ to typhoid tever, acompared with \& in Tune. 1906 . and .5 from pmeumonia. as compared with 30 during the eorresponding perion of lant year, showing a definite improvement along all lines. Of the $t$ deathe which occurted among whites from the Cnited States, 3 were from extemal violence and one from organic heart disoase. The first 2 deathe on the I-thmus from liydrophohia ocemred in June. There was no quarantinable disease of any kind during the month.

## THE JOURNAL <br> OF THL <br> INDIANA STATE MEDICAL ASSOCIATION

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## EDITORIAL

## THE TIIREE DOLIAR LJFE INSUR:IN(E EX. $M$ MNATIOS FEE.

The communication from Dr. Dauhenheyer, printer in this issue of Tue Jocrance offers furtler points for discussion on the sulbject of the fee which should be received by the physician for making a complete examination for life insurance.

There is no logical reason why a doetor shoukd camine for some companies for $\$ .5$, for other companies for $\$ 3$, ant still other companies for $\$ 2$ or even $\$ 1$, and render practically the same service in each rase. 'The essence of a life insurance examination is the decision as to whether the applieant is a good risk or not, and essentially the same thorough and painstaking examination is required in erery instance before the examiner can intelligently pass an opinion upon the character of the risk. If, to determine the facts, the examiner is entitled to a fee of \$.5, then \$. should be required from every company, whether it be an old line life company, an assesement company or a fraternal organization, and the fee should be the same whether the poliey is for \$.500 or $\$ 50,000$, as the requirements and the responsibilities are the same in cach case. If the police is for a large amount, and the company desires to take umusual precautions, a number of examinations by the same man or different men should be marle, each being thorough and complete and the fee in each instance being the established fee. If a life insurance examination is worth only $\$ 3$ then that fee should prevail in all instances.

We have alwars contended that a complete life insurance examination, not including microsopic examination of the urine, is wortly $\$ .5$, and we are glad to note that there are many companies, a list of whicla we have published in The Jormadl, take this riew of the question. There are some companies that originally paid \$., and now pay but $\$ 3$, other companies that have never paid over $\$ 3$, and still other companies that have nevel paid over $\$ 1$ or $\$ 2$ for their insurance examinations. But these companies have not pair these
foes because they thought they were paying all that the services were worth, but because they roukl get the work done for the amount that they were willing to pay. As long as there are doctors who are willing to make life insurance examinations for one, two and three dollars, there will be insurance companies that will never pay any larger fees, as it is against the policy of most insurance companies to pay any more than the are athally obliged. They pay large salaries to their officers, immense fees to their attorners for opinions rendered. enormons rentals for palatial office guarters, and large commissions to agents ant brokers, but when it comes to paying for the opinion of the doctor. upon whom the life and prosperity of the company depents, they rise up in a burst of indignation and say that a three. two or one dollar fee is all that the will pay for an examination. and that they can serone all the examiners at this rate that their businese requires.

Truly it is up to the medical profession to deride whether the insurance companies shall fix fees for professional services rendered or whether the medical men shall have a voice in saying what the services are wortl and what amount shall be received for the services. When the medical profession beeomes unanimous in the demand for reasonable and just compensation for services rendered, then some consideration will be shown. and not until then.

## THE DISTRIBETION OF BACTERI. IN МЦК.

In the August number of the Ireliures of Pediutrics, Dr. Alfred Hess, of New York, disfoused the relative distribution of bacteria in bottled milk in its relation to infant feeding. and gives the results of repeated examinations and animal inoculations he has made to prove that the bacteria are not only not equally distributed in the cream and milk, but also that the cream raries in bacterial content in its sereral layers. And from his work he is able to reduce some wery practical and raluable points in the modifieation of raw cow's milk.

Tiables are appenterl, a glanee at the first two of which reveals the fact that, contrary to the heretofore accepted theory that the crean was a lomogeneous and uniform suspension of the greater numbers of bacteria, it is the top-most layers of the cream that are highest in baeterial content, such content diminishing as the lean milk is approached. Hence. by removing the upper two ounces a great nidus of bacterial infection is eliminated and a mueh cleaner milk
result. whose fat percentage can be readily calculated and made the basis for any modification desired. That the same fact holds true for tubercle bacilli. streptococei and other bacteria, he ma= able to prore by inoculation into guineapigs and by smear: made with artificially inoculated milk. Papidly centrifuged milk will. of course, contain relatively fewer bacteria in the cream and more in the sediment than grarits cream.

By thi s simple procedure of remoring the upper two ounces of the bottled milk a much les: contaminated milk is arailable to the great masee to whom certified milk might be a forbidden luxurr. and a 3 per cent. milk results that serres admirably for a summer diet for those babies that are being fed upon modified cor $\pi^{\circ} \equiv$ milk. But if it is desired to increase the fat, this can readily be done br computing that with the upper two nunces discarded the next seren ounces gire a 1 ? per cent. milk. next eight ounces a 10 per cent. milk and the next twelre ounce a i per cent. milk.

Any method that will materially reduce the bacterial content of milk without depriving it of its rital nutritire properties, as is eridenced by the rickets produced by sterilized milk, should appeal strongly to those interested in the artificial feeding of infants.

## "OAE HLADRED CHRISTIAN SCIENCE CURES."

In the Auguit number of McClures Magazine. under the abore caption, Dr. Richard Cabot deals with some of the fallacies and rirtues of Christian Science $a=$ observed in a series of cases personally investigated. In not one of the cares studied ha: he been able to find any eridence of the arrest or eradication of an organic disease. the "cure" being cither among the functional disorder. usually some form of neurasthenia, or of some disturbance the diagnosis of which was entirely home-made or at least second or third hand. In some ten of the cases no rational diag-no-is at all had been or could be made. "Irritable disposition." "an abnormal growth." ""reak back." and "an incurable disease" hardly appeal to the average thinking phrsician as sufficiently definite ior diagnostic or therapeutic purposes: Yet these are only a fert among the multitulinous triumphs of (hristian Science as heralded br the oificial organ, the Christian Science Journal. "serenteen bruises, cuts and breaks," having healed rather lowly under ordinary surgical treatment in a hospital mere nerertheless classed as a "cure." and a case of insanity remored from
$2 n$ insane hospital by Christian Science friends and pronounced cured. remains insane at the present time.

Dr. Cabot is generous enough to credit some of the enthusiasts of this cult with no intention of wilful deceit. but points to the experience of every physician in the daily encounter of patients who come in with their own diagnosis already made and who are honest enough in their own belief. e. g.. pain in the back almost invariably leads the arerage layman to accuse his kidners, thanks 10 quack adrertising and the adrice of solicitous: friends.

- Chronic nerrous or mental disease is the ('hristian *cientist's stock of trade:" says Dr. Cabot, and hence the peculiar susceptibility of their clientele to mott forms of parchotherapr. One only needs observe his acquaintances in this cult to glean the impression that the chiefest ailment with which they are afticted is themselves, and as Dr. C'abot says. "Christian Scientists do set idle people to work and turn inverted attention outward upon the world-the greatest service that can be done to a human being.'

That scientific psechotherapr can be more safely and effectively applied br those who are familiar with physiologic and pathologic processes, a knomledge gained by years of study in these and allied branches, ought to be patent to all who are blessed with an average amount of God": common sense without any of His "special dispensation:."

## THE FREE CLINIC.

The Indiana Universitr School of Medicine i= sending letters to the physicians of Indiana announcing the adrantages offered by the State College Hospital at Indianapolis for the free treatment of indigent patients.

No medical school can be counted a succes-ful institution from an educational standpoint unless it affords its students an abundance and rariety of clinical material. Every communitr. and the larger cities in particular, has its quota of worthy poor who are deserving of medical charity, and the state of Indiana can furnish an abundance of clinical material for the medical department of the unirersity without recourse to the pernicious practice of accepting in the clinic: patients who are amply able to pay for services rendered. Indiana has been particularly free from the free clinic evil, largely as a result of the determination of the medical colleges to accept in their clinics only the indigent. Now that tre have onls one regular medical schonl in Indiana. and that under state enntrol. we hope
that the policy pursued with reference to the free clinics will be similar to the policy pursued by the medical schools that united to form the medical department of the university, in that the clinics will be open to the deserving poor and that class only. The city of Indianapolis alone can furnish an abundance of material for the clinics, and supplemented by the material which can be furnished from various portions of the state, the clinics ought to be overcrowded with material all of the time without the necessity or inelination on the part of those in charge of the clinics to resort to the practice pursued in some cities of accepting patients from any class whether able to pay or not.

The evils of the free clinic to which we refer do not always arise from a determination on the part of the well-to-do patients to secure free services in the clinic, but are in part due to the short-sighted policy of some physicians who in their endeavors to curry favor with their patients often times suggest the free clinic as a means of securing gratuitous professional attention, and the patients are encouraged to take adrantage of the opportunity. The physician who follows this practice is injuring himself, for he is educating his patients to seek gratuitous services at the clinics under all circumstances, and when such services can not be secured, to underestimate the value of any services rendered outside of the clinics. This pauperizing of the community has its injurious effect upon the medical profession in geucral, and in time would end in a decided decrease in the income of every physician in the State, and in many instances would force physicians to adopt some other means of earning a living.

We are firmly convinced that the university authorities have determined upon a course of action that is entirely in keeping with the high aims and objects of the medical department of the university, and in the circular recently issued they indicate that the only patients to whom they are offering the adrantages of the State College Hospital wards, are those who are unable to pay for regular hospital fees and medical service. In all probability the privilege will be frequently abused, but we sincerely hope that no medical man will be guilty of aiding the abuse, either directly or indirectly, by referring any patients for free hospital service and attention who are able to pay a fee of any kind whatsoever. The indigent are deserving of charity, and physicians should not hesitate to refer such patients to the free clinics, for without such ma-terial-and there is an abundance of it in Indiana-one of the chief features of successful medical teaching would be handicapped.

## EDCCATION IN PUBLIC HEALTH.

In his oration on state medicine delivered at the last meeting of the American Medical Association and published in the Journal of the American Medical Association, June 13, 1908, Dr. Harrington touched upon some very salient points conccrning the shortcomings of the United States in presentive medicine. In the first place, he emphasizes the tremendous interest that is aroused by things commercial among our people and contrasts it with the lethargy displayed toward the more humanitarian projects. Is a result of this national trait, it is, relatively speaking, an easy matter to obtain the necessary legislation for the control of those evils that directly touch the pocketbooks of any large number of the people, whereas years of persistent effort are required for the enactment of laws to promote the health of the people and the prolongation of human life. As a specific instance he contrasts ihe outbreak of vellow fever in the Gulf states in 1905, for the eradication of which epidemic Congress appropriated not one cent, with that of foot and moutly disease in New England in 1902, for which $\$ 500,000$ were allowed, the greater part of which was paid to the owners of the slaughtered cattle. Again he calls attention to the extreme hesitancy on the part of the national legislature to enact laws for the protection of the public health for fear of infringing on the sacred rights of state, but immediately such laws concern themselves with commercial interests it hecomes apparently an entirely different question. Such was the case with the recent so-called pure food law. which, Harrington says, is not in reality a health law, at all, but one of commerce.

That it becomes practically an impossibility to reckon the nation's financial loss by preventable mortality and morbidity is the fault of the widespread lack of interest in vital statistics, not only among the laity. but eren the medical profession itself. And there is but one way to orercome this shortcoming in our national economy, and that is by the education of the masses along the lines of preventive medicine, which duty, of course, devolves primarily upon the medical profession. Though a great deal has been and is being accomplished in their field, yet much remains to be done and this will only be brought about by an unselfish derotion to the task by a united profession. The present systems of health boards, municipal and otherwise, are accomplishing a wonderful amount of good, but they must ever remain handicapped so long as the present system obtains of allowing their tenure of office to remain a matter of political preference. Contrast with such a custom as ours that of England,

Germany and other European conntries in which no man receives the appointment fo these re--ponsible posts without evidence of years of "pecial training in this partieular line of work. and once appointed he is likely to remain in office so long as he renders satisfactory serviee. independent of petty political prejudices.

The laty shonk receive due ererlit for many philanthropic enterprises along medical lines, such as its part in the great tuberculosis crusade. its aid in the establishment of free dispens:ries, milk and ice depots for the worthy poor. etce, which shows that once instructed in the wass of dong, its aid will be fortheoming. One of the most direct ways of promoting the interests of preventive medicine then remains that of creating among the laity a demand for a national department of public health with a separate head and an assurance of an adequate smport from onr national treasury to permit of the broadest and fullest pursmit of all questions that have to do with the health of our people.

## EDITORIAL NOTES

The Intermediate Life Assurance C'ompany, of Evanswille, Indiana, has recently notified its medieal examiners that on and after Angmst 2\%, 1908, the mertieal examination fee will be $\$ 3$ for each examination. In writing the medical exaniners the company hands ont this delicions morsel: "We have adopted a plan wherehy we lope to secmre a large rolume of bosiness, and it will mean, of contse, that our examining physi--ians will hase quite a lot of work to do for ins." ive preemme that the "plan" mentioned consists in increasing the commision given the agent for procuring husiness and a corresponding deerease in the amomet paid for medical examinations.

Tus department of health of Chicago has recently sent the following notice to physicians: "The department of health suggests: Why not wise tuberenlin and diagnose your case of consumpt on now? Why wait intil there is no hope: Whach poliey is best for yome patientfor the community-or for son :" The department will give you the tubereulin."

This is certainly a most commendable departure and one which conld with profit be mudertaken by the state Boarl of Health of Indiana. Is it not quite as important tlat plysicians of the rural districts be urged to a vail themselves of all means of early diagnosis in the tuberenlosis crusate as that those of the cities shoulil be so importuned?
'TABE communication from Dr. Bird, publisherd in this iswe of 'THE Jotricis, is worthy of the attention of all physicians who have cases referred to them hy confrères. Many surgeons and spectialisis are notoriously negligent in the matter of writing physicians conceming cases ros ferred. We recognize the fact that many of thess negligent phesicians are rery busy men, but that is no excuse for not attenting to important correspondence and in partienlar showing common courtes to phrsicians who have referred cases for attention. In this comnection it is not out of place to say that it is generally the men who have the largest practiees and who are always the busiest who find time to give attention to the ordinary civilities, including early and proper care of correspondence.

Tue Indiana state Board of Health has iswerd a letter to the people entitled, "Why Not Protect the Health of School Children :" In this the importance of pure air and proper leating and rentilation is urged, the evils of air starvation detailed-all these with the idea. first of preserving the health of the school chidren, and second of saving the money of the state and increasing the general wellbeing and happiness. Very many valuable suggestions are given concerning the rules to be followed to protect the health of sehool chaldien, and the eircular conchndes with the statement that the State Board of Health weleomes and invites inquiries from the perple. and is always glad to be of service. We believe that every parent in Indiana should receive a copy of this circular.

IN answer to numerons inquiries. we desire to say again that The Jocrival is sent regrlarly to only those whose State Medical Association dues, which inchades a subecription to The Joctixal. have been paid. In a few instances comnty secretaries have neglected to promptly forward collected dues to the secretary of the state A seociation, and in conserpuence some physicians who think they are members in good standing in the State Asociation are not. and their names are not on the mailing list of The Journal. Failme to pay State Association dues ako deprives the delinquent of the privilege of being a member of the American Medical Association, as membership in that body is dependent upon membership in the state Asoeiation. Furthermore, the new medical directory soon to be issued by the A. M. A. will credit memberships in county: state and national assoeiations from the reeord of paid dues.

Sive the publication of Dr. Hoorer's communication with referenee to the medical art:ertising carried by Mr. Bryan's Commoner, we have received several letters from physicians shying that ther, ton, wrote Mr. Bryan concerning the framblent character of some of the adrertising carricel in his paper, and receiving mo satisfaction cancelled their subscriptions. It is Enite evident that Mr. Bryan thinks more of the many dollars received from medical advertising which swindtes the sick and afflicted than he does of the few dollars received from subscriptions from rloctors, and he probably cares little for the opinion of the medical profession as long as the sulsecription list continues to grow. But we wonld like to ask Mr. Bryan how he eases his consermee when in a burst of oratory he discourses upon the high noral principle which shonld preval in our relations with our fellowmen.

Ax officer of a life insurance company has recently marle the statement that in Kentucky and some other states where it is presumed that no reputable physician makes a life insurance examination for less than $\$$, it has been possible to secure examiners from among the very best physicians in every community on the understanding that the fee for examinations: i : not to exceed $\$ 3$. The officer imparting this information says that the men accepting appointments have generally rergesterl that no mention be made of the fact that examinations were to be made for the $\$ 3$ rate.

Fither this statement is a deliberate falsehood or there are a great many knaves in the medical profession, and we are not quite prepared to take the latter riew without further proof. So far as we know there is nothing in the constitudion and by-laws or the code of ethics of any medical organization which prevents a medical man from estimating the ralue of his services as he may wish, but every reputable medical man ought to appreciate the fact that his services in making a thorongh and complete life insurance examination are worth $\$ .5$, and lee should obtain that fee or none at all. If he has a motual understanding with his fellow practitioners to this effect and then quietly accepts anything which he can get for his work, he is deserving of severe censure at the hands of his confrères who hase placed respect and confidence in him. If it is his intention to make life insurance examinations for whatever he can obtain, then let him frankly announce that fact so that his associates will know where he stands.

And, concerning the $\$ 5$ insurance examination fee, it may be said that the only way to secure that fee is for a majority of the recognized competent medical men of this country to refuse to make any examinations for any less.

## CORRESPONDENCE

## THE THREE DOLLAR LTFE INSURAN('E EXDMINATION FEE.

Butlerville, Ind., Aug. 12, 190s.
Editor Tire Jocrarile:-The ruestion of the proper fee to charge for a life insurance exambination has been agitating the profestion of this and other states. To examine a man. to pass judgment on him as to the prohability of his lising his altotted time, to say that he is not a good man physically when he thinks he is all right, or that he is not fit to become a member of the aswociation which le wishes to join, is, for the phrisician who does this, to assume a responsibilitr out of propotion to the remuneration received.

To make an intelligent report requires not only competency on the part of the examinere, but a careful and thorough examination of the applicant, which requires considerable time. The examiner owes it to the company as well as to himzelf to make a report which is aceurate and reliable, no matter whether it be in favor of the applicant or not. If the examiner "turns down" the applicant, he probably will lose the applicant's practice and perhaps the practice of some of the applicant's friends, the remuneration of which would amonnt to many times more than the insurance examination fee. It is quite true that this is not always the case, but I have known many instances where the applicant who was rejected would always look with disfaror upon the physician who did his duty. I wrote life insurance before studring medicine, and while engaged in that line of work discorered that in nearly every case the rejected applicant thought that he had been mistreated and that the examiner was responsible for the mal1 reatment and from an unwarranted cause.

Considering the expert sprvices rendered and the responsibility asommed, I bolieve that any professional or husiness man will say that not less than $\$ .5$ should be paid for a life insurane examination if the fee is to be within reason. But the question that comes to my mind is. why do the physicians of Benton County, or any other county or locality, when passing resohutions with reference to life insurance examination fees. de-
cide that the $\$$ a fce shall apply to only "old line life insurance companies"? Why not say that the fee shall be $\$ 5$ for any life iusurance examination? Why examine for one class of insurance companies and charge one fee and then do the same amount and kind of work for another class of companies and charge a different fee? The same kind and amount of work ought to be worth as much to a fraternal organization as to a legal reserre company. On a $\$ 1,000$ policy there is as great a loss to the one as to the other. In fact. the asscssment company loses more, as the applicant pays in less for his insurance, and therefore a thorough examination is of more value to an asscssment or to a fraternal organization than to an old line company.

In comparing the examination blanks of different companies it can readily be seen that fraternal orders not only demand more of their examiners, but pay less for the service. So far as I know, physicians all orer the country make examinations for the Modern Woodmen for \$1, and the Modern Woodmen require more of an examiner than is required by any old line life insurance company. On the first page of the examination blank of the Modern Woodmen are over one hundred questions to be answered and properly filled out by the examiner, and this in addition to the questions pertaining to the family history, which goes into detail even back to the year in which the grandparents died. To all these questions the physician must write the answers and certify that lie has written them personally. Of course, it would be as binding on the company and the applicant if the applicant or the agent filied in these blanks, and it would give the examiner as much information, but I presume the company wants the examiner to earn his $\$ 1$. Under the part entitled "Special Report of Camp Physician" the instructions are numerous and demands many. It has eren been a source of wonder to me that the examiner was not required to go bcfore a justice of the peace and be sworn.

Now why in the name of reason do physicians make these examinations and comply with all of the exactions of the Modern Woodmen at $\$ 1$ for each examination and refuse to do the same work for another organization for less than \$5? Why make this distinction? The work is practically the same, the responsibility is the same and the liability of the company is the same. It is as important to one company as to another to have the poor risks culled out. In fact, the assessment and fraternal companies are more dependent and can not stand loss as well as the
old line companies, and a thorough examination and opinion of an able physician is of more value to them than to the old line companics. Would it be right to pass resolutions to the effect that we shall charge steam railroad companies $\$ 50$ for amputating an arm and then charge an electric railroad company only $\$ 10$ for the same work?

It strikes me that if we are going to pas- resolutions to charge $\$ 5$ for an insurance examination we should include all companies and make the fee the same for the same kind of work in crery case. No distinction or favoritism should be slown. If the fraternal orders and assessment camps are too poor to pay a reasonable examination fee, they are also too poor to pay their losses. I beliere it to be a self-evident truth that the less money a company las or the harder straights they are in financially, the more money they can afford to pay their medical examiners. If the fraternal orders and assessment camps are objects of clarity, then give them the service and charge the $\$ 5$ to charity, but if any fee is to be accepted from them, then insist that the fee shall be the same as from any other company. Treat all companies alike.
M. F. Dacbenheyer, M.D.

Grefrsburg, Ind., Aug. ~. 190 S.
Editor The Jourxal:-In the strenmousness of the time have we not lost sight of some of the common civilities? Why does not the surgeon take occasion to keep the practitioner informed as to the progress his patient, whom he has ikindly referred for operation, is making?

Yery truly yours,
Charles R. Bird.

## DEATHS

Dr. Shacel Eisenberss died at his home in Elkhart, July 20, from carcinoma of the colon, after an illness of four months, aged i4.

Dr. Shmuel S. Horie died at his home in Jonesboro, August 9, after a long illness, aged 65. He was a graduate of the Medical College of Ohio, and Medical Department, University of Cincinnati.

Dr. Johi A. Morehouse, for forty-six years a practitioner of Indiana, died at his home in College Park, Huntington, August 1, from cancer
of the stomach, after an illness of six years, aged 69. He graduated from the Physio-Medical Institute, Cincinnati, in $18 \% 0$.

Dr. Solomox D. Kell died at his home in Liberty, Ind., August 3, from locomotor ataxia. He had practiced medicine for forty years in Liberty, coming there after graduation from the old Pennsylvania Medical College. For a number of years he serred as secretary of the County Board of Health.

Dr. Thomas A. Glasgo, one of the oldest physicians in his county, died at his home in Brazil, Ind., Augnst 8, at the age of 69 years, after an illness of three weeks. Dr. Glasgo began the practice of medicine in Holmes County, Ohio, but had practiced for the last forty years in Brazil. While not an active member of the county society during the last few years, he had been carried on the list of honorary members, and the society voted a floral tribute to his memory and attended the funeral in a body.

## PERSONALS

Dr. Edward J. McOscar, of Fort Wayne, has returned from a European trip.

Dr. Josepif Maurer, of Marion, is in Chicago, taking a short post-graduate course.

Dr. John F. Birniuill. of Indianapolis, is in Europe, visiting the medical centers.

Dr. D. B. Taylor, of the Soldiers Home, has resigned, and is now on a farm in Ohio.

Dr. J. M. Pinkston, of Holton, has been nominated for coroner on the Democratic ticket.

Dr. James W. Hadley and Miss Ethel Stoms, both of Frankfort, were united in marriage July 2.

Dr. Schuyler A. Whitsitt and Miss Margaret Crosby, both of Kent, were united in marriage June 24.

Master Bevan, son of Dr. R. C. Townsend, was successfully treated for tetanus by Osgood physicians.

Dr. L. T. Cox, of Napoleon, present Republican representative, has been nominated to succeed himself.

Dr. Jay D. Nesbadm, of Auburn, has been appointed surgeon to the Toledo \& Chicago Interurban railway.

Dr. Harry C. Sharp, surgeon at the Indiana Reformatory, Jeffersonville, has resigned, to take effect October 1.

Dr. Hexry G. Livy, of Rusliville, has been taken to the East Haven Hospital, Richmond, for treatment for cholelithiasis.

Dr. H. W. Lactexschlager, of Dayton, has taken the position made racant by the departure of Dr. Taylor, of the Soldiers' Home.

Dr. Harold J. Pierce, of Cloverland, who recently underwent an operation for appendicitis, has recorered and resumed his practice.

Dr. Floyd G. McBride, assistant surgeon at the Marion Soldiers' IIome, has resigned and will be succeeded by Dr. Lloyd B. Campbell.

Dr. J. N. Hurty, secretary of the State Board of Health, has been appointed a director of the National Association for the Study and Prevention of Tuberculosis.

Dr. and Mrs. Oliver Jantes, of Cory, returned August 15 from a summer's tour of Europe. They? report a delightful journey through England, Scotland and Germany.

Dr. George D. Kahlo, president of the Indiana State Medical Association, who has been ill with typhoid fever at the Methodist Hospital in Indianapolis, is slowly recovering.

Dr. Mary Widdor, for several years superintendent of the nurses of Lafayette Soldiers' Home, has been made assistant physician in the State Hospital for the Insane, Longcliff, Logansport.

Drs. J. N. Hess, of New Marion, and Bine Whitlach, of Pierceville, were chosen to read
papers: at the ammal meeting of the Fourth ('ouncilor District Merlical Societr, October $? 2$. at Matison.

Dr. Frank liovorpat, of Filkhat, has just returned from London. where he has spent three months in Moorefieds Hospital. The two previous smmmers were spent in Vienna, studying diseases of the eye, ear, nose and throat.

## NEWS, NOTES AND COMMENTS

Founderi - D.iy was observed at Dr. W. B. Fletcher's Sanatorium, Ingust 18, in commenoration of the life and work of lor. William Baldwin Fletcher, born Aug. 1s, $183 \%$, and died April 25 , 190\%.

Dr. John Ridlon, of Chicago, will read a paper entitled "Lateral Curvature of the spine." at the meeting of the 'Twelfth District Mertical society, to be held at Fort Wayme October ?i. 1908.

Tue newspapers of Indiana announce in glarjug headlines that 1)r. F. ('. Heath, secretary of the Indiana State Medical Association. a lifelong Republican, has ilecided to rote the Democratic ticket this fall and has been delivering political speceches hefore Dmmoeratic audiences in Indianapolis.

The gradnating exercises of the Training Shool for Nurses of I)r. IV. B. Fletcher's Sanaorimu were held on Jugust 1s, the following rereiving the degrees: Luetla schosser, Blanche P. Bell, Ivah M. Hill, Margaret E. Macirath, Olive L. Neal, Mazy DeBertrand and Jolm J. Lynch.

Dr. J. L. Frefland, smperintendent of the Indiamapolis City lospital, gave an informal reception in honor of the ex-superintendents at the hospital Tuneday' evening, July 28. There was a large attendance of phrsicians. Short talks were made by Drs. J. M. Kitchen, I'. H. Jameson, F. J. Van Vorhees, (i. V. Woollen, IV. B. MeDonath. IV. N. Wishard, J. H. Oliver, C. F. Edenharter, (\&. E. Ferguson, Paul F. Martin and J. L. Thompson. liefreshments and cigars were served in the new laundry bilding, and the new administration wing was thrown open for public inspection.

Dr. W. D. Hoskivs, of Indianapolis, has received from Dr. Flexner, of the Rockefoller

Institute for Merlical Researeh, a supple of antimeningitis serum for gratuitons distribution among members of the mertical profeseion who wish to use the sermm in the treatment of patients and are willing to comply with the conditions and restrictions laid down by the Institute for the use of the sermm. In all cases it will be neessary to prove the cases bacteriologically, so that the final recorts may be complete, and it is inembent upon the physician who receives the sermm to keep a complete record of all cases treated with the sermm and fumish a copy of sucl: record to the Rockefeller Institnte.

Thire State College Hospital. located at 210 Sorth semate street, Indiamapolis, under the control of the Indiana Iniversity School of Medicine, is now ready for admittance of surgical, obscure medical, and olstetrical cases among patients who are mable to pay for regular hospital fees and medical services. The hospital is not a place for chronic cases or incurables. The services of the elinical teachers of the faculty are iendered to those patients arailable for elinical instruction. Patients may be entered in the obstetrical ward and the male and female medical and surgical wards at $\$(i$ per bed per week. In operating room fee of \$.5 is charged for surgical cases. The rost of plates is charged where skiagraplis are necessary. Irivate rooms may be secured at from ten to twenty dollars per week. Patients who can afford private rooms should not be reterred to the wards. The hospital is modern in every praticular and has seventy beds. For information concerning rules for admission of patients to the hospital, correspondence should be addressed to Dr'. Filmund D). ('lark. seeretary, Indianapolis.

The following list of committees of the Indiana ['niversity school of Medicine is announced:

Advisory Committee: The Dean, Drs. Barnhill, Clark, Earp, 'T'. B. Eastman, Ford, Hutchins, Jameson, Kimberlin, Lẹons. Morrison. Myers. Oliver, Porter, sowder, sutcliffe, Wishard and Wyon.

Education: Drs. Wymn, Earp, J. R. Eastman,
 Ritter, Graham, Nyers and sowder. Library: Parker, Brayton and Reed. Tcachers' Associations: Earp, Dodds and Heath. Scientific Publications: O. (. Pfaff, Brayton, Bulson and Earp. Craduate Work: Myers, McCaskey and Ritter.

Hospital Clinics: Drs. Kimberlin, Charlon, T. B. Eastman, Hodges, Hutchins and Wells. Hospitals: Charlton, DeHass, Dorsey and Farp. Obstetrics: Hodges, Beckman and Jackson. Insane Hospital: Hutchins and Neu.

Dispensary: Drs. Morrison, Dodds and Wales.
Laboratories and Museums: Drs. Lyons, Burkhardt and Neu. Museums: Burkhardt, Mllen and Ritter. Laboratories: Reed, Dodds, Gariett, Keen, Morris and Neu.
College Hospital: Drs. Sowder, Clark, Kahn, Kimberlin and Lindenmuth.

Finance: Drs. Barnhill, Clark and Iutehins. Buildings and Grounds: Drs. Clark and Lindemmuth. Text-books: Wales and Charlton.

Miscellaneous Alfairs: Drs. Wishard, Hond. Hurty and sterne. External Relations: Wishard, Ford. Kahlo, Porter and Sexton. Social Sfairs: Hond, T. Kennedy and Kyle. Student Organizations: Sterne, Link and Woods. Melical Instruction of the Public: Murty. Potter, scherer and Sutclife.

## SOCIETY PROCEEDINGS

## ALLEN COUNTY.

FORT W.IYYE MEHICAL NOCIETY.
(Meeting of June 30 s 1908.)
The society met in joint session with the clergymen in the assembly room Theaday evening. with Is: members and guests present. Minutes of previons meting read and approved.
"The Healing of a Man" was the title of an ofl-hand talk by Rev. Frank Fox, in which he wid that there is much in common between the ministry and the medical profesion. He waid that a man should not enter the ministry or the medical profession withont a call or fitness for the work. We work upon the same subject and upon the same lines, i. e., man. Man is physieal and spiritual. Sickness and disease helong to a world that is opposed to Cool, but God permits it to exist. When a man has broken spiritual laws, then there is need for the minister to bring him back to his proper relation to Gool. The physician ministers to the phrsical man and the minister to the -piritnal. The body is the temple of (iod and llis spirit dwells within. He spoke of the Emmantel movement in Boston, or peychic therape: Minister* and physicians can cooperate in preventive medicine.
"Peyrhie Research, It, Relation to Science and Theology" was the title of a paper by Dr. H. V. Sweringen.

The papers were discunsed by Dr. Porter, Rev. Lenig, Dr. Buchanan and Dr. W. P. Whery. The dis(dusion was closed by Rev. Fox and Dr. Sweringen.

Adjourned.
J. C. Wallace, Secretary.

## GRANT COUNTY.

The regular meeting of the Grant County Medieal Society was held August 25 . The entire evening was
spent in disenssing "Typhoid Fever." Dr. (i. G. Eckhart presented a young man on whom he intended to operate for supposed stone in the kidney.

> Adjourned. O. W. McQuows, Secretary.

## HANCOCK COUNTY.

The Hancock County Hedical Society met in the grove at Lake View House, near Greenficld. Jugust 6. with members of the Henry and Wayne County societims as guests. Meeting ealled to order by President Parnes. In the absence of the secretary, Dr. E. R. (Gibbs, Dr, E. F. Sommer was appointed seeretary pro tcm.
"Puerperal Convulsions" was the title of a practical informal talk by Dr. Gronendyke. He report- being called in consultation in fourteen cases, in which but one died. One may well be terrified when ealled to see -uch a condition in a human heing, the pathological condition about which so little is known. The author said that placenta provia was the worst yet. In such condition- it would seem that the unfortunate wom:m had little chance for recovery. In puerperal convolwion* the liver may be affected, but always recovers to the normal. The condition is, no doubt, due to a toxemia, depending largely upon changen which are due to the presence of the fetus in utero. Dr. King, of the L'niversity of Pemnsyania, find, albuminuria in nearly all cases, and Edgar says st per cent. The author's cases have all had albuminuria. The elimination of mea is increased, Small feen are re-ponsible in many instances for earele-nes and lack of preparetness. The cases usually present somptome a long time before the convulsions come on, ant by heing properly prepared convulsion- can be prevented in many instances. In one cave that died there had been no dimination established for fonrteen homrs after the convulsions came on. In the treatment of puerperal convulsions every eane is a rule to itself. Cratrim no doubt has its place in these carea, e-pectially when the pmbe is boundeng and full. which it nearly always is. Marphin seems to have some effect in producing elimination.

In opening the discussion Dr. Bramkamp, of Riehmond, said he had been fortunate in escaping such eases. It the lant meeting of the A. II. A. the treatment of cmptying the uterus immediately was emphat sized.
Dr. Groff, of Greenfield, said that in one of his cases, wix monthe pregnant, he used morphin and chloral to good adrantage-patient recorered. In another cave convulsions came on after delivery of child; he controlled the convulsions with veratrum, and the patient recotered.
Dr. Heath, of Indianapolis, said that his experience in obstetrics was now ancient history, having treated the eye for eighteen years. Do the eye symptoms spoken of recover completely? Dr. Gironendyke says res. There are two forms of eve trouble due to al-hmminuria-one a imple retiniti- which disappears entirely, the other of a more malignant type and which is permanent. Blool-letting weed to be the routine treatment in such cases and is practiced oeeasionally in suitable eases.

Dr. Cook, of Anderson, said that the main point in the treatment is the relief of the symptoms. He always carries chloroform and induces labor as soon as possible. The metabolism between child and mother
seems to be the cause of the convulsions or the toxic condition. Chloral, veratrum and codia are preferred by the author to morphia. The ultimate recovery is not satisfaetory, as a predisposition seems to be established.

Dr. Adams, of Greenficld, reported a case in which there was complete suppression of urine, and elimination could not be catahlished-paticnt died. Reported several other cases with recovery.

Dr. Benjamin, of Wilkinson. reported three cases in which two recovered and one died. He has adoptea the treatment already emphasized.

Dr. Sterenson, of Richmond, said that any man who would produce pregnaney in a woman who had onee had puerperal convulsions should be treated to the same operation on the vas deferens as is used in the institutions of correction and the insane in the State of Indiana. Fortunately chloroform is a rasomotor depressant and is a safe agent in this condition from the fact that the pulse is always full and bounding. After depression comes on, chloroform should not be used.
Dr. Comstock, of Greenfield, Dr. Weller, of Richmond, and Dr. Markley, of Richmond, all agreed with the principles of treatment, namely: every case is a rule to itself; control convulsions: establish elimination, and empty the uterus. Dr. Markley reported a case which died from cxhaustion due to convulsions and mentioned the induction of elimination by the use of a tent-like arrangement for holding stean to the body.

Dr. King, of Richmond, said that he disagreed with Dr. Gronendyke in that puerperal convulsion is the worst condition to be met with in the pregnant woman. He said that placenta provia is the worst yet. to which Dr. Gronendyke concurred. He reported one ease of puerperal convulsions with recovery.

Dr. Barned, of Greenfield. asked for information concerning eases in which there was no albuminuria, bowels in good condition and convulsions present. There is little literature on such a condition, but it is supposed to be a nerrous irritation of some kind or a ricious circle of the nervous system.

Dr. Gronendye, in closing, said that all his cases had been purely toxic. Hypodermoclysis is very important in treatment. The apparatus for this purpose is as important as forceps. Heated corn is great for the purpose of diaphoresis. To deliver the child in these cases is no easy task when the os is not patulent.
"The County Society and Its Members" was the title of a paper by Dr. Weller. The author said that the eounty society is of great benefit to the doctor, as it teaches him how to think and to think out loud. He is always enabled to carry home some idea. which will prove a jewel. From a social standpoint it is of great benefit; it increases love for profession and brethren. Preparation is the key to success; hence the work of the society in preparation on any subject is of great benefit to all. What a mistake to consider attendance a loss of time because nobody is present who knows more than we do. We should remember that we can learn something from every one, to say nothing of being of benefit to others. We must do our part to lend a helping hand to our brethren. Do not knock.

In the discussion of Dr. Weller's paper much was said in regard to making the meetings of the county society more interesting by Drs. Heath, secretary of the State Medical Association, and Stevenson, councilor of the Sixth District. Special attention was paid
to the idea of doing postgraduate work at these meetings by the use of the cadaver. Dr. Sommer, being secretary and treasurer of the State Anatomical Board, was able to explain how to sccure bodies under this act, also the care and preparation of the same.
"Etiology and Prevention of Typhoid Fever" was the title of a paper by Dr. Sommer, in which special stress was laid on sanitation and the care of existing cases to prevent the spread of the disease. The author also mentioned the duty which is laid to the doctor in educating lis patients on the nature and cause of the disease in order that they may be better able to prevent its spread, also the spread of the disease by convalescing patients when the fcces and urine are still loaded with the bacilli. The method of railroads in allowing the feces of passengers to be scattered along the country, washed into the streams and polluting water supplies was condemned, and is no doubt the cause of many which appear to be sporadic cases. The use of antiscptics in purifying water supplies was spoken of. Copper sulphate seems to have acquired some reputation in that direction.

In the discussion Dr. Bruner emphasized the use of copper sulphate, it being safe, cheap and he believed efficient. That part of the program which was conducted around the dinner table was not slighted in ans respect.

Adjourned.
E. Francis Sommer, Secretary Pro Tem.

## KOSCIUSKO COUNTY.

The regular meeting of the Kosciusko County Mrdical Socicty was held August 18. Meeting called to order by President C. R. Long. The first paper of the afternoon was by Dr. C. E. Thomas, of Leesburg, entitled "Acute and Chronic Ileocolitis," which was discussed by Drs. Cary, McDonald, Long, Howard, Foster and Yocum. "Anatomy and Physiology of Stomach and Intestines" was the title of a paper by Dr. F. J. Young, of Leesburg, the discussion being opened by Dr. Cary, followed by Drs. MeDonald, Burket and Warvel. The subject of "Acute and Chronic Gastric Indigestion; Acute Gastritis," was presented by Dr. M. G. Yocum, of Mentone, and was discussed by Drs. Burket, MreDonald, Bowser and Cary. Dr. J. L. Warvel, of Sidney", read a paper on "Acute Intestinal Indigestion; Cholera Infantum," which was discussed by Drs. Burket, Ford, Young, Howard, Foster, Bowser, McDonald and President Long.

A letter was read from the Directory Department of the American Medical Association, asking for a list of the advertising doctors and medical companies in the county, which request has been complied with by the secretary.
A congratulatory letter in regard to the socicty's program was read from Dr. John H. Blackburn, director of the A. M. A. "Course of Postgraduate Study for County Societies."

The secretary reported that there were only seven active physicians left in the county who were supposed to be eligible but who were not yet incinbers of the society. Two more who were eligible were not in active practice. The editor of The Journal of tue Indiava State Medical Association had kindly sent a copy of The Jourval, a letter and an application blank to each one of these nine. The secretary has also written letters to some of them, enclosing applica-
tion blank and program, while others have been seen personally by members of the society living in the same town.
Adjourned.
C. Norman Howard, Secretary.

## LAPORTE COUNTY.

On August 14 the LaPorte County Medical Society departed from its time-honored custom of meeting on dry land, and was called to order by the president, Dr. J. L. Gray, on the waves of Lake Michigan. We were for the afternoon the guests of Dr. F. R. Warren, aboard his new launch Lucille, a trim 51 -footer of 25 gross tons, graceful in all her lines and beautiful in finish of mahogany and brass. Though the wind was brisk and the breakers rolling, yet such was the steadiness of the craft and the skill of the "skipper" that no serious outbreak of "Mal de Lac" occurred, much to the disgust of certain overzealous ones who hoped for abundance of clinical material in order to demonstrate some "new remedies."

When safely out from land it was diseovered that there were no papers on board and only one essayist, who was easily overpowered. Being thus deprived of our "feast of reason," nothing was left us but the "flow of soul," along with such light refreshments as the "skipper's" well-stocked locker afforded. At length, anchored in quict waters, swimming was declared in order. Then did Allopaths and Homeopaths, disearding therapeutic differcnees, and their elothing, beeome for the once Hydropaths, all eager to excel by divers stunts in going to the bottom of things.

Our sorrow that the afternoon was gone was only equaled by our pity for the brethren down state who can not cujoy these fine times, for, though they may substitute something, claiming it "just as good," we know better. Suffice it to say that when again the profession of LaPorte County is overcome by that "tired feeling" it will prescribe:

## R. Lucille.

(Warren).

## sig. Pro re nata.

Omnes.
Though it may be claimed that this is in a sense a "proprictary article," yet it will be found strictly ethical, thoroughly pleasant, an agreeable vehicle, and when taken with a proper amount of water not inclined to disturb the most sensitive stomach.

While my stammering pen ean never do the subject justice, yet we hope that some time again Dr. Warren "will git us, when
we're
all

> tired
> out."
> J. W. Milligan, Seeretary.

## PIKE COUNTY.

The Pike County Medieal Society met in regular session August 13, with a large attendance. The paper of the evening was by Dr. Hunter, entitled "Constipation in Children," which was generally discussed. Various case reports were also made, with clinical history and treatments. A very interesting program
is being prepared for the September meeting, and all physicians in the county are cordially invited, whether nembers or not.

Adjourned. E. S. Imel, Seeretary.

## RIPLEY COUNTY.

The regukar meeting of the Ripley County Medical Society was held, August 3, at Versailles. The applications for membership of Drs. M. L. Samms, of Morris; H. G. Nelson, of Osgood; C. D. Ryan, of Cross Plains, and Lucien Bailey, of Friendship, were unanimously accepted.

Adjourned.

> M. Joseph Coomes, Secretary.

## STEUBEN COUNTY.

The Steuben County Medical Society held its August meeting in Dr. Waller's cottage at Crooked Lake, with eleven menbers and thirteen guests present, Dr. Brown of Kalamazoo among the number.

The program was opened with two clinical case reports, which were well discussed. "Acute Intestinal Indigestion" was the title of a paper by Dr. Mary T. Ritter, the discussion being opened by Dr. T. F. Wood, followed by Dr. F. B. Humphreys. The next paper read was on the subject, "Public Sanitation and Hygicne," by Dr. T. J. Creel, which very ably brought out the needs of Steuben County along the lines of sanitation. The general discussion was unusually interesting.

The society then adjourned to the Crooked Lake Hotel, where a banquet was served, followed by toasts. The meeting was one of the best ever held in Steuben County.

Adjourned. Mary T. Ritter, Secretary.

## WARRICK AND SPENCER COUNTIES.

The Warrick County and Spencer County Medical societies met in joint session at DeGonia Springs, August 11. Meeting called to order at 2 p. m., with Dr. S. W. Stuteville as chairman.

Dr. Edwin Walker, of Evansville, read a paper on "Tubereulosis of the Kidney." The discussion was opened by Dr. P. N. Hoover, of Boonville. Dr. II. Q. White, of Grandview, presented his opinion on "Mincral Water in Treatment of Disease," which was followed by an interesting diseussion. Dr. P. N. Hoover gave the symptoms of a patient who suffered from an obstinate ease of constipation, from an obscure eause.

It was the consensus of opinion that such joint meetings were profitable in a social as well as a professional way.

Adjourned. Daltox Wilson, Secretary.

## NORTHERN TRI-STATE MEDICAL ASSOCIATION.

The thirty-fifth meeting of this Association was held at the Oliver hotel, South Bend, Ind., on July 14. The society was ealled to order by the President, Dr. Albert E. Bulson, Jr., of Fort Wayne. About 125 members and guests were present at the meeting. The following papers were presented: "Ostcomyelitis," by C. A. Daugherty, South Bend; "The Surgical Treatment of Ulcerative and Purulent Cystitis," C. M. Harpster, Toledo; "Mastoid Symptomatology and Treatment," Albert H. Andrews, Chicago; "The Future Hygiene," J. N. Hurty, Indianapolis; "The Etiology and Treat-
ment of Nephro-Enteroptonis." hy W. W. Lomgyear, Detroit: "Conjunctiviti-." Walter K. Parker, Detroit: "Trammatic Neuroses. with Special Reference to Jitigation." bẹ Lewi- Millur. Tolecho: aldre-s. "The l'resent Status of Some Ophthahmic Means of General Diagnosis," by Carey A. Woot, Chicago.
some fiftem or twenty new members were added to the society.

The amual clection of offieers resulted as follows: Iresident. William A. Dicker, Toledo: vice-president. C. B. de Nancrede. Am Arbor, Mich.; secretary, Wiiliam F. Shumaker. Butler: treasmrer. J. A. Weitz, Nontpelier. Ohio; board of censors. H. F. Mitchell. South Bend; J. A. Dumean. Toleto, Ohio: and A. IV. Crane, of Kalamazoo, Mich.

The A-soeiation will hokd its mid-winter meeting at Ann Arbor, some time during Jamary. the date to be scleeted by the oflicers and committee on arrangements.

## SECOND DISTRICT MEDICAL ASSOCIATION.

The third ammal meeting of the Second District Medical Association was held in the Knights of Pythias building. Bloomfich. Jnd., Thurvlay, Alay 14. 1908. It was one of the most suecesful and enthusiantic meetings in the history of the Second District.

The afternoon anom consisted of the following papers: "Should the Country Doctor Do Major Sturgeryo" by Dr. O. K. Mekittrick. disensed by Dr. B. A. Rove; "Hematuria," by 1)r. J. F. Spink, discusced by Drs. Allen Pierson and Joe Crowder; "Rupture of Langs from Injury Without Fracture of Ribs," and report of cases. hy Dr. E. T. Sherwood, discussed by Dre. Angust Knoefel and 11. R. Lowder: "Ma-titis in the Puerperal Woman," by Dr. H. R. Lowder, discussed by Dre. J. W. Clifford and John Sloan: "Headache as a symptom." by Dr. John Jon's, and "Puerperal Eclampxa,* by Dr. W. E: Kessinger. discussed by Dra. J. M. Marrah, 11. R. Lowder and 13. A. Rose.

At the cluse of the afternoon scosion the society and guests were taken ('n masse via automohiles to the factory of the American Post Company, where the complete process of constructing sheet metal posts was observed. Following this the society spent a very plea*ant hour at the Bloomfied Social Club as gnests of the club.

The erening ses-ion opened with a paper by Drs. Henry Alburger and Fletcher Gardner on the subject, "Hypermephroma and Fibroid Awociated with Tubercnlosis of Endometrimm and Thbes," with specimen and report of cane. l'aper was dimelnom by Dr. C. E. llarris. "Therapuaties or No," was the title of a paper presented by Dr. Frank LIolland, which was discussed by Drs. E. R. Mason and August Knoefel. Dr. John Sloan read a paper on "'home of the Diffieulties That ('ome To the Private Practitioner in Obstetrieal Work." Dr. N. D. ('ox real a paper on the subjeet, "Treatment of Fracture of Claricle," which was followed by election of officers, renlting an follows: President, Dr. J. E. Harris, Bloomington; viee-president, Dr. Fletcher Garduer. Blomington; secretary, Dr. Frank Holland.

At the conclnsion of the mecting a banquet was enjoved at the Elnora Hotel.

Adjourned.
Frank Holland, Scc.

## BOOK REVIEWS

Intervational Cliniss. Vohme 1. Bighteenth Serie190s. J. B. Lippincott © Co., Pliladelphia and London. Cloth. Pp. 309. Price. \&゙2.00.
A rather musually interesting rolume is lure presonted, combining artieles of considerable practical worth with the more seientifie ones. The years prog. tres in medieine and surgery occupies considerable space and contains much condensed information that is new. The volume is well illustrated.

Inthrinational، Chicics. Volume 2. Eighteenth Series. 1008. J. 13. Lippincott \& Co.. Philadelphia and Lonton. Cloth. Pp. 304. Price, \$2.00.
In this volume are inchoded several artieles of interest under the gencral headings of Treatment. Medicine, Surgery. Gynecology. Ophthahmology. Dermatology. Orthopedies. Pediatries and Pathology. The rotume closes with a contribution by Charles E. Simon Ont the "Recent Research into the Pathology of Malignant Disease," including some original work by the aluthor which would indicate that ere long the former gloomy prognosis of malignant disease may be altered through the properly selected mee of injection- of atdtogenons extracts of the patient is orn growth.

Theatment of Interial, Diseases. By Dr. Norkert Ortuer, L'niversity of Viemna. Edited by Nathaniel Bowditch Potter. Il.D. Viwiting Plysieian to New Tork City Hospital, etc.. Instructor in Medicine. Columbia Lnivervity. Translated by Frederic 11. Bartlett. M.D., from the Fourth German Edition. Cloth. Pp. (i.5s. J. B. Lippincott Co., Philadelphia and London.
In this fonrth edition the work has been condensert. the preseriptions made to conform to the Americal Pharmacopeia. and the equivalents in the Engliwh scale added to the metric quantities. Temperatures have been tran-posed to the Fahrenheit scale and, in short. the colume made to meet the demands of the Ameri(an practitioner. Dr. Potter has rewritten certain sece tions and added one on treatment of neurasthenia. On the whole, we are inclined to agree with the editor*: criticism. viz: the profusion of preacriptions and the too inherent faith in drug- by the author.

The Treatmext of Fractures: Witi Notes Upoa a Few Commos Dislocations. By Chas. L. Seudder. M.D., Surgeon to the Massachisetts General Honpital. Sixth Edition, Revised and Enlarged. Octavo volume of 435 pages. with 854 original illustrations. Philadelphia and London: W. B. Sannders Company, 1907. Buckram, \$5.50 net; Half Moroeco, $\$ 7.00$ net. The sisth chition within almost the same number of years, speaks not only for the popularity of the work But also for the commendable effort of the author to keep it well abreast of the times regarding its subjeci matter.

Already profusely illustrated, eren more has been added to this very essential element, to which the x-ray has contributed no small part. More recent bibliography has been recorded, and especial attention has been gisen to obstetrical skull fractures of the new-bom. fractures of the zrgoma. malar bone, head and neck of radins, femeral neck, and old, mmredueed and pathologie
fractures and dislocations. More attention is direeted to the treatment of ununited fractures, operative and otherwise, and more frequent and repeated inspeetion is urged. The use of the x -ray for the demonstration of results obtained serves a double purpose; both as a therapeutie aid and a measure of protection for the surgeon, in ease of legal eomplications. Indeed it is very pertinently remarked that "when there is doubt of the diagnosis of a fracture, no physician has done his full duty by his patient if he can command skiagraphie examination and has not used it."
The volume is beautifully gotten up, on excellent paper. and with the profuse illnstrations and full deveription should rank first in its line.

Progressite Medfine. Vohume 2, June, 1908. Lefr \& Febiger. Philadelphia and New York. Pp. 352. Paper. Qmarterly. Price, $\$ 6.00$ per annum.
In this number are discussed the general subjects of abdominal surgery, gyneeology, diseases of the blood, diseases of the glandular and lymphatic systemas. metabolic diseases, and ophthalmology. Worthy of expecial mention are the extensive and interesting disetusions of the general subjects of hernia, by Coley, and cancer of the uterns, hy ('lark.

The bhe es (Splanchine Nettrasthenia) Catses and ('cre. By. Albert Abrams, A.M.. MI.D. (Heidelberg), F.R.M.S.. Consulting Physieian Denver National Hospital for Consmoptives. Illustrated. Third Edition, revised and enlarged. New York: E. B. Treat \& Company, 190s. Pp., 287. Cloth, \$1.50.
Despite a few poorly worded clanses and an umpleasant eonfusion of terms, such as "puerperal" for "gestation" on page 32, and "palpitation" for "palpation" on page $1 \cdot 2.5$, this little work proves interesting reading to the general practitioner in that it deals with eonditions so eommonly encountered in daily work. The author would ascribe most of the phenomena obtaining in neurasthenia to a condition of engorgement (venous) of the ablominal riscera, particularly the liver, and directs his attention to the different methods of relieving this condition. Various useful hints are given, and a treatment outlined that is commendable for its limitation of medication. Nore can be ateomplished by a proper dietary, abdominal and respiatory gymmastics, and a regulation of the halits of life of the patient. The anthor accords the sinusoidal current an enviable place in the armamentarinm of him who would sueressfully treat the curse of "the blues," believing it superior to all other forms of clectrotherapy. Hypnotism. in selected eases. pomes in for its share of commendation at the hands of the author.
Certain parts of the book might prove equally interesting reading to both the lay and professional minds.

## ABSTRACTS FROM CURRENT MEDICAL LITERATURE

## PHYSICIANS IN POLITICS.

A member of the committee on medical legislation comments this week on the work recently accomplished in Ohio, where 105 physieians went to the state convention as delegates of one of the leading parties, the
result being that, for the first time in the history of the eountry, a state convention adopted a platform containing a declaration in faror of the organization of a national department of health. It is hardly neepssary to say that such a plank would never have been adopted had not a large number of physicians been sitting as members of the convention with the right to rote. This is in marked contrast to the attitude of the medieal profession heretofore, which has been to send committces to stand without and to plead for dexired legislation. Physicians hereafter, if the example of Ohio is of any value, will work and vote for needed reforms as members on the floor of the eonventions and legisa tures, and will not merely wait as visitorn in the lobbies or appear before eommittees. If letter conditions are to be obtained in munieipal and state government, it must be through an appreciation of the fact that the proper work of govermment is administration and not exploitation of the publie. With this in riew, there is no reason why the physician should not prove as good an administrator as his brother the lawyer, to whom the lion's share of politieal duties and opportunities has been awarded in the past. Three-fourths of the work of the average legislative body to-day has to do with the questions of administration. There is nothing in the personality, training or experience of the successful physician that would render him less effective in dealing with administrative problem. than the lawyer or the business man: neither is there any reason why a physieian should not demand and exercise his full rights as a citizen, especially since he is far better fitted by education and experienee for dealing adequately with many of the problems of modern legislation than is the a verage lawrer. It ean not be denies that the mamagement and conduct of many of our state institutions would be far better were physicians represented on the legislative committees, or that better sanitary laws would be enacted if physicians had rotes in the legislature instead of merely being represented lay proxy. The message of the Ohio profession to the physicians of the comutry is. "If you want a thing done, do not send another, but go yourself." It is hoped that plysicians in many other states will follow the example of their Ohio brethren.-Jownal of the $A$. 1I. . 1 .
"The signs of the times" point to a rapid change in the status and work of the medical man. Changes lave already occurred within the memory of those now in ative practice. Time was when the prospective physieian registered with some neighboring doctor, took care of his horse and garden, assisted in a few operations, and read more or less thoronghly the few books on his preceptors shelves. Having this spent a few months, he felt duly qualified to hang out his shingle. There were medieal sehools, too, in which he might listen to the lectures given by the more promi nent practitioners, and the most embryo Esculapians songht this means of eompleting their professional education. The bent of these colleges required attendance at only two short seswons, and laboratory work was limited to a little chemistry and anatomy. The line between the scientific physician and the empiric was diflicult to dixcover, and rery frequently the man who have never seen the inside of any other educational institution above the district school could look with pity upon his poor neighbor who struggled hard. though entitled to append "A.AI., M.D.." to his name.

Today the people are becoming so educated that they are realizing the difference between the man who knows and the one who tries to look wise. The quack and imposter is finding his position less profitable and more ignoble. Our municipal, state and national health officials are making such war upon the causes of disease that already the amount of sickness is being reduced, and consequently there is less work for the individual physician. There is no longer excuse for permitting any but the thoroughly trained to enter the profession, and those already in must keep up with the advances in the science of medicinc. It is not improbable that the average practitioner of twentyfixe years' standing shall become an expert bacteriologist, but lie may become posted upon the facts of bacteriology and make use of a neighboring laboratory. He should recognize that diphtheria and typhoid fever are the results of special bacilli, and he should know the diagnostic value of tuberculin injeetions. Every practitioner may make the Tallquist hemoglobin estimation or the agglutometer test for typhoid.

The physician of today is rightly expected to be much more thorough in his study of each individual case than was the custom a quarter of a century ago. He must have a better office equipment and a larger library. He must have fewer cases, but spend more time upon each, and he should be paid accordingly.The Charlotte Mcdical Journal.

The public health planks in the platforms of the two leading political parties ought to be placed in juxtaposition, so that every physician and every layman who is interested can make an odious comparison. The Lancet-Clinic is non-partisan, but it can not refrain from expressing the regret that the Republicans have failed to take advantage of an opportunity to go on record for a most important reform. Here is what the politicians of that party want the intelligent voters to applaud and swallow: "We commend the efforts designed to sceure greater efficiency in publie health, and favor such legislation as will effect this purpose." As originally drafted this plank might have been endorsed as promising something respectable, but now it is meaningless and rapid. Here is the Democratic health plank: "We advocate the organization of all national public health agencies into a National Bureau of Public Health, with such power over sanitary conditions connected with factories, mines, tenements, child labor and other such subjects as are properly within the jurisdiction of the Federal Govermment and do not interfere with the power of the states controlling public hoalth agencies." Further comment is unnecessary at this lime. But the unprejudiced reader will do some effective thinking.The Lancet-Clinic.

Practicing medicinc is a pretty dangerous thing for the patient if the man doesn't know anything about the science, and sometimes it is rather dangerous for the alleged practitioner himself, as was the case with a fellow out in Massachusetts who sold a person two bottles of "catarrh cure" that contained cocain. The catarrh curist was arrested, fined $\$ 50$, and put in jaila practical lesson to all who have no business to deal in medicine.

Then there was that woman, mentioned in the papers the other day, who gave the little girl attending her daughter's party some of her headache medicine, and
then put the child to bed to sleep it off. The ehild went to slecp and never wakened again.
But these overt acts are not much worse than the simple carelessness of some pcople, as was the easc of that woman who left her "heart mcdicine" on the table, where her little girl got it and ate a portion of the tablets. In a few hours the ehild was dead.

Sometimes these little medicine adventures do not result fatally. But most of them, if ignorantly taken, manage to get around among the organs somewhere and do more or less damage. It is about as bad to deal haphazard with powerful cures as it is to go meandering about a magazine with a lighted candle.-The Ohio State Medical Journal.

The bills now before the New York State Legislature "to prevent cruelty by regulating experiments upon living animals" will seriously interfere with research work should they become laws, and it is the duty of every physician to use his best endeavors to defeat them.

These bills seek to define and fix by law the cases in which an anesthetie must be, or need not be, given to an animal; the cases in which an animal must be, or nced not be, killed immediately at the end of the experiment, and if such experiment "is calculated to cause pain or distress" it becomes a misdemeanor unless it conforms with the sections of the bill.

The laity becomes the judge and jury of all original work where animal experimentation is needful and if the future is to be judged by the same hysterical outbursts as in the past, the outlook is not bright for the scientifie advancement of the art of medicine in those states where such laws may prevail.-Pcdiatrics.

Some doctors who have been annoyed by the frequent and unauthoried repetition of prescriptions have been inquiring for an ink which will last about as long as a bottle of medicine or a box of pills. We select the following from pharmaceutical formulas: Iodin, 0.35 ; potassium iodid, 0.35 ; mucil, acacia, 8.00 ; aqua ad. oz. 60.00. Dissolve the potassium iodid in one dram of water, add the iodin, and when it is dissolved add more water and the mucilage. Use the ink on glazed paper. The writing disappears in about four days. Another method is to boil some nut galls in some nitrie acid and add to the infusion gum arabic and a little sulphuric acid. However plain the writing may be at first it will disappear in a few days. The latter formula is found in Practical Druggist.-The Mcdical Fortnightly.

The howl about vivisection goes regretfully on. No question is so sclf-evident but that there are supporters for either side. Animal life is precious and should be considered in a greater or less measure as sacred. Human life, though, should be held so far above animal life as the blue vaulted skies are above the earth. If the saerifice of the lives of a thousand-yes, a million -dumb animals, will give us the knowledge for saving some human lives, let us shed tears, not of sorrow for the animals, but of joy for the human.-The Mcdical Fortnightly.

Osteopatil Not a Physichan.-The Corporation Counsel of New Iork City, George L. Sterling, has advised the Board of Health that it should not register osteopaths, and that it should decline to receive death certificates signed by them.-Journal A. M. A., April 18, 1908.

# THE JOURNAL <br> OF THE <br> Indiana State Medical Association 

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA
ISSUED MONTHLY under Direction of the Council

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ben perley weaver, B.S., M.D., Assistant Editor

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## ORIGINAL ARTICLES

## THE SURGIC.AL TREATMENT OF EXOPHTHALMIC GOITRE.*

Jewett V. Reed, M.D. INDIANAPOLIS, IND.

The value of the surgical treatment of exophthalmic goitre is emphasized by Dr. Barker in the following words: "In the very early cases, surgery is capable of curing nearly 100 per cent.; even in the outspoken cases almost is per cent. can be cured by operation judiciously planned and skillfully performed; and the mortality, now about 5 per cent., can be further reduced. Internal medicine, up to this time, has been utterly unable to obtain results comparable with these." This same riew regarding the superior-- ity of surgical orer medical treatment is held by many internists. However, they do not mean that every case of Grases' disease should be opcrated upon as soon as the diagnosis is made. We frequently see mild but typical cases of exophthalmic goitre, especially those cares coming on at puberty and in early pregnancies, and also thosc acute cases following certain infections, which can be practically cured by medical treatment, the essential element of which is rest in bed. In these cases the thyroid gland seldom returns to its normal size, and there is also a tendency for the symptoms to return at various times; but with intelligent patients, who can be made to appreciate the value of rest as soon as symptoms appear, medical treatment is probably a. safer and a more comfortable procedure than operation. As a certain number of cases of Grares' disease do improre very markedly under a non-operative treatment, one feels that in all

[^47]cases there should be given the benefit of the doubt, and medical treatment used for a period of from two to four months before operation is adrised. If at the end of this time operation is found to be necessary, the result will be much more favorable on account of the previous rest and preparation. The indications for operation, and the best time to perform it, varies with individual patients; but, in general, they may be stated as follows:

In the primary form of the disease, that is, in those cases where the goitre is of the soft, vascular type arising in an apparently normal gland, operation should be performed when, after three months of medical treatnent, the symptoms are worse or at a standstill; or when, in spite of a general improvement in many of the symptoms, the pulse-rate remains permanently high. Also in all cases where the patient is unable to carry on his regular work, on account of general weakness and nerrousness; or when the degree of cxophthalmos is so great as to lead to corneal listurbances. No case is so far advanced as to contraindicate operation. However, these serious cases especially demand a preparation in the form of rest and medical treatment for a few wecks before operation is attempted. The indications given by Dr. Charles Mayo for this preoperative preparation are, a pulse that can not be counted continuously because of uneren tension, gastric crises and diarrhea, and edema of the feet and hands.

In the secondary forms of Graves' disease, that is, in those cascs where symptoms of hyperthyroidism supervene upon a pre-existing thyroid tumor, an operation is practically always indicated, and medical treatment should not be attempted except as a preparation for operation. Exophthalmic symptoms have been seen to follow all forms of tumors of the thyroid gland, cysts,
simple colloid adenoma, fetal adenoma, and carcinoma. The mere existence of these tumors is an indication for operation, and the added exophthalmic symptoms makes this even more imperative. Moreover, the operative treatment of these secondary forms of disease, with the exception of those arising from carcinoma, have given universally good results, with an exceedingly low mortality.

Perhaps in no disease treated surgically is the estimation of the patient's resistance more necessary than in exophthalmic goitre. The degree of hypertrophy and dilatation of the heart should be ascertained as accurately as possible, together with the pulse-rate and blood-pressure changes throughout the day. The changes in the vascular system should be noted after a moderate exertion, as a rough indication as to how the patient will stand the operation. The preparation of the patient before operation, by rest in bed and modified diet, is a point that should be emphasized. If the medical treatment has not continued up until the time of operation, the majority of patients will do much better if they are giren a period of from one to two weeks, depending upon the condition of the heart and nervous system, of absolute rest.

The question of the proper anesthetic is still an undecided one. Deaths have occurred with both local and general anesthesia. Kocher and Halsted prefer the local infiltration with cocain solution, while the Mayos use ether. Other operators use choloroform alone or with oxygen. The advantages of general anesthesia are that the patient, already in a highly nerrous state, is free from pain and discomfort, and that the operator can do his mork more easily and more rapidly. Local anesthesia is generally used in the form of Schleich's solution, which is a $1 / 2000$ cocain in normal salt solution, to which is added a small amount of morphin. This can be used in large quantities without giving an excessive dose of cocain. All pain is practically abolished, so far as cutting is concerned; but traction on the tissues, and the weight of the artery forceps are very often uncomfortable. Local anesthesia has the advantage of throwing less strain upon the heart, and of producing less mucus in the throat than general anesthesia. The mere fact that the patient is conscious prevents the operator from pressing or dragging upon the trachea and cutting off the air supply, which is very easily done; and also by having the patient talk while working in the region of the recurrent laryngeal nerve, he is able to escape cutting the nerve, by the changes of the patient's voice when the nerve is approached. Dr. Halated says that in spite of
the fact that operation done under local anesthesia may produce a certain amount of shock in an irritable and nervous patient, nevertheless he considers the local safer than a general anesthesia.

With the exception of Jonesco's operation of excising the cervical sympathetics, all operative procedures aim at reducing the secreting parenchyma of the thyroid gland. The resection of the sympathetics relieves some of the symptoms, especially the exophthalmos; but this operation is probably based on unsound principles, gives uncertain results, and has now become practically obsolete. Attempts have been made to reduce the substance of the gland by the use of the $x$-ray and also by burying a bulb of radium in a lobe; but I find no definite cures following these methods. The injection of caustics into the substance of the gland has given perfect results in some few cases; but this procedure is dangerous, and decidedly unsurgical. The ligation of one or more of the thyroid arteries, in an attempt to produce an atrophy of the gland, has been done with good results in some cases. The benefit is only temporary, however; for it is difficult to regulate the degree of atrophy by this means. The ligation of two arteries is seldom sufficient, while the tying of three or four has lead to tetany, and even necrosis of the entire gland. Moreover, in the case of very large goitre, ligation alone may be even more difficult than resection. There is a field for simple ligation, however; and that is in those cases where the symptoms are very severe, and where an acute thyroidism, which generally follows resection, might be sufficient to cause death. In these cases a preliminary ligation of the arteries of one side should be done, but more than tro should never be tied at the same operation.

At the present time the operative treatment of Graves' disease consists in a partial resection of the thyroid gland. This consists in removing a part or the entire lobe of the more enlarged side. The ideal operation is one where the thyroid tissue left is equal to the normal amount. The more exactly this is done the better will be the result. When too little gland is removed the symptoms will be improved but the disease will not be cured. If too much is taken away, symptoms of thyroid insufficiency will appear, which will necessitate thyroid feeding. It is better, however, to err on the side of taking away too little than too much. The main points in this operation are as follows: The incision most commonly used is the transverse or collar incision of Kocher. One of the serious objections to this operation in young women is the resulting
scar in the neck. This disfigurement can generaily be overcome by marking with silver nitrate the line where a closc-fitting necklace falls. By making the incision along this line the scar can generally be completely hidden by the necklace, afterward. After the muscle has been divided, and the external capsule of the gland incised, the thyroid will be seen as a purplish-colored mass covered with a very thin connective tiszue cápsule, under which run many large, friable veins. In cutting down upon and dissecting out the lobe great care should be taken not to soil the tissues with blood, as the staining of the areolar tissue makes the dissection more difficult, and also harder to aroid important structures. This soiling can gencrally be avoided to a large extent by clamping all vessels before cutting them. The dissection of the gland is carried out between the esternal and internal capsules, and this is gencrally very casily done over the anterior and external surfaces of the gland, and up orer its superior pole. In dissecting the posterior and interior surfaces of the lobe, great care must be taken to aroid two important structures, the para-thyroids and the recurrent laryngeal nerve.

The para-thyroids are small, glandular bodies situated on the posterior and inner surface of the thyroid gland. Each lobe generally possesses two of these glands, one connected with the superior. the other with the inferior thyroid arteries. The para-thyroids are small, disc-like bodies, about a quarter of an inch in diameter and lighter in color than the thyroid tissue. At present it is gencrally accepted that post-operative tetany is due to the remoral of the para-thyroids. Even the excision of two of these may be followed by bad results. It is, therefore, important to do cverything possible to save these important little structures. This can only be done when the field is bloodless, so that they can be seen; and when the thyroid arteries and their branches can be ligated distal to the para-thyroid artery. Charles Mayo leaves the para-thyroid undisturbed, by what he calls the "sub-capsular method of dissection." This consists in slicing off the posterior part of the gland, leaving the para-thyroids untouched between the layer of internal capsule and a thin layer of thyroid tissue. Halsted prefers the ultra-ligation method, of tying the thyroid arteries distal to the parathyroid branch, and then dissecting the bodies away from the surface of the thyroid gland. Both of these methods are based on the same principle, but are somewhat more difficult than the simple ligation of the main thyroid trunks. With the
knowledge of the importance of the para-thyroids an attempt should be made to save them in all cases.

On continuing the dissection downward, next to the trachea, we come close to the region of the recurrent laryngeal nerve. This can often be seen and avoided, if the field is perfectly bloodless. When local anesthesia is used it is generally very easy to avoid this nerve by gently picking up all tissue with forceps before cutting, and at the same time requesting the patient to comnt. As soon as the nerve is caught in the forceps a marked change in the roice will be noted.
When the lobe is entirely removed, all blecding points are stopped, the cavity is flushed with normal salt solution to remove any thyroid secretion that may be in the wound, the muscles and skin are sutured, and a small gutta percha drain is placed from the depth of the cavity to the outer angle of the skin-wound. This drainage is most important, for in most cases it prevents or reduces, at least. post-operative thyroidism, or "thyroid fever," as it is sometimes called. This condition is practically always seen to a greater or less degree, and is due to the rapid absorption of the thyroid sceretion that comes from the cut surface of the gland, or that has bcen squeezed out during the dissection. It shows itself by an intensification of all symptoms, to which is added fever that may reach as high as 104 to 105 degrees. When rery severe this may lead to death. Acute thyroidisin can generally be reduced to an insignificant degree by proper drainage of the wound, and in farorable cases disappears in from 24 to 36 hours.

The post-operative treatment consists in keeping the patient in bed, in a semi-sitting position, and giving large quantities of cracked ice or ice water. The patient should stay in bed for one week at least, or longer, depending upon the subsidence of the symptoms. Improvements have been seen within 48 hours after operation, while in other cases months may pass before the benefits of the operation are seen. As a rule the tachycardia is the first symptom to improve, next the nerrous manifestations, and last, the exophthalmos. In fact, the exophthalmos may persist when all other symptoms are entirely gonc.

It is difficult to obtain accurate figures showing the results of operative treatment. From the statistics of Heineck, Kocher, Halsted, and the Mayos, it would seem that in general we can conclude that the operation in all cases, both mild and serere, promises a cure in from 95 to 80 per cent. Deaths duc dircetly to the operation, or following close after it, have been due to the anesthctic, hemorrhage, tetany, acute
hyperthrroidism, influenza, and pneumonia; and with different operators the mortality has ranged from 2 to 5 per cent. Most of the cases that survive the operation, and are not completely cured, are greatly bencfited. A rery small number of cases are not improved in the least. It is difficult to obtain the number of recurrences, but they are probably not very great. When they do recur it is gencrally due to not cnough gland being removed, or to a subsequent hypertrophy of the remaining portion of the gland.

While partial resection of the thyroid gland cures from $\gamma 5$ to 80 per cent. of all cases, and this number will probably be greatly increased when we get the cases earlier, nevertheless we must not think that we have solved the whole problem of treatment until we learn more in regard to the cause of the diseasc. There is no doubt that the thyroid gland undergoes marked changes in Graves' discase, but these changes are admitted by practically every one to be identical with those compensatory changes experimentally produced. If the hypertrophied thyroid gland in ¿rares' disease be due to a compensatory process. the removal of the gland would hardly seem rational ; but until we know more regarding its etiology and primary pathologic changes, excision is the hest means of treatment at our disposal.

## THE DIAGNOSIS AND TREATMENT OF SINUS THROMBOSIS.*

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Since 1ss0. when Zanfal of Prague first operated on a thrombosed lateral sinus. considerable interest has been manifested by the profession. especially otologists, concerning thrombosis of the intraeranial sinuses. The sinuses most likely to become affected are the sigmoid and lateral sinuses, the jugular bulb, the superior and inferior petrosal and the cavernous sinuses. From the above channels the thrombus may extend into the internal jugular rein as far as the innominate, into the ophthalmic reins from the carcrnous sinus: posteriorly to the torcular, or may even spread to the lateral sinus of the opposite side.

Although the thrombus may be due to an infection carried inwardly from an injury to an external part of the head, and to the marasmus of old age or malnutrition, the chief cause lies in a

[^48]suppuration within some part of the temporal bonc. Such suppuration may be acute or chronic. When resulting from the acute form, the transmission of septic material from the focus within ihe temporal bone to the blood stream of the rein, the path of infection is through the intercommunicating blood or lymph channels, whereas in chronic cases of mastoid disease the pathogenic material from the mastoid usually comes into direct contact with the sinus wall, the osscous tissue lying between the original focus of suppuration and the vein having been first destroyed by necrotic processes. In many cases of chronic discharging ears there is formed first in the attic of the middle ear, and later by extension to the mastoid antrum, that curious collection of mar terial known as cholesteatoma. Cases of this kind are always farorable ones for the sinus infection and sinus thrombosis. The presence of a cholesteatome in the mastoid antrum causes the breaking down and removal of the surrounding bone to such an extent that the antrum is thereby several times enlarged, and as a result of the loss of osscous structure, the dura mater may be exposcd above, or the wall of the sigmoid knee may be laid bare posteriorly. In either case infection of the intracranial contents may follow, resulting in meningitis, brain abscess or lateral sinus thrombosis.

A predisposing cause of sinus thrombosis, and one to which I have on another occasion called the attention of the profession, ${ }^{1}$ is due to the formation and arrangement of the pneumatic spaces of the temporal bone. Thus one temporal bone may contain but few cells, and these may be separated from the sinus by thick and cburnated bone, while another temporal bone may contain numerous cells which are so located that they extend along the sinus for one or more inches, and will sometimes halfway surround the ressel. In any individual having a temporal bone with cells like the latter, it is not difficult to understand the ease with which, in case of mastoid suppuration, the pathogenic material could find its way into the ressel where infection would speedily follow.

The symptoms of sinus infection and thrombosis are of practical interest to every physician. Any case of either acute or chronic discharging ear, whether in child or adult, is one in which sinus thrombosis may possibly follow. A discharging ear is, therefore, the chief key to unlocking many a difficult problem relating to an otherwise meaningless chain of ugly symptoms.

[^49]The story of sinus thrombosis may be briefly stated as follows: A rumning ear, which has possibly never been considered more than the most trifling anuoyance: to this is added at some indefinite period of its progress a chill or chilly sensation, a rapid rise of temperature, a sudden fall of the fever, and a profuse sweat. In other words, a septic state has been added to the aural discharge, which for mauy years, perhaps, ha: been thought of no importance. Such a septic condition may, and often is, not in any way associated with the discharging ear by the physician in charge, or by those having most intimate knowledge of the patient. Indeed the patient may deny that the ear has discharged any for the past sereral months, and this may be true in so far as the appearance of any purnlent ontflow at the external meatus is concerned. A careful examination of the fundus of the ear by means of reflected light would. however, reveal the fact in such cases that a discharge had been present in small amount, that it had dried into a crust, which completely covered the perforation in the drum membrane, and thus had blocked the further outflow of pus. Hence the mere fact that an ear has not discharged for several weeks or months is no indication that the ear is not primarily responsible for the septic condition found in a given patient. On the other hand, the history of a previous discharge which has ceased may be, and sometimes is, responsible for the spread of the progenic infection to the sinus, for the reason, as just stated, that dried crusts have hindered the drainage to an extent that has driven the pus into new directions.

Thrombosis of the sigmoid sinus occurs rarely in cases where no discharge whatever las at any time occurred from the external auditory meatus. and wheu no perforation is present in the drummembrane. In instances like this the infection has reached the mastoid antrum and cells without all the usual phenomena of middle ear suppuration.

It would be impossible in this slort paper to narrate all the symptoms that may be present in sinus thrombosis. The chief one, as already stated, is a condition of sepsis. The temperature rises from normal to $103^{\circ}-4^{\circ}$ or $6^{\circ} \mathrm{F}$, and suddenly drops to the normal or near the normal. This rise and decline does not occur with the regularity of malaria. Indeed it may occur more than once in twenty-four hours. Profuse and exhaustive sweating occurs, as a rule, during the period of declining temperature.

A marked chill, or at least chilly sensations, occurs in most cases at some time during the progress of the disease, although many cases of
sinus thrombosis have been reported in which no chill was present at any time. It is my belief that if careful inquiry and frequent examination of any case be made that it will be found that a chill or coldness of the surface in some degree will usually be present.

Pain may or may not exist on the affected side of the head. It is often not present unless there is an acute mastoiditis accompanying the disease. There is often no swelling of any part, no stiffness of the muscles of the head and neck. and indeed no external evidence of anything going wrong. This is oftenest true of cases following chronic mastoid suppuration. Later in the disease, when the internal jugular vein may be involved, the cervical lymphatics may be infected, in which event the neck is stiff and feels hard. In the earlier stages of any case, the stages when it should usually be possible to make a positive diagnosis, no such formations as a "sausage cake" in the neck, as formerly described, should ever be expected. In the late stages general infection may occur. Particles of the broken down clot are carried into the general blood stream and thence to the lung where septic pneumonia is set up. A harassing cough and disturbed brcathing, together with physical signs distinctive of pneumonia will then be present. Should the patient withstand all this, septic emboli are sooner or later likely to be carried from the lungs to the distant parts of the body like the arms and legs, where multiple abscesses are formed.

Unimpaired intelligence of the patient is one of the distinctive features of the affection. Throughout the trying ordeals incident to the disease the patient is usually rational and the mind unusually active. I have known patients during the remission of the temperature to desire to read or write, and if permitted to do so would often show surprising mentality.

Ocular changes occur in from 25 to 50 per cent. of cases, and, therefore, where possible, the fundus should be examined frequently for such cridence. Disturbauces of the eye grounds may occur in other intracranial affections, as brain tumor, brain abscess, etc., and hence when pres(nt in suspected thrombosis such symptoms form only a help, but not a certainty as to diagnosis. Nystagmus and double rision are also present in perhaps one-third of all cases. Sinus thrombosis being a disease due to infection, the general symptoms will, of course, resemble those occurring from infection due to other causes. The disease may be mistaken for malaria, typhoid ferer, pneumonia, and the disturbances due to faulty digestion of food. In some of the typical
cases of sinus thrombosis the symptoms may resemble one or more of the abore diseases so elosely that the diagnostician will find it necessary to call to his aid every artifice known, and then may possibly find that he must await the further development of additional evidence.

Bezold, in larmony with most writers, states that few cases of thrombophlebitis get well, unless the condition is managed properly, and surgically. While it is believed by all observers that cases do occasionally get well without operation surh an outeome can not be expeeted in the simplest cases, and then not unless the original foeus of infection in the temporal bone be thorouglily eradieated by means of a mastoid operation. Procrastination, and the use of poultices and other external applieations, are favorable to a high mortality.

The treatment is nearly always surgical. While waiting, as is often necessary and wise, for absolute evidence upon which to base a definite diagnosis, almost any method of treatment may be followed which will make the patient most comfortable. Since the vast majority of all cases of this disease is due to the presence of a mastoid suppuration, it is permissible, and, I think, highly advisable in most cases of strongly suspected sinus thrombosis, to do a complete mastoid cxenteration as a preliminary necessity as well as a proper aid to diagnosis. At the time of this operation all diseased tissue which lies in the direction of the sinus should be removed, and if nceessary to be eertain, it is proper at this time to remove the bone and uncover the wall of the sinus for one and one-half or two inches. This will allow of an easy and reliable inspection of the sinus, and it may then be determined whether the sinus is or is not tlrombosed. In uneovering the sinus the operator may find a perisinous abscess, or the sinus may be covered with thick unhealthy granulation tissue. If sueh extra-sinus disease is found as has just been described, and the sinus itself looks and feels to the touch, rather healthy, the safest procedure is to disinfeet the mastoid wound as perfeetly as possible, pack the same loosely with iodoform gauze, and await the development of the next few days. During the succeeding two or three days evcry feature of the progress of the disease should be noted, and if marked and satisfaetory change in the condition does not take place the patient should again be anesthetized and the sigmoid sinus slould be opened and examined in each direction. Any elot or collection of pus should be removed, and when thought advisable the internal jugular vein should be ligated in the neek and the diseased part resected.

Many of the procedures connected with the surgery of the sinuses are still in dispute, and 1 shall not enter into their discussion. The aim of all operators is to first clear out of the vein or veins all the septie material that is present, and then, if thought best, to prevent by means of ligation of the internal jugular, the entrance of further sepsis into the general eirculation. In all cases I believe it is not wise to undertake this class of surgery without the best reason, for reckless operating with the cranium, espeeially if it involves opening one or more of the large blood streams, is undoubtedly a procedure that is dangerous to life. But when the surgeon is assured by a careful study of all the symptoms present that some accessikle sinus is thrombosed he is entirely justified in opening the same and ridding the patient of his fatal malady. The results of the operation when performed early and skillfully are favorable in from one-third to onehalf of all cases.

## DISCUSSION.

Dr. J. J. Kyle, Indianapolis: The doctor has emphasized a very important point, and that is the early diagnosis of sinus thrombosis. I have had five cases of sinus thrombosis that died subsequent to operative procedures, and all eame under obscrvation when they were praetically moribund. One ease in the city hospital had been treated four or five days for suspected typhoid, but the Widal and diazo tests were negative, and the patient was in collapse when I was called. It was reported that the lungs were in very good condition, but at the postmortem the seeond day after the operation both pleural cavities were found half filled with mueo-pus, and there were abscesses throughout the lungs, kidneys and spleen. I remember another case treated for a number of weeks for pneumonia. She had metastatic pneumonia, but the ear symptoms had been altogether overlooked. It is very important in ear trouble, wherever you have a sudden chilling of the body, or a distinet rigor followed by a rise of temperature, to suspect sinu: thrombosis or an osteomyelitis or extra-dural abscess, and in either case it is necessary to make exploration. The danger of ineision in the mastoid and dura is little compared with the danger of suppuration in or about the sinus.

Dr. George F. Keiper, Lafayette: I wish $\dagger$ h emphasize a point in diagnosis in these cases, and that is the frequent taking of the temperature. In fact, it is the only way you can tell sometimes whether you have sinus thrombosis or not. Where we have a temperature that fluctuates markedly and suddenly we may be pretty
certain of sinus involvement. I like the classifieation into stages, as given by MacCuen in his classic work on Diseases of the Brain and Spinal Cord. MacCuen divides sinus thrombosis into three stages, the first beginning with the formation of the clot, the intima being involved, where perhaps nothing has yet entered the circulation to give any clue in the way of temperature, few ehills or rigors occurring at that time. The temperature should be taken cvery three hours, so as not to miss the fine points the chart would rereal to us. The second stage is where the clot las formed in the sinus and more septic material is entering the circulation marked by more severe symptoms. And the third stage where the elot has fully formed and broken down and suppurating, entering the circulation, revealing the marked temperature changes shown on the chart. The question of the ligation of the jugular vein in these cases has probably been settled by the statistics of Perrin, which show that when the jugular vein is ligated septic matter is prerented from getting into the circulation and producing pneumonia, and the percentage of fatalities is improved about 18 per cent., so that ligation of the vein is a desirable procedure.
Dr. D. IV. Stevenson, Richmond: I operated a short time ago on a case of sinus thrombosis in which the temperature reached 106.5 , and there was very severe inflammation of the optic nerves of both eyes. I may say that in cases with this high range of temperature, if the patient lives there will usually be some atrophy of the optic nerves.
The steps in the opcration, as emphasized by Dr. Barnhill, are two: the exenteration of the mastoid, which ought always to be done and done early; and second, the ligation of the jugular. But about this latter there is some doubt. In my case I did not tie the jugular. It was a case of severe infection and was so treated. I gave large doses of strontium salicylate, 100 grains a day, and also mercury almost to salivation, and 1 believe the life of this patient was saved by this rather bold treatment with these internal antiseptics. I believe the time will eome when ligation of the jugular will not be performed so often, and we will depend more on internal antiseptics. The high temperature records in these eases are interesting. A case in Boston broke five thermometers that registered 110 and over, and yet the patient is living. It seems that certain centers in the brain are affected that give this high temperature found in no other diseases.
Dr. K. K. Wheelock, Fort Wayne: There is too much temporizing on the part of the general practitioner, as well as the specialist, in handling
suspicious car cases. Within the past year we have lost two valuable young lives by the dilatoriness in the diagnosis on the part of the general practitioner, although after it was recognized every resource was brought to bear to save the children's lives. This should not be, and while I appreciate that the general practitioner las a lot to contend with, yct if he takes the responsibility of treating suppurative ear cases he must take the full responsibility. In regard to treatment, as shown by the cases collected by Tupfer, the question is not so much how you operate as when you operate. If we operate within the first week after the development of the temperature shown by Dr. Keiper, we will save is per eent. of them: after that time you will lose 62 per cent. Thercfore, it is a question of the early recognition of these cases and of a complete and radical operation, opening and exploring the sinus, and if you have a septic sinus epen it and cause a free flow of good blood where bad blood exists. Simple tying of the jugular I do not think is the best method. Alexander's method I think is a better one-cutting off the jugular and tying, of course, the distal and learing the proximal end open in the wound. I have made it a rule in mastoid operations, in view of my experience within the past ycar, to expose the lateral sinus to the extent of an inch or an inch and a half, and it is entirely within our province where there is the least suspicion of infection to cxamine the lateral sinus.
Dr. J. F. Barnhill, Indianapolis (closing) : The object of the paper was to bring before you for the first time, as I believe, the subject of sinus thrombosis, and it was my aim to dwell upon the diagnosis. I would like to emphasize the points brought out in the paper. First, it is a common disease. Second, it ought to be recognized by any one who practices medicine. Any case of suppurating ear in which there is an unusual rise of temperature ought to call attention to something more than a simple mastoiditis, in which latter trouble it is rare to find a temperature more than 101, and if higher than that, and cspecially if it shows the zigzag course shown in Dr. Keiper's diagram, we ought to suspect that it is complicated by some general disease or by some intracranial complication of the ear disease. Now, as to diagnosis, it might be, in the first place, malaria. Examine the blood and find the plasmodium. You may find it is typhoid by the blood examination. You may find a eentral pneumonia, a latent pneumonia. in which it might be difficult to decide whether it is the ear or the lung. I had one case in a child in which it was difficult to diagnose. We held
the case for a week and then found it was due to a difficulty of digestion. I want to emphasize what every one has said. Have the nurse examine the hands and feet and body frequently, because a little chill would be as important as a decided rigor. If you have a discharging ear, a possible mastoiditis, a little coldness of the extremities, a septic temperature, you ought always to think of the disease which we have been discussing.

## THE PRETENTION OF TENEREAL DISEASES.*

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It is our intention to deal only with one phase of this subject: The responsibility of the physician in the prevention of venereal diseases, with special reference to gonorrhea. In considering the subject from this standpoint we can not overlook the fact that the entire responsibility rests upon the physician just as the educational campaign against tuberculosis, begun and pushed enentirely by physicians, has become a duty. We will not consider those benefits that might arise only from the action of law makers, involving deep sociologic problems, such as the control of prostitution, moral prophylaxis and the regulation of marriage.

It is a self evident fact that if every person suffering from a renereal disease were cured without having transmitted the affection to another the disease would soon be stamped out. What conditions prevent an approach of this desideratum, and what is the duty of the physician in bringing them to an end? There are two ways whereby proper control would be preventive: 1. The control of the uninfected individual, preventing his contracting a prevalent infection. 2. The control of the infected individual, preventing his communicating the disease. Keogh asserts that the heated discussions that hare arisen to obscure the question depend more upon differences regarding the nature and morality of legislative control of prostitution than upon the denial of the scientific fact that the spread of an infectious disease, renereal or otherwise, can be and is limited by such measures as notification, isolation and adequate treatment.
There has always been such a widespread prejudice against any dissemination of knowl-

[^50]edge along these lines that lay information is very limited and usually erroneous. A campaign of enlightenment must be originated, sustained and prosecuted by the physicians of this country. With the social problem unsolved, our hope lies in education. As a means of reaching everyone at the proper time, in life nothing offers opportunities equal to the public schools. This has been recognized by the zealous workers against tobacco and alcohol, who have succeeded in making it compulsory that every child have placed hefore it exaggerated pictures showing the baneful effects of these drugs. This suitable season to reach the mind when it is most impressionable should not be disregarded. With proper activity en the part of the medical profession some of the time now devoted to teaching scientific temperance might be used for instruction in scientific physiology and special pathology. Of course there would be difficulties hard to surmount in teaching youths, as education in regard to vencreal diseases presupposes a certain amount of knowledge concerning sexual matters, or would require accompanying light on these subjects. The fear of thus injuring the minds of children may be dismissed, for a subject properly presented in the light of science loses vulgarity. By all means, however, the contamination of our young men and of our young women should not be as it is now, the tainting of the imnocent. Why should a picture of a haggard user of whiskey and tobacco be shown a school boy when he has never heard of the terrible results of diseases which await the indulgence of strong, natural appetites? Why should a diseased lung be charted to the boy and girl who are not to be taught the anatomy and physiology of the organs of generation and will probably not be able, even as adults, to connect cause and effect when the surgeon removes the wifes' pus tubes. I have yet to find a case of initial gonorrheal infection that the patient did not bewail his ignorance in regard to the severity of the disease. His state of mind can usually be likened to that of a man who, thinking he had exposed himself to varicella, had developed a malignant case of variola.

Education must be begun early. It is customary now to confine efforts along this line to gatherings of adults and, as a rule, in such a technical manner that little good is done. Recently a member of the Young Men's Christian Assocaition came to me complaining bitterly because the specialist who had lectured to the society had failed to cure him of an acute gonorrhea in ten days. There was evidently a misunderstanding in that case. The young man had utterly failed io grasp the most important facts taught by the
physician. Thus is shown the futility of efforts toward educating the masses as they are usually directed to-day. Education in regard to the importance of venereal diseases must be begun at an age when, acting as a control of the uninfected individual, it will serve to prevent his contracting disease. We have always "locked the door after the horse is stolen."

It is in the treatment and control of the infected individual that we need the greatest awakening. The burden of this work rests entirely upon our shoulders. There are practically no cases of syphilis that do not come under the care of a physician. A large per cent. of cases of gonorrhea are at some time in the physician's care, though a considerable number seek restoration by means of patent medicines, druggists' treatment, and favorite prescriptions. The physician can not be hcld accountable for those indiriduals who do not seek his advice, but the medical profession is to blame for not having, by education, given the patient sufficient fear of this malady before it was contracted. In our cities there are many drug clerks with a clientele of renereal patients, and several druggists in Indianapolis boast a sub-rosa reputation as specialists in venereal diseases. One of these informed me that he had, at one time, as many as twenty eases of gonorrhea under treatment. The worst feature of this is that the druggists as well as the patients beliere in the cure, and in their ignorance consider themselves able to judge of the absence or presence of this dread disease. Why do these sufferers go to the druggists and to the patent medicine shelves? Invariably, I have found it to be either a matter of expediency or a financial reason, or both. The disposition of the average American is to have the best for his own comfort and health, and I have concluded that he usually seeks the cheaper methods because he thinks them just as good as the plysician's treatment. Thus we are brought back to the first premise that lack of education regarding the nature and importance of venereal affections is the principle cause of trouble.

Though the number who treat themselves or are maltreated by druggists is great, they alone do not account for the spread of disease. Where did the 95 per cent. of gonorrheal pus tubes and pelvic abscesses that Joseph Price has operated get their infections? Not from among the careless and those too poor to pay for treatment. Careful investigation will show that most of the chains of infection at some time passed through a physician's hands and should have been broken. This brings us to an accusation of the profession at large for a great crime of omission.

It is a fact that hardly one case of gonorrhea in Indiana out of one hundred is properly diagnosticated, properly treated, and properly dismissed, aside from the cases of a very few enthusiasts. Gentlemen, the import of that statement can hardly be appreciated until you think of the hundreds of abdominal sections made yearly because the male focus is not cured of his infection. By carelessly dismissing him uncured, the physician becomes a party to the crime against society, the spread of gonorrhea. It is unneccssary to recount all the blasting results of this disease. The cases of male and female sterility, with the consequent loss to the state, the 50 per cent. of blindness in children. the suffering in later life from stricture, and the many aches and pains that gonorrheic woman is a rictim of are all familiar to you.

You will bear with me if I go into the subject of treatment very carefully, for therein lies the foundation of the evil which we seek to remedy. The physician accepts a patient suffering with gonorrhea and not appreciating the importance of the disease himself, he causes the patient to consider it as of little consequence. He makes no microscopic examination in the beginning and he makes none during the course of the disease. Many times lie does not even make a physical examination, but merely takes the patient's statement. He regards the disease as unclean and is willing to quit treatment whenever the profuse discharge is checked and the patient satisfied. The result is that nine-tenths of these cases, feeling unmarred, become active centers of distribution. At a table conversation during a recent professional gathering I was surprised to hear a confrère give a prescription which he declared would stop a urethral discharge in one week. He slyly added that with the discharge stopped the doctor could collect his fee and not be troubled further. To my disgust another young physician took out his note book and eagerly copied the prescription with great care of detail. Is it any wonder that under such conditions people think that gonorrhea is a trivial disease, often "no worse than a bad cold," and that it is easily and quickly cured? Naturally it is not surprising that they are willing to give only a small fee for short service, consisting of a bottle of medicine with advice. Nor are they to be blamed for considering themselves sound when they have been assured by the physician, anxious to be rid of such work, that a slight intermittent discharge is only a sequel, a weakness.
To recapitulate: for years the physician has regarded gonorrhea lightly. The people, there-
fore, regard it lightly. The physician has done small work and has asked small pay; and the people have come to expect the same. The people have been allowed to belicre a quick cure possible and a poor eure safe. Upon these misconceptions depend the other abuses enmmerated. dirug store treatment, as well as self-treatment and patent medicincs. Physicians, the blame for this deplorable condition lies at our doors.

Before we can expect a better understanding by the laity we must come to a proper eonelusion among ourselves, then the people, as they alwars do, will meet us. Have we not taught them to accept operation for appendicitis and many other lessons far more difficult to learn than this one? We must remember that gonorrhea is a microbic disease with its bacteriology placed upon a firm, practical basis. The treatment should be conducted with the aid of microscopic examinations, and abore all the eure must be exaetly and scientifieally proven with the most searching microseopic examination of débris from the prostate, seminal resicles, posterior and anterior urethra. This does not neeessarily mean the orrnership of an expensive apparatus, as the state has wisely made provision for the examination of specimens both in the state laboratory at the eapital and at Indiana University. It does mean, howerer, careful and untiring labor.

But you say we ean not afford to do all that for a mere pittance. I answer: Patients must be taught to pay fees commensurate with the treatment. I ean say on the authority of others and from my own experience that the people are ready for this education and will pay for the labor if we are worthy of our hire. Personally, I would rather undertake an abdominal section than a ease of acute gonorrhea. The laparatomy does not require as much time and labor and puts no greater demand on skill. Every ease of gonorrhca should cost the sufferer from fifty to one hundred dollars, but he should get full value in proper treatment and a safe eure. For the class of patients who can not afford such expensive private treatment, the state should provide hospitals or dispensaries. Why should the tubereulous subject be cared for to prevent the spread of disease and subsequent loss to the state, and not the vietims of this malignant affection? Tenereal patients are not only neglected, but they are discriminated against. There is not a hospital in the state of Indiana that will receive a sufferer from gonorrhea, as sueh. While resident physieian in the largest general hospital in the state, the Indianapolis City Hospital. I did not treat a single ease of
gonorrheal urethitis, except where the patient had been admitted on aeconnt of some grave complieation. In charge of a free clinie later, I found these patients eoming in sueh numbers that they lhad to be turned away and only the most interesting, from a clinieal standpoint, received for treatment.

In the light of our present knowledge, the successful treatment of gonorrhca in the male calls for adequate physical examination and proper medication. Recently I was told by a country physician that what was needed was some simple successful plan of treatment which would meet the convenience of the physician, and especially of his rural patient. Something that would not make freqnent office visits necessary and thus expose the patient to an enquiring neighborhood. Unfortnnately this is not now arailable. The present methods of treatment, while satisfactory in their results, are often tedious and require personal attention for a considerable period of time.

Drug makers have flooded the market with remedies, each lauded as a specifie for gonorrica. Some of these are better than the old remedies, but all the good derired from them has been vastly outweighed by the great harm done in fostering the idea of a specific and encouraging a false sense of security in eareless treatment. What we need most is not better drugs, but better methods in the application of those we have. The profession, as well as the laity, ean not relinquish the idea that in one remedy we may discover the long sought sure cure. Soon after the popularizing of a new silver compound among the profession, we find a certain elass of patients, on their orn eounsel, injeeting their anterior urethra with this magie drug vaguely expecting to eure a diseharge which originates from a seminal resieulitis, prostatitis or posterior urethritis.

The science of genito-urinary surgery has been negleeted and even to-day the average medical student looks upon the teacher and practitioner of this specialty as a person defiled. Quite reeently I was told by a physician who graduated from a large eastern medical school that during his time in college he did not see a single case of urethritis. Upon visiting the same sehool later I found one man in the department deroted to this class of work, and he seemed half-hearted and apologetic about it. The surgeons and gynecologists in this school were not lacking in numbers nor in ability.

Before this society three years ago the writer advocated legal eontrol of prostitution. This met with unanimous disapproval. A short time
after, through a change of administration in Indianapolis, we were able to sec the effects of control. During the administration spoken of a policy was pursued consisting of segregation of regular prostitutes and almost complete abolishment of clandestine prostitution. The result, as rerified by the observation of several physicians, was a very appreciable reduction in the number of acute cases of venereal infection during that time. It seems, however, that the spread of venereal diseases can not be succesfully attacked from this quarter just now, and it devolves upon the physicians of this country to educate the uninfected that they may protect themselves and by thorough work to prevent as far as possible the communication of infections.

## DISCUSSION.

Dr. Harrey A. Moore, Indianapolis: The subject of renereal infection has been ably presented by Dr. Link, and there is little to add at this time save to urge a greater radicalism and a more unanimous awakening of the reformative impulse in the medical profession at large.

I heartily agree with the speaker that the fundamental responsibility for the presention of venereal disease rests upon the physician, and I believe that the first move is to educate the public. It is true that there is a large element in the medical profession that needs this education almost as badly as does the suffering public, but the weakness in this case is from indifference or direct antagonism to the subject, and will therefore only fall before the disgnst of an educated population.

We must, therefore, gather together the energies of the men who do appreciate the seriousness and the immediate dangers of this situation, and bend our combined faculties in the effort to give the public the needed reform. It is true that we must tolerate the limitations of our prirate practices and expend our greatest energies in therapy for the present, but we must not lose sight of the fact that a more radical move must be made in the not far distant future.

At the present rate of gain of the venereal plagues the individual cases cured will in no way equal the number of new infections. Our efforts, then, arc not climinative, but only modifying, and we can not be satisfied to merely moderate this monster. It must be eradicated.

Education is the solution; it is the quenching fluid that will forever kill the flames of this sacrificial pyre; it is the ultimate materialization of the fabled elixir of life. Every evil is based upon the absence of that great and only uplifting influence which we call knowledge.

It must not be forgotten, howerer, that knowledge is not acquired in a night, in a decade, or even in a lifetime. Before knowledge can be properly assimilated there must be an upbuilding of the finer tissues through careful l,reeding and a continuation of the educational processes year after year and generation after greneration. Thus, it is easily seen, time is the greatest handicap to our movement. Will the plagues undermine and cause the fall of the efforts before a sufficient foothold is found to make our offensive and defensive tactics sufficiently effective to turn the tide?

An affirmative to this question would surely be a black conclusion, but the position would be untenable. Confidence in mankind, in his universal and inevitable impulse to progress. forbids.

But what will be the methods by which advance is made? This is the question which most greatly perplexes us at this time. It would be folly to attempt to eliminate the renereal plagues by such methods as were used against alcoholism a few years ago. Prohibition teachings probably made as many, if not more, drunkards than they cured, for prolibition, as a class. told lies and not truth about alcohol. Prohibition revelled in exaggeration, and exaggeration is prorocative and not preventative. We, in our campaign, must not fall into this error.

We must make truth our motto and our battlecry, and then live up to it. Teach the public the truth about venereal diseases, and when all the better minds have grasped it we may be able to get an enlightened legislature and thence laws and law enforcement which will lend an impetus to our effort.

When we have reached a point where laws can be made to support the truth, we will have the plagues throttled and will be able to slowly choke them to death. When venereal diseases are placed in the same legal category with smallpox, yellow fever, bubonic plague, cholera. leprosy, and all other diseases which are isolated and published, they will disappear.
"Why," I have heard men ask, "do not these other diseases disappear before isolation and publicity? -and if they do not, why should syphilis and gonorrhea?"

The question is an easy one to answer. Smallpox and the other diseases in the same jurisdiction are the diseases of misfortune only. Syphilis and gonorrhea are the diseases of shame. Shame is the child of crime, and the most masterful enemy of that foul parent is the great white light of publicity.

The conquest of the rencreal diseaves must not be undertaken merely as a moral question． They must be combated finally on the broad grounds of econome，public and indiridual． Economy is the governing principle of civiliza－ tion，and it surely crushes out the wasting ele－ ments，sometimes slowly，but alwars with the certaintr with mhich it is now crushing our the ravaging force of alcohol．

## GONORRHEAL OPHTHALIIA．＊

 Walter Jetis Sharp，M．D．Visiting Oculist to the Indianapolis City Hospital and City Dispensary．
INDIANAPOLIS，IND．
There are three diseases of the ere that the general practitioner should be able to recognize unmistakablr：these are iritis，glaucoma and gonorrheal ophthalmia．The latter disease is dreaded br the phrsician when he feels the re－ sponsibility of its ultimate results．

The disease is known as gonorrheal ophthal－ mia，gonorrheal conjunctiritis，purulent ophthal－ mia，ophthalmo－blennorrhea，ophthalmia neona－ torum，ete．This raried nomenclature must be somewhat confusing to mans practioners．

White makes a distinction between gonorrheal conjunctivitio and gonorrheal ophthalmia；the former being an involrement of the conjunctira only and caused by direct infection：while the lat－ ter includes the deeper structures of the ere and is of metastatic origin．can only occur in persons having urethritis，usually accompanied with ar－ thritis and affects both eyes．From custom．all caves called ophthalmia neonatorum are supposed to he gonorrheal；but Arlt in an examination microscopically，of the pus in serenteen cases of blennorrhea neonatorum．found the gonococcus of Selswer in only nine．and Houpt，in sisty－two cases of suppuration of the conjunctiva in the nem born．found that in seventeen cases the gono－ coccus tras not present．I hare seen sereral cases myvelf whice resembled gonorrheal infection，but on microsopical examination the gonococcu： could not be found．For this reason it seems to me that the true condition should be specified br the term gonorrheal．
The disease is caused br direct or indirect con－ tact，or br metastasis．In the infant the former mode is more common，while the adult is subject to the tro latter means of infection．Metastasi－ in the adult mar be due to a preceding．dormant or co－existing active urethritis，often accom－ panied by arthritis．By this latter mode of in－

[^51]fection the detp，structures of the eve are in－ volred．The adult is not alone the subject of metastasi＊in gonorrheal infection．As the or－ ganisms travel the lymphatice from primary urethral infection in the adult，so they do in the infant from primary conjunctival infection． Dahlstrom reports fifteen cases of infection of the joints with ophthalmia neonatorum．Sterens has reported a fatal case of septicemia due to ophthalmia neonatorum；after the elerenth day the joint affection became noticeable：the infant succumbed to endocarditis seventeen dars after the beginning of the attack of ophthalmia．
Manr case：of intrauterine infection have heen reported with accompanying theories．Some claizs the infection to take place through a prematurels ruptured membrane：other＝to the passage of the coccus through the membrane itself．It mar be possible that these cases are affected through the maternal circulation：the current is so strong through the umbilical cord．the organisms are pushed along the course of the resse＇s：but at birth the circulation is much more feeble and the organisms confined within the infant body find lodgment at some point of election and manifest their pathological influence in due time．This．of course，is only theoretical．but it seems feasible． particularly in those cases where other parts than the ere are involred．
Te know that in adults gonococci do tratel in the blood or lymph channels，or both．and de－ relop in remote parts．or toxin＝produced．excite inflammation of the deep structures，such as thase of the eve．I have no doubt that many cases of so－called＂rheumatic iritis＂are causen by gonorrhea in this manner．I recall cases in nis orn practice in which the diagnosis was ques－ tionable．Galezowshi calls attention to the metas－ tatic affections of the iris．chorioid and optic nerve in gonorrhea．and ascribes their derelop－ ment＂to the rirulence of the bacteria and the low general resistance to the individual．Generaliza－ tion of the infecting rirus generally accompanies an increased production of tosins．＂

There is a wide difference in the degree of rirulence of the gonococcus．I have seen infants＊ eres filled with pus and the fields of the micro－ scope containing mane cells enclosing numerous gonococci．while the pathological conditions were comparativelr slight and confined to the conjuns－ tiva；other cases were extreme in the degree of pathological involvement，while the amount of secretion was slight and the bacteria so few they were difficult to find．This shows that the at－ tenuation of the organism is not．in all cases，the most farorable indication．

The gonococcus affects the whole conjunctiral surface but seems to hare choice points of selec－
tion, principally the retrotarsal folds. It burrows itself beneath the epithelium, and for this reason is more difficult to control in some cases. Probably the pathology of the conjunctiva could not be more briefly and better stated than by quoting Scliridde, who "found the ocular conjunctiva fairly intact in an infant who died while suffering with blennorrhea. The retro-tarsal folds and the palpebral conjunctiva were very foul and permeated with neutrophile leucocytes. The epithelium was loosened in places, and here and there were particularly large numbers of leucocytes and gonococci. These lay in bands, free between the cells in the sub-epithelial connective tissue, and only on the surface were they enclosed in the leucocytes. In places where the affection had progressed further there were ulcers, total destruction of the epithelium of microscopic size from the bases of which granulation tissue was springing."

The clinical picture of gonorrheal ophthalmia varies according to the stage of the disease and the intensity of the inflammation-from a slight injection of the conjunctiva without secretion to a severe inflammation accompanied by a secretion varying from a muco-purulent character to that of a thick, creamy greenish-yellow pus and profound edema of the lids and conjunctiva.

When confronted with a case, the question arises, what have we to deal with, a case of true gonorrheal ophthalmia or a purulent conjunctivitis from other cause? I recently had a case which was diagnosed gonorrheal conjunctivitis br: the attending physician ; it looked like such a casc in every particular ; I could find no organisms by smear examination, but a serum culture showed a luxuriant growth of colonies which proved to hos diplo-bacilli. It is not an easy matter to make an offhand diagnosis in such cases, especially when the history is negative. We are not justified in accusing a patient of having gonorrheal ophthalmia unless we are positive that such is the fact by bacteriological examination. Therefore smear examinations should be made in every case of purulent ophthalmia, and if diplo-bacilli of the biscuit varietr are seen the diagnosis should be verified by Gram's method, particularly in such cases where medicolegal questions are apt to be involved; as other cocci resembling gonococci may be present, and if the smear be not properly made, these may appear to be within the cell when in reality they are above or beneath it. Therefore it is safer to make several smears, using Gram's method with some of them at least. If a physician has not a microscope, and many of them have not, smears should be made and sent to the State Board of Health for diagnosis, and in the meantime the physician should confiden-
tially take it for granted that gonorrheal ophthalmia exists and treat it as such, as no harm can result from the treatment and it is always best to be on the safe side. As this disease, neglected, is the cause of such a large percentage of blindnesss, it is criminal practice not, to pui forth every effort by watchfulncsss, care and treatment with every case. We can not always consider the family or its standing in society, for the gonococcus is no respecter of persons and the practitioner may be confronted with this organism where he least suspects it.

I presume that no one knows the percentage of gonorrheal ophthalmia accompanying urethritis in the adult-which must be small--nor the percentage of infants which have escaped eye infection when favorable conditions prevailed. Herf finds that of infants born in institutions 0.2 per cent. have ophthalmia, and he estimates that in private practice $0 . \%$ to 0.8 per cent. are infected. In an experience with nearly five hundred cases of labor in sixteen years of general practice near the city of Boston I never liad a case of gonorrheal ophthalmia in the infant. I do not know that the parents ever had gonorrhea, or, if they had, the absence of ophthalmia in these infants may have been due to the prophylatic measures used in cleansing the mothers previous to delivery and the personal care of the infants' eves immediate! y after delivery. Eren if gonorrhea exists in the mother I believe many infants escape infection by careful cleansing and other prophylaxis.

The report of the Committee of the American Medical Association on Ophthalmia Neonatorum shows that in the investigation of the schools for the blind, where the records were exact in ten schools, representing eight states and the province of Ontario, for the fall admissions of $190 \%$, that 25.21 per cent. were needlesssly blind. It was difficult for this committee to get an accurate percentage of blindness caused by ophthalmia neonatorum, because of the inexact data, but. from the census taken by the Commission of the blind in New York and Massachusetts, in 1906, it was estimated according to the age when vision was lost, that nearly" one-half the whole number became blind as a result of ophthalmia neonatorum.

In Indiana there is no improvement over other states in this respect. Through the kindness of Mr. George Wilson. superintendent of the Indiana Institution for the Education of the Blind, I recently looked orer the record of admissions to this school for a period of the past three fiscal years, and I found during that period that only one report of cause of blindness had been given as ophthalmia neonatorum. The number of new admissions for the three years past is $4 \%$, and
the number of which blindness occurred under eight months is e2; under three months 20 , and under one month 15 . The causes given were numerous, such as "unknown," "strong medicine," "birth mark," "bad treatment," "sickness," etc. It would be safe to say that if the real cause were known that all, or nearly all, of the twentytwo cases becane blind as a result of ophthalnia neonatorum, as the percentage tallies favorably with the report of the committee above referred to. In one annual report for the year 1903-4, page it, under age at which blindness occurred, it were classed as congenital and 29 during the first jear, making 83 children who became blind under one year of age of a total of 132. Had the blindness of these 83 cases been prevented, as it might have been, by timely diagnosis and proper treatment, it would have saved the state for that year alone $\$ 19,200.39$, as the expense per capita was $\$ 231.33$.

The fact that therc is no improrement in these conditions is shown by the admissions for the fall of 190\%. Out of a total of fifteen admissions nine became blind under three weeks after birth, or 60 per cent. of the total. We should not go to foreign countries for statistics, but should study the conditions at home, and to lessen this large percentage of needlesssly: blind children the state should legislate compulsory prophylaxis. Many of the younger physicians of recent graduation become careless in this respect, and many of the older practitioners are not only careless but ignorant of the diagnostic measures and the therapeutic indications. The laity should also be instructed in plain language of the danger to their own eyes and to those of their infants while suffering with gonorrhea. Not until this is done and the conscience of the careless physician is awakened will the percentage of blind infants be lessened.

There seems to be no excuse now, with our knowledge of the cause and prevention of this disease, for it to occur in the infant in private practice, nor in institutions where women are confined. Whether we should drop into every infant's eye at birth a solution of silver nitrate, as is prescribed by law in some states, irrespective of existing conditions, is, it seems to me, an open question, one which the attending plyysician and the parents of the infant might modify. If a case can not be watched either by a competent nurse or the physician it is the most desirable thing to do; otherwise it seems needless to irritate the eyes with silver nitrate, especially when they have been cleansed with antiseptic solutions. To be wilfully negligent in suspected cases is criminal practice. To combat such negligence and the ignorance of midwires the state laws above
referred to in regard to the compulsory use of silver nitrate in the eyes of the new born were enacted. If a physician is not able to cope with gonorrheal ophthalmia as it is met with in his practice le should immediately place it in the hands of a specialist. The great danger is, such cases are often tampered with by untutored hands, and when they are placed under the care of the specialist the damage already done is often beyond repair.

In neglected cases the nother wonders why the infant does not open its eyes, and when they are opened, probably by the physician who has been called for that purpose, the lids are found to be stuck together, and when released, masses of creamy ycllowish pus flows out, and much damage has probably already been done to the delicate corncal epithelium if ulceration has not actually taken place. Usually too few calls are made following labor cases. Every infant should be watched for the first week, at least, even if no apparent symptoms of eye trouble are present. When the physician leares directions for the care of the eyes, in many cases, through carelessness and ignorance, the directions are not carried out. It is one thing to drop into the eye one of the silver salts and quite another thing to properly cleanse the eye. Eren some trained nurses fail to appreciate the importance of this. I have in numerous instances found thick pus in the folds of the conjunctiva immediately after it was supposed to have been cleansed. This is one, if not the most important, indication in the treatment.

There has been much controversy during the past year in regard to the value of the proteid silver salts. Some have discarded them, claiming them to be practically inert, others continue to use them and claim them to be the best antiseptics for ophthalmic use, and these conflictinc statements are from men of national repute. After reading a discussion on the treatmient of purulent conjunctivitis in one of the leading medical journals a practitioner of note in Indianapolis told me that he was more at sea than ever in regard to the treatment. Because some one of large practice makes the assertion that a valued remedy is practically uselesss it is no reason, if in our hands it has served us well, that we should abandon it. We have in medicine, as well as in other departments of life's labor, to a certain degree, to work out our own salvation, and if our experience has taught us anything it is that we should cling to that which has proved itself of great ralue.

For my own part, in the treatment of these cases, I prefer argyrol in fresh solution of 50 to 25 per cent. strength, beginning with the 50 per cent. applied every half hour. This is dropped
into the eye and not applied with cotton on the end of a stick. In inexperienced hands the latter method is a dangerous one, as too much pressure is often used, causing the conjunctiva to bleed, and the cornea was in one instance scratched, when applied by a nurse, and an ugly ulcer was the result. If cotton is used, which all will agree is indispensible for cleansing the eye, the gentlest pressure should be exerted especially when the conjunctiva is edematous and bleeds easily by slight friction. I mould a small piece of cotton about the size of the end of the little finger, free it from loose fibers, dip it in an antiseptic solution, preferably a saturated boric acid solution, squceze out the excess of fluid, Hatten the cotton and apply the edge to the everted lids, when any secretion present will adhere to it. By a repetition of this procedure several times the eve can be entirely freed from pus, though it may take some time to do it well. It pays, however, to make a thorough cleansing in the first place, as the subsequent cleansings are much easier. After this I then drop in the 50 per cent. argyrol, let it remain a minute, and again cleanse the eye as bc. fore, as the argyrol coagulates any remaining particles of secretion which form in shreds; these are easily dislodged, while if allowed to remain they act as a foreign body and cause much discomfort. Ifter the second cleansing more argyrol is dropped in and allowed to remain. This operation I repeat every half hour to every two. three or four hours, according to the severity of the case, and it has been sufficient in my hands, even when the cornea has been much involved.

In some cases of corneal ulceration compression is an excellent adjurant to other treatment, but when the eye is bathed with gonorrheal pus, the corneal epithelium softened and abrasions occur, compression is by no means desirable; in fact, we wish to encourage the patient to keep the eye open as much as possible, in order to keep the conjunctiva from coming in contact with the cornea. Irritation naturally causes reflex spasm of the orbicularis and consequent pressure on the cornea. Silver nitrate will produce this result, while argyrol obviates this, practically causing no irritation if dropped in rather than rubbed in. If argyrol is incrt as a bactericide, as some claim it to be, then the excellent results I have had have been due to frequent cleansings.

It is needless to say that when only one eye is involved the other eye should be bathed with argyrol. properly protected and watched; and if the patient is an infant, in addition to the above precautions, its arms should be bound to its sides and the child caused to lie on the side of the affected eye. Also, when severe complications exist, such as deep ulceration of the cornea, iritis,
etc., they should be met by proper adjunctive treatment.

I believe that cold applications are useless except in extreme edema of the lids. Hot applications for five minutes at a time every hour are more favorable when the cornea is involved.

As blindness from gonorrheal ophthalmia is estimated to be about $j 0$ per cent. of the total number of blind, it scems to me that in all our experience in general or special work, there is nothing more gratifying than to know that we have saved one more of these unfortunates from the environments of a blind asylum, and there is nothing that pricks one's conscience more keenly than a knowledge of the fact that through his carelessness one more child has been committed to such an institution.
As an example of many cases treated by the foregoing method I will report three, and two ot these collectively:

Case 1.-A male infant ten days old. The eighth day the attending physician noticed that the infant had a discharge from both eyes. He called me to see the infant two days later and left it in my charge. I found both eyes literally filled with pus, and the right cornea had a central ulcer of considerable depth. The left cornea was clear. I spent fully fifteen minutes in cleaning the eyes and instructing the mother how to care for them. The cleansings were kept up every half hour day and night for forty-eight hours. After each cleansing a drop of 50 per cent. argyrol was dropped in each eye. I made several smears which showed many gonococci in every field. The secretion stopped almost masically, and in two days from the time I first sarr it there was no secretion. The infant opened its eyes and looked about in the darkened room, much to the delight of the mother and welfare of the cornea. The cleansings and argyrol applications were lengthened in frequency. The ulcer took on a healthy look, became clean and gradually filled in. The argyrol was reduced in. strength but was kept up to the end of the third week, when boric acid solution was substitute? and a mild yellow oxid mercury ointment used t. i. d. to stimulate corneal repair, and now, about eighteen months since I first sam the infant, the corneal scar is faintly visible.

Cases 2 and 3.-Both men of foreign birth, and as neither spoke English we could get no intelligent history of the cases. When they came under my care at the City Hospital last year the four eves were bathed in pus, and three were complicatcd with corneal ulceration and one with iritis. The pupil in this eye was rery small and would not react to a strong solution of atropin. It was difficult to see it well on account of the cloudiness of the cornea. Which was in places in a state of maceration and multiple ulceration.

The same treatment was used in these cases as in that of the infant. On my return visits for the first few days I noticed that pus was present cach time. I admonished the nurse in attendance to exercise more care with the cleansings. This was better for a day or two afterwards, but one morning I saw the pratients at an unusual hour. I was informed that the eyes had just bcen cleaned, but on personal examination I found thick shreds of pus in the conjunctival folds. My patience became exhausted and I demanded a special nurse, one who could give the patients her constant attention or the patients would be blind for life. After this I had no further trouble; the eyes were free from pus at each visit. In addition to the treatment usel in Case 1, atropin and hot applications were uscd. These cases were obstinats at first, but in my opinion this was due to want of proper care. The patients were in the hospital altogether about six weeks, principally becansa they had no home nor any one to give them attention outside. Except for several scars over the site of the ulcers, the corneæ gradually cleared up. The patient with the iritis was the worst case; the man was totally blind in this eye and nearly blind in the other eye when he entered the hospital, but when released he could count fingers at six feet with the better eye. I uscd yellow oxid of mercury ointment for the corneal complications as soon as they became clean.

Without going into the minute details of these cases, I will simply say that my objcct in reporting them is to show the efficiency of argyrol in full strength frcquently applied and accompanied by proper cleanliness, even in severe and complicated cases.

## DISCUSSION.

Dr. D. W. Stevenson, Richmond: I believe these are cases the general practitioner ought to turn orer to some specialist. Even the specialists will have troubles enough in the severe cases and enough worry and responsibility. Then, again: the cases ought to be treated in a hospital, if possible, and I believe almost every specialist would be willing to go down in his own pocket and pay rather than see these little ones suffer blindness for life. It is only a matter of two or three day: before the scrious symptoms are over, and during this period a trained nurse should have charge. The treatment the doctor mentioned will cure $95^{\circ}$ or 100 per cent. of these cascs; but there are a few cases in which the nitrate of silver ought to be banked upon and applied effectually under the conditions of a surgical operation, with a good light and several assistants, and where the patient is controlled by wrapping with a shawl or sheet so that there can be absolutely no morement. If you use the nitrate in 10 per cent. soln-
tion and hold it on long enough you will get the effect of 100 grain solution, but I prefer to use the 100 grain solution, and I wouldn't care if it was 300 . I would not be afraid to use it in my own eye or my children's eyes. I would also have present a simple salt solution and a boracic acid solution and then thoroughly wash off the superfluous nitrate, and I wouldn't care if a little of the strong solution remained in the cul-de-sac. In the Chicago Eye and Ear Infirmary, Dr. Montgomery was known for his successful trcatment in these cases, and he never used less than $\delta 0$ grains to the ounce. I saw him treat dozens of cases with no bad results to cornea or conjunctiva. This is a virulent germ and is often decp in the succulent tissue, and you want to reach some depth, and I believe in bad cases we should rely on the old reliable nitrate of silver, and you can go to bed and sleep with a free conscience, for you will probably save children from blind. ness.

Dr. J. L. Thompson, Indianapolis: There is a difference between the treatment of adults and infants. In adults, in spite of all you can do, you will lose many eyes. There is a stiffness of the lids, even though you cut the canthus, and this is important; but in infants, if you commence in time, you will not lose one in 500 . I commenced with Dr. Williams a long time ago with the nitrate of silver, as the doctor mentioned. But unfortunately some physicians do not open the lids and you are called to the child some days afterward and there is ulceration of the cornea. If the doctors would examine them and see how they are they would save many. If there is no ulceration of the cornea you want to treat the lid, and if not due to gonorrhea the mild cases will get well in three weeks, but if due to gonorrhea you will have to treat it six weeks. For about twenty years I treated cases in the old city hospital and never lost a case in that time. I never lost but one case in thirty-seven years. The cornea rias ulcerated beforehand. In infants take the patient on the knee with a shawl wrapped around it, with something over you, and then evert the lid. It is difficult to do. Then have the nitrate of silver and some water and a pipette and a toothpick or something of that kind wrapped with cotton and dipped in the silver. Then lay it on till it turns white and wash it. Do it every day yourself. If you do not you will lose the eye.

Dr. F. C. Heath, Indianapolis: We still have the old controversy as to the use of the nitrate of silver and its substitutes. That controversy, in my opinion, is unnecessary. I have a rule of
action which has been satisfactory. It has giren good results in nearly all cascs. It is this: In the arerage case and in the mild cases it is unnecesssary to use nitrate of silver. Good resulte follow frequent cleansing and the use of argyrol as a substitute. In the most serere cases I do not neglect the argyrol or the cleansing, but resort to the occasional applications of the nitrate of silrer. I object to the routine use of so riolent a remedy as the nitrate of silver. Its use can not be justified unless it can be shown that it is necessary, for this rcason: First, it is an extremely painful remedy; sccondly, it may damage the eve if not used with caution. Of course, the saring of the eye is the great thing, and if you can not save it without the nitrate of silver you are justificd in its use, and in the most severe cases I bclieve we should resort to it, not depending upori it alone, but in addition to the argyrol and fro$q_{\mathrm{q}}$ uent cleansing. I have had considerable expcrience with these cases, especially of ophthalmia neonatorum, not only in private practice but in the Eleanor Hospital and the city hospital in Indianapolis, and for quite a number of ycars I have used the nitrate very little. There has been no case in which the eye has been totally lost, during the last four or five years or since I have'been using argyrol. I can recall but two cases with ulceration of the cornca at all. The bacteriologists tell us argyrol is not an efficient germicide. It may not be an efficient germicide, but it does something, because if you continue the use of a 5 per cent. solution, dropping in one drop every hour, following cleansing with boric acid, carrie? out faithfully by the nurse, on the second or third visit very little pus will be found. It is true if you neglect the argyrol for a few hours the pus returns. But that argyrol docs something. We do not know whether it inlibits the germs, or whether it acts simply mechanically by crowding out the pus. We do not know whether it stimulates the cells to resist the action of the germs. I do know it does good in these cases, and, inasmuch as it is a painless remedy and usually an effective remedy, I will continue to use it and rely upon it with frequent cleansing in the majority of my cases of ophthalmia neonatorum, and only resort to the nitrate of silver as an adjurant to this treatment in the most severe cases.

Dr. George F. Keiper, Lafayctte: I beliere, as the result of education, we are seeing less ophthalmia neonatorum than we used to. It is so in my practice. For the recognition of the cause of this trouble we give great credit to James Gibson in the Edinburgh Medical Journal in 189\%. He
noted in one case a baby with sore eyes had been born of a mother with what was then called fluor albus. That was a great discorery. Now, in these days. the general practitioner should follow out the method of Credé; that is, filling each eye with a 1.6 per cent. solution of nitrate of silver as soon as the head of the baby is born. The experience of Credé las shown that the percentage of cases in the hospital was reduced from 16 per cent. to .3 of 1 per cent. In other words, instead of being common, it became a very rare disease, and his expericnce has been duplicated time and again. Some objection has been made to this method because some have had the experience of losing the eye after the application of the nitrate. My opinion is that these results were due to free nitric acid in the nitrate of silver. This should be guarded against. It has been found that the gonococcus is not always present, but we are not going far wrong if we treat it as if it were, because these cascs yield very nicely to the nitrate. Argyrol, I believe, acts mechanically in strong solutions. It scarches out the innermost recesses of the cul-de-sac and lifts out the pus. Several years ago I went with Reynolds to see a case in which he was relying upon irrigations with boric acid solution crery twenty minutes, having a nurse to attend to them and using a special apparatus, and the germs were gotten rid of as quickly as possible. The boric acid and argyrol make an active form of treatment and should be commended.

Dr. W. N. Sharp, Indianapolis (closing) : It is almost impossible for one in the limited time to include all that might be said upon this subject. I attempted to bring out a few of the important features. I think, however, there should be some action by the state which shall oblige physicians to use more care in these cases. This large number I have taken from the records of the blind institution, it secms to me, shows that they are blind simply through carelessness and ignorance as well. To illustrate this I asked one of the older practitioners of the state what he would do in a case of ophthahmia neonatorum. "Well," he said, "I would use a little sulphate of zinc, just enough to make it smart. Then I would send to the meat shop and lave fresh meat ground up, and apply that to the eye every night." Now, it is just such physicians who are the cause of this large percentage of blindness, bccause of ignorance. Dr. Hurty has told me of numerons cases of carclessness on the part of physicians that he has come in contact with throughout the state. I think if the stata would take this in hand it would be the means of lessening this large percentage.

## SPECIAL ARTICLE

## ANTERSATLOSAL COSGRESS ON TLBERCULOSLS

I. N. Herty, I.D.<br>Secretary Indiana state Board of Health. JNODIANAPOLIE.

The long-heralded International Congress on Tuberculosis opened in Washington. D. C., for three weeks. commencing sept. ?1. 1908. In the first and third wecks. public lectures and demonstrations of the exhibits constituted the Congress, and the real Congress met the week commencing Mondar: september 2 s .

The opening was very impressive. The 4.000 seats in the great auditorium were all filled. and riespite the efforts of the soldiers, who had been instructed to keep the aisles clear, standing room was at a premium. When the procession of notables, must of them in uniform and decorated with their medals of honor and led by Secretary ('ortelyou and Professor Koch, stepped upon the stage, a great oration was giren. The great andience rose. and with cheers and waving of hats and handkerchiefs made the flage of the nations, which decorated the room, more in unison with their enthusiasm.

Dr. Lawrence F. Flick, chairman of the Central Committee, declared the Congress open and announced the names of the honorary presidents. Mr: Cortelyou then delisered his addres. This was followed br the short addresses of the representatires of the thirty-three participating countries. From the appearance and from many exprestion= leard, it was plain that Dr. Jee, the Chinese delegate, made the best speech. He spoke in English withont the least accent or hesitation. His attitude of mind and general personality was rery plea-ing. Dr. Jee greatly pleased Chinese Minister Wu. who sat in the audience with sereral attaches of the legation. all dresed in gorgeous silk:- Dr. Jee ended with the following: " The must work out our own medical salration through onr own medical men, and I hope some day China will have the honor of entertaining thi: (ongress of humanity:"

The opening meeting continued from $11 \mathrm{a} . \mathrm{m}$. to $1 \mathrm{p} . \mathrm{m}$. It $2 \mathrm{p} . \mathrm{m}$. the seren sections began work. These sections were: Section 1. Patholog! and Bacteriology: Dr. William H. Welch, chairman: section \&. C'linical study and Theraps of Tuberculosis. Sanatoria, Hospitals and Dis-pen-aries, Dr. Vincent I. Bowditch, chairman: section 3. surgery and Orthopedics. Dr. Charles Mayo, chairman: Section 4, Tuberculosis in

Children. Etiology, Prevention and Treatment, Dr. Abraham Jacobi, chairman: Section j, Ilygiene. Social. Industrial and Economic Aspects of Tuberculosis, Mr. Edward Derine. chairman: Section 6, state and Municipal Coutrol of Tuberculosis. Surgeon-General IV yman. chairman: Section i. Tuberculosis in Animals and It: Relation to Man, Dr. Leonard Pearson, chairman.

No mater when anr of these sections was risited, a treat awaited. The intensity that existed appears in the fact that Section 1 had 140 papers to read and discuss from Monday noon to the following Friday noon. All the other sections were equally engaged. The progran itself was a study. In section 2 papers were read by Koch, Arloing. Szaboky. Courmont. Kinghorn. Calmette, ron Pirquet. Wolf-Eisner. Klebs. IVoodhead, Fibiger, liarenel, law. Park, Webb. Vaughn and other well known writers.

The greatest session was held on Wednesday. when all of the sections joined to hear Foch, Smith, Woodhead. Ravenel, Arloing. Fibiger and Raw discuss ."The Relation of Human and Borine Tuberculosis." Koch read first and took the ground that it was not yet absolutely proven that borine tuberculosis was communicable to man. The following utterance by Koch was receired in absolnte silence: "Of all human beings who succumb to tuberculosis, eleven-twelfths die of consumption or pulmonary tuberculosis. and only one-twelfth of other forms of the disease. One would have expected, therefore, that those investigators who are interested in establishing the relation between human and borine tuberculosis would have searched for bacilli of the borine type preferably in cases of pulmonary tuberculosis. This, howerer, has not been the case. Exidently, animated by the desire to bring together as many cases as possible of borine tuberculosis in man, ther hare investigated particularly cases of gland and intestinal tuberculosis and have neglected the much more important pulmonary tuberculosis. In spite of the bias under which the researches hitherto have suffered. there ret remains at our disposal a snfficient number of investigators of pulmonary tuberculosis to warrant a prorisional expression of opinion."

Prof. Theobald Smith followed Dr. Koch. He reviewed the experiments which showed he had concluded that borine tuberculosis was communicated to the human familr. Prof. S. Arloing, of Lyons, spoke in French, the same being immediately interpreted into English. Professor Arloing took sharp issue with Professor Koch, declaring that from the standpoint of hygiene,
his experiments emphasized unity and fusion of the classic types and demonstrated the necessity of taking precautions against tuberculosis, whatever may be its origin, human or bovine.

Dr. Johannes Fibiger, professor of pathology and anatomy, University of Copenhagen, presented a paper, the joint work of himself and Dr. C. O. Jensen, professor of pathology, Royal Veterinary Hospital, Copenhagen, which roiced the most pronounced views heard in opposition to Dr. Koch.

Dr. Mazrke Ravenel, formerly of the Tniversity of Pennsylvania, and now professor of bacteriology in the Wisconsin University, followed Dr. Fibiger. He is about 40, stocky build, pleasant. clear roice. a frank, open countenance, and neatly dressed in dark gray. He is a picture of health, eridently has a great capacity for work, and turns off words like a machine gun. The chairman had hardly announced that Ir. Ravenel wonld discuss the question, and he was at it. He had no notes, and said in part:
"On the correct solution of this question depends, no doubt. the health of many children, and even their lives, and I would consider it an extreme misfortune, not only for this country, but for every country on the face of the earth, if any impression should go from this meeting that even the small proportion of deaths due to the bovine bacillus was a negligible quantity.
"I have inoculated repeatedly the bacilli of the bovine type, absolutely characteristic in every respect to the human, and if not recovered in cultmre, if examined in the tissue you will find them beaded and stained exactly like the human bacilli. I have also demonstrated that cows couglr up sputum and distribute it exactly as human beings do, and in the sputum of such cows I have demonstrated the tubercle bacilli exactly corresponding to the human body.
"One other thing has been proved through the work all over the world, namely, that the tubercle bacilli can press through the intestinal wall and move through the mucous membrane of different parts of the body very rapidly without leaving any mark of its passage. Demonstrations have shown that inside of four hours, in fact. inside of three and a half hours, tubercle bacilli have passed from the mirlk of animals through the thoracic duct and have reached the lungs in sufficient quantities to kill other animals inoculated.
"llaving demonstrated that there are a certain number of cases due to bovine tubercular bacillus; that a certain number of deaths occur from this bacillus, and having demonstrated that the tubercular bacillus passes into the stomach, or gets there from some outside source, it behooves us
from every point of view to take every precaution possible against contamination of our milk. I do not think it is possible with our present knowlcdge, and it will be many years before we have sufficient knowledge to determine the number of cases due to bovine bacillus as compared to those due to the human bacillus. There can be no doubt, I think, that at the present time the human phthisis is the phthisis that we must look at for the first victims.
"I can not agree that the proportion of cases due to borine bacilhus is insignificant. It is an extremely important factor. I may call attention to the fact that to stamp out this disease both sides must be looked after. There is no use of keeping cats out if yon are going to let the kittens in. The kittens will grow to be cats, and, therefore, it is important to guard against tuberculosis in cattle, not only from the public health standpoint, but because it is a most serious cconomic question in every civilized country in the world, with one or two exceptions."

In opposition also to Dr. Koch was Dr. Nathan Raw. of Liverpool, who presented the views of the Einglish delegates to the Congress. He contested vigorously the riew that tuberculosis from catttle could not be conveyed to human beings.
"As a result of observation in hospitals of more than five thousand cases," said Dr. Raw, "I am convinced that there are two distinct forms of the disease occurring in the human body. The first, or largest group, commonly called consumption, is caused by infection from person to person. The sccond group occurs chietly in children and is conveyed by tuberculous milk. I am convinced that when tuberculous cattle are eradicated this latter type of disease will entirely disappear. but I am also convinced that consumption will only be stamped out by education, improved sanitation, and scientific treatment.'

When the Koch-bovine-human-bacilli symposium ended, it was the general feeling that Professor Koch had lost the tuberculosis leadership.

Dr. Detre demonstrated his method of differentisting between bovine and human infection on Thursday evening, and this was a further blow at Professor Koch's contention. His method is throngh the cutaneous test. The application of human tuberculin causes a reaction if the infection is from human bacilli, and the borine tuberlin causes a reaction if borine bacilli are the infecting agent. Bovine infection should be treated with bovine tuberculin, and human infection with human tuberculin. Dr. Detres demonstrations and lectures made a marked impression.

# THE JOURNAL <br> OF THL <br> INDIANA STATE MEDICAL ASSOCIATION 

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## EDITORIALS

## OUR POLITICAL FAITH.

Three medical men, all running for office and partisan politicians, have written us to the effect that The Journal should not discuss political questions or say anything for or against candidates for political office. One writer says that he knows that the cditor is a "red hot Democrat or he wouldn's slander Joe Cannon." Another writer says that "if the editor was not a rabid Republican he would not jump on Bryan because he (Bryan) carries quack merlical advertising in The Commone?:"

To all of this we desire to say that the editor is neither a Democrat nor a Republican when he edits Tie Jourril, and his editorial comments of a political nature prove the statement. He is a needical man, witl the hest interests of the medical profession at heart, and he honestly believes that medical men owe it to themselves and to their profession to take an interest in political questions from a medical man's standpoint. He also believes that The Journal is not overstepping the bounds of propriety or diplomacy in frankly discussing political questions and candidates when such discussion is limited to that phase which is of particular interest and importance to the medical profession, and which should be considered wholly and above the question as to whether it is for or against any political party.

One of the reasons why we as medical men have not accomplished more for our profession and for humanity is that we have devoted too little attention to politics, and in consequence the politicians have given us scant consideration. We have been too long wrapped up in partisan politics to accomplish anything, and with a Democratic or Republican halter around our necks we have been led up to the political trough to drink, and oftentimes swallowed a bitter draught for the sake of keeping in line with one or the other leading political party.

Medical men as a class are way above the arerage in intelligence and good judgment. There is no reason why they should not wield a powerful
influence for good in a political way, but they never will wield that influence until they begin to think and rote independent of political parties. The doctors in Joe Cannon's district in Illinois could, if they mnited for the purpose, defeat him for Congress, and if ever a man merited the condemnation of the medical profession that man is Cannon. If the doctors of Indiana would unite in their efforts to elect members of our state legislature who favor rational public health and medical legislation there would be no question about the fate of the measures we labor so hard to have recognized. Let the medical men of Indiana but once make the influence of their rote felt, and ever afterward the candidates for office would be right careful to pledge themselves to support all rational legislation proposed by the medical profession. It is with a view to stimulating medical men to exert this influence that The Journal ventures to discuss some questions having political significance. The Journal is not Republican or Democrat. but it is independent, and at all times and on all occasions will try to uphold all that a progressive, intelligent and conscientious medical profession deems worthy of advocacy and support.

## GUBERNATORIAL CANDIDATES WATSON AND MARSHALL ON PUBLIC HEALTH AND MEDICAL LEGISLATION.

Following the suggestion of the Council of the Indiana State Medical Association, The Journal sent the following letter to Hon. Thomas R. Marshall and Hon. James E. Watson, Democratic and Republican candidates for governor:

Fort Warke, Oct. 2, 1908.
Dear Sir:-The medical men of Indiana, irrespective of political faith, are constantly working to secure rational medical and public health legislation. Whatever is accomplished by their efforts is for the best interests of all the people and has a value which can not be estimated by a standard of dollars and cents. Indiana has been slow to recognize the necessity for legislation which aids in the prevention of disease and thereby increases the comfort and happiness of the people as well as adds to their wealth. This has been cvidenced by the failure of legislators and governors to favor legislation which if enacted would have widened the scope and beneficial influence of the work of our public health boards. At the next, as well as the succeeding, sessions the State Legislature will be asked to place and keep Indiana on a plane with the progressive states that recognize the real value, even from a monetary standpoint, of expenditures and provisions for carrying on
every phase of work pertaining to publie health.
Believing that the medieal men of Indiana, who are most active in urging medieal and publie health legislation, are entitled to know how you will aet with referenee to these important matters in ease you are eleeted governor, we solieit an opinion from you for publieation in the Oetober number of The Jocrivil, soon to go to press. We espeeially desire to ask you if, as governor of Indiana, you will approve all rational publie health and medieal measures, and in partieular if you will approve measures whieh have as their objeet an increase in the effieieney and serviee of the State and County Boards of Health.

Your early answer to these questions, or any comment thereon, will be of interest to the readers of The Journal, who are found in every eity, town and village in Indiana.

Tery truly yours,

## The Jourval of the Indlaxi State Medical Assoclatiox

The following answers were reeeived:
Indinapolis, Oct. 11, 1908.
Editor The Journal:-I thought I had made myself thoroughly understood in my two printer speeches, in which I said that I was heartily in aeeord with all measures whieh the state enuld afford that would inerease the efficiener of the rarions Boards of Mealth and would promote prerentive medieine.

Sineerely yours.
Thos, R. Maresilill.
Indinsipolis, Oct. 12, 1908.
Editor The Journal:--I received your letter of the 2 d at Indianapolis, and I hasten to respond to it.

You ask me whether or not as Governor of Indiana I ain willing to "approve all rational publie health and medieal measures." I do not see how any right-minded man eould objeet to approving legislation of that eharaeter. There may be some dispute as to what eonstitutes rational or irrational publie measures, but certainly no reasonable men ought to disagree on a proposition of that eharaeter.
You ask whether or not I would be willing to "approve measures whieh have for their objeet an inerease in the effieieney and service of the State and County Boards of Health." I do not see how it would be possible to have a difference of sentiment on a matter of that kind. Horrever, men who understand the objects of these boards eertainly want to inerease their effieieney and would be willing to see sueh legislation enaeted as would bring about that result, and I would eertainly approve of sueh measures.

I am greatly pressed for time and ean not write at length, but more need not be said.

Sineerely yours,
James E. Watson.

Owing to the short time at our dispozal we were able to seeure but one of the two printed speeches to which Mr. Marshall refers. In that speech. delivered at Riehmond, June 3, MIr. Marshall said:
"I beliere in the equitable adjustment of salaries, and instead of a horde of petty offieeholders parading the State of Indiana and drawing salaries out of its treasury, I should prefer some of this money to be expended in increasing the salary of such men as Dr. J. N. Hurty, men whose life, whose talents and whose learning are being devoted to the mpbuilding of the mental, the moral, and the physieal welfare of the people of this state."

We are reliably informed that in the other speech Mr. Marshall eommented farorably upon the work of the medieal profession and the State Board of Health, in the interest of public health, and said that it should be the duty of the state to make suitable provision for increasing the extent and ralue of this work.

So far as we know, Mr. Tatson has made no publie reference to publie health or medieal measures, and in view of his early attitude eoncerning the "Pure Food Law" so earnestly adroeated by the merlical profession, we are pleased to have him eome out so emphatically in favor of an increase in the effieiener of our boards of health. At the next session the State Legislature will be asked to make larger appropriations for earrying on public health work, and to so change the laws governing the selection of county health offieers that sueh offieers will be chosen for their fitness and not beeause of their politieal faith, and an adequate salary be paid for their serriees. To accomplish the desired result will require a very much larger appropriation than has ever before been made, but it is an economical expenditure whieh the state ean well afford and means the saring of many times the amount expended. If the state can expend thousands of dollars for the proteetion of its hogs, sheep, cattle and horses, as it does now, it eertainly ean expend a much greater sum for the protection of human lives. No expenditure of money by the state ean be of greater benefit from a purely eommereial standpoint, to say nothing of resulting eomfort and happiness, than the amount spent in publie health work, and the governor and legislators should be thoroughly impressed with that fact.
The promises of Mr. Marshall and Mr. Watson indieate that the next governor of Indiana will be in favor of inereasing the effieieney and widening the seope of the work of our State and County Boards of Health. It was with a view to
getting the gubernatorial candidates to place themselves on record on this point that led The Journal to solicit an expression of opinion for publieation. We regret that the candidates for the legislature were not also placed on record in a similar way, $s_{0}$ that the members of the medieal profession would know just what to expect from the men now soliciting rotes. So far as the influence and action of the next governor is conecrned. it seems quite safe to assume that the aims and objects of the medical profession will receive appropriate consideration at the hands of either Mr. Marshall or Mr. Watson as governor.

## LAY HELP IN THE SOCLAL ETHI FIGHT.

Again Editor Bok has come out in a most commendable effort to arouse the laity to reform, but this time the subject for attack is the great "black" plague. In the September issue of the Ladies Ilome Journal there appears upon the editor's personal page a discussion of this evil which merits the perusal of even medical men. who, abore all others, are presumed to be familiar with these hideous facts. In truth, the conditions herein described are not one whit orerdrawn and the medieal profession should rejoice that there is at least one layman who is engaged in reaching a great number of the people, who is courageous cnough to come out and face this matter squarely and openly.

Doctors can and should deal frankly and earnestly with their patients in their efforts at education in renereal prophylaxis, but without the support of the fathers and mothers and their more active cooperation but little can be accomplished. So that it is a matter of no little satisfaction to sce Editor Bok "put it up to" the parents straight from the shoulder.

The subject is treated under three headings, the condition, the five results, and the remedy. Unḍer the condition the following appears: "Because of the secrecy with which the whole question is enslrouded it is practically impossible to obtain absolute figures. But so far as the highest authorities have been able, through the most eareful inquiries. to sccure accurate figures, it is a conserrative statement to make that at least sixty out of erery hundred young men are to-day sowing their "wiłd oats." Of these sixty young men a startling number are already making or wili make a tragedy of marriage. They produce either childless homes, dead-loorn or blind babies, children with lifelong diseases with them, or they will send thousands of women to the operating table. Exactly what pereentage of these sixty men escape the lifelong perils of their carly indiscretions it is impossible to tell."
"The statements are not made upon theory, but facts that are proved and demonstrated at thousands of domestic bedsides and in the autopsy rooms of hundreds of hospitals. They are facts that are known to every physic̣ian.
"This frightful condition has been brought alout largely by two contributing factors: First: The parental policy of mock modesty and silence with their sons and daughters about their physical selves, and, second, the condoning in men what is condemned in women. Fathers and mothers, and, in consequence, girls have condoned in a young man this sowing of his 'wild oats' lecause it was considered a plysieal necessity; that "it would do him good; that 'it would make a man of him;' that 'it would show him the world'-all arguments absolutely baseless.
"With lundreds of girls the young man who has most promiscuously and profusely seattered his 'wild oats' has been looked upon as the most farored among possible husbands. To many a girl there is always something alluring to marry a man with a past because it appealed to her vanity to 'remake' or 'reform' him. The peril to herself she has never known, for silence has been the portion meted out to her by her parents."
The five results are given as follows: "First: The lifelong invalidism or the surgical mutiration of thousands of women. Sccond: The deaths of thousands of unborn or newborn infants. Third: The lifelong taint of disease upen children who do live. Fourth: The blindness of orer sixty out of every hundred new-born babies. Fifth: The domestic unhappiness of tens of thousands of homes because of the absence of children."
As the remedy: "Now thousands will naturally ask, 'Is there a remedy for this slaughter and maiming of babies and the surgical mutilation of women?' There is not only a remedr, but a remedy as potent as it is simple. It is this, and it is distinctly 'up to' the parents.
"First: We parents must first of all get it into our heads firm and fast to do away with the poliey of silence with our children that has done so much to bring about this condition. Our sons and daughters must be told what they are, and they must be told loringly and franklr. But told they must be.
"Second: The fathers of daughters must rid ourselves of the notion that has worked such diabolical havoc of a double moral standard. There can be but one standard; that of moral equalitr. Instead of being so painfully anxious about the 'financial prospects' of a young man who seeks the hand of our daughter in marriage and making that the first question, it is time that we
put health first and money second; that we find out, first of all, if the young man eomes to court, as the lawyers say, with clean hands. Let a father ask the young man as his leading question whether he is physically clean; insist that he shall go to his family physician, and if he gives him a clean bill of health, then his financial prospects can be gone into. But his physical self first. That much every father would do in the case of a horse or dog that he bought with a view to mating. Yet he docs less for his daughter; his own flesh and blood. Once let young men realize that such a question would be asked them by the fathers of the joung women whom they would marry; that a physical standard would be demanded, and that knowledge would be more effective for morality among young men than all the preaching and moralizing and exhortations of the past thousand years. Thus and thus only can we save our daughters and their unborn children. But in no other way."

This editorial is followed by an article in the October isssue, by Dr. A. C. Wolbarst, which enlarges somewhat upon the editorial and very aptly states that the time has come for us to cease our ostrich-like policy of hiding our faces from the facts but to turn around and mect the condition squarely as it is found to exist at the present time.

It would seem that reprints from such articles or similar compilations, based upon straight facts, pointing out in plain language where the fault lies and the remedy, mailed by physicians to the various family heads of their clientele, might be productive of considcrable results in this thankless campaign heretofore attempted by the medical profession alone.

## ANTITONIN IN DIPHTHERIA.

The time of year is approaching when diphtheria will be more or less prevalent in many localities, and the suggestion that antitoxin be used early and in sufficient doses in every case of suspicious sore throat may not be out of place. The matter is worthy of special note at this particular time because we have learned that recently three children in one family have lost their lives from diphtheria, the attending physician either intentionally or through ignoranee neglecting to use the one treatment which at the present time is recognized as practically a speeific in this disease.

Diphtheria has lost its terrors since the proper use of antitoxin has demonstrated that the disease can be both prevented and cured. It is un-
fortunate that there are some doctors, though their number is constantly diminishing, who will persist in ignoring the ralue of antitoxin, and who, if they do use the remedy, do so only as a last resort and then in a manner which experience has shown is devoid of beneficial effect. It has been, clearly proven that antitoxin, to be most efficient, should be administered early, the earlier the better, and in large doses. In a suspicious sore throat the antitoxin should be administered at once and the bacteriological diagnosis made afterward. A few hours' delay in instituting antitoxin treatment oftentimes means greatly increased severity of symptoms.

Most authorities are agreed that even to a very young child the dose, under any cireumstances, should not be less than 3,000 units, and if the symptoms are severe the initial dose should not be less than five or sir thousand units and repeated in three or four hours, and as often as necessary thereafter to bring about the desired improvement. Those who have had the largest experience in the use of antitoxin insist that the guiding practice in the use of the remedy is to give it until the characteristic effects are produced, whether 5,000 or 50,000 units be required for this result. In other words, the antitoxin should be administered until there is shriveling of the membrane, a diminution of the nasal discharge, correction of the fetid odor, and a general improvement of the condition of the patient.
"The importance of giving large doses in the very severe and apparently hopeless cases has been clearly demonstrated. The mistake made by many physicians is in giving too little rather than too much antitoxin, as this method of treatment has been proven both safe and efficacious even when abnormally large quantities of the remedy have been used. Of the untoward effects that have been noted the most common are urticaria and arthralgia, but they are trifling and unimportant.

The one fact which stands out prominently is that antitoxin is a speeific, and no physician does his whole duty to his patient and to himself if he neglects to use this life-saring remedy.

## EDITORIAL NOTES

The exhibits at the International Congress on T'uberculosis covered two acres. Germany's show was far and away the best, but Yew York and Pennsylvania were a close second. England, France, Sweden, Hungary, Switzerland, Belgium, Austria, Canada, Argentina, Russia, Truguay, our
national gotermment, all of the New lingland States. and Ohio. Minnesota, Wisconsin, Lowa, Illinois and Michigan, all had rery excellent exhibits. Indiana lad no exhibit, simply because no money was arailable. How fortunate it was that the legislatures of other states understood the wisdom and economy of letting their light shine before men !

Mr. Cocett secretary, have you done your duty to your society, yourself and Tife Jourval by sending in for pullication a report of the proceedings of your eounty medical society, and such news items and personals as are of interest to the members of the medical profession?

It is intended that the department deroted to "Society Proceedings" shall be a feature of The Journal, but we regret to say that many county society secretaries are not giving us the desired cooperation in carrying out the plan. If your eounty socicty is not being represented in Tire Jocrial by reports of meetings then ask your seeretary why he does not send us the reports.

The health plank in the Republican national platform reads as follows: "Public Health.-We commend the efforts designed to seeure greater efficiency in the mational public health agencies, and favor such legislation as will effect this purpose."

The Democratic plank: "We adrocate the organization of all existing national public health agencies into a national bureau of publie health with such power orer sanitary conditions connected with factories, mines, tenements, child labor and other snch subjects as are properly within the jurisdiction of the federal government and do not interfere with the power of the states controlling public health agencies."

The Vigo County Medieal Soeiety has placed the seal of disapproral upon contraet practice by adopting a bylaw prohibiting its members, under penalty of forfeiture of membership, from engaging in contraet practice for any lodge, fraternal order, soeial society or mutual proteetive association. wherein unlimited serriees for a fixed and limited eompensation are required. This is a step in the right direction. There is nothing more demoralizing than the contract practice engaged in by some misguided medical men, who, for temporary gain, are willing to sacrifice future prospects for themselves and their confrères. But, worse than all else, contraet practice breeds indifference to good seientific work.

Agan we urge the readers of Tife Journal to earefully examine our advertising department and patronize the firms advertising with us. Renember that this is YOUli journal, and that our ineome from advertising enables us to give you a larger and better periodical than otherwise would be possible. Reeinroeity is not only warranted but necessary if we are to keep up our present standard. Our advertisers expect returns from the money paid us, and the readers, who are also the owners of The Journai, owe it to the advertisers to give a fair return. No objectionable firms advertise with us, and praetically every necessary required by the medieal man for use in his profession is advertised in The Jourval. We, therefore, urge our readers to give our advertisers the preference, and when doing so to mention the fact to the advertiser.

Coscerxing the working of the Indiana Optometry law the Ohio Medical Journal very pertinently says that instead of haring a few harmless spectacle rendors in this state we now have a horde of opticians who all call themselves doctors and who do not limit their work to the fitting of glasses but attempt to treat diseases of the eye, and in many instances assume the rights of a physician by prescribing medicines. It is even reported that not a few of the opticians are attempting to perform surgieal operations, particularly operations for the relief of strabismus. The harm that is being done by these imposters is incaleulable and some effort should be made to suppress the evil. That the average optician is daily breaking the law pertaining to the practice of medicine is a recognized fact, and yet our Board of Medical Registration and Examination, sworn to enforce the medieal practiee aet, are, so far as we know, doing absolutely nothing to stop the optieians from practicing medicine. Certainly it is not lack of evidence which prompts the board to maintain such a painful silence.

Judging from the monthly bulletin issued by the Tigo County Medical Soeiety, and the reports of meetings sent in for publication in Trie Jourial, the medical men of Terre Hante and ricinity are an active and progressive crowd. The bulletins contain not only the programs for the weekly meetings but much interesting miscellaneous information concerning the businesss affairs of the society. The dues are $\$ 5$ per year, and recently an assessment of $\$ 1$ was made to
meet eurrent expenses. The society owns a stereopticon which is freely used in illustrating papers and lectures, and clinical demonstrations; exhibition of specimens and microscopical slides are a prominent feature of the meetings. In one of the bulletins the active and capable secretary announces that he wants the members of the society to turn out in force at every meeting so that he can report to The Jourdal an average attendance of fifty. This shows the proper enthusiasm and spirit, and we call attention to the matter with a view to stimulating other societies to emulate the example.

The Wisconsin Board of Medical Registration and Examination has succeeded, after long and persistent effort and in the face of powerful opposition, in conrincing and driving from the state of Wisconsin a band of advertising quacks who for years have swindled the gullible public and who, with a frce use of their ill-gotten gains, were able to control in a large measure the courts of the state through political influence. The Wisconsin board descrves great credit for their persistence in following up the prosecution of such a dangerous and well-entrenched set of scoundrels posing as medical men, and medical boards in other states can well emulate the example. In Indiana there are many notorious medical quacks and pretenders who descrve the fate meted out to their Wisconsin brethren, and our state board of medical registration and examination owes it to itself as well as to the inhabitants of Indiana to take hold of the question. It is neither the duty nor the province of the individual members of the medical profession to enter prosecution in these cases. The medical law of Indiana distinctly states that it shall be the duty of the board to enforce the medical practice act. That the board will have the earnest and loyal support of the medical profession of the state can not be doubted.

County secretarics should remember that the State Association dues are $\$ 1$ per year for each member and the fiscal year begins January 1st and ends December 31st. Membership carries with it a subscription to The Journal for the fiscal ycar only. Dues for any less than a year are not accepted, and, in riew of the fact that the dues are so small and the association has no application fee, all new members, no matter when admitted, are required to pay a year's dues, which carries membership and subscription to The Jocrnal to December 31st following the date of admission.

Attention is called to this subject because a few county society secretaries have been collecting less than $\$ 1$ as dues to the State Assosciation for unexpired portions of the fiscal year, and some secretaries have been collecting dues for 1908 and requesting the State Association officers to credit membership and send The Jourval for the bailance of 1908 and all of 1909. It can be readily understood that for every membership for 190 . the accounts of the State Association must show the payment of $\$ 1$, no matter what time of year the membership is entered, and one of the requirements of membership at any time is the payment of dues. Nerr members joining the association now are credited with membership until December 31st only, and no one is credited with membership until dues hare been paid, and eren the American Medical Association will not credit membership in that organization until the State Association membership requirements have been complied with. No objection will be made to donating The Jourval for a month or two to prospective members for 1909, but no nisembership in the State Association for any portion of 1908 can be granted except upon receipt of full dues.
It should also be remembered that The Jocrral may be secured without membership in the State Association, as any person may subscribe and receive The Jourval for a full year upon the payment of $\$ 1$. In other words, every member of the association, by rirtue of his membership is a subscriber to The Journal, but ever? subscriber to The Joursal is not a member of the asssociation.

The A. M. A. organizers who have been working in Indiana during the last few months have taken several hundred applications for membership in the State Assosciation. Up to date less than one hundred of these applications have been acted upon by county societies. In some instances doctors who are eligible to membership in county societies have written us that they paid their dues to county secretaries when applications were made, but as yet no action has been taken upon the applications. In other instances doctors who have inade application for membership in county societies hare informed us that they were ready to par membership fees or dues whenerer requested by the county society secretaries to do so.
Some of the county society secretaries, when asked concerning failure to act upon applications, write that applicants have not sent in their fees for membership, and consequently their applications can not be acted upon. This failure to send in membership fees is in many cases due to an oversight or to lethargy on the part of applicants.

But in any case it is the duty of the county society secretary, if he fills his position creditably, to follow up these applications and make an endearor to secure membership fees, and afterwards cncourage these applicants to become active members. No county secretary should take the position that it is the duty of the applicant to approach the county secretary with the fees in his hand. Is a matter of faet, the secretary ought to be the aggressive one in seeing that no man who has once become interested in organization ever gets away.

If we are to build up the county societies in Indiana and bring into the State Association all of the eligible doctors in the state, the eounty society secretaries must lend a helping hand in the organization work, which has been so laboriously and expensively carried on by Dr. McCormack, the A. М. A. canvassers and the couneilors. Nothing can be accomplished without work, and plenty of it, and when once organizations have been built up they must be kept active by a continuation of the work which created them.

Most if not all of the county societies hare an election of officers in the fall or not later than December. It is not too carly to consider the qualifications of the men who are to serve for the ensuing year. We desire to urge every society to use great care in the selection of a seeretary, for upon the secretary depends in a very large measure the life and growth of the soeiety. A secretary can either make or break any society, and therefore he should be selected because of his special qualifications for the office. Above everything else he must be cnergetic and ambitious as well as capable. Under no consideration should the office be given to a man as an honor, for if the duties of the office are properly performed it means hard work and the display of no little executive ability and diplomacy. Generally speaking, the younger men make the best secretaries, as they are more apt to be interested in the work and to comply with the requirements of this important office. When once a good secretary is found he should be retained from year to year or until it is shown that he has outlived his usefulness. Any society can get along with a poor president, but no society can get along with a poor secretary. It is a recognized fact that the most active and the most progressive medical societies have goorl secretaries, whereas the societies that exist in name only usually have a secretary who has utterly failed to take any interest in his work or make any move to improve the conditions for his organization. It is therefore of the utmost importance that all and in particular the inactive societics weigh well the question of the selection of a sceretary.

## CORRESPONDENCE

## A COMLMENT ON CHANGE OF POLITICS. Indianapolis, Ind., Sept. $20,1908$.

## Editor The Jouratl:

As the note, in your last issue, concerning the amouncement of my politics might conrey some wrong impressions, I beg the privilege of a few words of explanation. One might infer from the expression "a life-long Republican has decided to vote the Democratic ticket" that I had made a sudden flop, which is far from the case. (Of course I know that you simply used the expression giren in the lay press). I never have been in line with the Republicans on the tariff and have differed with them on other points, and, with such riews, it was only a question of time when I must have broken away from the assoeiation and overcome the prejudice against the Democratie party in which I was reared. A elose study of the lives and works of Jefferson and other leaders has helped this along, together with an intense admiration acquired for Mr. Bryan on hearing him speak.

When I announced at the First Ward meeting of Demoerats that I stood with them I did not suppose that it would be deemed of sufficient importance to get into the papers. The prominence was thrust upon me and I have been, in a way, roped into making some speeches, and may make more, not of eourse to the neglect of professional business.

Although the prime motive is sineere devotion to the cause, I believe that I may secondarily increase my usefulness to the profession and public by the influenee thus acquired in the Demoeratie party, especially with relation to medical edueation, medieal and sanitary legislation and other matters, right in the line of the article you quote from the Journal of the American Medical Association on "Physicians in Politics."

And in this age of enlightenment and freedom from bigotry in religion or politics, we can differ in opinion without disturbing our friendly relations and without changing our estimation of ${ }^{*}$ each other's worth.

> Sincerely yours, F. C. Heith.

## THE LIFE INSURANCE EXAMINATLON FEE. <br> Oxford, Ind., Sept. 30, 1908.

## Editor Tile Jourcial:

In answer to Dr. Daubenhever. I wish to say that there is a difference between an old line life insurance company and an assessment company. In the latter the applicant pays the examination fee, and the majority of the applicants for insur-
ance in assessment companies are among the poor classes of people. We are called upon to do charity every day. and I suppose the examination of applicants for assessment insurance goes with it. That is the essential reason why our county society did not make a $\$ 5$ fee for all insurance examinations. While Dr. Daubenheyer is urging one fee for all insurance cxaminations he has of-

## DEATHS

Dr. Geo. H. Grant, ex-president of the Indiana State Medical Association and one of the most prominent physicians in Indiana, died at his home in Richmond. September 21, aged 40 years. He was born in Richmond, January 5, 1868, and received his early schooling in that


Dr. George H. (irant, Ex-1יpesident of the Indiana State Medical Association, Died Sept. 21, 190 .
fered no remedy for the $\$ 3$ cxamination fees accepted from the old line companies able to pay what the services are worth. If he will get his county society solid for the $\$ 5$ fee from sll comr panies I will promise to get all of the physicians in our county in line, but we would like to see other counties go even as far as we have. We are collecting the $\$ 5$ examination fee from some companies that are paying only $\$ 3$ in other counties. R. E. LEE.
city: He graduated from the Rush Medical College. Chicago, in 1888, and for one year following his graduation he practiced at Hanover, Indiana, at the end of which time he located in Richmond. where he continued his professional work until the date of his death. He was a member of the American Medical Association, the Mississippi Talley Medical Association and his own state and county medical societies. In 1905-6 he was president of the Indiana State

Medical Association, a position he filled with honor to himself and to the association. It the time of his death he was lecturer on surgery in the Indiana Thiversity School of Medicine. surgeon to the C., C. \& L. and Erie railroads. a member of the staff of Reid Memorial Hospital, Richmond; health offieer for Wayne county and physieian to the Home for Aged Women and the Lutheran Orphan Asylum.

Dr. Grant was not only studious, eonscientious and progressive in his professional work, but he possessed that rare faculty of making and holding friends in and out of the profession by his renial and optimistie manner, his loyalty and derotion to his friends and his striet adherence to all the prineiples which go to make a right lhinking and right acting man. During the last ferr months of his life he was not a well man, though he bravely and uneomplainingly attempted to attend to the requirements of a large and lucrative practice. It is reported that while de--pondent on account of continued ill health he siont and killed himself.

## PERSONALS

Dr. R. S. Wilson, of Berne. Ind.. has moved to II ren. Ohio.

Dr. Edward J. MeOsear, Fort Thayne, has returned from Europe.

Dr. C. A. Roark. formerly of Milton. has located at Brookville.

Dr. Chas. E. Barnett, of Fort Warne. is in Europe doing post-graduate work.

Drs. J. F. Barnhill and Chas. R. Sowder returned from Europe september 21st.

Dr. and Mrs. Frank Rudolph, Elkhart, have returned after three months abroad.

Dr. Fent K. Wheelock, of Fort Wayne. is taking an extensire racation trip in the East.

Dr. Florence M. Olmsted, of Versailles, has located at ?18 W. Sixth street, Michigan City.

Dr. Richard E. Holder, Columbus. fraetured his arm reeently while cranking his automobile.

Dr. Harry Miller, surgeon of the Soldiers' Home, is in Washington attending the Congres: on Tuberculosis.

Dr. C. H. Adye has again located at Patrouville, Speneer County, after a few months* residence at Troy. Ind.

Dr. H. G. Xierman, Fort Wayne, was a delegate to the Congress on Tuberculosis which recently met at Washington.

Dr. C. J. Orerman, who has been at Asherille, N. C., for the past month, in the interest of Mrs. Orerman's health, has returned to his home in Marion.

Dr. Perry Wollery, of Heltonville, has just returned from St. Joseph Infirmary at Louisville, where he reeently underwent a very delicate surgical operation.

Dr. William H. Wood. Mishawaka. en route. to New Mexico, was seized with hemorrhage September 14 th and was remored to the Trinidad (Colorado) Hospital, where he is said to be in a critical condition.

Dr. G. D. Kahlo, president of the Indiana State Medieal Asssociation, who has been ill with typhoid ferer at the Methodist Hospital. Indianapolis. has recorered suffieeenty to enable him to leave the hospital.

Dr. John T. Scott, for many years treasurer of the Indianapolis Medical Soeiety, and Miss Lena E. Hanson were married Tuesday, September 15th in the private car of their friend, E. E. Elliott, in which they were to take their wedding trip.

The many friends of Dr. II. T. Latson, of Danville, Secretary of the Hendricks County Medieal Soeicty, will regret to learn of the death of his wife, which oeeurred at Danville, September 25,1908 , from the effects of a goitre with heart complications.

Dr. Freeman H. Hibben, for two years assistant surgeon in the Government Hospital at Ancon. Panama, and now general surgeon to the Indianapolis Street Railway, was united in marriage September 15. 1908, to Miss Evadne Hayward, of Indiazapolis.

## NEWS, NOTES AND COMMENTS

Mrs. Louisa Casselberry, wife of the late Dr. Isaac Casselberry, of Eransville, died September 23 rd from exhaustion.

The 1909 session of the American Surgical and Gynecological Asssociation will be held at Fort Wayne. The invitation was extended by Dr. M. F. Porter, of Fort Wayne, who is one of the Indiana members of the association.

The trenty-third annual meeting of the Conference of State and Provincial Boards of Health of North America was held at Washington, D. C., Sept. 25 and 26, 1908. It was the largest attended and best meeting in the history of the society. Drs. Hurty, McCoy and Tucker of the Indiana State Board of Health were present.

Totice to the physicians of the Ninth Councilor District of the Indiana State Medical Association. The date of the District Meeting has been changed from October 13 to November 10; place of meeting Crawfordsville. The House of Delegates will meet at 10 a. m. Each county society should elect its delegate immediately. Dr. J. N. Hurty will be the guest of honor. A banquet will be served in the avening.

Cilas. Chittick, President.
Geo. F. Keiper, Secretary.
The Twelfth Councilor District Medical Society will hold its semi-annual meeting at Fort Wayne on Tuesday. October 2\%. The morning program consists of an orthopedic clinic at St. Joseph Hospital, to be conducted by Dr. John Ridlon, Professor of Orthopedic Surgery in the Northwestern University, Chicago, and Dr. Maurice Rosenthal, of Fort Wayne. The afternoon program is as follows: "Two Rare Heart Lesions," report of case, byi Dr. Fred. Metz, Ossian, and Dr. B. W. Rhamy; Fort Wayne; "Lateral Curvature of the Spine," by Dr. John Ridlon, Chicago. "The Treatment of Cross Eyes," by Dr. Albert E. Bulson, Jr., Fort Wayne; "The Anemias of Pregnancy;" by Dr. L. P. Drayer, Fort Wayne. The erening program consists of a paper by Dr. Joseph Brenneman, of Chicago, on "Infant Feeding," and a stereopticon illustrated lecture, subject to be announced later, by Dr. Reuben Peterson, Ann Arbor, Mich. The evening meeting will be followed by a smoker to be given at the Fort Wayne Club. The Twelfth Councilor District Medical Society has already proven itself
one of the most active and progressive councilor district societies in the state. All of the previous meetings have been rery largely attended and the programs have been of unusual excellence. It is expected that the coming meeting will fully equal its predecessors. The officers of the society are as follows: President A. P. Buchman, Fort Wayne; First Vice-President. J. L. Gilbert, Kendallville; Second Tice-President. H. F. Costello, Decatur; Secretary, E. MI. Van Buskirk, Fort Wayne; Treasurer, D. C. Wybourn, Shendon.

The fall mecting of the Elerenth Councilor District Medical Association was held at Wabash, Thursday, October 22. The committee in charge had made arrangements for a good scientific and practical meeting, while the social features were not neglected. The Ladies' Committee of the Wabash County Medical Society had arranged suitable entertainment for the wives and friends of the members during the business and scientific session in the afternoon. The banquet in the early part of the erening likewise included the entertaining of the ladies. The annual election of officers took place at this meeting.

The tenth annual meeting of the Ohio Valley Medical Association will be held at French Lick, Norember 11 and 12, 1908. A program of thirtysix papers is announced. The following Indiana men are on the program: Drs. N. A. James, St. Meinrad; F. L. Daris, Evansville; H. R. Allen, Indianapolis; J. R. Eastman, Indianapolis; 'T. Victor Keene, Indianapolis; L. D. Brose. Eransville; A. E. Sterne. Indianapolis: Carl Viehe, Evansville; G. IV. Combs, Indianapolis, and A. Xi. Hayden, Eransrille. The list of officers is as follows: President. Dr. J. L. Wiggins, East St. Louis. Ill.; First Vice-President, Dr. Curran Pope. Louisville, Ky.: Second Vice-President, Dr. Albert E. Sterne, Indianapolis; Third VicePresident, Dr. G. Frank Ludston, Chicago; Secretary and Treasurer, Dr. Benj. L. W. Floyd, Eransrille.

The annual meeting of the Eighth Councilor District Medical Society was held at Anderson, October 22. The President, IV. L. Bryan, of Indiana University, delivered an address on "Medical Cooperation." After dinner the meeting was in the hands of the following: Dr. J. B. Fattic, Anderson, "Text Book Essays;" Dr. M. A. Cowing, Muncie, "Cooperative Medicine;" Dr. John Oliver, Indianapolis, "Doc Seifers;" Dr. Fred. Ruby, Union City, "How to

Get Moner Out of an Automobile:" Dr. G. R. Green, Muncie, "Benzene or Betsy";" Dr. H. R. Alburger. Bloomington, "Post Mortemi Values:" Dr. R. E. Brokat, Portland, "The Mind of the Patient;" Dr. H. R. Danfield, Marion, "The Poor Deril." Article 4. Section 11. Clause 44 of the rerised constitution and br-laws states: "Any person who uses the personal pronoun ' $I$," talks shop or tries to work the specialist game. is subject to a fine and expulsion from the societr:"

## SOCIETY PROCEEDINGS

## ALLEN COUNTY.

## FORT TAYYE MEDICAL SOCIETY. (Meeting of Sept. I, 1908.)

The socictr met in regular session in the Asoembly Foom. Tuesday evening. September 1. Meeting called to order by President Dr. W. D. Calvin, with thirte members present. Minutes of previous meeting real and approved.

Dr. C. E. Barnett presented some specimens for inspection. (1) Appendix with a hog bristle in it. Appendix had been remored from Dr. S. (2) Appendix taken from baby 4 months old. Baby had been operated for strangulated inguinal hernia and the appendix was foumd to be in the hernial sac, and was removed. (3) C'terus with submucous fibroma in it. This little affair had bled so profusely on five or six oceasions that it almost exsanguinated the patient before it was removed.

Nephrectomy.-Case report and patient exhibited by Dr. C. E. Barnett. Patient, Mr. D.. age 55, married; two children; occupation, farmer. First symptoms began three sears ago with pain in both lumbar regions. Last September patient noticed bladder pain and pain at the end of penis. Family history showed a daughter having died five fears ago from tuberculosis. Patient was treated by many phrsicians for his bladder trouble, but each treatment was followed by an increasing inflammatory action; his physician reported considerable blood, pus and albumen in his urine. Nocturnal micturition frequency began three rears ago; bladder capacity was found one-fourth normal. Cystoscopr was done May 5, 1908: right ureter was seen emptring pus: bladder soon filled with pus and blood, obscuring the field. Patient was sent home with directions for his phesician to inject 10 per cent. iodoform oil into the bladder every third day, besides washing the bladder daily. Mar 25 the bladder capacity was found to be one-half greater. Crstoscops found left ureteral opening seemingly healthy; the right side of the bladder trigone was found ulcerated and the ureter again pouring pus. May 31, erstoscopy showed left kidncy competent; (nine minutes prior patient had been injected with 30 min . of indigo carmen;) right kidner showed incompetent to blue reaction. On Junc 4 the lumbar pain srmptoms were not marked on either side, the right side possibly predominating on deep pressure. Crstoscopr findings were the only truc symptoms for operation, outside of the urinalysis made by Dr. Rhams, which showed quantities of tubercle bacilli and kidney detritus.
latient was sent to St. Joseph Hospital and for two days the kidney and bladder were thoroughly flncherd out. On June $G$, a five-inch oblique lumbar incision was made through to the perincphritic fat, and found the right kilney densely adherent and considerably tmmefied. Kidney delivered by shelling it out of the caj-ule: stump ligatured and kilner removed; ressels -parately ligated and ureter tied off; ureter tubercular and as large as a lead pencil. The cavity was drained with a cigarette drain to ureteral stump. which is located in the mid iliac fows, and fascia and muscles closed in tiers down to and up to drainage tube (iodoform ganze drain to renal stump). Skin was closed with silk worm gut and patient put to bed in Fowler's position. On June \& the patient's condition was grod: was up out of bed. He passed twentr-six ounces of cloudy urine during the first twenty-six hours. On June 15 the stitches were removed (primary union), and cigarette drain was also removed and iodoform gauze introduced. Condition was admirable. Patient left hospital for his home on July 1.

Prostatectomy.-Case report and patient exhibited by Dr. C. E. Barnett. Patient, Mr. W., age 67: married three times; three children dead. Wras an old soldier who had been shot in the right thigh and the femur broken, but the bullet was not found. Dead bone came awar after the injury in 1864. His present tıouble was pronounced nine months ago, beginning with pain in the end of penis, and frequent micturition. June 11, 1908, patient micturates every fifteen minutes: no retention. Rectal examination showed marked prostatic hypertrophy in right lateral lobe. On June 11 urinalysis showed heary cloud, acid 60. albumen 9 per cent., pus 3 per cent, parement cells and a few blood cells. On June 24 urinalrsis: Albumen 8 per cent., urea 2.2 per cent. Patient sent to hospital June 16 and placed on eliminative treatment with daily bladder washings with borie acid solution. June 29, urinalysis: Sp. gr., 1.016. reaction acid, transparener cloude, and albumen 3 per cent. by rolume. Patient operated June 30, a pre-operative cratoscopr being done. Prostatic hypertrophy was seen, but no stone discovered by sight or sense of tcueh. (The skylight made the room too light for crstoscopic examination.) At tuberischail incision was made; dissection to bulb, and bulb lifted up. Central tendon was cut and urethra opened on staff from membranous urethra into bladder neck. The stone searcher found stones, and forceps delivered five highly polished faceted stones, each about the size of the thumb nail ${ }_{2}$ and about the thickness of the thumb. The right and left lateral lobes of the prostate were delivered, the right being much the larger and the socalled middle lobe slightly enlarged. The small portion was remored and drainage tube introduced into the neck of the bladder; adrenalin injected and bladder washed. Two small pieces of gauze were packed along the drainage tube, which was elosed in the usual way. Patient was put to bed in exaggerated Fowler's position with continuous drainage. On the next dar, July l, the patient's condition was admirable; he was out of bed. July lt he returned home from the hospital, forts miles distant, on the railroad, in fine shape. Instructions were given to his physician to irrigate the bladder twice daily and keep the perineal drainage opening as large as possible. On August 2 patient returned to the office with a history of improvement in every direction. His phrsician was unable to introduce the smallest probe into the perineal
sinus July 30. Found perineum entirely elosed. The Kolmman dilator was introdueed into the bladder without diffieulty and dilated to 23 F . without pain. The patient reports nocturnal micturition frequency, and at no time more than twice, and claims perfect blad der control. One feature of speeial interest in the ease was the enormous albuminuria complieating its leginning. On the evening of September 1 was able to dilate to 2.5 F . without pain.

Dr. E. J. Mensear, in opening the diseussion, said that in tuberculosis of any part of the body it is well to remove the focus of infection if possible. But in supposed cures we should not overlook the resisting power of the patient as a factor where surgieal treatment failed to reaeh such foci. He reported a ease of tuberenlosis in a woman where, by segregation, pus was eolleeted from botli kidneys. The left showed tubercle bacilli present, and the right showed pus, but no tubercle bacilli. The faet that both kidneys were throwing out pus decided the surgeon to let the ease alone and not operate, because of the likelihood of both kidneys boing tubercular. At best both were seriously discased and two defective kidneys are better than only one kiduey and that defective. She developed a facial erysipelas of a very severe type which continued for several weeks. She was given urotropin, ete. In three or four months the pain subsided and now, after five years, she elaims to be relieved from all pain, has gained in body weight, and presents no symptoms referable to kidney funetion. Had not pus been present in the seeretion from the right kidney the elearly tubereular kidney would have been removed and the return to apparent lieath would have been aecredited to the suraical treatment.

He reported another case of a man, a minister, who for nine years had suffered from bladder trouble; gravel. He presented a fhuctuating mass on the back, and ineision was made and about a gallon of foul, stinking pus eame out. Pus of the same character was roided from bladder in large quantity. This incision was done to relieve him, as it was thought that he could live only a short time. From 160 pounds weight he was redneed to 111 pounds. A few weeks following the ineision he was removed to hospital and the kidney removed, which was fond to be very much disorganized and momerous stones were found in the suppurating mass. The ureter was not removed. Following the operation the patient gradually regained his weight, and the discharge eeased after several months. After ten months he had taken on about his normal weight, which has continued two years and three months after the operation.
In closing the discossion Dr. Barnett said, concerning the removal of the ureter, he believes it ought to be removed. In this case it was left for seeond operation if necessary. A great number of authorities say that a diseased ureter if left will drain itself. If you have tuberculosis of kidney on one side and don't remove it you will have tuberculosis on the other side before long.
Malaria.-Case report by Ir. H. K. Mouser. Patient, girl, age 16, middle grade, an imbeeile. Family history and previous history negative. Sne was admitted to the hospital on June 18,1908 , with a temperature of 104 , pulse 110 , respration 28. Physieal examination was negative, with the exception of slight distention of abdomen, together with some little tenderners. I'atient's limbs were eold and lips bhe, but she had a bright appearanee. Urine 48 oz . in twenty-
four hours and presented nothing of interest chemically or mieroscopically. Blood examination gave -0 per cent. hemoglobin, red $4,100,000$, and whites 4,107 ; differential eount, small 2 per cent, large $3 \pm$ per cent., polynuelear 64 per eent. On June 26 and 30 the WidaI reaction was negative. Blood was examined in fresh and stained specimens repeatedly, but gave no sign of the hemameba malaria. The patient as shown by the chart ran an irregular remittant temperature varying from 97 to 105.2 F ., together with irregular chills and sweating. The face and extremities were eyanolie. On July 12 the patient was given 30 grains of quinin sulphate in divided doses of 10 grains each an hour and a half before expecterl ehills. The patient had a slight ehill with temperature of 99 degrees, after whieh temperature fell to normal and remainet there. With the aid of arsenic and iron the patient completely recovered. This case illustrates the eases of irregular temperature due to malarial infection in which the hemameba ean not be found in the peripheral eireulation. While quinin will often elear up an irregular temperature due to malarial infeetion, yet the salutary effect of this drug, together with the elinical pieture presented by this ease, marks it one of estivo-autumnal malaria.

Typical Lobar Pneumonia, involving right upper lobe. Case report by Dr. Mouser. Patient, boy 17 vears of age, admitted to hospital in a chill; toxie symptoms were marked by vomiting, which lasted three days. The examination marked ease as one of lobar pueumonia, as shown by the ehart. The points to be mentioned in this eonnection are the good effeets of fresh cold air in the treatment and the correet use of a heart stimulant. Northrup was the pioneer in adrocating cold air treatment in puenmonia. Pneunonia is a sclf-rimited disease, and a great many cases will recover with good nursing alone. Those cases in which the toxemia is marked are the most likely to prove fatal. Air, fresh and cool, together with proper diet, proper attention to the bowels and goorl mursing, make up the main treatment. On the third day the heart in this case began to flag. Digitalis is the remedy in eases like this; it strengthens the heart muscke and rests it, not whipping it out like alcohol and strychnin do at times. That stryehnin and atcolol aet more quiekly is the only excuse for using either of them in preferenee to the digitalis, and then only in exeeptional eases. That digitalis acts in the presence of eomparatively high temperature is shown by the pulse in this case being reduced and strengthened in the presence of a temperature of 103 to 104 . This boy had the erisis on the fifth day and was diseharged on the twelfth day after admission.

Sarcoma.-Case report by Dr. Mouser. Patient, a girl, 19 years of age, was discovered to have a hard glowth involving the short head of the right biceps. In November, 1907 , the growth was removed entire. Mieroseopical examination showed it to be a fibrosareoma of large spindle cell trpe. In May, 1908, the tumor began to return and the patient, owing to her lowered condition, was not deemed strong enough to resist another operation. For three months she has been reeeiving gradually increasing doses of the combined toxins of Coley every other day. The treatment ir Dr. Mouser's opinion, has not been in the least benefieial

A Case with Three Major Operations at One Sitting. --Reported as follows by Dr. B. Van Sweringen. Mrr. M., 65 years of age, was referred to me by Dr. Dippel.
of Huntington. Ind.. for a lysterectomy for a sus. pected malignaner of the uterus. Her menopause occurred at 50 years. and it was not until last winter that she again saw a bloody discharge from the vagina. This appeared only at times, but in addition there was a constant diecharge of pus. Pain was also eoinplained of in the pelvic region on both sides. The uterus was prolapsed, enlarged and hears. but freely movable, and she had not lost very much weight, so that it seemed a favorable case for operation. The perincum was gone, down to the rectal sphincter, and there was found a caruncle at the meatus urinarius. At the umbilicus was found a tumor the size of it small orange which could not be reduced into the abdominal cavity. and which, from the consistener, was thought to be an omental hernia incarcerated. In the gall-bladder region was felt a tumor the size of a man's fist. somewhat tender on palpation. There was no history of clay-colored stools nor had she suffered much from "stomaeh trouble."

It was thought best to go after what appeared to threaten her life most, and do as mueh as possible after the hysterectomy was accomplished. Accordingly the abdomen was opened in the midline below the umbilicus, and what appeared to be an enlarged uterus was grasped with a strong volsellum forceps and drawn up in the wound. It was then seen that the broad ligaments were absent or represented by very insignificant structures at the bottom of the pelvic carity. Upon closer examination it was found that what we had to deal with was a senile uterus from the very fundus of which had developed a fibroid about the size of a pear, resembling very elosely the shape and size of an ordinary uterus somewhat enlarged. This fibroid was removed and the fundus of the uterus grasped and drawn up, revealing the broad ligaments in their usual position. The hysterectomy was then completed, the whole organ being removed.

The umbilical hernia was next treated by excision of the sac and ligation and removal of the contained onentum. It was found that the edges could be approximated in the vertical direction.
The gall bladder was next palpated and found filled with calculi. An incision was made two inches to the right of the midline incision, and the gall bladder emptied of five of the largest gallstones it has been $m y$ fortune to sec contained in one gall bladder. This was not accomplished without considerable difficulty, especially the last and largest one, which was impacted in the cystic duct.

The operation lasted two hours and after she recovered from the immediate effects she had no untoward symptom. Her color lightened each day as the drainage improved, and she left the Lutheran Hospital in four weeks, with the fistula elosed. The case is interesting as indicating what a patient 65 years of age will stand in the way of surgical procedures and yet make a good recovery.
Dr. Rhamy's report on the specimen was adenomyoma of the uterus, also two adenomatous polyps in one of the cormua. These accounted undoubtedly for the hemorrhage.

In opening the discussion Dr. Weaver said that Coley advises that fluid be given daily and that the best effect is obtained when they do react. Reported case of sarcoma of the ovary in which Coley's fluid was used in conjunction with dechloridization. Dropsy cane down but patient was not materially benefited by the treatment.

Motion was made and seconded and carried that the secretary send in the names of quacks to the A. M. A. Directory when presented to him.

Dr. C. II. English presented resolutions concerning legislation with reference to the use and sale of explosives on the Fourth of July, and a motion was made and carried that a committce of three be appointed to bring the matter before the eity couneil. President appointed Drs. C. II. Euglish, E. J. Mc. Oscar and K. K. Wheelock.

Adjourned.
J. C. Wadtace. Sec.

## GREENE COUNTY.

The Greene County Medical Society met in regular session at Jyons on September 17, with twenty members present. This was onc of the most enthusiastic meetings in the history of the society. The first papers of the evening were on the subject of "Chorea," by Drs. L. A. Hyde and J. M. Harrah, which brought out considerable discussion. The subject of "Melancholia" was presented by Drs. J. M工. Jackson and A. F. Knocfel, which was also freely discussed by those present.
During this meeting a resolution was introduced to abolish or repeal a former resolution making the fee for all old line insurance examinations $\$ 5$, but it was almost unanimously voted down.

After meeting adjourned an elegant supper was enjosed at the Lyons Hotel.

The next meeting was held at Worthington, on October 15. the subject being "Responsibility in Mental Disease."

Frank A. Vax Zanidt, See.

## GRANT COUNTY.

The regular mecting of the Grant Countr Medical Society was held September 22. "Typhoid Fever" was the subject of a paper by Dr. Toner, which brought out an extended disenssion. Dr. Davis also read a paper on "Diarrhea of Children."

Adjourned.
O. IV. McQuown, Scc.

## KOSCIUSKO COUNTY.

The regular meeting of the Kosciusko County Medical Society was held September 15. The first paper of the afternoon was by Dr. J. E. Potter of Milford. entitled. "Etiology of Typhoid Fever, Methods of Transmission, Prophylaxis." This was discussed by Drs. Burket, Cary, McDonald, Yocum, Howard. Thomas and Nehrbas. Dr. J. G. Nehrbas then read a paper on typhoid, entitled, "Intestinal and General Pathology," which was discussed by Dr. Burket. Dr. A. C. McDonald, Warsaw, spoke on the "Diagnosis. Symptomatology and Special Symptoms," after which President C. R. Long, Pierceton, took up the question of the "Treatment of Typhoid Fever." The former paper was discussed by Drs. Warvel, DuBois, Howard. Cary, and Leiter, and the latter by Drs. Haworth. Cary, McDonald and Burket.

It was moved, seconded and earried that a committee of three be appointed to look over the constitution and by-laws of the society and report at the next meeting any amendments which they consider would be of value. The following committee was appointed: Drs. A. C. MeDonald, C. C. Dubois and G. W. Anglin Adjourned.
C. Norman Howard, Scc.

## SPENCER COUNTY.

The regular meeting of the Spencer County Medical Society was held at Chrisney, September 15. Minutes of previous meeting read and approved. The evening was spent in the discussion of typhoid fever, which was opened by Dr. II. Q. White. Each member presented some little variation in treatment, but all were agreed on calomel for cleansing the alimentary tract and quinin during the initial stage, sponging of either hot or cold to reduce fever, and strychnia in order to support the patient.

The next meeting of the society will be held in Rockport the third Tuesday of October.

Adjourned.
H. Q. White, See.

## VIGO COUNTY.

The Vigo County Medical Society did not take a summer vacation this year, but held meetings every Tuesday night tbrougbout the hot weather, with an attendance tbat was gratifying.

Under the auspices of the society. the State Board of Health gave a public tuberculosis exhibit all day July 2, witb a popular lccture in the evening by Dr. J. ㄷ. Hurty. The success of this meeting warrants us in recommending that every county socicty secure this exhibit for at least one day.

During the month devoted to typhoid fever, demonstrations were made of the new diagnostic test for that disease. Tbe blood of a suspected case was mixed with a culture of ox-gall. After incubation, a hanging drop preparation showed the motile bacillus typhosus. The result was verified by a control specimen of ox-gall mixed with a pure culture of the same germ.

Dr. Knowlton showed plootographs of a case of hydrocephalus in which the head of the child, 1 year and 10 months old, was $403 / \mathrm{s}$ inches in circumference. Dr. Cook showed a case of tuberculosis of the spleen, liver and mesentery in a boy aged 13. Other cascs were reported by Dr. W. R. Mattox on birth paralpsis; Dr. Bohn, spina bifida, Dr. Louis, incipient tuberculosis, and Dr. Bloomer, on cement workers' erythema.

At the regular meeting of this society on August 2.j Dr. Schell entertained the society with a lantern exhibition of slides, covering practically every patliological lesion found in the liver.

The Vigo County Medical Society met in regular session September 1, with thirty-one members present. Dr. Mullikin lectured on "The Physiology of tbe Kidney," and Dr. Learitt on "Hematuria and Hemoglobinuria."

The following physicians were unanimously elected to membership in the society: Drs. O. T. Crafton, W. G. Crawford, R. Z. Taylor, F. L. Farman and L. A. Salb. Prof. C. L. Mors, M.D., Prof. C. R. Dryer, M.D., and J. A. Pinson, M.D., were elected to honorary membership. The secretary read a fee bill in which the amounts were averaged from replies received to letters sent different members, and the same was ordered printed.

Dr. J. H. Weinstein, after a discussion of the evils of lodge practice, submitted the following resolution, which was unanimously adopted and was ordered printed as an amendment to the by-laws:

Resolved, That any lodge, fraternal order, social society, or mutual protective association practice,
wherein unlimited services for a fixed and limited compensation are required, shall not be permissible by any member of the Vigo County Medical Society, and any member engaging in such contract practice after Jan. 1, 1909, shall forfeit his membership in this society.

Adjourned.
Charles N. Combs, Sec.

## BOOK REVIEWS

Text-boor of Surgical Anatomy. By William Francis Campbell, M.D., Professor of Anatomy at the Long Island College Hospital. Octavo of 675 pages, with 319 original illustrations. Philadelphia and Londlon: W. B. Saunders Company, 190s. Cloth, $\$ 5.00$ net; half morocco, $\$ 6.50$ net.
There is here presented a very prectical work on essential anatomy as used in every day work by the surgeon, without any attempt to cover all the details of a descriptive treatise of the subject. Many valuable hints in operative surgery are inserted which are at the same time intensely practical.

A few grammatical and typographical errors have unfortunately crept in, but will doubtless be climinated in future editions.

A profusion of illustrations which are well done, combined with an appended bibliography of the subject matter, serves to make this work deserving of a place among the standard texts on the subject.

Pulmonary Teberculosis and its Complications. By Sherman G. Bonney, M.D., Professor of Medicine, Denver and Gross College of Medicine, Denver. Octavo of 778 pages, with 189 original illustrations, including 20 in colors and 60 x-ray plotographs. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, $\$ 7.00$ net; half morocco, $\$ 8.50$ net.
A thoroughly practical and comprehensive treatment of the subject embraced in the title of this work is at last offered to the hungry profession of our continent by one who has a wonderful store to draw upon. In the midst of an enviroument teeming with clinical material ready to demonstrate each and every phase of the subject, Dr. Bonney has proven himself equal to the occasion and produced a work that meets the crying need of every general practitioner.

Possibly some would desire that he incline to a less restricted use of the subcutaneous tuberculin test in the early cases, and yet his stand is here only equally conservative with that which he has wisely adopted in regard to other problems, such as the wholesale denunciation of the climatic treatment.

More about home treatment for the indigent would have been welcome.

Au admirable set of skiagrams and a profusion of illustrations accompany this most excellent and timely work.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New American edition, enlarged and thoroughly revised, by J. Chalmers Da Costa, M.D., Professor of Surgery and Clinical Surgery, and Edward Anthony Spitzka, M.D., Professor of Anatomy in the Jefferson Medical College of Philadelphia. Imperial octavo, 1625 pages, with

1149 large and elaborate mgraving- Price, with illustrations in colors. eloth, 86.00 net; leather, s. 00 net. Lea \& Feliger, publishers, Philadelphia and New York, 1908.
Gray:- Anatomy, larger, more complete and more improved than ever, is striking evidence that "Gray"s" will continue to be, as it has been for over fifty rears, the standard anatomy for student, teacher and practitioner. The publishers have very wisely seleeted two able and noted authorities to thoroughly revise. re-cdit and supplement this new edition, and as a result they have produced a work that has no equal. Every page shows evidence of alteration and improvement, and the whole section on the Nerve System has been rewritten in conformity with recent revolutionary changes in methods of approaching and viewing it. The liberal use of colors in illustrating very greatly enhances the value of the work. and as the publishers announce, "the new Gray's Anatomy embodies all that careful thought and unstinted expenditure can combine in book form, and it now enters it s second halfecntury well equipped to excel even it: own record."

Prixctples and Practice of Graecology. Bry E. C. Dudley, A.M., M.D.. Professor of Gynecology' in the Northwestern University Medieal School, Chicago. Fifth edition, thoroughly revised. Octavo, 806 pages, with 431 illustrations, of which iot are in eolors. and 20 fut-page eolored plates. Cloth, $\$ 5.00$ net: leather, $\$ 6.00$ net ; half moruceo, $\$ 6.50$. Lea \& Febiger, publishers, Philadelphia and New York, 1908.

This work is derlicated to Thomas Addis Emmet. The introductory chapter is a strong and eloquent plea for gynecology as a specialty. and especially for the combined specialties of gynecology and abdominal surgery. The great debt which surgery owes to the gynecologists is clearly and forcefully shown.

The plan of the work is rather pathologic than anatomic. That is, the rarious infeetions, tumors, etc., are classed together as ther are manifest in the various structures instead of treating of these raried conditions as they appear in one organ. Thus. after the consideration of general principles in part first, infections, inflammations and allied disorders are treated of in part second, while tumors, tubal pregnancy, and malformations are taken up in part third. and so on.
Space will not permit of a complete review in detail of this book, nor is it ncressary of a work so well and widely known as one must be to have reached the fifth edition. Suffice it to say that it is a clear. strong. systematic and altogether splendid exposition of the subjeet, brought well up to date.
The illustrations are numerous and good, though wanting perhaps a little from an artistic viewpoint. The use of heary-faced type for headings and subheadings makes it easy to refer to any partieukar phase of a subjeet. The index is ample. The paper, type and binding are good.

There are many, no donbt, who will disagree with the author on some points, but all will agree that the book bears ample cridence that it is the work of a master.

Medical Gyaecologr. By S. Wyllis Bandler, M.D., Adjunct Professor of Diseases of Woman, New York Post Graduate Medical School and Hospital. Octavo
of 67.5 pages, with 13.5 original illustrations. Philadelphia and London: W. 13. Saunders Company, 190s. Cloth, $\$ 5.00$ net; half moroceo, $\$ 6.50$ net.
Non-operative Gynecology, or, better still, perhaps, Minor Gynecology, would more elearly indicate the field covered by this book. For certainly dilatation of the eervix, curettage, intrauterine applications, efe., etc.. are surgieal procedures. The first part of the work is given to a deseription of the methods and means used in examination and treatment of grnecologie cases and inchudes with the more common the less eommon, such as baeterial cultures and incoulation, and the Nauheim bath.
The anatomy and physiology of the genital organs are largety omitted. and, we think, wisely so. Following the introduetory sections above noted the symp toms and diseases usually discussed in books of this kind are taken up, and in addition other subjects nore or less closely related to gynecology, and yet not essentially a part of it. are discussed. Special mention should be made of the section on constipation which occupies forty-two pages, and is especially good. Other noteworthy sections belonging in this eategory are that on pain. inchuding raginismus, despareuria, and coccygodinia, and that on associated nervous eonditions in gynecology. The author's views are sane and sound and hence in accord with the majority of the advaneed grnecologists of the day. Especially commendable is the section on uterine deriations and their relation to pregnaney, together with the prophylactic effect of intelligent treatment of women after labor.
The plan of the work is unique, indeed it may be said that it is not methodieal, but it is very interesting and very good, and especially valuable to the gen eral practitioner because of the emphasis put upon diagnosis: for it is he who must make at least the provisional diagnosis in many gyneeologic cases if they reach the surgeon early enough for a timely operation. The publishers' work is satisfactory.

## ABSTRACTS FROM CURRENT MEDICAL LITERATURE

Convinced that the distribution of samples of patent medicines in riolation of the Cleveland city ordinance had resulted in many cases of siekness and one death among children, the judicial committee of the city council took steps in a meeting recently to enforee the ordinanee. Dr. Martin Friedrich, health officer, was instructed by the committee to write a letter to the ehief of police asking him to rigorously enforce the ordinance. The police will be ordered to make arrests wherever viohations are discovered.-The Lancet-Clinic.

The public is by no means doing its whole duty towards its children when it furnishes them with what is generally understood by the word edueation, and when it permits its sehools to be devoted entirely to the training of the mind. A child with physical defects ean never compete with a perfectly healthy child, and when these physical defects are such as may be easily remedied it is the duty of the public to see to it that these defects are looked for and that the proper medical means are taken by those who have charge of the sehools.-The Lancet-Clinic.

## THE JOURNAL <br> of tur

# Indiana State Medical Association 

# DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA <br> ISSUED MONTHLY under Direction of the Council 

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## ORIGINAL ARTICLES

## SCOLIOSIS.*

Datid Ross, M.D. INDIANIPOLIS, IND.
In $1.5 i 9$ Ambrose Paré, in one of his published rolumes, said: "For food is my witness, and all good we know. that I hase labored fifty years with all eare and pains in the illustration and amplifieation of surgery : and that I have so certainly touched that work whereat I aimed, that antiquity may seem to have nothing wherein it may execed us beside the glory of invention. nor pooterity anything left but a certain small hope to add some things."

Thongh posterity since then has added many things to the sum total of surgical knowledge. ret we would cach be doubtless willing to admit that what we each are able to add in our time and sphere is small enough, so I do not claim much. if ansthing, for originality in what I may say to-night.

Gray tells us in his description of the spine that it is a flexums and flexible column composed of a series of bones called vertebre (from vertere to turn). and it is this ability not only to bend but to form the componnd curres which makes the spine so graceful, as well as useful in orereming deficiencies of the body elsewhere. Also its slight degree of rotation between cach rertebra permitting a man to see objects other than those directly in front of him that makes the disease, or condition, under diselussion possible. So all through life every good is offset by possible harm. Without these adrantages of flexion. flexunusness and rotation there could be no currature of the spine. neither could man en-

[^52]joy the manifold blessings and comforts that these properties bring.
"Lateral curvature of the spine is a habitual or fixed deformity in which the spine is deriated in whole or part to one or the other side of the median line."-Whitman.

The definition, as given. cxcludes all the compensatory curres that disappear when the condition or neal which called them into being ceases to exist or operate. The curre, or curres, that result from the tilting of the pelris because of the shortness of one leg, disappear when the patient sits down.

In fixed lateral curvature we have passing into a pathological state what we have in a less degree as a phrsiological function of the spine. In all bending of the spine of any appreciable amount to either side there is also some rotation of the rertebre, the bodies turning to the side of the conrexity. In all simple accommodative lateral inclinations of the spine, the change in contour would be more marked if riewed from ini front, or, in other words, the change in contour is more marked in the bodies than in the spines, and since the pathological is simply the physiological exaggerated and fixed with more or less permanency, we can readily see that the currature may be much further adraned than we woutd at first suppose from a superficial examination, as in those cases in which we have a slight lateral currature without an appreciable rotation. Although I doubt if such a thing can be as a lateral curvature with absolutely no rotation.

The necessity for dividing the weight about the center of grarity in order to balance the body in the upright position accounts for the distribution and effects of lateral curvature. As the normal contour of the spine is the necessary rosult of static conditions. a change in the normal relation in one part necessitates a change else-
where．If there be a primary curve convexity to the left in the lumbar region，there must be a secondary or compensating curve conrexity to the riglit higher up，and if these curves be sul－ ficiently pronounced there will be a correspond－ ing appreciable rotation in either region．Thus we have the＂$S$＂shaped curve of scoliosis．These curres may diride the spine equally：or there may be one long and one short one．Occasionally we may have three distinct curves，or in rare m－ stances the spine mar be bent laterally into one long curve．＂total scoliosis，＂which in childhood is often combined with general posterior curra－ ture，and is peeuliar in that the torsion of the rertebre may be toward the concare instead o？ the conrex side，as is usual，the torsion probably representing the early stages of the secondary or compensatory čirre．

Not only the balance but symmetry of body is preserved by the compensatory eurves．In case of one ！nng curve，either lateral or antero－pos－ terior．the balance is maintained only by sway－ ing the entire body on the pelvis in the direction opposite to the distortion．

Etiology．－This is the most common of all de－ formities．though its insidiousness often allows it to develop to harmful proportions before it is recognized．In fifteen years，from 1885 to 1899. 3,252 cases were recorded in the out－patient de－ partment of the hospital for ruptured and crip－ pled in New lork，and during that time was only exceeded by bow legs．of which 5,030 cases were treated during the same period．

Sex．－＂Lateral curvature occurs more fre－ quently among females than males in about the proportion of four to one．＂－Whitman．Sex scems to exercise no influence in early childhood． l＇ossibly the greater solicitude of the mother for her daughter who thus suffers as compared to a son，may be one reason why so many more are detected and brought for treatment，just as bow legs and knock knees are more serious deformities in a boy since his manner of dreas does not hide his misfortune．

Ige influences its derelopment．but no time of life is exempt in the 3.252 cases just noted ； 39.9 per cont．were less than 14 years of age． 48.4 per cent．were between the ages of 14 and 21. and 11.6 per cent．were more than 21 years old． These figures simply show the age at which the patients presented themselres for treatment and give little or no clew to the beginning of the de－ formity．Certainy those influenced by rachitis would naturally begin in early infancs．though they may continue to develop later in life．In a table prepared br Dr．Walter Truslow，Hospital Tuptured and Crippled．of thirtr－seren patients
of six years or less，twenty－five were unmistakably due to rachitis．so we see this trouble plays no small part as a causing factor．

It is an easy matter to go down the line and suggest predisposing factors，but it is by no means easy alwars to point out the determining cause in cach case．

1．Lateral currature secondary to deformity nsewhere，as where one leg is shorter，or follow－ ing torticollis．
$\therefore$ ．Paralysis，particularly that of anterior poliomyelitis，along with its many other horrors， may，and often does，add this deformity to the others．

3．As to occupation，certainly no cause is more active as a determining cause than occupation： from the school girl at her desk to the stone cut－ ter plying his trade，from infancy to age．Jean Val Jean was intelligent enough to detect the evils a habitual attitude due to their occupation had on the other prisoners in the galley ships． and was not slow to profit by what he saw and sared himself by using the same intelligence． When fathers and mothers and all concerned in growing childhood use the same good sense，lat－ teral curvature will be a thing of the past．

4．Congenital lateral currature is uncommon in infants otherwise normal，but beware of the rachitis．Those with a weaker spot and an entire framework as easily moulded as clay are easily bent in any shape and are certainly creatures of circumstances．
j．Heredity，though mentioned，is not easily connected with the deformity in most cases．The pranks that Nature plays in this regard，in bless－ ing us with our ancestor＇s virtues as well as curs－ ing us with their rices and deficiencies，are in－ disputable if not always explainable．

Symptoms．－Generally the first is the deform－ ity．Pain may accompany or precede the de－ formity and is generally of a dull，dragging na－ ture，and is often said to be due to pressure of the nerres caused by the currature，but pain is often felt on the conrex as well as the concare side，so that theory does not hold well．In ex－ treme cases doubtless the abore explanation would hold good．

Often weakness and awkwardness precede de－ formity：The writer recalls a case，a child of three that was brought to his office by the parents to see why the little fellow fell so often as le would run across the floor．A beginning lumbar curve was found which rapidly progressed from want of treatment．

Museular coordination is often wanting and neurasthenic or hysterical symptoms are often present．sometimes culminating in all the un－
pleasant symptoms due to misplaced thoracic or abdominal organs in the cases of extreme deformity.

Diagnosis.-Scoliosis is a simple deformity, accompanied by the symptoms of diseasc. Unfortunately, too often the diagnosis is made, or rather the deformity detected, by the dressmaker or tailor. The doctor has had no chance to know of the trouble. The elerated hip or shoulder gives trouble when we demand something ncar accuracy in fit of our clothes. The inclination of the body to one side; rotation of the spine as shown by fulness on one side or flatness of the other; the curre best shown by the position of the spinous processes in the erect position; the lcssened flexibility of the spine and range of motion of the shoulder joints.

Prognosis.-Doubtless there is a predisposing or preliminary stage, a stage of progression and a stage of arrest. All deformities of this class are more likely to progress during the growing pcriod, so the later in life that the deformities begin the better the chance for the stage of arrest to be reached before great damage is done.

Cases secn in the preliminary or early part of the stage of progression may, under proper care, if the patient is in proper health. be completely cured, but if the muscular change has gone too far or if adhesions lave formed, or the osseous changes hare occurred, a checking of the deformity is all that can be hoped for.

Treatment of this class of dcformities, like the education of children, should begin before the rictim is born. Every child is entitled to a birthright of a good, strong, healthy constitution, and such a guardianship of its early life as would have judgment enough to know and take interest enough to see that all is well with the child physically as well as morally. To sccure all this is beyond our power, but we may give an occasional word of adrice to those in charge of these children so that they may know better what is norinal, and knowing that, know how to secure it and keep it. Seating of our schools has been and is sadly deficient. The child must fit the seat and not the seat the child in the present srstem of economics. This condition exists partly because of ignorance, partly because of indifference. Tasks beyond the strength and in no wise adapted to childhood must be abolished. Child labor in factories is going and must go. Good, healthy play grounds with proper equipment, both as a prevention and cure, must be furnished.
Whitman gives the following principles for the guidance of those who would deal with such cases:

1. To overcome all restriction to passire motion.
?. To strengthen weakened muscles, especially whose action is opposed to habitual deformity.
2. To insist on the aroidance of overfatigue and improper postures.
3. To support the weak part by a brace if deformity can not be corrected otherwise.

It would seem that these principles cover the ground pretty thoroughly, but it is much easier to give principles than to apply them. When the muscles that resist passire motion are not easily reached and the bodies of the rertebre can not be affected, it is not so easy to orercome all restriction and passive motion.

The second principle is the most important in the curable cases unless the third be added to and classed with it, for nothing is more important than what is taught in the two combined, proper exercisc and proper rest. Proper cxercisc, both passive and active, as far as the patient is conccrned. Passire, as properly given massage and posture; active. all that is combined in proper movements and cxercises. If one has a well equipped gymnasium at hand and at its head a good physical director to turn these patients ore: to, the matter would be simple; but only the few can get one or both and nearly crery one has to meet and treat these cases.

The exercises illustrated and described br Teschner in the Annals of S゙urgery and used by Whitman in his cxcellent work on orthopedics are fine, but are more elaborate than most can master untaught, and few can get the proper instruction. The writer has had grod successs in dorsal and lumbar curres in haring the patient swing from a pole or rings by the hands. In case of high dorsal or cervical curre a halter fastened under the ncciput and chin with an elastic band fastencd to the pole abore gare the neccssary extension. This has been used in both antero-posterior and lateral curses.

The necessity for proper rest at proper times can not be too strongly emphasized and avoidance of improper posture is absolutely necessary it aught is to be accomplished.

The last principle is to be shunned where possible, but in infants to orercome deformitv and in those where support or such correction as it may give to aid exerciscs, and lastly in those to whom there is no other course open. the mechanical support is a neccesity.

## DISCLESION.

Dr. H. R. Allen, Indianapolis: Any paper on scolinsis is a good paper. And there is entirely too much scoliosis and it is largely because of
some kind of fake modesty that seems to be not to look at naked little children. You will save them a great deal to sce that their pelvis is square and level. That is the foundation of the spine. The sccond thing is to look after the spine. There are two or three things in regard to the human spine not to be found in text books. Of all the creatures, the human being is the only one that has ever ventured upon the difficult task of balancing. In the spinal column a series of cules rest mpon a scries of spheres. You have your rertebra with a double convex dise of sartilage, and this spinc is all the while held in the perpendicular position, and man is the only animal that has ever attempted it. Mice and elephants and other creatures have been taught to asssume an upright position for short periods, but the biggest apes we have walk on the first three fingers of their forelegs, and this approaches nearest to the human being. The rock seal goes down and sleeps in an upright position, but is surrounded by something that acts by hydraulic presssure. The bat hangs with its hooks on rock ledges. There is no creature with a tilted pelvis but what the spine is going to come on up and proride for some point of halancing. Dr. loss made frequent reference to local irritation of the spine. I will show you what I mean by the rotation theory. I found that the theory I had learned in the books would not answer. and so I built a machine that would work in any weather and anywhere. (The doctor illustrated on the blaekboard his rotation theory). So there is no use of their talking about the rotation of the vertebra and no use of talking about scoliosis unless the curve and the rotation are as I maintain they are. And in seoliosis they had better not use instruments until they change their scheme of thought a little bit. The Doctor spoke of complete scoliosis-I have yet to see a case of eomplete scoliosis. There is no more complex thing than that presented by the spine, muscles and rils attached thereto in all medicine and surgery. Proper exercise-I do not know what it is. I do not know any exereise calculated to produce any correcting effect but what you will find a corresponding point where you will find your conditions reversed. In the Orthopedic Socicty they varied in their treatment of scoliosis, and will keep on varying. They varied on the treatment with the plaster of Paris casts. In that you have a hump here and a depression there. Likewise with the braces; they were properly condemned because while pushing on one place they were pulling on another. They must change their proeess. What good is twenty or thirty minutes of proper exercise going to do when all the rest of the time is having a develop-
ing influence, and gravity is the biggest force? Auother thing, swinging by the hands is recommended to correet scoliotic curres, but swinging by the hand is only lifting the weight off the spine.

When you come to swinging the patient by the arms I want you to notice what you do. The latissimus dorsi is the biggest muscle in the body. It comes from the pelvis and the processes of the spine and is attaehed to and swings the arm. If you want to lift the pelvis up the latissimus is the best thing to do it with. Your attaelment in front is the rectns. If you want to pull up the front part of the symphisis catch hold of the upper part of the rectus and do it. If you swing them by the head then you come down to causes and do something. Catch them and swing them by the chin and the occiput. My treatment depends on correcting positions under strain, and the application of a brace of this sort built along progressive lines to carry off the weight by the chin and the occiput to kecp the deforming influences out of the question and put them in exercising machines, which will shove the rectebrex in such a manner as to untwist the revolution that has occurred. It wouldn't be fair to go into details. Every one of these casces must stand on its own feet. You must measure them from time to time and find out what you are doing. There is one machine that will measure them just as the oculist can measure lis eve cases. But remember when you put traction on the spine do it with the chin and the occiput. Show me one muscle that will pull the spine one way and I will show you several that are pulling harder the other way.

Dr. David Ross, Indianapolis (elosing) : There is no question but what great good comes from extension of the spine, and yet often times in these exercises in which the patient swings, whether from the surrounding museles or not, you do get good, and without being aided by them, by swinging them from the occiput and chin alone, you can not, as in deformity such as club foot, get at the part offending.

## OBSTRUCTION OF THE BOWELS FROM TRAUMATISM.*

J. I. Ford, M.D.<br>indianapolis, ind.

Traumatism of the abdomen is a frequent source of intestinal obstruetion. The obstruction may be meehanical or reflex. If mechanieal, it is due to rupture of the intestine, due to pressure

[^53]upon the intestinal eavity by hematomas. It may bring on violent peristalsis whieh may cause a kink in the bowel. If it is reflex it is more probably due to injury of the nerve centers within the abdomen, which brings on paralysis.

In examining a patient for traunatism the utmost gentleness must be employed lest the surgeon's fingers or the patient's movements should conrert an ineomplete into a eomplete ruptnro or induce a renewal of hemorrlage.

Exact diagnosis may be impossible. The absence of all acute symptoms, or of symptoms distinctly pointing to a risceral lesion, is not enough to justily the surgeon proclaiming the injury unimportant. For example, there may be nothing to indieate soon after the injury sueh a severe lesiol: as rupture of the intestine. but in a few hours the onset of aeute peritonitis will reveal the gravity of the care. In many eases, therefore, where an actual diagnosis of visceral lesion can not be made, an exploration shonld be made. This is: partieularly true where rupture of the intestine is suspected and where the injury in the solid riseera wonld lead to severe hemorrhage.

The most pronounced symptom is slock, which is most intense immediately after the injury. It is an indleation of interference with the nerves, and is usually most intense when the traumatisn is in the upper half of the abdomen, especial! if the stomach is full, though it may be absent or very slight and transient in rupture of the intestine.

Hemorrhage may be of the concealed variety, and the general signs are aeute anemia and shifting dullness in the abdominal earity, though it is not always advisable to move the patient from side to side in hemorrhage of the abdomen. Pereussion should be made very earefully and lightly. not only to aroid giving pain and exeiting museular spasm, but the foree of the blow may possibly eomplete an incomplete rupture of the intestine or blood ressel. Rupture of the abdominal wall is an extremely important sign in risceral injury. When the patient ean take a full deep breath without pain and the abdominal wall is everywhere quite soft to the toueh, it is almost eertain that there is no riseeral injury or peritonitis. Pain is the symptom of all injury. When it is intense, and inereasing spontaneously without any movement on the part of the patient, and is fixed in one spot and radiates thence over the belly, it beeomes of serious import.

Vomiting is another very frequent symptom. When the patient reeeives a blow upon the abdomen soon after a meal, romiting to the extent of emptying the stomaeh usually oeeurs and is of
no serious signifieanee, but when the aet is oft repeated, and partieularly when the ejecta contains blood, it is an important sign of viseeral lesion. The signifiancec of passage of blood by the bowel is obvious, and it may be pointed out if bright blood is passed as a result of abdorninal injury, it points to a lesion of the eolon, while an altered condition of the blood (tarry stools) would show that it eomes from some loop of the alimentary canal further removed. The most frequent and most riolent sequela of abdominal injury is peritonitis, whieh may result from a perforation of any part of the alimentary canal, or from a less serere injury which permits pathological organisms to traverse the intestinal wall and infeet the peritoneum.

Peritonitis is a frequent cause of intestinal obstruction, and when the obstruetion arises from this cause surgieal interference is demanded. I'robably the most frequent cause of obstruction from traumatism is adhesive inflammation. Contusion of the peritoneal eoating of the bowels and abdominal walls eauses adhesive exudate to be thrown out. Whiel agglutinates the bowels into masees and frequently forms adhesive bands which constrict the bowel, produeing an internal hernia. These conditions have all the eharacteristic stmptoms of hernia produeed in any other position. As an example, I was called to attend a man who was pinched between two ears. At the time of the injury he had profound shoek, temperature dropped to $961 / 2^{\circ}$. pulse small and thready; with a leaky skin. The man reeorered without any symptoms of peritonitis and was diseharged from the hospital at the end of a week or ten days. Some two weeks afterward I was called to his lome in the night and found him with the characteristic symptoms of intestinal obstruction. He was immediately removed to the hospital and an abdominal exploration made, when we found a knuekle of bowel had slipped under an adhesive band whieh had formed from the promontory of the saerum, into the right iliac fossa. The obstruetion was complete, the borel was strangulated, and neerosis had already set in. The strangulation was relieved and the man has made an unerentful reeorery.

Probably the most serious obstruction from traumatism with which we have to deal, and the one whieh the surgeon fears the most, is postoperative ileus. This condition is not as well understood as it will be, and seems to be due, first, to nervous shock, producing a paralysis of peristalsis. This allows the contents of the bowels to take on aetive fermentation with great distention, whieh further eomplicates the paralysis. This
condition pronnotes absorption of toxins. and the patient soon becomes thoroughly poisoncd. Unless the condition is speedily relieved death will surely ensuc.

The treatment of this condition is one which puts a grave responsibility upon the attending plysieian. If the bowel ean not be mored by laxatives, then there is only one recourse, and that is surgical interference. Open the abdomen, incise and drain the bowel, washing out the contents of the intestinal traet, getting rid of gas and the fermenting feeal matter. This is rather a radical procedure, but is adrocated by some of the best surgeons.

Focher adrocates opening high in the jejunum and low in the ileum, washing the gut through and through, and closing the opening at the termination of the irrigation.

Munks, of Boston, in the last eopy of Aunals of Surgery, has an article upon this subject, in which he states that he has not been able, in experiments upon animals, to wash the whole of the small bowel through the high and low openingz, but states that he has been able to cleanse this tract through some three openings: open high in the jejunum and make a middle incision at th: upper end of the ileum, washing out the upper part of the tract; then, closing the upper opening, make another incision low down in the ileun. using the lower opening in the first washing for the high opening in this second washing. In this manner he has been able to cleanse the small bowel and also force the water through the ilencecal valre into the colon.

Dr. Haslam of Fremont, Neb., as far back as 1902 , reports cases of obstruction treated in this manner. He reports a boy, fourteen years of age, suffering from a severe attack of intestinal paralysis following a relapse of appendieitis. i loop of the bowel as high up as possible was drawn through an opening in the abdomen and incised. Quite a length of bowel was drawn through the opening and an ineision low down was made. The bowel was flushed out and the opening in the bowel stitched up and the bowel returned to the abdomen, the patient recovering.

Dr. Pond, of Brooklyn, also reports a casc where le opened the abdominal cavity and irrigated the lower part of the bowel down to the ileoceal valve. He flushed the bowel out with hot saline solution and thoroughly unloaded it. He stitehed the open bowel into the wound and kept up the irrigation for several dars.

I have to report a case of my orm in which obstruction followed a case of pus appendicitis, where I lad paralysis with great distention. and
was unable to unload the bowel by any medieation tried; high colon flushing, eatharsis of saline and croton oil, injection of hydrobromate of eserin, all failing to produee peristalsis or get any motion whatever. 'The abdomen was not opened at the old wound but in the median line, for fear that there might be some contamination still lingering in the old pus tract, whieh was being drained. The lowel immediately appeared in the wound, and when brought out on the abdomen we found it largely distended, the peritoneum quite congested, adhesive exudates being thrown out and more or less agglutination having taken place. These adhesions were broken up and the bowel was opened as high as possible and found to be filled with gas and fermenting liquid. This portion of the bowel was washed in both directions as far as it was possible, but I found it impossible to bring about contraction of the lower part of the bowel which was out upon the abdomen. The upper incision was now closed and the bowel was stripped gently domnward so as to force all the contents as low in the bowel as po:sible, and compresssion forceps put upon it. In incision was now made in the small bowel and it was again drained of fecal contents. Is we proceeded down the bowel we found the contents dark. liquid and very foul. This bowel was thoroughly drained by stripping upward toward our compression forceps, filling repeatedly with hor saline solntion, the salt solution being forced bs compression down the bowel, afterward returning to the opening. After as thorough cleansing as possible, the wound was closed by a double row of Lembert sutures and the bowel returned to the abdomen. Before closing the abdomen a color tube was passed into the lower bowel and by putting the hand in the abdominal cavity throug'l the opening and guiding the tube into the eolon we were enabled to pass it almost to the first flexure. The colon was filled with a solution of epsom salts, the abdomen closed with drainage and the patient put to bed in the Fowler position. In a few hours the lower bowel was thorough?y unloaded, a great amount of gas passing, and the patient made a lingering and tedious recovery, but without any further ileus.

I am firmly of the opinion that many of these cases of post-operative ileus could be relieved by thoroughly washing the intestinal traet. I can see no objection to the operation, as, under proner precautions, it is certainly safer than to allow the ileus to run its course, as death almost invariably follows.

In closing. I would state that all eases of obstruction due to traunatisn should be operated
promptly, before peritonitis has set in, or the patient has become weakened from loss of blood or intestinal absorption has taken place and the patient las become thoroughly poisoned. I beliere, after reading the article by Munk, that I shall be tempted to operate if the patient gives any promise whatever of living to come off the table.

## discussion.

Dr. T. B. Noble, Indianapolis: Every case of intestinal obstruction is a case which puts the life of the individual in imminent jeopardy, and death will occur unless the condition be promptly diagnosed and properly treated. In personal experience, by all odds my greatest mortality lies in this class of cases. I believe, as a rule, every one of these cases ought to get well, just as every case of appendicitis ought to get well, because there is a time if these cases be properly interpreted, properly analyzed and proper treatment instituted they will uniformly recover. They must be treated promptly. The death angel is busy from the time the obstruction is complete and we have no time limit in which to oprate. I have seen cases rccover in six weeks and in six days following an obstruction, and I have seen them die in twelve hours. My experience is that I am not called in to interpret symptoms of obstruction of the bowels, but to interpret symptoms of impending death, symptoms of exhaustion and collapse resulting from peritonitis or some cther sequential pathological condition, the outgrowth of the obstruction which occurs probably days before. It is a shame that in these cases we encounter gangrenous intestine. The day is now here when we should study more carefully the early symptoms of this condition. These are papers that should be over in the other section, before the men who do not often see inside the abdominal carity and do not appreciate the seriousness of the changes that so rapidly occur following an obstruction. Nature's first cry for relief from this fatal malady is pain, and if doctors properly interpret this first cry they will relieve the pain and we won't have intestinal necrosis, we won't have general peritonitis and but very few deatns from this terrible disease. It is the pain from impaired peristalsis, pain from obstruction, pain that is colicky in character, it is severe, it refuses to be relieved. Then how often when we are called do we find that the pain has ceased, an obtundation of general character, a receding abdomen, a leaky skin, weak pulse, cyanosis over the abdomen, and we are called now to operate as a last resort. We should be called in when they are having their early pain. When it
comes to the management of these cases, that depends upon the individual experience of the operator himself, the environmental condition in which the patient is, together with the pathological conditions that obtain at the time he is called into the case to do his operation.

Dr. T. C. Kennedy, Shelbyville: Too frequently we come to these cases to find they have been relieved by morphin, and there is a sense of security felt by the patient and his friends and they refuse operation, as occurred in a case where I was called recently. But, as has been well said here, these cases should be operated early, as soon as the condition is diagnosed, and it does not make any difference whether we diagnose correctly a volvulus, an intussusception or whatever it may be, but as soon as obstruction is diagnosed laparotomy should be performed at once. Ind, as Dr. Clark has said, I do not believe it is well to hunt for the obstruction, but drain the bowel and wait for improvement in the condition of the patient. In many cases when the surgeon is called the patient is in collapse, the pain is gone and the patient is in a profuse sweat and when even an operation would no longer be of service. But I believe we would be warrantcd, no matter how extreme the condition, in attempting to reliere the condition by operation.

Dr. E. D. Clark, Indianapolis: I did not refer to my personal experience except to say when I am called in the rast majority of cascs the patient has been so greatly intoxicated by the absorption of poisons from the intestine that it is absolute folly, almost, to attempt operation. It is my belief, and I think is the belief of every operator, that if these cases could be gotten soon enough they could be relieved of their trouble.

Dr. J. H. Ford, Indianapolis: I believe the surgeon is not in position to decide when an operation is futile. While it is desirable and extremely important to have early recognition of the conditions obtaining, still I do not think a man should refuse to operate on a patient in a reasonable stage of collapse, because cases have been recorded where the alimentary tract has been unloaded and cleansed and the patient has recovered. The hunting for the obstruction is serious business. It is easy to recognize, as a rule, because above the obstruction you find a distended bowel and collapsed below; but the trouble is that if the obstruction is low down we have such a mass of intestine that it is almost impossible to find it. So I believe the thing to do is to relieve the bowel of the material that is poisoning the patient and Nature will come to the rescue.

THE RELATLON OF PHISLCLANS AND DRUGGISTs.*
Shauel E. Earp. MI.D. indistipolis.
The universal recognition of pharmacy as a -cience and a profession is the dawn of a new era, which. consequently, gives greater dignity to the relationship between physicians and druggists. The subject is a broad one, and yet much that might be said is embraced in the following four propositions: First, the relationship should be professional; second, trade relations should be distinct and separate; third, obligations on either side should be those of a professional character: fourth, the ethical relations of physicians and pharmacists should be, as far as possible, the same as those of physician and physician. These are sufficiently axiomatic to make a discussion of them in detail unnecessary.

Contribntory to the betterment of the conditions of pharmacy are both the state and the non-state schools of pharmacy and the special departments in many other institutions of learning. The progressive states have passed laws regulating the practice of pharmacy, so that now pharmacy is given deserved credit anong the professions. As a result the present generation of druggists are pharmacists and no longer bear a relation to the drug-store conditions that existed several years ago.

While it is proper and right that there should be a dignified relation between physicians and druggists. yet the former has no right whatever to dictate the method by which a store should be conducted, although he may fecl like entering an objection if there is a violation of the unwritten law of ethics. The physician may recommend to his patient a conscientious and faithful druggist, but he should never depart from the method of right and equity to do so to the exclusion of others who are equally competent.

A physician has a right to always expect courteous treatment, which applies equally well to his patients; and the druggist has an equal right to expect the same in return.

I readily sec wherein an unwise druggist might unintentionally cause conditions that would be a inutual detriment; to discuss, with the members of a family, a prescription in reference to its merits and intents, rendering an opinion as to its ralue, would be unethical, and, furthermore, it is not a part of his profession to form a judgment of the propriety of a prescription.

[^54]That either one should not speak disparagingly of the other applies to both physician and druggist.

Occasionally some proportion of the prescription does not scem quite clear to the compounder, and rather than depend upon his own judgment the pharmacist seeks information from the author of the prescription, which naturally reacts to the credit of one or both of the parties interested. Upon this point the pharmacists of some localities are very particular and this method is commendable.
I an inclined to take rather an optimistic view in reference to pharmacists frequently wearing the garb of a physician and engaging in the practice of medicine which their license does not entitle them to do. Nor do I believe that simply to recommend a remedy is close to counter prescribing. To suggest an agent for the relief of pain or to act in a case of emergency so far as a pharmacist's knowledge will permit, is surely not objectionable; but to inaugurate a line of treatment, thereby usurping the powers of others, is an injustice to physician and to patient.

I do not believe that the cry of substitution of the "just as good" has strained the relations of physicians and druggists. It is a medium which has been overworked by the advertiser. Some few manufacturers have ridden it as a hobbyhorse until it has become wind-broken. There may have been some guilt, but the innocent have been made to suffer.
The pharmacopcia recognizes certain preparations and some trade preparations are identical with tham. There is every reason why the physician should give the standard the preference, but if a prescription contains the trade preparation and a druggist uses the standard it is substitution; yet it is a violation of the letter of the law and not the spirit. There can be no question but that a prescription should be filled as written unless a conference is held with the prescriber and permission given to do otherwise. The druggist is in a position to frequently furnish information, and rclations should be such as to warrant such a conference. The interests of physicians and druggists should be mutual and professional men should be honest in their work and there is no reason why conditions should be otherrise. If our confidence is weak, let us increase its strength.

One of the greatest evils that I recognize is the metlod which the public has of calling upon the druggist for remedial agents to relieve a cough. Some do this simply for the purpose of avoiding a physician`s fee, while others form a judgment
that it is of too trivial a nature to require the attention of a physician. Cases of this kind unquestionably are frequently cases of tuberculosis which may be carried to a period beyond redemption, and if they had been under the eare of a skilled physician at the onset a cure would have been effected. I call attention to this point, which in no sense is a criticism of the druggist, but to emphasize the fact that if the druggist will stop the imposition of the people upon him he will be as great a factor as many health officials in eradicating tuberculosis. This is true because what appears to be a simple cold is frequently the forerunner of a fatal issue, and also beeause eurative methods depend upon an early diagnosis.

I have frequently been told that the treatment of venereal diseases by the druggist is a commonplaee practiee, but I do not know of a ease in point, and I would be loath to believe that the members of a profession of pharmacy are guilty of anything of this eharacter; however, I can readily see that if such a method were in vogue there would be a possibility of a larger number of complicated eases visiting genito-urinary specialists for a final eure, and perhaps furnish a few sterile women, if not worse, for the gynecologists; and yet with the confidence I have in the best class of pharmaeists I am impressed with the idca that they use the skill that rightfully belongs to them as members of the profession of pharmacy without a stain of this character upon their garments, and if there are a few exeeptions others should not be eondemned, but the guilty deserve punishment.

The pure food law will react to the advantage of the two professions under consideration, and the department store method will wane under the restrietions of this law and it will soon be known that the place to get standard drugs is at a standard drug store. The topic is worthy of further consideration, but time forbids.

Some members of the medical profession have been in the labit of using preparations in the treatment of disease whieh were on par with an ordinary patent medicine, which in no wise increased the respeet of the practitioner from the standpoint of a skilled pharmacist, nor was it condueive to harmonious relations.

There is now a wave of reform movement in progress, and on April $\%$, 190\%, the Indianapolis Medical Soeiety issued to the physicians of Marion County the following address, a copy of whicl was sent to every physician in the county. It is as follows:

It is well known to all who keep themselves informed upon the progress of things medical that an earnest and determined movement has arisen throughout this country and the world looking to a reform in the prescribing of medicines. The advertising and the more or less irrational and unscrupulous promulgation of various types of proprietary medicines and nostrums has to such an extent beguiled, deluded, degraded and even debauched the profession that the situation has become intolerable to a liberal and self-respecting calling sueh as ours.

This matter, as you know, has been offieially taken up by the American Medical Association, and its Council on Pharmaey and Chemistry is doing a great work in a preliminary elearing of the field. We commend this work, as published from time to time in the assoeiation journal, to your constant and serious consideration.

Infiuential representatives of the publie press, daily journals, widely-cireulated monthly magazines and scientific publications are not only endorsing the eampaign against the ordinary "patent medicines" and promiscuous and irritional self-drugging, but are also seriously looking into and critieising this evil of the use of "professional patent medicines." Plainly there is a lond call for an awakening of the professional intelligence and conscience in this matter, and an equally urgent call upon our integrity and self-respect, in view of the fact that our derelictions are being scrutinized, not only among ourselves, but among those upon whom we mnst depend for recognition, respeet and support.

It is idle to seek to lay the blame upon others: upou too enterprising and unscrupulous manufacturers, upon the commercial necessities of medical journals, or upon the druggists whom we have been chiefly responsible for leading astray. The fault lies ehiefly with us in that we have been false to our own ethical principles and have been seduced away from our own reeognized standards.

The reform must begin and continue among ourselves. Then only will the other guilty ones -the manufacturing pharmacists, the medical journals and the druggists-be willing and compelled to follow us. We must come back to a recognition and appreciation of what is meant by rational therapeutics, by a rational simplicity in the prescription of drugs, by rational professional independence in medical practice, and by rational pharmacologic standards. Having adopted a Pharmaeopeia and National Formulary as our ehief guide, we should follow the earnest advice of our appointed authorities in clinical medicine and pharmacy, avoiding the use of mnnecessary and meaningless proprietary preparations and the worse nostrums, as far as possible, prescribing and thus encourage the
druggist to dispense according to the Pharmacopeia.

At a recent meeting of this society this important subject was freely and helpfully discussed in conjunction with representative pharmacists of the city, the pharmacists expressing their willingness and desire to follow the physicians in this form of prescribing, and a committee was appointed to formulate an expression of combined medical and pharmaceutical conviction and adrice. Therefore:

Resolved, That the Indianapolis Mcdical Society does hereby record its approval and endorsement of the presont movement for reform in the prescription of drugs; and,

Resolved, That the Socicty does hereby call upo:1 its members to give heed and scrious consideration to this reform; urging upon them the conriction uniformly and repeatedly expressed by the master-minds of clinical medicine, that the habitual and routine preseribing of meaningless proprictary medicines and nostrums is degrading to rational therapeutics, lays our calling open to a charge of insincerity in its claim as a liberal profession, makes insignificant its criticism of the ordinary patent medicine business, deprives it of that public estecm and confidence which is its due, belittles it and us in the eyes of the pharmacist, and, sooner or later. almost invariably compromises the otherwise thoughtful and capable physician in his diarnosis and treatment of diseasc.
lou are, therefore, urged by this society to cease prescribing unworthy and irrational remedics and to act in conjunction with your local druggists in bringing about a new order of scientific prescription writing.

Failure to participate in this rcform movement lays us open to the charge of either indifference or of inability or unfitness to scientifically practice and to prescribe medicines.

The medical profession is trying to teach the public the importance of hygiene, sanitation and preventive medicine, and we must have the help of the pharmacist. He is in a position to render sarrice which will make the physician's work more effective and thereby he becomes a public benefactor.

I am impressed by what I believe to be a fact --that it is the duty of the members of the medical profession to recognize the ability of the pharmacist to a greater extent than we now do. He is not simply a tradesman, but after years of study the pharmacist of to-day is fully able to meet the demands of the physician; do we justly give him the opportunitr? If our knowledge of materia medica and therapcutics is deficient, if we are rusty or indolent, so much so that it is easier to prescribe a nostrum, then we do not utilize his skill. If we have been unconsciously drifting to a port of danger, let us resolve to steer
clear of it, and after all it will not be disadvantageous to now and then refresh our memories conccrning the unwritten law of cthics letween physicians and pharmacists.

## THE RELATION OF THE PHARMACIST TO THE PHYSICIAN.*

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In order to better understand what should be the relation of the pharmacist to the physician, it may be well to review briefly the history of medicine and pharmacy and the origin of the two professions as separate practices.

During the Galenic period the art of medicinc consisted chiefly of the endearor to discorer remcdies for the cure of disease. We note the superstitions and mysticism which prevailed in the amulets and other charms; the famous "Anodyne Decklass of Galenus," and so on. At this time it naturally required that the physician would prepare, compound and often collect medicines which he employed. Thus was developed the regetable materia medica.
During the latter part of this period the search for the "elixir" was also participated in by the alchemists, in connection with the "philosopher's stone," which when found was expected to transmute baser metals into gold and also to supply the key to everlasting life.

While the alchemists did not realize their ambitions, their labors resulted in a vast amount of experimentation upon which the science of chemistry subsequently developed.

The Galenic period was succeeded by the Paracelsic period, commencing about 1600 A. D., which introduced mineral substances in medicine, beginning with mercury and antimony, and with their introduction the materia medica was rastly augmented.

The preparation of chemical substances reguired more time than the physician could derote, and thus was developed a class of specialists who manufactured these chemical substances and Who also relieved the physician of himself preparing all other medicines that he used.

The introduction of chemical substances and medicines into commercial use was soon taken adrantage of by laymen and others for criminal purposes. Thus we have the "era of the poisoners," one of the darkest pages of the middle ages.

[^55]We are reminded here of the woman Tofana in Italy who, at the time she was executed, confessed having murdered several hundred persons by poisoning them with arsenic. This name is also a ghastly reminder of the New England woman, Toppan, who only a few years ago confessed having murdered some thirty persons by administering poison to them. Poisoning became so common a practice that it became a profession, and was the common practiee invoked to get rid of undesirable citizens, whether through late, jealousy or greed. Beginning with the sixteently century the authorities in all countries of Europe employed rigid means to stop this practice. Pharmacies under the strict supervision of the authorities were established, and cortain exclusive privileges to the pharmacist attending controlled competition through restriction of trade. As a result there developed a class of highly educated and trained apothecaries who, assured of a life tenure, were largely independent of commercial considerations. These things are possible, however, only in countries where the code is supreme as distinguished from those gorerned by the common law. In the latter such regulations and restrictions must await the slow progress of enlightened public sentiment and the treacherous processes of political compromises before they can be enacted into legislation. While commercialism is allowed to play such an important part in the handling of medicinal agents, the relation of the pharmacist to the physician is difficult to define.

The medical profession has its code gorerning relations between its members and the public, but there is no written code concerning the relations of the pharmacist. However, the latter's relation to the physician may specifically be stated as follows: (1) The attitude of the prescription. (2) The recommendation of medicines. (3) Adherence to the standards of the U. S. P. and N. F. (4) Professional courtesy.

Since many physicians have quit writing prescriptions, because they do not feel warranted in writing one prescription which may come into use for a whole neighborhood, or from the dangerous effects of potent or habit-forming drugs, following unwarranted repetition of compounding such medicines as were designed only for a partieular person for a particular period, I would call attention to the recent conelusions of a joint committee of the Chicago Medical Society and the Chicago branch of the American Pharmaceutical Association, expressed in their declaration as follows:

First.-The prescription is an utterance of the prescriber who alone should direct and control its emplorment. It should, whenever practicable, carry the name of the patient, the age in years if a minor, and the date when written.
Second. - The pharmacist who prepares the medicine should retain the prescription as refercnce for his services and as record for a certain limited period-not less than five years-for the protection of the prescriber, himself and the patient.

Third. - The medicine prescribed should be supplied not more than once on the same prescription: (1) If ordered by the prescriber, "Not to be repeated"; (2) if containing narcotic or habit-forming drugs; (3) if called for by some person known not to be the original holiter.

Fourth.-Copy of the prescription mar be furmished and sloould be written on an especial blank. containing a declaration that it is a copy of a prescription which has been delivered to the original holder and is not to be refilled except on order of the prescriber. The copy is made without rccourse to possible error.

To my mind these requirements are exceedingly reasonable.

Theoretically, it might be said that the pharmacist should not recommend any medicine, but suggest that his patrons seek the advice of a phrsician. But this is impracticable because the arerage layman thinks he knows as much about medicines as does the doctor. Incidentally. it might be added that this attitude of the layman is in no wise improved by the observation he often has the opportunity of making, in the fact of physicians recommending proprietary pharmaceuticals to him which, through the trade name and literature accompanying, offers opportunity of too much familiarity. Besides, in this great country every man, woman and child enjoys the privilege of recommending medicine for every ailment, and while the laws require a high degree of qualification and license for the practice of medicine, any old woman can set up as a healer, and any adrenturer with a few dollars can organize a chemical company and dope the community by the wholesale under the apparent sanction of the govermment; that is, by the natural although wrong interpretation of the guarantee label of the food and drugs act.

It is, therefore, exceedingly difficult to draw a line where the pharmacist's privilege begins or ends, except for at least one well-defined prineiple, namely, he has no right to diagnose.

I should say that he has the right to supply the articles of the poison and narcotic drug schedule only under such restrictions as required by law. He should never recommend any patent medi-
cines, display them or allow his name to be used in connection with them. As to what extent he shall entirely refuse to handle them will be a matter of individual taste or judgment.

As to patent medicines generally, and I refer to those articles exploited on the public through the press, in my judgment the marketing of them as practiced is fraught with so much danger as to overshadow all the good to which they may lay clain. So far as the layman's personal interests are coneerned, there is about as much judgment used in this self-medication, especially for obscure ailments, as there would be in his trying to pilot a modern locomotive over a piece of busy railroad track with which he was unacquainted. The pharmacist, from the nature of his position toward the public, ought to be honest enough to protect his patron, even against his credulous insistence, and to point out that when medication is needed for obscure troubles the only proper thing to do is to consult the physician.

That uniformity may be secured in strength and dosage of medicines, every civilized country has established a standard through its pharmacopeia, a work compiled by joint medical and pharmacal authorities. The United States Pharmacopeia, as presented to us in the last or eighth decennial revision, fixes the standards for the identity, purity, strength and quality and gives directions for the preparation, valuation, preserration and compounding of medicinal substances. For the first eighty-eight years of its existence the U. S. Pharmacopeia was not legally recognized by the government, and then not until the enactment of the Food and Drugs Act in 1906. The National Formulary is a work issued by the American Pharmaceutical Association, compiled by a committee on revision of this association. It is a compilation of some 500 formulas and is now in its twentieth year. The National Formulary is now likervise recognized in the Food and Drugs Act on the same basis as the Pharmacopeia. It is the consensus of opinion that the present U. S. Pharmacopeia is the most complete of the world's pharmacopeias, no less an authority than Dr. L. F. Barker of Johns Hopkins having recently expressed his judgment to that effect.

The medical profession and the pharmacists of our country have drifted away from these standards of authority in recent years. To my mind one reason for this is that it is easiest to follow the line of least resistance. The latter has been supplied through the medium of the large manufacturer, and myriads of lesser ones, in their specialtics, so-called specifics and ready-
made prescriptions, chiefly because to them it is a profit-earning method. Besides this great flood of specialties, etc., sampled by the physician and rended chiefly through the pharmacist, we also have to contend with the small manufacturer who sells the physician direct, often quoting prices below actual market value and throwing in a few shares of stock beside. This kind of thing, generally speaking, has gone on to the point where it would seem both physician and pharmacist have lost sight of their true interests, individual and mutual.
The young physician starting in practice, often but meagerly equipped so far as pharmacology and therapeutics are concerned owing to the shortcomings of his alma mater in this respect, and feeling the need of something, somewhere, to lean upon, naturally listens to the siren roice of the neatly-dressed and artistic detail man and promises to preseribc. The pharmacist in turn meets this same genial gentleman, who bombards him with a long list of names of physicians who are going to prescribe his specialty and. as a consequence, stoeks up the pharmacist.

At this point, it may be properly asked, what are the real objections to proprietaries, secret formule, after all? There is really no objection io them if a better knowledge of medicines than we have of them is not required, or if something leetter is not desired. Indirectly, however, the use of them as a practice is very objectionable. possibly most so because they are in direct opposition to the liberal principles upon which true medicine and true pharmacy are based; their use encourages or falsely rewards pretense and undermines those fundamental processes which encourage true pharmacologic and therapeutic attainment; and it certainly can not be said that the use of such things is in any way consistent with the extremely precise methods employed in all other departments of medical and surgical practice.

In my judgment, it has come about largely because it is easiest. I do not wish to be understood as undertaking to dictate to, or to criticise the medical profession for having, by their method of prescribing proprietary remedies, assisted in the vending and the use of such agents. liather, I wish to acknowledge the fault of the pharmacist and to shoulder a full measure of blame; for is not the pharmacist in his true sphere, the helper, the assistant of the phrsician and the outer-guard, as it were, toward things pharmaceutic?

That we have drifted far, very far, from the proper channel is eridenced by a glance through
the revised or fourth edition of the "Propaganda for Reform in Proprietary Medicines," being a reprint from the Journal of the American Medical Association. In this we find article after article, with which, after years of handling and of use, we felt perfectly familiar, fallen by the wayside as a result of the scrutiny of careful examination. Page after page of evidence that the true reason for all this heraldry by tongue and pen of the wonderful discoveries of new mixtures and combinations, has not been any desire on the part of the makers to aid and assist in establishing true therapeutic standards, but to the contrary, has been purely a selfish and commercial cne. To encroaeh upon the threshold of siekness and disease with falsehood and deceit, under the guise of being a helpmate to the physician, is an extremity in commercial practice which is certainly profound in its dishonor.

If time permitted I should like to call attention in detail to the work being done by joint committees of medical societies and local branches of the Ameriean Pharmaceutieal Association, but you doubtless are all more or less familiar with this subject, which has for some time past been presented through the columns of the Journal of the American Medical Association and elscwhere.

A few days ago I received, upon request, from the seeretary of the Kentucky State Board of Health a copy of the reply postal eard which has been sent all members of the Kentueky State Medieal Assoeiation for their signature and return, bearing the following obligation:
"I hereby agree with the other physicians of Kentucky that I will, as far as possible, use only those medicinal preparations which are described in the United States Pharmacopeia and the National Formulary, and of other medical preparations will only use those which lave been approved by the Council on Pharmacy and Chemistry of the Amcriean Medical Association, and that I will not subscribe for nor receire from the postoffiee any medical journal which advertises nostrums or proprietaries which have not received such approval. I sign this with the understanding that I intend doing my part toward freeing the profession and its publieations from the use of nostrums and useless proprietary medicines."

My understanding is that with true Kentucky enthusiasm, the members have responded one and all.

Throughout the land the propaganda of the new reform is activc. I am told by Dr. Barnard, State Drug and Food Inspector of Indiana, that the conditions throughout the state have rastly improved as to quality, strength and standards of medicinal articles carried in drug shops. Upon
inquiry of commercial representatives of the pharmaceutical manufacturers I am told that the pharmacists of the state, having awakened to the sophistry and frand which heretofore has been practiced upon them by the rendors of cheap goods, have turned almost entirely to the leading manufacturers who are reliable. It seems to me that the physician should understand the import of these facts as a safeguard to himself and against the vendors of unreliable goorls sold to him direct.
In conclusion. I believe the plan which in substance contemplates a better understanding between the physician and pharmacist, and a closer leaning towa-d those medicinal preparations which are legitimate, is the correct one. Persenally, I beliere we sloould weleome any and all opportunity of a proper kind for a better understanding between the professions of medicine and pharmacy. Te may not hope to aceomplish so much as has been done in Europe by the hard hand of the law, but it is by the kindlier offices of affiliation and fraternity; of encouragement and helpfulness from the stronger to the weaker, that we must look for betterment and for truth.

## A PLEA FOR STATE CONTROL AND TREATMENT OF DIPSOMANIA, IS EBRIETY AND DRUG ADDICTION.* <br> A. L. Wilson, M.D. <br> indianapolis.

Since Cain, in the very dawn of creation, after having slain his brother Abel, asked "Am I my brother's keeper?" men in all ages have been answering that question in the affirmative. If not in word, in act and deed. It the present time we need only to look at the vast amount of money expended annually besides the self-sacrifice and human sufficring entailed in missionary work--medical and othcrwise-besides the fraternal organizations and national, state, county and municipal eharities all over the civilized world which testify to the universal "brotherhood" of man."

That "all men are created equal" can not be accepted as true, at least in so far as relates to their physieal and mental capacities. But all men, women and children are or should bc "endowed with certain inalienable rights," among which is freedom from the curse of alcoholic

[^56]excesses, either in their orrn lives or that of members of their immediate families.

It is a blight upon our boasted civilization that such conditions should exist as shown in a recent publication meant to be funny, where a missionary in making her rounds soliciting contributions was met at the door by an overworked, forlornlooking woman just from her washtub, who, in answer to the question "IIave you anything for the Drunkard's Home?" answered "Yes. come around next Saturday night and get my husband." How many hundreds of wives there are in Indiana who have sufficient cause to feel as this moman did. And, unfortunately, there are a good many husbands as well as fathers and mothers, besides helpless children, who feel the same way. I have no desire in this paper to outline any particular medical treatment for alcoholism or drug addiction; in fact, I feel my utter inability to do so, howerer much I might wish to suggest a treatment that would hold out a ray of hope to these poor unfortunates.

I presume we all are ready to admit that much of the drunkenness and drug addiction is due to heredity and environment. This is no doubt true; but we should he careful lest our sympathy cause such persons to become imbued with the idea that they, by reason of heredity and environment, are a class to themselres and not responsible for their lack of self-control. Of course, we are not responsible for our hereditary characteristics; but certainly we can, to some extent at least, control our appetites and passions and no man has a right to say because his father was a drunkard it is necessary that he should follow in his footsteps.

As "the child is father to the man" so it seems to the writer that if we wish to influence heredity it can best be donc upon the generations yet unborn by proper education and control of those now living. As to environment, that can be changed; and while it may be a difficult thing to do, I believe no man should lide behind his enviromment and give that as an excuse for his dissipated habits. The causes of drunkenness and drug dissipation may be many and raried. Among them, as has been stated, heredity and environment are probably of first importance; physical and mental suffering also play a part in these cases. Business failures, domestie unhappiness, and, unfortunately, in some cases we must admit the cause is due to careless prescribing by the physician.

It is not necessary to beliere because drunkenness is influenced by heredity that a child is born with an appetite for strong drink any more than to believe the child born of tubercular parents
larbors tubercle bacilli in his system as a legacy from the father or mother. But that there is a transmitted tendency toward tuberculosis and other so-called hereditary diseases there can be no doubt. So also it would seem that the children born of parents who have become excessive users of alcohol or narcotic drugs would be more likely to be deficient in mental poise and nervous equilibrium and more readily become the slaves: of appetite and passion than the children of better balanced parents. For thesc reasons the children of these unfortunates should be taught from their earliest infancy the danger besetting them and cvery effort made to guard them from this foe. Some of these rictims seem to be in this condition purely from choice, as they continually place themselves in the way of temptation and make no effiort to abstain.

Then some appear to be criminally inclined. committing theft and deeds of violence when intoxicated which they would not do when sober. And, judging from the circumstances surrounding some of these criminal cases. the delinquent purposely nerves himself to commit such crimes by orer indulgence in alcoholics or possibly narcotics.

Another class of these unfortunates seems to be on the border line of insanity. Indeed it is difficult to comprehend how human beings, made of God's own image, can so far forget their duty to themselves and their families and fellormen as to degrade themselves even beneath the level of the lowest animal. But whatever the cause may be the fact remains that we have them with us, and the question is what to do with them. Helieving as I do that it is incumbent upon the state to make some provision for the control and treatment of dipsomaniacs, inebriates and those addicted to the excessive use of narcotic drugs is the only excuse I have for bringing before you a paper which can in no wise be considered scientific; but rather humanitarian. I am aware that this subject has received a great deal of attention in the past and that there are many perplexing problems to be worked out before anything. like satisfactory results can be hoped for in the management of this most difficult class of cases. But as guardians of the health and happiness of the people I know of no profession or class of men more competent to deal with this question or upon whom, by reason of their calling and intimate relationship with moral as well as physical delinquents, the burden of agitating a movement of this kind justly belongs, than to us.

Every physician who has had any experience in treating these cases knows that in most instances his best efforts are rendered useless be-
cause he can not control his patient. A few of them will recover under proper medical and lyggienic treatment while retaining their freedom; and a few others will get away from the habit after a period of forced confinement in a penal institution, without any special medication. It would appear then that with absolute control, which can be secured only by legislative enactment, together with good hygienic surroundings, a pleasant environment, being well-fed, clothed and housed, supplemented with proper medical treatment for a sufficient length of time, ought to result in a permanent curc of some of these patients and a larger percentage of others would remain free from the habit for longer or shorter intervals. Of course, some of them would not be greatly benefited, if at all; and some would probably prove to be criminals from choice, and some might become insane.

In the opinion of the writer, state guardianship of these people is much more feasible than municipal or county. An institution such as conteinplated in this paper should be founded upon broad general principles; and to reach all who should come under its influence it should have the moral and financial support of the state. It should be a hospital primarily for the treatment of such cases as should properly come under its beneficent carc. The management should be free from political and mercenary motives. The superintendent should be a competent medical man with full control, not only of the innates, but he should have the right to select his assistants, including physicians and nurses. And he in turn should be responsible to the board of trustees. Its doors should be open to all who nced such treatment and have been residents of the state long enough to be entitled thereto. Admittance should be both voluntary and by legal commitment. But persons placing themselves roluntarily under such treatment should be subject to the same rules and regulations as those committed by legal process. Every effort should lee made, for a sufficient length of time, by kind treatinent, pleasant surroundings, work for those alle to labor as a means of recreation and to keep the mind employed; good nourishing diet and proper medical treatment to restore these victims to their normal condition. Howerer, it should not be made a permanent home for any one; but rather a sifting out place, where, in the discretion of the superintendent, after sufficient time has elapsed, they may be discharged on parole subject to return for violation of the same; or if the superintendent is convinced that a cure is impossible such patients should be placed in a separatc institution sufficiently removed from the
former that no contaminating influence may be had upon those for whom there is still hope of a cure. This annex or auxiliary institution should exercise custodial care rather than hospital treatment; and should be made a permanent home for incurable cases, as the state can exercise better control over them than can be had otherwise and society thus saved from the baneful influence of such persons in the community at large.

It seems to me that the presence of persons who constantly permit themselves to be under the influence of alcoholic drinks or narcotic drugs to such an extent as to render them unfit to attend in business and to become a nuisance to their families and the community in which they live, can not be otherwise than harmful to those about them, especially the roung. The presence of such a person in the home tends to destroy the domestic and social happiness of the family, and the financial strain upon those compelled to contribute toward their support is almost unbearable.

How many innocent young lives have been blighted and ruined by the curse of strong drink? Many a young man has had his college course cut short and many a young woman her social standing in the community ruined by the father's delinquency. But you may ask, what lias all this to do with inebriate asylums? The answer is, give the father a chance to recover from his exccses and to again assume the responsili,ilities of life. But if he proves to be incorrigible and will not do the right, then free the family from his presence and the responsilility of his support. There is a law now in this state constituting child desertion a felony. This is right; but if child desertion, in the sense of a parent scparating himself from his child and lcaving it without support. is a felony with a pencilty attached, what shall be said of the man who not only fails to provide for his wife and children but adds the burden of his own support, besides cther abuses he too often heaps upon them?

I have tried to point out some of the moral and humanitarian reasons why the state should assume control and care of these people; now let us for a moment consider it from an economic standpoint. First, statistics show that the saloon license fecs (county, city and town) in Indiana almost equal the entire maintenance cost of all the state charitable and correctional institutions. Second. the strength of a state or nation depends apon the mental and physical rigor of its individual citizens. Third, I believe statistics will bear out the assertion that a large percentage of the inmates of each of the thirteen charitable and correctional institutions of the state of

Indiana are where they are as the result, either directly or indirectly, of the intemperate use of alcohol and narcotic drugs. Fourth, if these statements are true it would scem that the state, for financial reasous alone, ought to take steps looking toward the restoration of as many of these unfortunates as possible; and those who will not cease their evil habits should have state supervision as to marriage in order that the propagation of such undesirable offspring may be reduced to the minimum. This may appear too drastic upon first thought; but it would only be in keeping with the restrictions now in force regarding the marriage of consumptives, epileptics, etc.

Referring again to county care of these casce, I wish to quote from the report of the Indiana Eoard of State Charities for the year 1907: "Our jail system is a standing disgrace, though it is some comfort to know that Indiana is no worse in this respect than any other state." Then they quote from the report of the committee appointed by the National Prison Association at Albany, N. Y., last ycar to make an investigation of the jail system of the United States as follows: "The county system of prisens, judged by over a century of experiment, is bankrupt. All who have studied the subject in full light of experience advocate removing all convicted persons to district workhouses and colonies under the control of state officials." Home and private sanitarium treatment results in the cure of some cases; but they fail in most instances because of a lack of control of the patient.

Whatever success the so-called Feeley and other like "cures" have enjoyed has been due perhaps more to the long time thesc patients are required to remain at the institution than to any specific virtue in the remedics used. Private sanitarium treatment is expensive also, and many who would can not aflord to go to these places. And, on the other liand, some who could do so will not avail themselycs of such assistance.

I find upon investigation that Massachusetts and Iowa are the only states maintaining separate hospitals at public expense for the treatment of inebriety, dipsomania and drug addiction.

Quoting from the statistics compiled by $R$. M. Mathews, July, 190\%, we find that Mainc provides for treatment of sufferers from labitual use of narcotics; and Connecticut, Delaware, Michigan, Mississippi and New Jersey provide fol appointment of a guardian over and com-unitment-without patient's consent-to some institution for the cure of habitual drunkenness,
lut makes no provision for public defrayment of lis expenses if lie be indigent.

In Pennsylyania a guardian must give security for payment of expenses, and in Rhode Island security by some one must be given for expenses. In Virginia two friends of the family must give security for expenses. In New Mexico and Texas provision is made for appointment of a guardian over an habitual drunkard, and his support at the county's expense if indigent, but no permission is given to have him treated for inebriety at public cost. An habitual drunkard, if indigent, is to be committed to the state insane lospital at county cost in Michigan, Nebraska and Wyoming. In these states the courts are to proceed in the same manner as if the person were insanc.

In the following states an liabitual drunkard, if indigent, may, with his consent, be commitled to some curative institution for treatment at public expense as indicated:

Colorado.-County expense, not more than $\$ 25$ per week for treatment and $\$ \%$ per week for board. Institutions must show at least 75 per cent. of cures for past year.

Louisiana.-Parish expense, institution must agree to $\$ 100$ for one year.

Maryland.-At cost of county or city of Baltimore. Not imperative to treat an inebriate a second time at public cost.

North Dakota and Oklahoma.-At county expense if not over $\$ 100$ per year.

Vermont.-Consent of drunkard not necessary. At expense of the state.

Wisconsin.-Consent of drunkard not necessary. At county expense if treatment be taken in a state institution.

In all the above states if an inebriate be financially able, or his friends willing to bear the cost, he can be committed without his consent to any institution for his care through guardianship. Commitment means power to enforce confinement in institution for the period allowed. In Minnesota laws providing for treatment of indigent incbriates at public expense were twice enacted, but were both declared unconstitutional on account of details. And the supreme court in rendering an opinion in this case makes the following statement in part: "Nor are we to be understood as holding that a general act uniform in its holding throughout the state, providing for the treatment of inebriates at the public expense, would not be a valid law for reclaiming the inebriatc, who is incapable of self-respect or selfsupport, and restoring him to society prepared
again to diseharge the duties of citizenship, direetly promotes the public welfare."

The argument may be adraneed by some one that if the present ware of "anti-saloon" sentiment continues to advance there will soon be no use for an inebriate asylum. But as there has been drunkenness sinec the days of Noah it is hardly to be hoped that all men will beeome total abstainers so long as human nature remains as it is now.

And eren if the time should eome that for any reason such an institution was no longer needed for its original purpose, it eould be turned into a hospital for insane, as we understand that all the state hospitals for the insane are overcromded and that eren the completion of the one at Madison will hardly proride for all the insane wards of the state.

A bill has been prepared by Senator A. J. Rowser, of Chesterton, to be introduced into the next session of the Indiana State Legislature, proriding for the establishment of a state inebriate hospital. I presume most of you have read this bill, as it has appeared in the publie press. This is a more in the right direction and one I believe which most medieal men will endorse. There are many good provisions in this bill, but I wish to quote especially from Seetion 1\%, whieh reads as follows:

In any case wherein a person is convicted of a misdemeanor 'in a court of original jurisdietion in this state, if the evidenee presented proves to the satisfaction of the judge that the person so eonricted is a fit subject for the treatment of the State Hospital for Inebriates, and if the judge believes that the ends of justice and the best interests of the person eonvicted and of the state would be better served by a commitment to said hospital than by the imposition of the penalty as required by law for the misdemeanor of whieh the said person has been convicted, the said iudge may make affidavit setting out sueh faets and belief and in the name of the state make application for the commitment of sueh person to said state hospital and shall suspend sentence pending the hearing thereon. which hearing shall be bcfore annther judge than the one making such application, and in no sueh case shall sueh hearing be dispensed with or waived. If thereupon a commitment of sueh person to the said hospital be ordered the penal sentenec aforesaid shall be suspended subjert to the discretion of the court before whieh sueh convietion was had.

In a letter from Dr. Charles E. Woodbury: superintendent of the Massachusetts Tnebriate Ifospital, he says: "No other one thing aided so much in the establishment of the institution at Foxborough as the faet that inebriates had to be treated in hospitals for the insane." Dr. WV. S.

Osborn, superintendent of the Iowa State Hospital for Inebriates, in a letter says: "While we have been in operation less than two years, we have met with a fair degree of success. The matter of state care and treatment of this elass of patients is largely in an experimental stage. There are a great many things that will have to be brought about in the eourse of time when wc lave found just what are the needs and requirenents of sueh an institution. Patients are eommitted to this hospital in a similar manner as to insane hospitals. The usual duration of treatment is in the neighborhood of four months, depending upon the individual case. Some patients we have had with us since the institution opened, and others have been paroled after a residence of two montlis. The inmates are under restraint for an indefinite period after admission. We have both the voluntary and involuntary eommitted cases. Patients arc paroled under piedge to make written report at the beginning of eael month. If they fail to report they are taken and returned to the hospital, or if the paticnt relapses into his former intemperate habits lie may be returned for further treatment and given parole when sufficiently recovered that he may get along.
"Since the institution opencd therc have been so0 patients. The daily average, about 150. The majority of patients are aleoholies, perhaps \&.) to 90 per eent. The remaining 10 or 15 per cent. are eomposed largely of morphin habitués: howerer, we have a great many coeain users under treatment, and I regret to say that the number of this latter class is increasing, and we find them to be diffieult individuals to manage and treat." Then he adds, a statement whieh I e-pecially wish to endorse: "I think that the time is eoming when most of the Commonwealths will. provide similar institutions for the eare of this unfortunate class."

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## discussion.

Dr. A. E. Sterne, Indianapolis.-I have so frequently voiced my feeling and sentiments upon this question in the Statc Medieal Association that it is difficult for me to keep from repeating something of that which I hare said on various occasions. I took the opportunity yesterday of registering myself in the line of the paper, more ably expressed by Dr. Wilson, of terminating this curse and of inculcating the teachings so needful and adroeating the consideration of heredity, whieh is the eause of insanity, drug addictions and alcoholism itself. We must clearly apprehend as physicians what a significanee heredity
has. We should and must know this, but we must refrain from teaching that a man the son of a drunkard must be or has a right to be a drunkard and that the son of a man insane must necessarily lecome insane. Many a man has become insane through fear, and we must keep that clearly in mind. Now we liare tried on various occasions -that is, your Committce on Inebriety has tried -to get the attention of the legislature, but we have invariably met witl opposition, and in one case with opposition from the drug trade. One objection was that it was putting too much burden on the druggist-not the right kind of a druggist. The bill failed to pass because of the opposition. We have learncd something since then and will probably not make the error we did before. But I have grown somewhat sceptical. I used to be very optimistic about our power to stamp out this evil. As I grow older and see more I feel more shaky and dubious about it. The trouble is this, we look upon these individuals as sick people and imagine that is true. But it is a great and unfortunate outcome that society as a whole stamps to a certain extent its disapproral upon this kind of fight. That is a lamentable fact. But alcoholism is a social evil primarily. DIost men take to drink in the beginning on account of the social atmosphere. It is a general thing. I belicre years and years ago, possibly early in the last century, heary drinking was commoner than now and gencral drinking less; now the general drinking is common and the heavy drinking growing less. When I was a young man-say twenty years ago, possibly a little longer-it was an uncommon thing to see a young lady or young matron in public using alcohol in any form, but I am sorry to say it is very common now. and it is looked upon with a certain degree of approval. Cocain and morphin are hidden. But it is unfortunate that the alcohol question is one which has this social prominence. I don't know how we are going to stamp that evil out. In our state incetings, general meetings, among our own profession, we sit down and do exactly what we condemn in others.

In regard to the drug addictions, I do not believe that a physician ever has a right or ever has occasion as a physician to give a prescription calling for morphin, cocain or anything of that kind-there is never a single condition in which he should give that drug out of his hand. The patient need not know what it is, this that or the other, so as to easily get it replaced. This is unlike the alcohol question, where the social element is a prominent one. In these drug addictions the first start came from some member of the profession. The cocain addiction is extremely
casy from the common use of cocain sprays in the nose and throat. Sprays are so easy to get and aflord so much relief. I want to say that I most leartily endorse the movement for a state institution for this class of cases, which will increase, and in a generation or two double our present number of state institutions, because there is no doubt but that alcoholism increases the number of inmates in our prisons, insanc asylums and other state and charitable institutions. We will lessen the number there by striking at the root of the cril at any rate.

Dr. J. Mr. Anders, Philadelphia.-I might say that this is an important subject and that we in Philadclphia have a bill to be presented at the next legislature with a view to establishing an institution for this class of cases. There is an earnest detcrmination to do so, at least. I have promised to do what I can to help to secure its passage. Unfortunately in our state those addicted to drugs have no place to go except to the asylum for the insane and the poor house.

Dr. J. N. Hurty, Indianapolis.-In discussing heredity there is one point I think should be brought out, and yet I have not heard it brought out. It was not brought out yesterday, and that is the point that has been called attention to by Iugust Wrisman; that acquired characteristics are not transmitted. I am aware that this is disputed, but it must be pretty generally true. The addiction of alcoholism which comes tirrough social conditions is drelt upon, and it is claimed will not in any way affect the germ plasm. It is a habit pure and simple that has leen acquired by evil surroundings and I consider these conditions which would produce that habit as always evil whether in the parlor of the rich and great or in the clubs of the land. I entered a certain club house not long ago and passing through the dining room there sat the cockitails already prepared for each diner. There were three different glasses prepared for three different wines and it was a surprise to find that the giver of that dinner was a practical business man, a man managing great interests. Now, could he do anything more impractical than that? And subsequently I saw his own daughter, less than 20 years old, partaking of those alcoholics. How may we reach that class? It is a big problem. The person who takes alcohol is more susceptible to discase, mental degcneration, everything that is bad for man.

Dr. G. W. McCaskey, Fort Wayne.-The chair would like to be permitted a word to express the disapproval of the theory of the non-transmission of acquired characteristics. He belicves it is
unscientific and dangerous, as individuals who have acquired these diseases are disabled and can not discharge their full duty, therefore the posterity must be affected.

## ATYPICAL PNEUMONIA.*

Charles R. Sowder, M.D.<br>Professor of Clinical Medicine in Indiana Caniversity School of Medicine.<br>INDLANAPOLIS.

Recent investigations of pulmonic inflammations by Aufrecht, Kuhn, Freidreich, Leichtenstern and others emphasize the neecssity for a :arore definite classification of these acute inflammations.

The older writers recognized as sueh acute croupous pneumonia and grouped all other pneumonic inflammations differing from it in mode of onset, sputum and clinical course under the indefinite term of "typhoid pncumonia." Such atypical pneumonias may be produced by various bacteria, and the present tendency is to classify these various elinical forms according to their ctiological factor. Differing from the ordinary ↔roupous pncumonia is a type occurring during the prevalence of sharp, cold north and northwest winds in which the inflamnation begins in a circumscribed area and gradually advances from day to day. The fever lasts ten to fourteen days, with undiminished severity. The fever more frecurently terminates by lysis. Delirium and coma are more apt to develop. The spleen is enlarged often two or threc finger breadths below the costal margin. Jaundice is very apt to occur and diarrlea is common. The case may assume a malignant, pernicious character rescmbling a typhoid infection. Leichtenstern, under the name of asthenic pneumonia, calls attention to a class characterized pathologically by the fact that infiltration takes place slowly, the hepatization being flaceid, more aptly termed splenization liy rapid change to gray and marked tendency te purnlent infiltration, abscess and gangrene.

Clinically the discase differs from the so-called croupous pncumonia in that it develops insidjously, temperature curve is atypical, there is great prostration with scvere cerebral disturbances. The sputum if present is not characterisic, and the initial chill and pain are absent. This type is prone to occur in individuals suffering from some chronic disease as diabetes meliitus, chronic interstitial nephritis, cirrhosis of

[^57]the liver, chronic alcoholism, extreme age, etc. lecause they occur in the course of these affections and depend upon their presence as the predisposing factor they have been termed secondary asthenic pneumonia.
Primary asthenic pneumonia differing from the above form may occur in the young as well as old aud in strong individuals. It is due to infection with a specific poison and frequently occurs in a lobnlar form. Constant enlargement of the spleen, frequent cnlargement of the liver with jaundice and the presence of albumin are sufficient to characterize the disease. This type more frequently occurs in prisons or similar institutions, although Mucller and Batry describe similar epidenics in villages.

Numerons other obscrvers have reported cases that tend to show it as quite distinct clinically and etiologically from the acute croupous type. A comparison of the pathology of acute croupous pneumonia with the atypical forms may be of value.

Most writcrs recognize four stages in acute lobar pneumonia: first, stage of engorgement; second, stage of red hepatization ; third, stage of sray hepatization; fourth, stage of purulent infiltration or resolution. If consolidation occurs the resicles and finer bronchi are filled with exudate consisting of fibrin, cellular elements and blood.

Atypical pucumonias in contrast are also lobar, the lung is heavy. airless and on section of a dark red appearance. The structure is soft, similar to the discased lung of croupous pneumonia in the stage of engorgement. The vesicles are filled with blood, the lining of the brouchi are open and fibrin is absent during the entire course of the disease. The appearance noted above has led to the term splenization being used to describe it rather than hepatization applied to the liver-like consistence in acute lobar pnenmonia. These characteristic differences permit of a different group of lobar infection in which the individnal cases will in the future be differentiated by the hacteriologic cause.

It is now recognized that so-called acute croupcus or lobar pneumionia is always due to the presence of the diplococcus of Fraenkel, diplococens pncumonia.
In atypical pneumonia the bacteriological study has not been sufficient for them to be elassified according to their ctiological factor, yet it is expected that a definite bacteriological cause will be found for each type. The diplococcus, bacillus pncumonia. staphylococcus, streptocoecus, bacterium coli and in the type transmitted from parrots to man a bacterium not identified have been
found in these conditions. Further investigation may enable us to state with a reasonable certainty the etiological factor and to properly classify the disease.

Aufrecht gives the following classification withont regard to the etiologieal factor: 1. Asthenic and bilions pnermonia. 2. Prison pneumonia. 3. Pneumonia occurring in epidemic form in special localities and directly transmissible. 4. Pneumonia communicable from birds to man. \%. Pneumonia communieable from other animals to man. (6. Pneumonia occurring in premia.

Other authors may make different classification, thus adding to the general confusion from lack of a definite nosology. For example, Babcock mentions under this classification migratory, relapsing, abortive, central, massive, latent typlioid, bilious, asthenic, terminal and hypostatic and senile pneumonia, taking as his basis the clinieal course. French, Osler, Anders and Strumpell merely mention the various forms, inders giving perhaps the most complete description of the clinical rarieties. Further baeteriologic study will ultimately bring out of confusion and place the nomenclature on a definite scientific basis and will make the clinical study much easier and more fruitful of results.

Every variety of atypical pneumonia presents peculiarities in the duration and severity of the disease. These will depend largely on age and susceptibility of the patient. The etiological factor will have marked influence on the course of the disease. As a result of the abore-named infinences marked differences in the symptomatology will occur and no classical description can be made.

The discase in most instances begins with a fecling of general malaise and gradual rise in temlerature so that it will not be well marked before the fourth day. In such cases the physical signs of pneumonia may not be demonstrable before the second to fourth day. The disease, however, may legin with a chill and sudden rise in temperature to 103 or 105 and may terminate by either lysis or crises, more often the former.

Physical examination will reveal on the second 10 fourth day over the area of the affected lung a diminished rcsonance, rarely well-marked dulness, an empty note with or without tympanitic admixture is frequent, later marked dulness may occur, the affected area becoming more extensive. The loud bronchial breathing of acute lobar pneumonia is replaced by a note of soft bronchial respiration and crepitation. Vocal fremitis is less marked.

The sputa are rarcly characteristic. Rusty -putum rarely occurs, although the prune juice sputa may occur rather early, the sticky fibrinous character of acute croupous pneumonia is absent. Sputa may be purulent from the beginning.

The spleen is ncarly always enlarged. Diarrhea with foul-smelling stools is frequent. The urine is albuminous and parenchymatons nephritis frequent. Roseola and petechiæ occasionally occur. The nerrous system is frequently involved. clouded sensorium, stupor and delirium occurring. Pleurisy is frequent; pericarditis rare. Nearly all writers regard the disease as severe and the mortality great. Marked albuminuria with early and severe involvement of the nervons system renders the prognosis exceedingly unfavorable. Early microscopic examination of the sputum is cssential, the absence of the diplococcus pneumonia and prevalence of other baeteria aiding in the diagnosis.

In institutions where the disease occurs the cases should be isolated. The medical treatment of the disease does not differ materially from that of acute lobar pneumonia.

The insidious onset, the atypical temperature, the absence of characteristic sputa, the lateness of physical signs, the bacteriological content, are aids in differential diagnosis. The rariations in clinical course, the graver prognosis, make the condition worthy of further study. At the present the streptococci have been the most frequent demonstrable etiologieal factor, Finkler finding it in trenty-seven out of forty-two cases, the staphylococci coming next in twelve cases. Recently I hare had occasion to observe two cases coming under the atypical class:

Case 1.-Mrs. B., age 26, wife, family and personal history negative. In the fourth week following labor complained of general malaise, headache, loss of appetite and slight cough, with temperature of 99.5 , pulse of 116. Physical signs on examining chest negative. On fourth day temperature had gradually increased to 102.4, pulse 120. Cough rather severe, no pain. Examination revealed diminished resonance over base of right lung, involving about one-third of lower lobe, soft bronchial breathing and sputum purulent and filled with streptococci, no other bacteria prescnt. Disease terminated by lysis, temperature becoming normal on tenth day. Repeated examination revealed streptococci.

Case 2.-Cliarles Mc.. age 43, butcher, admitted to State College Hospital Feb. 25, 1908. Family history negative, personal history diseases of childhood, including scarlet fever. Had drunk beer since age of 2 till ten years ago, since which time whiskey had been used to extent of twelre to fiftecn drinks daily.

Present illness, srmptoms of la grippe for three weeks, general aching and malaise. more or less fever, cough, with considerable yellow expectoration, sometimes tinged with blood. Became worse two days before entering the hospital, had a light chill, cough and expectoration increased. Severe diarrhea, foul-smelling stools. Patient walked to hospital and admitted at 8 p. m., February 25, with pulse 92, temperature 98.4, respiration 20. February 26, pulse 82, temperature 100 , respiration 20, and at $8 \mathrm{p} . \mathrm{m}$. pulse 80 , temperature 101, respiration, 24. Physical examination, inspection, patient well nourished, weight 1\%5, dusky appearance of face, conjunctival jaundice, tongue dry, tremulous, brown coat, lips dry. Chest, veins prominent, small telangiectasis over surface, eapillary reflex sluggish, respiration regular, retarded on left side.
Percussion, impaired resonance on left side beginning at elaviele and extending to fifth interspace in mammary line. Yocal fremitis increased over area of suggested dulness.

Auscultation, soft bronchial breathing over left side to fifth interspace, moist râles, increased resieular breathing over right side.

Heart, negative except slight increase in second pulmonie sound. Abdomen, distended and tender to touch. Spleen enlarged. The fever gradually increased until temperature reached 102.6. Pulse 100. Area of diseased lung became markedly dull by third day. Expectoration purulent and full of streptococci, oecasionally streaked with blood. Diarrhea profuse, sensorium clouded. Patient in stupor during most of illness, albumin. constantly present, marked leucocytosis.

Illness terminated by lysis, temperature reaehing normal on twelfth day. Patient left hospital on Mareh 30 , having been in five weeks.

The things noted in these two eases were: First, the insidious onset; seeond, physical signs not prominent before fourth day ; third, temperature irregular and terminating by lysis; fourth. presence of streptococei as only demonstrable etiological factor.

The further study of these cases, differing as they do from the acute croupous pneumonia socalled in so many ways, may lead us to a rational basis for their classification. I believe they should ise classified aecording to their etiological factor. A careful study of atypical forms will enable us to hare a better basis for prognosis as well as a more scientific basis for treatment.

## DISCUSSION.

Dr. J. M. Anders, Philadelphia.-This is a question of great interest to the general practitioner from the fact that the cases are more numerous than has been supposed. I agree with the essayist that the elassification of these eases
is entirely unsatisfactory at the present time. 'The symptomatology was fully presented by the doctor. With reference to the physical signs, they are precisely as Dr. Sowder has giren them. The diagnosis is, of course, very important, and in all cases I would earnestly urge that the sputum be examined mieroseopically and the organisms be identified. It is only in this way that we will be able to know the pathology.

Question.- Do you think the opsonic index would be of ralue?

Dr. Anders.-No sir.
Dr. Chas. R. Sowder, Indianapolis.-I simply presented this paper to call attention to the distinction that we ought to begin to make in these cases, and that we should particularly be careful in using the term "pneumonia." Recently a physician said that he had sixty-five eases of pneumonia in one winter, which would be most unusual. I think there mould be a question as to the diagnosis of the eondition rather than sueh a wide prevalence of the disease. We may be able to solve some of these problems later by the use of the serums, and we should as internists keep abreast of the fellows in the laboratory and aid them in getting a serum that will throw off these conditions, as well as aiding us in their classifiration.

## DERMOIDS.*

## H. G. Niermax, M.D. fort wayne, ind.

A discouraging feature in the study of these growths in the body of man is the want of definite knowledge on the subject. This is particular! noticeable in the etiology. The idea in medicine, wherein the question of tumors is most pressing, is to discorer a preventative or institute a reliable cure. It is not unlikely that control could be adranced over the present method of treatment if the nature of false growths were more fully understood.

A research in the properties of a protoplasmic cell shows a decided preference in its actions to conform to a set environment. That impulse best fitted in design to the welfare of its being is most readily accepted, while opposite situations are equally well rejected. It is analogous to the changes in other elements in Nature which obey an inexorable larr, i. e., the sea tides of the ocean and chemical reactions in minerals conform to grarity and attraction.

When mistakes of Nature are unfolded they rereal a rational order infringed; a guiding influ-

[^58]ence or force, which in the inanimate atom or molecule is termed affinity. An appropriate title for such an organic inception is not at hand. The "susceptibility" which impels the branch towards the light and the root towards the ground in plants and guides the spermata:oon toward the orum in animals, governs the entire arrangement of the cells throughout the body of man. Physical change in the life of a unicellular body is practically identical to anatomical changes in the human system; "irritability" in the cell corresponds to "sensibility" in the cultured human being, and follows the same fundamental principle inherent in all liring matter, taken as a whole.

This theory of Webber-Fechner brings the entire psychophysical relation of the body of man in consonance to the law. Where the adjustment is harmonious the body is considered to be ir health; a deriation from this balance manifests itself in symptoms the meaning of which we diagnose as disease. The words normal and death are descriptive terms for the extremes in perfection and disorder respectively.

The origin of dermoids traces back to fragments or cells of skin which became displaced in the embryo into tissues where they do not normally belong, and to defects in the fetus that encumber its proper erolrement. In spite of the failure of rarious attempts to demonstrate the parasite of malignant tumors, it may be hoped that, with improvement in scientific methods, such a parasite may be unequivocally demonstratcd. As striking examples: the miliary formation in tuberculosis, granuloma in leprosy, gummata in syphilis and the toxic elements found in carbuncular diseases, force a recognition of the marked influence of bacteria and their poisons on the tissues of the human body.
The name dermoid limits the contents of these tumors to the clements which properly belong to the skin and the mucous membrane. Their walls possess the characteristic structurcs of these tissues, and contain sebaceous material, hair, fatty detritus, cholestcrin, teetl, etc. As sequestered growths they occur near the tissues where union of skin surfaces took place in the embryo and in obsolcte organs which fail to disappear before birth.

Landmarks to loeate the positions referred to follow in the lines of coalescence of the primitive processes that form the face and neck. The contour of these parts give an imaginary drawing of surface delineation along the eyes, mouth and fronto-nasal divisions, a guide indicating the places where these tumors are most apt to arise. A line drawn from the occipital protuberance to the coccry through the perineum (serotum
and penis) onward through the midline to the neck, corresponds to the tumor line in the body proper. It was here that the skin surfaces met when the germinal layers tubed the trunk and enrobed the spine. Implantation is a means of migrating these tumors to the limbs, and for this reason they might be found on any other part of the body. Another type of these dermoids are those that grow in the scalp and at the base of the nose. During early embryonic life the hyaline cartilage of these parts is corered with skin; as bone derclops between the two a fragment of skin remains under this bone and gires rise to a tumor.

The prognosis depends on the location and extent of the growths. When occurring near the surface of the skin they can be removed without any danger of harm to the body. A growth of hair in the mediastinum, howerer, will invade the lungs, et cetera, and cause a suppuration in the bronchi. It demands an early diagnosis with enucleation to prerent fatal consequences. Der. moids of the scalp interfere with the brain by their downward growth and result in death to the patient when not remored.

Persisting branchial clefts, a remaining thyroglossal duct, or a retained post-anal gut, are sources from which tumors manifest themselves as tubulo-dermoids. The first of these mentioned (branchial) occurs beneath the deep cerrical fascia of the neck; the next (lingual) forms in the genio-liyo-glossi muscles of the tongue, and, lastly, the anal variety may pedunculate intra vectum, like polypi, or project out of or up into the hollow of the sacrum, between the bowel and the cocerx. Complex in structure they may contain tecth and grow to be large in size. ( $1 \pm \mathrm{lbs}$.).

The so-called orarian dermoids belong, in reality; to embryomata; pure dermoids are rarely found in the region of the ovary. They originate in the oöphoron, whether from ectopic blastomers or fertilized polar bodies, is not determined. They include all of the germinal layers as structure material; are smooth and spherical in shape and pearl gray to yellowish white in appearance. Rudimentary organs of smooth muscle, bone, central nerrous system, glands of skin, intestine and other abdominal organs make up their contents. Arult cells are characteristic. These tumors may occur in intrauterine life or old age, rarying in size from microscopic growths to fifty pound tumors.

Teratomata class as embryomata and are supposed to be claracteristic of malignant tumors of the orary in early life. Their contents correspond to the different layers of the germinal membranes but hare no fairly regular form or
arrangement, cxisting as a complicated mass. The cells also arc embryonic in type. Teratomata are known to occur in parts of the body outside of the abdominal cavity, and sometimes to be nodular in growth.

Moles become items of concern when large areas are involved, as half of the body and face, or where sccondary changes threaten to give them a malignant character. Hydatidiform moles are embryonic neoplasms that deserve attention on account of their intense malignancy.

It is not uncommon to find jellow to brownish patches of pigmented skin, rarying in sizc from dots to onc-fourth inch in diameter, on the body anywhere. The places scanty of hair are most affected, but the scalp and conjunctiva are not exempt. Microscopically, they consist of flattened or papillary columns of chromatophoric cells arranged perpendicular to the surface of the skin.
Melanoma is the malignant tumor which revelops from the cell changes that set up an alveolar sarcoma. When sharply defined from the stroma and its arrangement and form are like epithelial cells, it has the appearance of pigmented carcinoma; extravasated blood in the tumor gives it the resemblance of a hematoma. They class as pigmented spindle-celled sarcoma.

## DISCUSSION.

Dr. Moses Thorner, Indianapolis: The origin of these peculiar growths has been made clear in great measure since embryology has been developed. There is, however, considerable chaos in their classification and riddle as to why they should so often be the seat of malignancy. Thus these growths are for the most part classified as dermoids, whether their structure conforms to the skin and its elcments or a variety of tissue inclusions. . . . We can only look upon these formations as growths of sets of tissue, in which more or less skin, as well as more or less tissues from other embryonal layers take part, and lhave not been used in the general cconomy, i. e., supcrfluous tissues. It likewise is confusing to group as dermoids various cysts of the occlusion type, which are the result of simple failure of coalescence of diffcrent layers, as in the branchial clefts, or the remains of the Wolffian duct (the duct of Gairtner), etc.

It would seem that the real growths, due primarily to cell hyperplasia, and not the result of occlusion and distension, should be included under the onc tcrm "cmbryoma," and the name "tcratoma" (miraculous tumor), abolished as in-
accurate. Under this latter term are included growths which vary in structure from a complex grouping of irregular cell masses to parasitic fetal growths and (Siamese) twins. Of these teratomata the former type are undoubted displacements of embryonal tissue, and are rigltly classed with the so-called dermoids; while an explanation of the latter, well organized and correlated tissucs, would scarcely harmonize them with the above named growths, particularly if we would seck a different, and, it appears to ine, more plausible genetic explanation of their occurrence.
The close relationship that certain so-called dermoids and teratomata bear to malignancy has tempted me to discuss for the most part simply this phase of the subject, at the same time to offer a theory of my own with reference to the causation of malignancy, which is original if it is nothing else.
The Cohnhcim theory of the causation of malignant growths, namely, as being due to displaced embryonal tissues, has been the one theory that until very recent times has answered in considerable measure the solution of this complex problem. And cven now, with modification, it still holds the field as more nearly answering the varied conditions of malignant tumors. Still the fact of limitless power of multiplication, the lack of order and correlation ("altruism of tissues" as termed by Ewing) stand as a grave impedirent to accepting this theory as explaining more than a soil for these growths, than as a causc of the same.

Embryomata (i. c., dermoids and certain teratomata) are undoubtedly displaced embryonal tissues; but malignant growths are more than this. The energy of malignant tumors knows no bound and they never mature. Contrasting with this, the tissues concerned in true embryomata mature, and show a waning energy, as does ordinary normal, matured tissue.

Again malignant growths are proliferations chiefly of special cells (round cells, spindle, squanous, and gland epithclial cells, respectively) and remain confined to them, while metastases reproduce but the original type-the stroma following along in haphazard fashion. Embryomata, on the other hand, are simply the development to greater or less degree of groups of tissuc. Reasoning from analogy, malignant growths are very like the fecundated ovum. Thus in the lattcr there is evidence of mitosis most pronounced and energetic, beginning with conception, and lessening as life progresses. The same is
true in the former. though there seems to be no lessening of its cnergy to proliferate.
In the case of the fecundated orum, the energy is applied to the source of all succeeding cells: so that the cells of embryonal remains, receive but: part of this impetus, and normally, completely differentiated cells but an infinitesimal part of the whole vis a tergo, the one exception being the sexual cell.
In inalignancy the entire impetus to proliferate is concentrated in the single, differentiated cell, and explains its ability to far outgrow its environs, at the expense of the latter.

What can instill such an impetus into a differentiated cell? We know that in the ovum it must be the opposite sexual cell, the spermatozoon. The spermatozoon is attracted to the ovum (chemotaxis). We do not positively know that superfecundation does take place in the higher animals, and in these it has never been artificially produced, but it is known to occur in the lower trpe, and when it does monstrosities are the outcome.
Carry the derelopment of tissue down to complete cell differentiation, and, although we have no record of the spermatozoon fecundating such a cell, at least I have it from two of the best authorities in this country in this work, that it has never been attempted experimentally, and is worthy of trial.

The necessity of fertilization of cells in order to produce the regenerative power, as is exhibited in malignant growths, has led to different theories of this accomplishment. Thus Klebs (1887-89) supposed that tumor cells are fertilized through conjugation with leucocytes; Waldeyer (1887), by some parthenogenesis; v. Recklinghausen (1896), by conjugation of endothelium and fibroblasts; Auerbach (1891) and Bashford (1904) by nuclear conjugation of equivalent cells; and recently Farmer, by the conjugation of nuclei.

The fault in these theories lies in the explanation of the resultant reproductiveness of such union of cells being so greatly in excess of the inherent power before conjugation. This difficulty can be met in assuming one cell at least a sexual cell, the spermatozoon.

The above briefest outline of my theory is then, that:
(a) Superfecundation by the spermatozoon may take place at any time in embryonic, fetal and postfetal existence.
(b) When superfecundation occurs in the undifferentiated germ plasm, certain teratomata (fetal parasites, etc.) result.
(c) When occurring after complete cellular differentiation, then malignancy (cancer and sarcoma) results.
(d) Only cells that can primarily proliferats can be fecundated; thus we never have malignant tumors consisting of the purely parenchymatous cells of organs, as the liver, brain, etc.

From a study of the available malignancy theories the fecundation theory seems the one that answers all the conditions for these growths.

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## EDITORIALS

## THE EFFECT OF SUNLIGHT ON THE TUBERCLE BACILLUS.

To the modern clinician, the stand taken by Major Woodruft ${ }^{1}$ in regard to the danger of sunlight in tuberculosis is both irrational and illogical. The real question hinges upon the point of whether or not, other things being equal, sunlight is in itzelf inimical to the longerity of the tubercle bacillus, and such far fetchcd analogies as Woodruff would draw between his own and the commonly accepted doctrine, and that of Bodington and his confrères upon the occasion of the opening of the first fresh air sanitarium, are absurd. Plenty of experimental evidence is at hand and readily accessible for establishing beyond doubt or cạril the deleterious cffect of sunlight upon the growth of the tubercle bacillus, even though Dr. Knopf had not been kind enough to furnish the Major with evidence from clinicians whose opportunities and powers of observation are beyond reproach. The point has been demonstrated time and again, and we would refcr especially to the work done along this line by Koch, Ransome and Delephine, Gardiner, Migneco, Mitchell and Crouch, Strauss and Twitchell. The perfection of detail and the positiveless of the conclusions of Twitchell's recent work are sufficient excuse for reproducing an abstract herein :

One c.c. of rirulent sputum from two patients with active tuberculosis was deposited in sterilized, corked and paraffined white glasss bottles, three c.m. in diameter, with a depth of one c.m. One bottle was placed in a dark, moist box, and similar bottles in a dark closet, and in the diffuscd light of an ordinary room. In another series of experiments the bottles were exposed to light conditions but were stoppered with cotton. Still again the sputum was deposited in sand within the bottles, with the bottles corked and paraffined in some instances and unscaled in others. Sputum deposited in the white glass

1. New York Medical Journal, Sept. 12.
sterilized bottles with and without sand, sealed and unsealed, were placed in the thermostat. Open white glass bottles were deposited in the open air during the winter months. Corked and paraffined bottles were buried in the ground. Other bottles corked and paraffined were packed in ice or frozen in blocks of ice. Sputum was deposited upon handkerchiefs, carpets, wood and woollen blankets, under ordinary room conditions. Subsequent inoculation experiments with the sputum placed in sand and in blocks of ice were not satisfactory. The sputa placed in a dark moist box or a dark closet, under the rarving conditions described, produced tuberculous lesions in guinea pigs after $15 \%$ days, but in no instance after 188 days Positive results attended the inoculation of guinea pigs with sputum contained in paraffined bottles after exposure to the diffused light of an ordinary room for 124 days but not after 185 days. The sputum in open bottles placed out of doors in the winter months produced tuberculous lesions after 110 days but not after 132 days; the sputum from ice after 102 days but not after 133 days; from a handkerchief or woollen blanket after io days but not after 110. The same was true of the sputum deposited upon wood. Tubcrculous lesions were produced by the inoculation of sputum deposited upon the carpet after 39 days, but not after $\mathfrak{c} 0$; upon the sand in a light, dry place, after 30 days, but not after io. The sputum exposed to the direct rays of the sun was found productire of a tuberculous lesion after one hour, not after seven hours.

Compare the results of the sputum exposed to the dircet sunlight with that in an ordinary room, and this question has its solution conclusively demonstrated.

## THE EFFECT OF OTERCITILIZATION ON MATERNITY.

Exceedingly apropos of the times appears an article under the above caption in the October issue of the American Journal of the Medical Sciences, by Dr. Franklin S. Newell.

It las become a well-established fact among obstetricians of wide experience that a certain type of woman cxists tho, by virtue of an orercivilized environment from childhood up, has come to depart very widely from the natural condition which permits of the processes of gestation and labor as perfectly physiologic ones, from which, with reasonable care, the patient should be expected to make an absolutely com-
plete recovery. And, unfortunately as it may seem, the exil is on the increase, rather than otherwise.

A rivid contrast is drawn by the author, of the hard-working woman in the midst of poor enviromment, with her daily toils continuing up to the adrent of labor, coming to term in good physical condition, and, in the absence of definite organic disease, able to go through, if need be, a prolonged or difilicult labor with no untoward symptoms and often delivering herself safely eren without aid of anesthetics; and of the other type. the orercivilized woman, who in spite of constant medical supervision throughout her pregnancy, develops marked nerrous symptoms or manifestations of faulty elimination and autointoxication. The latter trpe, often unwilling or unable to obtain the proper amount of fresh air and exercise, comes to labor in a condition of poor resistance, the process is often pathologically prolonged or, in spite of anesthetics, painful, or a short and easy labor terminate? perhaps by an easy operation is followed by an alarming collapse with slow recovery. Eren after cenralesence is completed the patient is left with a dread of future preguancies, the nurse may be entirely inadequate or at best last only two or three months.

The author is unwilling to beliere that this disparity can be explained alone on the theory of evolution, the principle of surviral of the fittest among the working class eliminating the weaker, and enrironment among the overeivilized permitting of the perpetuation of the less strong. But he belieres the key to the situation will be found in a study of the conditions under which the citr-bred girl of to-day is reared. Like a hot house plant she is trained from childhood up with the one idea that at a specified age certain detinite accomplishments must be acquircd, that she may be the finished product that is necessary for her social position. To the strain of her usual studies are added those of musie and society, while the fresh air and outdoor exercise of athleties, if to the latter she be inclined, are obtained only at the expense of the time she should be using in recuperating from the effect of the previous night's ball. A large proportion of these girls suffer from a nervous breakdown before the age of 25 , temporarily nerrous invalids at the time when health is most needed. The duty of the obstetrician lies not only in concluding labor with a living mother and child, but also in bringing the young mother through the whole process in the best possible nervous and physical condition for the fulfillment of her further functions.

The question arises then, how best to meet ihese abnormal conditions as we find them. llany women there are, peculiarly sensitive to pain, and on whom the effects of a hard labor are severe and lasting, who react but slightly to a moderately severe operation undertaken before the occurrence of exhaustion. If a thorough study of the patient's condition throughout rregnaney reveals the fact that she has not improved in health, her condition in the later period being less satisfactory than in the earlier stage of her pregnancy, elimination poor, muscular system Habby, nervous equilibrium so unstable that marked reaction follows the sliglitest discomfort, it is fair to presume that such a paticnt will come to labor in an unfarorable condition to withstand the strain of a prolonged and dificult one. Borderline eases may be allowed to enter labor under such eareful supervision that immediate delivery will be undertaken with the first appearanec of unfarorable signs. But with a bad prognosis certain before the onset of labor, operative procedure at a set date is absolutely indicated.

Until recently, in the absence of faulty relation between the child and the mother's pelvis, (pperation was limited to delivery by forceps or rersion, despite the fact that many a woman lias been temporarily or permanently sacrificed on account of injuries to the pelvic organs incident upon a normal or operative delivery. Hence the study of the patient must include an c:timation of the probable damage that will result from delivery per cias naturales.

Given an elderly primipara with rigid soft parts and the danger of serious after-effects consequent upon a pelvic delivery. the wisdom of the conscrative obstetrician will to-day demand abdominal delivery, which, under proper conditions and in the hands of a competent operator, is practically without danger and at the same time offers a distinctly better chance for proper recovery than the mutilating pelvic delitery, which so often requires subsequently a more or less serious operation to restore the patient to even a moderate degree of health.

## EDITORIAL NOTES

If rour county society meetings are not reported in The Jocrial ask the secretary of your society why he does not furnish us the report.

Do you attend the meetings of your county society? Do you realize that the society needs you and you need the society? No man knows so much that he can not learn from others, and knows so little that others can not learn something from him.

Nerrs items of interest to the medical men of Indiana are solicited from any member of the association, but in particular from county society secretaries who by virtue of their offices are correspondents for The Jourisal. Newspaper clippings, with name and date of paper from which taken, containing accounts of deaths, marriages, remorals or other items of interest, are always gratefully receired by the editors.

IFe wisir to remind our readers that the state a-sociation dues for 1909 are payable on January 1, and it is therefore adrisable for county societies lolding meetings only once each month to collect dues at the December meeting. It is also well to remember that any member who does not pay his annual dues on or before February 1 will be dropped from the rolls, and his name taken from the mailing list of The Jocraiti.

Sext month the majority of the county sodieties will clect officers. Extreme care should be exercised in the selection of a secretary. If your secretary is a good one, full of energy and enthusiasm and constantly working to build up your society, then retain him. If he is apathetic, indifferent tos the success of your society, and otherwise inefficient, then elect a new secretary. Remember that the best society is the society that has the best secretary.

Ir is eminently proper for a medical man to derote from one to two hours to a formal addrese, but it is a stretch of propriety for any man to consume two hours of the time of a medical society in the reading of a regular paper which, according to the rules of the society, should be confined to fifteen or twenty minutes. The difficulty of many men is that they have an exaggcrated idea of their own importance or else they lack the faculty of "boiling down" their speeches and aroiding iteration and reiteration.

Pcblic attention in England has been aroused by the frequency of deaths from anesthetics, threc inquests in onc day haring recently been held in London on persons dead from this cause.

On this account the question has been taken up with the Home Secretary and a communication addressed to the general medical council, urging the adoption of a course of instruction in the administration of anesthetics in all medical colleges. This is in accord with the sentiment expressed in a former editorial ${ }^{1}$ in which we advocated including this branch in the curriculum of crery medical college in the country, this course to be supplemented in hospitals by practical experience under the superrision of a trained ancsthetist.

Gorerior-elect Thouris R. Marshall, son of a physician, a man of unquestioned integrity and superior intelligence. and for vears the friend and supporter of the medical profession in all lonest and progressive endearor, can be counted upon to do the fair and sensible thing when he comes to consider the medical, public health and other legislation in which the medical profession is seriously interested. Mr. Marshall is a broad-minded, capable and conscientious man. He is abore the narror-minded, demagogic and selfish attitude displayed by some men who hare serred in the gubernatorial chair of Indiana. He believes in the old-fashioned honesty which applies in public as well as prirate life, and no influence, of whaterer kind, will swerse him from what he considers the straight and narrow path of duty. His highest ambition as goternor will be to serve in such a way that the greatest good to the greatest number will be sccured. In his endearors he will ever be found on the side of truth and justice as he conscientiously riems it.

Do you as a member of the Indiana State Medical Association realize what you are receiving for the small sum you are paying each year as dues? Your membership alone and the honor and privilege accompanying it are worth the $\$ 1$ you pay as dues, but in addition you are receiring The Journal, which alone actually costs more than twice as much as you are paying as dues. And what are you doing to help the association, The Jotrival and yourself? Ire you cheerfully and willingly giving the association and The Jourizal your encouragement and support in order to build them up and make them better, or are you indifferent to their success and only show activity in efforts to discourage and create trouble? The association and The Jourx.ll are not what they can be made and will be made, but for either to progress requires your

[^59]encouragement and support. Not everyone can be pleased, for tastes and opinions differ, but if in the main the association and The Jourral. are conducted along right lines then each member should make it his business to help the good work along. $A l l$ effort should be constructive and not destructive, and always in the interest of the medical profession as a whole.

The Jourval was established in the face of obstacles and difficulties which it was prophesied by some were insurmountable, but labor and persistent effort have brought about a result that certainly should be gratifying to the members of the association. Tiie Jouranal has stood and will continue to stand for right principles, and for all that is best for right-thinking medical men. It will always work for the upbuilding of the state association, and in particular the county society, which is the foundation for all medical organization. The editors solicit and have a right to expect not only encouragement and support, but honest and friendly criticism in this work, in endeavors to make Tire Journal larger and better in every way. They have the capacity for work and the proper amount of enthusiasm, without either of which nothing could be accomplished, but they want the cooperation of every member of the association in order to accomplish the greatest good for the greatest number. Will you help in the good work?

There are now 152 medical schools in the United States, of whicl 123 are regular, 16 are homeopathic, 8 are eclectic, 2 are physiomedical, and 3 are nondescript schools which offer to teach all systems of medicine. Since last year there has been a net decrease of nine colleges, and indications point to a further decrease during the present year. On the whole, there has been a lengthening of college terms. Only two colleges this year report sessions shorter than twenty-seven weeks. Of those having sessions of twenty-seren or twenty-eight weeks, the number is 21 this year. There are now 26 colleges cłaiming courses of twenty-nine or thirty weeks, 51 claiming courses of thirty-one or thirty-two weeks, and 46 colleges require from thirty-three to thirty-six weeks. Among the lattcr is the Indiana University School of Medicine, which is also one of the 26 schools which either already require one year of work in a college of arts devoted to physics, chemistry and biology, in addition to a four-year high school education, or have announced their intention to do so on or before 1910. In the majority of the schools there has
been a decided tendency not only to advance the entrance requirements and lengthen the terms of actual work, but to improve upon the methods of teaching and greatly increase the requirements for graduation. With the rapid advance in medical knowledge has come this demand for a more thorough preliminary preparation and a thorough laboratory and hospital training before a student becomes a qualified practitioner. To meet the modern demands a medical college must be fully equipped with all the extensive apparatus so necessary for the teaching of modern anatomr, physiology, pharmacology, bacteriology and pathology; must have experts paid to devote their entire time to these laboratorics; must have hospital and dispensary facilities for graded clinical instruction, and laboratory courses in clinical diagnosis in connection with the study of hospital and dispensary patients. Trained teachers who are also successful clinicians are required to secure and maintain a high standard, and the attending expense requires state aid. The medical men of Indiana should be proud of the fact that our own school, the Indiana University School of Medicine, meets all the requirements of a modern medical school and gives promise of keeping abreast of the most advanced institutions of learning. The highest aims will not be met, however, without the earnest encouragcment and support of a united medical profession, and Indiana medical men should constantly work for such state aid as will make it possible to maintain standards of efficiency second to none of the medical schools of the country.

Tue Liberal Life Insurance Company, with home office at Anderson, Ind., las the following to say concerning the fee paid for life insurance examination: "Two dollars and fifty cents is our fee to all examiners through the state; our examiners are the very best and we have never had the least bit of trouble with any of them regarding our fee; the amount is the same regardless of how much the policy may be. We use the same blank for a $\$ 500$ man that we would a $\$ 5,000$ man, and the questions all require the same attention."

We suggest that the fee, fixed as it is upon what some doctors will accept and not upon what good services are worth, should be reduced to $\$ 1.25$, or even $\$ 1$. If the "very best" examiners can be procured for $\$ 2.50$ without the least trouble then it certainly is possible to secure enough "very best" examiners at smaller fees, and the money thus saved can be devoted to an
increase in the salaries of officers who work so hard (to kcep the doctors from obtaining just fees) in the interests of the company. Meanwhile the doctors will probably send in a vote of thanks for the privilege of making examinations at such a profitable rate.

For the benefit of the "very best" examiners of the Liberal Life Insurance Company, we desire to say that there are many insurance companies that appreciate the value of medical services and pay fees for examination that are in keeping with the value of the services rendered. In this issue of The Jouranal we publish a list of the companies paying $\$ 5$ for medical cxamination.

We may be a little bit old-fashioned in our conclusions, but we beliere that the companies paying the $\$ .5$ fee sceure on the whole better examiners and a higher grade of service. There may be and probably is, a competent and conscientions man here and there who does not know what his services are worth, and is willing to take what he can get, but the general proposition that a cheap price gets a cheap man holds good in securing medical services the same as it holds gnod in ary other profession or a trade.

Proficiency in medical practice is very much higher now than it was a few years ago, and it is secured and maintained at a correspondingly greater cxpenditure of time, effort and money. The returns should be correspondingly increased, and we venture to say are increased for the really proficient. It is very probable that some of the doctors who are making $\$ 2.50$ examinations for insurance companies are being paid all the services are worth, and perhaps are paid too much, but the really proficient doctor is worth more to the company, and if he has any sense of justice for himself he will not sell his services for a fraction less than they are worth. He knows that a thorough and reliable examination for life insurance is worth $\$ 5$, for many companics pay that price, and a similar examination of a private patient, less the clerical work entailed in filling out a long written report of the examination, invariably commands and brings a $\$ 5$ fee. There is, therefore, no logical defense for acceptance of anything less than $\$ 5$ for a life insurance examination by the really competent men. Of course, there will always be men who will make examinations for $\$ 2.50$, and there are many who even make examinations for $\$ 1$, but we believe we are right in saying that for the most part these men are not from the ranks of
the better qualified physicians, and if they are qualified and are making lonest examinations they are greatly depreciating the value of their services.

## CORRESPONDENCE

## THE ANTLIENTNGITIS SERUM.

Bloomington, Ind., Oct. 24, 1908.

Editor The Jourval:-I am writing you to ask you to make a note in The Journal of the Ivdiana State Medical Association of my appointment by Dr. Simon Flexner, of the Rockefeller Institute for Medical Research, New York, as agent for his Antimeningitis Serum in this section of the state. I would also like to suggest that you make an urgent request of the profession of the state to be on the alert for cases of epidemic cerebrospinal meningitis, and urge that they call upon Dr. Hoskins, of Indianapolis, or myself for the serum.
I have just returned from Boston, Mass., where I had postgraduate instruction in the department of children's diseases of Harvard Medical School. While on service in the Boston Children's Hospital as home physician, we tested Dr. Flexner's Antimeningitis Serum in a number of cases of epidemic cerebrospinal meningitis. The eflects of the serum, as you are no doubt aware, are most brilliant indeed. equally if not more specifie than the antitoxin for diphtheria. The mortality for the cases treated in the Boston Children's Hospital from 1899 to 190~ was 69 to 80 per ecnt. Since the spring of $190 \%$, when the use of the serum was first introduced, the mortality has fallen to below 20 per cent. The use of the serum further prevents, in those that recover, the terrible sequelæ, as hydrocephalus, blindness, deafness, defective mentality, and other serious deformities.

The serum has been tested now in over 400 cases, with results most brilliant, and that point toward its being a specific remedy. Reports of cases in which it has been tried have come in from many states, including Massachusetts, New York, Maryland, Pennsylrania, Ohio, Illinois, California, Kentucky, Washington, and from England, Canada, Ireland and Scotland. But up to date not a single case in Indiana has been given the benefit of this great discovery. Yet the reports of the Board of Health show deaths from epidemie cerebrospinal meningitis. This must mean that the profession of the state is either failing to recognize the disease or is not aware of
the existence of this serum and the readiness with which it may be obtained.

Experience has proven a positive diagnosis can not be made (antemortem) of meningitistubercular, cerebrospinal or pneumococcicwithout a lumbar puncture. Dr. Flexner's agents are not only able to furnish gratuitously the antimeningitis serum for all cases of epidemic cerebrospinal meningitis for which a request is made, but they are prepared to properly make the lumbar puncture for the diagnosis and the administration of the serum, or to show other members of the profession the same technique whenever so requested.

Again allow me earnestly to solicit you to make a strong appeal to the members of our profession in the state, through The Journal, to be on the lookout for cases of this disease and to not hesitate to apply to either Dr. Hoskins or myself for this scrum and thereby help save a number of lives that the state must otherwise lose.

Thanking you in adrance, not only in my own behalf, but for the people of our commonwealth, I am respectfully.

Honeer Woolery.

## SOMNOEORN FATALITY.

## Tife George Kxipp Sinitariem.

Tiacentes. Lad., Oct. 6. 1908
To the Editor:- On account of the widespread tendency of physicians, and especially dentists and laity, to riew thie use of somnoform as absolutely harmless, I feel that I owe it to the medical profession and the dentists to report a case that proved fatal.

For the benefit of those who may not be acquainted with the literature, I will state that somnoform is said to be made of chlorid of ethyl BO per cent., chlorid of methyl 35 per cent., bromid of cthyl 5 per cent., and is claimed to be one of the safest of anesthetics, the death rate, as stated in several publications, being 1 to 250,000 .

Harold K., aged 20 months, poorly developed. of strumous type, a mouth breather, showed nothing on examination except enlarged adenoids and tonsils. It was best to remove the adenoids in order to improve his respiration. He was given somnoform by means of the attached inhaler as per instructions. At the third respiration the patient became rigid, chest fixed, eyes opened, balls rolled up, pupils dilated and jaws set so that they could be hardly opened. Needless to sar. as the first of these symptoms manifested itself somnoform was withdrawn. From
ihis rigid condition he gradually relaxed, but all attempts at resuscitation failed, though the leart could be felt to beat for sereral minutes after breathing ceased. Artificial respiration was leept up for forty-five minutes after all signs of life were gone. Strychin and atropin were given hypodermically, all to no avail.

Satisfied that this death was caused by an idiosyncrasy, or that it was due to the fact that it was a strumous child, somnoform was still given at the sanitarium. A month later the following case presented itself:

John R., male, aged 13 years, strong, well developed, showed nothing on examination except enlarged adenoids, which at times interfered with breathing. Decided to do adenectomy. He was given somnoform by the same method as used in the preceding case, and at about the fourth or fifth breath went off in a rigid condition not unlike the other casc, from which condition it took several minutes to restore him to inatural breathing.

Since this one fatality, and the other case that came so nearly being fatal, somnoform is no longer given at the sanitarium. This report is not written as a criticisin. but to acquaint the profession of this one fatality from somnoform and likervise to see if any other cases will be reported.

Robert Caldiflle, M.D.
Howse Surgeon to Br. Geo. Knapp Sanitarium.

## NITRITE OF SILYER GAUZE.

Indiavapolis, Ixd., Oct. 19, 1908.
Editor The Jourinal:-I enclose herewith an interesting letter from Professor Rovsing, of Copenhagen, concerning nitrite of silver gauze. Is you are doubtless aware, nitrite of silver galuze and nitrite of silver catgut are in general use in the Copenhagen clinics. As this is a matter of lively interest, perlhaps you will care to use the letter in The Journal.

> Tery truly yours, Josepit Rilus Eastiman.

## Tife Royal Frederic Hospital, Copenhigen, 10 October, 1908.

Dear Doctor Eastman:-The preparation of nitrite of silver gauze is utmost simple: Pour a 1 per cent. solution of nitrite of silver into a sterilized yellow cylindric glass, stuff then pieces of sterilized gauze-of diffcrent greatness and form for the different purposes-into the solution at the bottom until the gauze is thoroughly moistened without being dropping, and the silver nitrite gauze is ready for use. I am using silrer gauze in all wounds and cavities where
formerly iodoform gauze was used, in rectum, vagina, mouth and nose. For all suppurating carities; so in osteomyelitis after chiseling and having cleaned the bone cavity, I fill this with solution of nitrite of silver and stuff then with dry gauze, so making at the same moment a tamponade with nitrite of silver gauze.
For septic peritonitis, appendicitis gangrenosa, salpingitis, etc., I introduce a Mikulicz gauze pouch into the cavity (fossa Douglassi, for instance) and fill this with strips of silver nitrite gauze.

In especially virulent infection I use a 2 per cent. solution for the preparation.
I never more shall use iodoform gauze with its bad odor, its poisoning properties and its doubtful antiseptic qualities.

Hoping that you will find this description sufficient and the gauze useful, I am sincerely jours,

Tiforvald Rovsing.

## DEATHS

Dr. Greex Hizlewood, a graduate of the Mcdical College of Indiana in 1850 , died at his home near Chambersburg, Ind., October 16, aged is.

Dr. Frank Campbell died suddenly at his home in Shelbyrille, October 8, from heart disease, aged 39. He was a member of the American Medical Association and his state and county associations.

Dr. Bexjamin C. Wright, Hospital College of Medicine, Louisville, 1891. formerly coroner of Clark Comity, Ind., a member of the Indiana State Medical Association, died at his home in New Albany, October 4, aged 45.

Dr. Frederick A. Merring, Goshen`s oldest physician and one of its oldest residents, died October 1 from scnile debility, age 96 years. He had been gradually failing in health for several months. Dr. Herring was born in Lennep, Germany, in 1812 , coming to this country in 1855.

Dr. Alonzo H. Good was born at Economy, Wayne County, Indiana, Sept. 22, 1843, and died on his sixty-fifth birthday, at his home in Muncie, from the effects of pneumonia. He served in the Civil War, taking up the study of medicine at its closc. He practiced medicine at

Economy, Bloomingsport, Selma and Muncie. IIe was a nember of the I. O. O. F. Lodge, Masons and G. A. R. Post, and of the county, state and national medical associations.

## PERSONALS

Dr. F. R. Morgan, of Illinois, has located in Kokomo.

Dr. Frank J. Spillafan, Jr., Connersville, sailed for Europe October 1.

Dr. IV. E. Risinger, formerly of Fort. Smith, Ark., has recently located in Bedford.

Dr. Otis L. Schrock, formerly of LaGrange. Ind., is now practicing in Greentorn.

Dr. G. IV. II. Fexiper, Muncie, has been elected president of the Wilder Brigade.

Dr. IV. S. Griystox expects to leave Marion and enter the practice of medicine at Huntington.

Dr. J. M. Moulder, of Kokomo, recently toured the southern part of the state in his automobile.

Dr. Wrleiak L. Hines and Dr. Frank H. Foster, both of Warsaw, have entered into partnership.

Dr. J. A. Mattison, of the National Military Home, is spending his racation in the woods of south Carolina.

Dr. R. D. Varner, who has been practicing for several years in Kokomo, has removed to Ridge Farm, 111.

Dr. O. E. Ifarrold, of Marion, in alighting from his buggy, fell and sustained a fracture of the right clavicle.

Dr. O. H. Sifantusch, of Metz, Ind., has moved to Butler and gone into partnership with Dr. IV. F. Shoemaker.

Dr. Wilhelat T. Von Kiappe, Vincennes, who was seriously injured several weeks ago, has recovered and resumed practice.

Dr. C. Mr. Hamris, Bourbon, has sold his practice to Dr. R. M. Stormont, of Posey County, Ind., and will locate in Casey, Ill., in the near future.

Dr. T. B. Eastman has withdrawn from the Joseph Eastman Hospital at Indianapolis. Dr. J. Rilus Eastman will now have entire control of the institution.

Dr. R. O. McAlextander, of Indianapolis, has visited, during the past summer, the well-known clinics of Europe, spending one month in Tienna, one in Berlin and one in London. He also made a visit of one week to Dr. Kocher's clinic in Bern.

Dr. A. C. McDoxald and Mrs. Edith Webb, both of Warsaw, were married on October 14 . After the marriage, which took place at Marion, Ind., the home of the bride's parents, Dr. and Mrs. McDonald spent two weeks in visiting some of the Eastern cities, including Toronto, Boston, New York and Philadelphia.

## NEWS, NOTES AND COMMENTS

St. Josepır's Hospital, Logansport, is under cover and is expected to be ready for ocenpancy January 1.

Ligonier is reported to he suffering from an epidemic of diphtheria; twenty-seven positive diagnoses were made.

At the last meeting of the Kokomo City Council an ordinance was passed appropriating $\$ 25,000$ for the purchase of a site and the construction and maintenance of a public hospital.

The Newcastle Plysicians' Association was organized September 22, Dr. Elmer H. Brubaker being elected president; Dr. H. H. Koons, riccpresident, and Dr. Clifford E. Canaday, secre-tary-treasurer.

Tire semi-annual open meeting of the Fort Wayne Acadeny of Medicine was held Nov. 12, 1908. The evening was given over to the discussion of some medicolegal questions presented by City Attorney Guy Colerick. A number of lawyers were present as guests of the society and added materially to the free discussion that is characteristic of this society of younger medical men. A banquet-smoker at the Homestead Café tollowed the meeting.

Dr, and Mrs. Christian B. Stemen, formerly of Ft. Wayne, but now of Kansas City, Kan., celebrated their fiftieth wedding anniversary on November $\therefore$ For many years Dr. Stemen was dean of the Fort Waync College of Medicine, and he took an active part in the amalgamation of the medical colleges of Indiana to form one medical school under state control. He now holds the position of emeritus professor of surgery in the Indiana University School of Medicine.

The following item has been received from the Ohio Board of Medical Registration and Examination for publication in The Journal:
"The State Medical Board has received information that some medical students, having preliminary educational requirements less than demanded by the Ohio law, have been induced to attend medical colleges in other states, under the impression that after graduation they can return to and obtain a license to practice in Ohio under reciprocity. This should be corrected. All medical students who lave or who contemplate matriculating in colleges in other states with such impressions should understand that a license from another state is accepted in place of an examination only. The applicant in all other particulars must comply with the laws of Ohio and the rules of this board. The preliminary educational attainments must be the same as required of students of Ohio colleges."

Anowg those companics paying the $\$ 5.00$ rate for life insurance cxaminations are the following: American National Lifc, Galveston, Texas; Anchor Life, Indianapolis, Ind.; Boston Mutual Life, Boston, Mass.; Citizens' Life, Louisville, Ky.; Commonwealth Life, Louisville, Ky.; Capital Life, Denver, Colo.; Colorado National Life, Denver, Colo.; Connecticut Mutual Life, Hartford, Conn.; Equitable Life of Now Lork; Etna life Insurance Co., Hartford, Conn.; Fort Worth Life, Fort Worth, Texas; Guarantee Life, Houston, Texas; Manhattan Life, New York; Massachusetts Mutual, Springfield, Mass.: Mutual Benefit Life, Newark, N. J.; Mutual Life of New York; National Life, Montpelier, Vt.; New England Mutual Life, Boston, Mass.; Northwestern Mutual Life, Milwaukee, Wis.; Pacific Mutual Life, Los Angeles, Calif.; Pacific Mutual Life, San Francisco, Calif.: Provident Life \& Trust Co., Philadelphia, Pa.; Rcliance Life, Pittsburg, Pa.; Southwestern Life, Dallas, Texas; State Mutual Life, Rome, Ga.; southern States Life, Atlanta, Ga.

## SOCIETY PROCEEDINGS

## ALLEN COUNTY. <br> FORT WAYYE MEDICAL SOCIETY.

(Meeting of Sept. 8, 1908.)
Socicty met in joint session with the Northern Indiana Dental Socicty in the assembly room, Tuesday evening, with twenty-scren members present. Dr. WV. D. Calvin read a paper on

## Etiology and Prophylaxis of Harelip and Cleft Palate.

Dr. G. E. Johnson gave a lantern slide demonstration of the operative procedure in havelip and cleft palate.

In the discussion Dr. Porter said that it was an established fact that defectives are apt to brced defectives of some sort; that is to say, a club-footed individual is more apt to breed a case of scoliosis or eleft palate than is a person of good ancestry. He said that if too much is promised these persons operated on for harclip and cleft palate in the way of phonation they will be displeased when they grow up. The object of operating early is to commence to train the patient rery carly to do well with an imperfect palate, and not because we hope to give the individual a perfect palate. If he is operated carly he commences talking early with as perfect a palate as he has, and finally learns to use it very well.

Dr. Mcoscar reported being present at one of Dr. Brophy's operations for harelip and cleft palate, and saw Dr. Broplyy gain a very excellent function for the child, who had been born very badly deformed. The defect was a perfeet cleft of both the palate and lip.

Dr. Buchman said that heredity and arrested development needs to be studied more than it has in the past, and we will have to take up Mendel's law of heredity and study it if we want to find out the facts, and apply it to these cases, after which it can be said with absolute certainty whether these cases are due to hereditary influences or some intra-uterine accident. In Mendel's law you can trace the heredity from one generation to another and you can make a calculation as to how many in a given family will escape the influences of the hereditary taint and how many others within a certain limited number are going to be affected by it. He believes that a good many of these cases of harelip and cleft palate are due to intrauterine accidents.

Dr. Nierman said that Dr. Brophy's operation has in its favor the age of the child to be operated on. Sensation in the first few hours of life is not very pronounced, and the action of the heart is stronger and of greater vitality than later in the age of the patient. Me said that when viewing the situation for an ideal method of procedure he thinks that Dr. Allen's operation eomes more closely to meeting the plan than any known to him. His conception is to bring the membranous surface of one side of the nasal cavity to act as the oral surface in the mouth; he transfers a flap from the mouth to the floor, the base of the nasal passage, making the two outer sides membranous and the apposing surfaces raw tissue. The blood supply is not cut off and the union of these parts should be good.

Closing the discussion Dr. Calvin said that the study of Ribot's work on the subject of herelity is most
interesting and logical, and extremely stimulating to further investigation and study of the subject. Conclusions without proper amount of study should never be made. One of the laws of Nature is that like begets like. If like does not beget like in exactness, defects beget other defects, as Dr. Porter has said, and as seven or eight of the cases I have cited, have shown Sonc have shown spina bifida, club foot, deformities of the hip, physical deformities and mental deformities. If we would give these cases more careful study in looking up the family history, in studying the mentality and physical condition of the parents, and especially of the mother of such children as these, we would in the future be able to refer cases with a history that is complete, much more so than I have found in the literature read.

Adjourned.
J. C. Wallace, Sec.
(Meeting of Sept. I5, 1908.)
Society met in regular session in the Assembly room, with thirty members present. Ninutes of two previous meetings read and approved.

Operation in Diffuse Peritonitis, with Obstruction of Bowels in Typhoid.-Clinical case report by Dr. M. F. Porter. Patient, man aged 48, referred by Dr. Murphy. of Intwerp, Ohio. On operation found perforation of the bowels, and later found that he was suffering from typhoid fever. The patient gave history of haring suffered with femoral hernia ever since he could remember. He had alwars been able to reduce it until two weeks previous. Patient called Dr. Murphy, who was able to reduce it without trouble. Fortycight hours before admission to the hospital he suffered from sudden excruciating pain in the abdomen, and sent for the doctor, but he was unable to cause the bowels to move. On cxamination diagnosis of diffuse peritonitis with obstruction of the bowels was made. On account of pain in the right side, a diagnosis of appendicitis as the origin of the trouble was made.

In operation, a midline incision was made, and belly found full of pus which seemed to come from the region of the liver or right kidney fossa. Appendix was examined and found healthy. On manipulations of the intestines a perforation was found in the small intestine, on the right side, high up, the perforation being about the size of a 48 -calibre bullet. It was closed in the usual way. The abdomen was washed out and drain placed in the neighborhood of perforation, and one placed lower in the petvis. The patient made an uninterrupted recovery following the operation.

About a week after the operation he was still running a fever, which was getting higher; he had headache, general malaise, anorexia, cte. An examination of the blood by Dr. Rhamy showed a positive Widal reaction. It was concluded that this patient was suffering from typhoid perforation of the ileum, as some blood streaks appeared in the stools prior to the operation.

Struma Nodosa.-Dr. Porter next presented a thyroid gland, unusmally large, a form of struma nodosa, and perlaps colloid variety. This is the most common form of enlargement of the thyroid. The upper portion showed the wall of the cyst, which was firm, beginning calcareous deposits. In the other portion was an unusually distinct nodule. These very seldom derelop in the upper aspect of the gland, but usually, as in this specimen, in the lower border. This speci-
men is of the vascular type; the goitre capsule being bery rascular, as were also the tissues of the neck. Dr. lourter think that on two or three occasions he had as many as twenty-four foreeps on at onee, then ligated, went on with the operation, nsed foresps and later ligated again. He spoke of the difliculty of aroiding recurrent laryngeal nerve and parathyroids on account of the extreme size of the gland. He thinks best to leave a small portion of the gland in order to aroid cachexia, and the posterior capsule to avoid injnry or remoral of the parathyroids. He sad that if parathyroids do happen to be removed. the administration of parathyroid glands overcomes the tendency to tetany.
In opening the discussion, Dr. E. J. MeOsear, speaking on typhoid perforation, referred to the case of a laboring man, working to saturday night, taken to hospital Sunday noon, with extreme shock, pulse 150. temperature 95 , which gradually rose to 107 , and he died thirty hours after admission.
Dr. Reall said that he had recently read an abstract of a paper ly some German reporting having removed the thyroids and parathyroids from a dog, and failed to get tetany before it died from adrenal insufficiency. The question of connection between parathyroids and adrenals is interesting.

Dr. Porter. in clowing the discussion, said that it is now established that most perforations occur in walking typhoid cases. To save parathyroids leave some part of the thyroid gland, barring malignaner. The four cardinal points in the operation are: (1) Avoid much hemorrlage; (2) avoid injuring or removing parathyroids; (3) avoid injury to recmorent laryngeal nerves; (t) leave a part of the gland.
"European Surgery" was the title of a talk by Dr. E. J. Mceoscar, who recently returned from a trip on the continent. IIe said that at Rome they have a magnifient and extensive hospital under. eharge of the govermment. He was accompanicd through the hospital by two physicians and an undergraduate, the latter being an Italian interpreter. The equipment is good for doing modern surgery; the wards clean and well rentilated.

At Bem, Switzerland, contrary to eommont report, goitres are not plentiful. He saw one on the streets, outside of hospital where they always make up a part of the Kocher clinic. It may be that most of these people have had their goitres removed, Kocher and his son laving temoved 3,ī00. Dr. Mcoscar spoke on the simplicity of dressings. In exery abdominal wound, whether in midline or appendiceal region, it is dressed with four thicknesses of gauze abont six inches long, brushed with colloclion, another layer and more collodion, and another layer and collodion until a splint is made. No abrdominal bandage is used. General suppurative peritonitic cases are closed without drainage in Kocher's clinic, the abdomen being opened, wiped out, and closed up tight. Of course, there must necessarily be some selection of cases for this kind of procedure.
Dr. Focher did four goitre operations, two large and two small, with the patients in a semi-sitting posture, under norocaine and adrenalin anesthesia, the patients never stirring. THe used abont 75 artery forceps, and it took assistant a half hour to close up the wound, with no groan from the patient. Silk ligatures and sutures were userl, and glass tube put in for drainage, to be removel the following day. Metal elamps were used to clowe the skin after operations. They have the
advantage of not carrying infection through the skin along the track, and can be removed as warranted. One man uses catgnt soaked in juniper oil for two o: three montlis, as it is strong and durable.

At Zurich the sterilizers are in a separate rom from the operating room, and there is an opening from the sterilizers into the operating room, and sterilized dressings, etc., are taken through this opening directly into the operating room. At Vienna the best general surgical clinic is conducted by Silbermark, the hest orthopedic surgery by Lorenz, the lest paraffine injections by Prof. Gersuny. Wertheim is one of the best men in Vienna in operations devised by himself.

A surgeon who goes into the abdominal cavity should le able to do whatever he finds to do within. Dr. MeOsear saw a gyuecologist make a creditable hysterectomy who also operated the same case for gallstones and was clearly ont of his aceustomed field, manch to the divadrantage of the patient.
He spoke on the method of preparing patient. If it is a walking ease it is put on the table and covered up, then eovered with soap and lather for ten minutes by the surgeon. The surgeon then washes himself and gets on gown, doing all the preparation himself. Sometimes the patient is under the anesthetic a half hour before the surgeon starts to operate. They do not care much for modesty. The patient is put on the wagon and stripped. For anestheties they use ether, chloroform and alcohol, and no pure chloroform is nsed. For suture material silk is used very extensively. The silk is looiled 25 minutes, put in formalin 3 per cent. for three days, and then boiled with the inctruments.

Dr. Boyd, of Charing Crose Hospital, London, usez sewing machine twist. Dr. MeOsear saw him operate, amputating foot under spinal anesthesia, absolutely suceessfully.

Bier's clinie was the only place where he saw collars and vests worn throngh long clinic by the surgeons and assistants. He did not see any wound closed with adhesive plaster.

In discussing this subject, Dr. Bulson said that the surgeons in Germany seem to have wery little regard for danger from anesthesia. He saw one case in Berlin where the patient was asleep from $8: 30$ to $1: 30$. He said that he had followed some of the eases operated on in clinic for mastoid trouble, and found that there were not such a large proportion of them cured. Some of the results of operation in foreign clinics are very interesting. On the whole, the surgical work in Europe is not better than in this country, and in some clinics and certain kind of work it is not as good as in America.

In closing, Dr. Mrosear said that surgical clinics in Germany are excellent.
The Ophthalmo-Tuberculin Reaction was the title of a paper by Dr. Chas. G. Beall.

In the discussion Dr. Rhamy eondemned the oph-thalmo-tuberculin reaction, saying that it was dangerous.

Dr. Metts, of Ossian, said that in one ease in which he used it the patient developed a eorneal uleer and he thought the patient was going blind. He had tuberculosis all right. He thinks it is good eollateral eridenee.

Dr. Morgan said that Arnold Knapp reports a ease of interstitial keratitis in a perfectly healthy eye from the use of tuberculin.
Dr. Weaver stated that from the evidence lie has been able to gather the consensus of opinion is that,
the ophthalmo-tuberculin test is no more rcliable than the subeutaneous.
Dr. Bulson said eare should be taken in its use, as he has seen on five oceasions bad results from its use. The subeutancous test should have the preference.
Dr. Drayer said that it is applieable to the class of cases where the subeutaneous test is not advisable. He said that it should not be discarded on account of a few bad results. It has its particular applieability in children. Drs. Dancer and Mouser also diseussed the subjeet.
In closing Dr. Beall said that people should not be in too much of a hurry to pass judgment on it until more is known about it.
On motion the meeting of October 27 was postponed on aecount of the meeting of the Twelfth Couneilor Distriet Medieal Soeiety.
Dr. Porter suggested that hereafter arrangements be made to have the meeting of the Twelfth Distriet So ciety on some night that will not interfere with the Allen County Society meetings.
Dr. Weaver asked the aid of the soeiety to get the Library Board to bind journals.

Adjourned.
J. C. Wallace, Seeretary.

## (Meeting of Sept. 22, 1908.)

Soeiety met in regular session at the Assembly room, with thirty-five members present. In the absenco of the president and seeretary the meeting , was ealled to order loy the rice-president, Dr. C. R. Dancer. Dr. E. E. Morgin was appointed secretary pro tem. Regular sceretary arrived later in the evening and assumed his regular duties.

Enuresis Due to Enlarged Tonsils and Adenoids.-Dr. Bulson reported a case of enuresis totally relieved by the removal of tonsils and adenoids in a girl 16 years of age. He also reported a similar result in a boy.
Decompression for Choked Disc.-Dr. Bulson reported an interesting case of choked dise left eye, and atrophy right eve, in which he diagnosed intra-cranial lesion, and skull was opened to relieve the pressure which he assumed existed. The patient is relieved but is still in the hospital. A full report will be given later.

In discussing the report Dr. Weaver said that the dceompression operation in Dr. Bulson's ease had improved the general condition of the patient as well as improved the vision.
Dr. S. H. Havice asked if anti-syphiltie treatment had been given and reported a case of ehoked disc without any history except failure of vision. Patient reeovered in about one year on K. I., but the condition has again returned.
Collections was the title of a paper by Dr. B. P. Weaver, in whiel he said that to his mind justly earned gratitude is the greatest stimulant and the most aeceptable compensation that comes into a doetor's life. And if such gratitude eould only furnish a livelihood for the doetor and his family the problem might perhaps be solved. But unfortunately this is not so, and the physieian is forced into that field which is by nature distasteful to most of us, and in whieh few of us are adept, viz., the role of the business man. To him who does, however, decide in favor of medieine for his life work, it beeomes a plain duty to avail himself of all just and honorable means to maintain his collections at a legitimate maximum, a duty to himself, his family and his patients.

Proper Medical Fees; How Maintained.--Paper read ly Dr. E. MI. Tan Buskirk. There is not a physieian in this soeiety who does not know what he should receive for any scrvice rendered. If his services are up to the standard he should demand proper compensation. The doctors who charge fifty cents a eall to people who have paid better fees do it to oltain business and know that they either undervalue their serviees or unjustly aecept money for scrvices they caun not perform. Competition and eustomers are two causes for low fees. By charging small fees a physieian may be able to get a great many of his eompetitor's patients. If he is eapable and sueceeds in this way he would no doubt sueeeed by eharging proper fees, People usually employ and retain a man for his ability, and will not continue his services indefinitcly beeause he is eheap. Then, again, the mechanie receives five or six times more for this work than le did half a entury ago, and yet the doctor receives about the same. Should not the tradesman, therefore, reeeiving more for his time, be willing to pay his doctor in proportion? Physicians are also, by their unbusinesslike competition, imposed upon by outside intercsts, suclı as insurance eompanies and railroads. Competition, such as it is, is rery injurious to the medieal profeswion as a whole, as each one tries to sueeced regardless of any welfare or embarrassment to any other physician. So physician has a right to pursue any course for his own benefit at the expense of others without their consent. Medieal proficiency at the present time is only obtained at a greater sacrifice of time, energy and money than was required a few years ago, and the advanee in our standard of efficiency entitles us to the same inerease in rcturns that eomes to those in other walks of life who lave made advances.

A Few Things We 0 we the Public was the title of a paper by Dr. C. R. Dancer, in whieh he said that "our duties may be divided into (I) those that we owe the patient, (2) those due the state, and (3) those due ourselves. These duties beeome conperative, and, after all, may be summed up as our plain duty, or in modern phraseology, a square deal. One thing we owe the public is the elimination or at least the minimization of quackery and the spreading of information coneerning preventable diseases. Should the doetor enter polities? Let us answer this question by pointing to the work done by those representative members of our profession who are now in politics. Roosevelt sent Dr. Reed, of Cincinnati, into the canal zone to investigate existing conditions: Colonel Gorgas was appointed a member of the Canal Commission, and let us give Dr. Wiley eredit for his slare in the enactment of the Pure Food law. Did not the Japanese medieal profession play the greater part in defaating Russia? Our own loeal board and the state board of health have done muell with reference to pure milk, meat, cte., and our loeal board is now sending appropriate literature to the homes of people quarantined with any of the infeetious diseases, thus enabling the physician to better carry out the method of treatment. We owe it to ourselves, our patients and the public to give our best serviee in remedying or eorreeting those conditions dependent upon influences which we as physicians are familiar with."

Opening the discussion, Dr. Haviee said that we should charge proper and reasonable fees and do good work to earn them. The man who charges good fees
is always thonght more of than the man who charges small fees.

Dr. Dlcoscar said that the physician is the loser nine times out of ten when he is lax. If he demands good round fees and requires early settlement he will make more friends and be better off financially. In cases where you suspect or have good reason to believe that the patient has been to another physician and not paid him. it is wise to call up the other physician and let the patient know that you know he has not squared himself with the other physician. Notorious abortionists shonld be put out of business, and if a man has the stamma to proceed against this class he should bave the support of his medical brethren.

Dr. Bulson said that the arerage feneral practitioner is too poorly paid, and all because reasonable and just fees are not charged and collected. The charge for a visit in the city is $\$ 1.50$, in most instances, and some doctors never charge but $\$ 1.00$, and this condition existed twenty years ago when it took less time, energy and money to become a qualified practitioner, living expenses were not so high and the people were not so able to pay just fees as now. Many doctors have no business ability and do not rollect what they earn, and they have not the good sense to charge fees that are in keeping with the services rendered. These men make it more difficult for their confrères to charge respectable fees and collect them. The man who gives his patients proper attention according to present standards of medical practice is deserving of better fees than generally charged in Fort Wayne, and he can get better fees if he insists upon having them. The public generally valnes a man's services at about the price which the man himself fixes upon for those services, providing the price is anywhere within reason. If good service is rendered, the public stands the fces, but if the service is poor the public rebels. Many men who charge low fees are really getting all or more than their services are worth. The proper way to establish a fee bill is to publish in the daily papers, as they did in a Texas town, a statement to the effect that the undersigned doctors, giving the names, believe their services to be worth such and such fees, and that they will eharge accordingly, but that some doctors who realize their incompetcney and lessened value for services rendered will charge less. No doetor who permits his name to be attached to such a statement will dare to cut fees, for by so doing he would at once lay himself open to the opinion of the public that he did not consider himself competent to be classed with his confrères and consequently was willing to work for less. The doctor's best friends and most appreciative patients are those who pay good fees and pay them promptly. It is good poliey to present bills at least once eacli month, and it is poor policy for physieians not to uphold each other in efforts to secure proper remuneration and prompt settlement of accounts. If one doctor gets a good fee it helps others to obtain good fees, and doctors slould sustain one another in efforts to obtain just remuneration.

Dr. Henderson said that he had found that a personal presentation of the bill by the physician himself is the best means of effecting settlement and the
sooner the bill is presented after the services are rendered the casier it is to secure payment and retain a satisfied patient.

Dr. Bower said that there are many people who change doctors in order to aroid the payment of bills for medical and surgical scrvices, and we ouglit to reestablish the "dead beat list" which the society starteu several years ago. The doctor who has a few good pay patrons is better off than the doctor who has many patrons, the majority of whom pay little or nothing. The doctor who furnishes medicines should eharge extra for the medicines.

Discussion closed by Drs. Weaver, Tan Buskirk and Dancer.

Adjourned. J. C. Wallace, Secretary.

## (Meeting of Sept. 29, 1908.)

Society met in rcgular session in the assembly room, with twenty-four members present. Minutes of two previous meetings read and approved.

Phraseology of Bone Fractures was the title of a paper read by Dr. II. G. Nierman, in which he said that coined names for lines and degrecs become essential items in the phraseology on fractures, whereas location and other details are apt to assume the names of authors or the like for synonyms of distinction. When the lines of a fracture radiate from a central point and they are distinct in form, the character is termed a stellate. Where the fragments are small and the point of radiation is not pronounced the same is understood to be comminuted. If several parts are broken and healthy bonc intervenes, the word multiple implies such a condition. Transrerse, oblique, longitudinal, T-shaped, or V-shaped are selfexplanatory and require no comment. If the whole thickness of the bone is traversed by a fracture it is said to be complete; when less in extent, incompletc. Should the lines of fracture be fissured, the break is spoken of as fissured. Depressed denotes that the fragments are pressed down below the surface of the bone. Simple, compound and complicated are of relative importance as follows: The ordinary closed fracture is of the first kind mentioned. If laceration communicates the wound with the surface of the skin, open fractures, the second title is appropriated to define it. Should a large blood vesael, nerve, joint or internal organ become implicated, the complexity makes the fracture a complicated one. Traumatic fractures are caused as the result of violence to bones that were primarily healthy. Necroses or caries indueed from poisons of diseases that produce such conditions in bones and tumors that make the adjacent or affected bone fragile will dispose to a fracture.

In the discussion Dr. Porter said that there are too many proper names without adequate descriptions of fracture used to name fractures. He said that he is opposed to the introduction of proper names to describe pathological conditions such as Graves' ant Basedow's disease; the same applies in operations. His objection is that by using proper names we do not signify anything, and often give priority to individnals to whom such credit does not belong.

Acute Osteomyelitis; Etiology, Symptoms and Treatment.-Paper by Dr. G. L. Greenawalt. Chil-
dren are peculiarly liable to this disease. The starting point is the anatomieal condition favoring localization of infection miero-organisms. The essential symptoms are chill, pain, tenderness, redness, swelling, srnovitis, ete. Pain is the earliest and most constant symptom; and the reasons for failure to make a diagnosis are not usually due to lack of ability but hasty and incomplete examination. He eited two cases of multiple osteonyelitis where treatment had been given for rheumatism. Ile spoke of the effect of the unyielding bony case and venous stasis from thrombophlebitis in disseminating sepsis, and the reasons for the absence of swelling in the carly days of the attack. He also mentioned the differentiation between serous symovitis and suppurative synovitis as eomplications, taking up exploratory puncture. The early diagnosis and differentiation from other maladies, rheumatism, gonorrheal rheumatism, typhoid ferer, tubercular arthritis, and cellulitis, is very important. As to treatment, prompt action is necessary to save a useful limb and promote early recovery. The author spoke on the responsibility of the general practitioner, and the sequence of not recognizing a rapidily destructive process. Radical treatment and immediate drainage is imperative. Constitutional treatment has its good effect, but proper drainage and proper dressings reliese the burden of giving mueh medicine. The expectant plan of treatment in acute osteomyelitis is trifling with fate and inviting disaster.
Opening the discussion, Dr. E. J. MeOscar said that we must recognize that osteomyclitis is a surgical disease and, therefore, treat it surgically.
Dr. Mr. F. Porter said that multiple osteomyelitis of acute variety manifests itself in the medullary eanal of bones and is usually due to streptococcic or staphylococcic invasion. Osteomyelitis may be due to typhoid, tubercular, syphilitic or gonococcic invasion. In tubercular osteomyelitis, if not complicated with pus organisms, it is best not to open. On the other hand, the best treatment of eases of staphylococcic infection is to open. When there are tubereular and other germs present, the physician must ofttimes combine various methods of treatment. He spoke on the relative frequency of ostcomyelitis with periostitis. Periostitis is one of the rarest of rare conditions exeept as secondary to osteomyelitis. After the medullary eanal is opened, the more the eurette is used. all things being equal, the more harm you are liable to do. The simple opening is often sufficient, with drainage.
Dr. Henderson asked about encasing the limb, and, in closing the discussion, Dr. Greenawalt said that the matter of encasing the limb should be left to the surgeon to decide. He spoke of the use of Beck's paste in sinuses, injecting the same, and then putting to rest. This paste is composed of bismuth subnitrate, 30 parts; raselin, 60 parts; soft paraffin, 5 parts; formalin, 1 part; white wax, 5 parts.
Phosphaturia was the title of a paper by Dr. L. P. Drayer, calling attention to phosphaturia rera and phosphaturia spurius.
The paper was discussed by Drs. Rhamy and B. Van Sweringen, and the discussion was elosed by Dr. Drayer.

Dr. A. P. Buchman made a motion, seconded by Dr. English, that the chair appoint a committee of three to draft a seheme, or plan of procedure, in accordance with the spirit of the papers read at the last meeting, relative to collections, fees, etc. The chair appointed Drs. Weaver, Van Buskirk and Dancer.

Adjourned.
J. C. Wallace, Secretary.

## ELKHART COUNTY

The Elkhart County Medical Society met at the office of Dr. Yoder, Goshen, on October I, Dr. Snapp presiding. The secretary being absent, the chair appointed Dr. Norris secretary pro tem. Minutes of previous meeting read and approved.

Hiccough.-Case report by Dr. Mr. K. Frieder. Patient, woman, 40 years of age, healthy in appearance, but an invalid for years, whieh invalidism has been getting progressively worse. Examination showed a lacerated cerrix, eroded os, and hemorrhoids, with subjective symptoms of various kinds. At one time patient suffered with a marked attack of hiccoughing. Dr. Krieder recommended dilatation of sphineter ani, which was done, with immediate relief of hiecough. This dilatation was repeated in about one month, and permanent relief was promised by repairing the laeeration and relieving the hemorrhoids, "thereby instituting sympathetie nerve force and a better capillary circulation."
In opening the discussion Dr. Fleming said that he considered this a case of nervous hiceough which simply demonstrated the value of suggestion. He did not doubt that the procedure adopted in this individual case was all righ't to relieve the patient temporarily, but he thought that in the treatment of these neurotic cases in general the medical profession should refrain from drugging them and tell them frankly that there was nothing serious the matter with them, that the condition was purely a nervous one from which they would recover if they could get their minds off themselves. He eonsidered it a great mistake to operate in the neurotic cases unless they presented absolutc evidence of organic disease, and even then during their convaleseenee they should be treated by the method of re-education which was outlined so well by Barker in the Amcrican Journal of the Medical Sciences a few years ago. When the profession handles these eases in the proper manner they will take out of the hands of the Christian Scientists and ostcopaths the bulk of those nervous cases which is their stock in trade.
Dr. Norris said that many of these neurotic cases are anemie or give eridences of autointoxication such as indieanuria, and he recommended appropriate treatment of thesc conditions.

Dr. Matthews of New Paris stated that hiccoughing ean usually be cured by diverting the attention of the patient into other channels, which was all that dilatation of the sphincter would do.
"Typhoid Fever" was the title of a paper by Dr. Yoder, in whieh he said that the diagnosis of typhoid fever is of peculiar interest, first, because it is a eommon disease; seeondly, because it may be quite atypical and hard of recognition; and, third, because the mor-
tality is comparatively high. In 1890 the death rate of trphoid ferer in the United States was 46.27 per 100,000 of population. In Indiana, in 1901, the rate was 50.8 . This was eighth in the list from all causes of deaths, there being thirty-two other causes of death whose percentage was lower than that of typhoid fever. Often the diagnosis is not made until the discase is well established, or even not until convalescence sets in, as the diagnosis may be difficult, so difficult that every available source of information must be sought before final judgment is rendered. No diagnosis of typho-malaria should be made unless it is definitely proven that the patient is infected, both with the plasmodium malario and the bacillus typhosis, which condition is rare. He said that if called to see a case of continued fever, it is his invariable rule to inquire into a possible prodromal period of lassitude and exhaustion, a possible existing eough, and whether bleeding at the nose has occurred. If these conditions lave existed, and if he finds an enlarged spleen, he makes a diagnosis of typhoid fever, or if he finds rose spots, althongh a palpable spleen is absent, a diagnosis of typhoid fever is also made.

To further aid in the diagnosis of typhoid fever, we have confirmatory tests such as the reaction of Ehrlich, Widal's reaction, and the isolation of the bacillus of Eberth from the blood, from the urine, from the stools, or from the rose spots.

There is no leukocytosis in uneomplicated typhoid fever, which helps to differentiate varions septic fevers and acute inflammations. Perforation with peritonitis in typhoid, however, is accompanied by leukoeytosis. The differential diagnosis must exclude malaria, miliary tubereulosis, septie processes, pneumonia, meningitis, tubercular peritonitis, appendicitis, and malignant endocarditis.

He said that the diagnosis of typhoid fever must often be tentative, and the patient must be earefully watched and investigated, and as evidence aceumulates we must be prepared to render final judgment.
Dr. Hoopingarner also read a paper on the subject of "Typhoid Fever."

In opening the discussion, Dr. Miller said that he considered diarrhea a favorable symptom, and when it was not present it was his eustom to give laxatives, usually ealomel. He considered it of particular diagnostie value if the fever was ligher than the other symptoms would seem to indicate. Dr. Work, Jr., insisted on the value of the diazo reaction, and called attention to an crror in diagnosis which was often made. The ring at junction of sulphanilic acid and sodium chlorate solution with aqua ammonia, must berose red and not brownish red to indicate typhoid, and the foam on top must be rose pink.

Dr. Krieder called attention to the similarity between inflammatory rhemmatism and typhoid.

Dr. Snapp took exception to the statement that antiseptics were of little value. He considers them of much value in prevention of fermentation and distention. It is his custom to use salol. He also urged sponging, often with tepid water, in those cases where baths could not be institnted.

Dr. Holderman spoke of his experience among the Amish. For religious reasons they would not permit
any form of hydrotherapr. Ilis usual treatment consists of internal antiseptics and laxatives for constipation, and a modification of the Woodbridge treatment.

The applications of Drs. M. T. Brumbaugh, Harry T. Barber and Chas. $W$. Haywood were reported on farorably by the board of ecnsors and they were elected to membership in the society.

Adjourned.
Allen A. Norris, Sce. pro tem.

## GRANT COUNTY.

The regular meeting of the Grant County Medical Society was held October 27. At this meeting it was voted that each nember of the society write the state senators, congressmen, and congressmen-eleet urging them to support the poliey of concentrating health bureaus into one department.

The paper of the evening was by Dr.J. E. Johnson, on "Eczema of the Conjunctiva," in which he said that the characteristic lesion of eczematous conjunctivitis is a small clevation about the size of a millet seed, composed in the main of lenkocytes and situated either on the bulbar conjunctiva or on the cornea. This elevation is rarely seen elinically, for by the time the patient presents himself for treatment the thin epithelial eovering has ruptured and a small superficial ulcer remains. The two chief symptoms of this disease are lachrymation and photophobia. The eyes are distressingly sensitive to light. The intense photophohia causes blepharospasm, and the lids snap shut like the jaws of a vise. The affection in its milder forms lasts from one to two wecks; where we have several ulcers and deep invasion of the cornea the course is correspondingly long. The tendency of the disease to recur is proverbial; ofttimes one attack has hardly subsided before new lesions appear and the patient is in the throes of a second. The treatment in these eases shonld consist of nothing irritating to the eyes, especially during the height of the inflammation.
Dr. F. B. McBride was given a transfer card to the Sullivan County Society.

Adjourned.
O. W. MCQuown, See.

## GREENE COUNTY.

The Grecne County Medieal Society held its regular meeting at Worthington, October 15. Mecting ealled to order with President Knoefel in chair and twentythree members and visitors present.
"Responsibility in Mental Disease" was the title of a most intercsting paper by Dr. II. R. Lowder of Bloomfield. The paper was discussed by all the members present and ordered sent to The Journal for publication.
Motion made and seconded that the chair appoint a committee of three to revise the fee bill and report on fraternal insurance cxamination fees at the next meeting. Carried. Drs. J. E. Talbott, II. R. Lowder and J. W. Gray were appointed.

Mr. Weims of the Worthington Times addressed the society in a pleasing and happy manner, and on motion was made an honorary member of the society.

The sulject for the next meeting is "Epilepsy," and papers will be presented by Drs. Lukenbill and Mallett. Adjourned.

Frank A. VanSandt, Sec.

## HOWARD COUNTY.

The Howard County Medical Society met September 4, after an adjourmment of three months, with a large number present. The paper of the day was on the smbject, "Corneal Uleer," by Dr. Will J. Martin, and was freely discussed by all present.

Adjourned.
Will J. Martin, Sec.

The society held its regular monthly meeting October 2, in the Carnegie Library. Dr. A. A. Martin presented a paper on "Typhoid Fever." It was an excellent paper. stimulating a general discussion. The paper dwelt at length on the etiology of the disease and on the necessits of early differential diagnosis.

Dr. O. D. Hutto was appointed to read a paper at the district society meeting to be held at Crawfordsville.

Adjourned.
Will J. Martin, Sec.

## KOSCIUSKO COUNTY.

The regular meeting of the Koscinsko County Medical Society was held on October 20. Meeting called to order by President Long. Dr. W. S. Leiter of Claypool read a paper on the subject, "Changes in Other Organs and Structures During Pregnance." This paper was discussed by Drs. Warvel, Bash and Howard. Dr. C. E. Leedy, Pierceton, read a paper entitled. "Diagnosis of Pregnaney: Eclampsia," which was discussed by Drs. Leiter, Burket, Howard, DuBois, Long, Warvel and Cary.

Congratulatore resolutions were passed in regard to the marriage of Dr. A. C. McDonald of Warsaw.

Adjourned.
C. Norman Howard, Sec.

## LAPORTE COUNTY.

The LaPorte County Medical Society met in regular session October 9 , with Vice-President Hollenbeck in the chair. The papers of the afternoon were by Dr. II. II. Martin, on "Cancer of the Uterus," and Dr. Bowers on "Locomotor Ataxia." Dr. Martin illustrated his talk with several pen and ink drawings. The next meeting of the society will be held in Michigan City, Dec. 11, 1908, for election of officers.

Adjourned.
James Wr. Milligan; Sec.

## LAWRENCE COUNTY.

The Lawrence County Society met in regular session at Bedford, Scptember 3, with fifteen members and two visitors present.

Dr. Emery read a paper on the subject, "Puerperal Septicemia," showing a diversity of opinion on the drug treatment of this trouble. The anthor said to take care of any wound in the genital tract, carefully curctte, using a dull instrument, and then wipe out the uterine cavity with the following solution: equal parts compound tincture of iodin, carbolic acid and glycerin. He does not favor the intrauterine douche, hut others claim good results from it. He believes iodin to be the ideal antiseptic in this condition, and in a direct streptococeic infection antistreptococeic
serum to be of great value. Special attention must be paid to elimination.

Dr. Risinger, in discussing this paper, said that prophylaxis is everything.

At the afternoon session Dr. Short read an cxcellent paper on "Constipation," which was followed by a lengthy discussion on the canses and modes of treatment. Two cases of appendectomy were reported, and a photograph of an adranced condition of a carcinoma of the forearm was shown.

Dr. Hays poke against the two frequent use of coal-tar headache remedies, citing a case in which he helieved death was due to this cause, as the patient had been a constant user of acetanilid headache tablets.

## MADISON COUNTY.

The Madison County Medical Soriety met in regular session October 27, with Dr. Alexander in the chair. Diphtheria was the subject for discussion. Dr. J. W. Crismond, of Anderson, read a paper on its history and treatment from the earliest history to the discovery of antitoxin. Dr. Samuel E. Earp, of Indianapolis. read a paper on "The Modern Treatment of Diphtheria," or the serum treatment. which very thoroughly .covered the subject. The public school board and teachers and the ministerial association were the guests of the society at thi meeting.

The next meeting of the society will be held at Summitville, the subject being pneumonia.

Adjourned. Bexdamis H. Coor, Secretary.

## MIAMI COUNTY.

The Miani County Medical Society met in regular session at the Commercial Club September 25. Meeting called to order by President Griswold. with twentytwo members and one visitor present. The new constitution and by-laws were read, and Dr. Carter offered to amend Article $!$ of constitution to read, "The society may amend any article of this constitution, at any regular meeting, by a two-thirds vote of its members present, instead of its entire membership." Motion lost. Dr. Yarling moved that constitution as read be adopted. Carried. Dr. Spooner moved that the bylatws as read be adopted. Carried.

Dr. F. B. Wrom, of Indianapolis, talked on the subject, "Diagnosis of Tuberculosis." The subject was very interestingly handled by Dr. Wyun, and was dis. cussed by several of the members.

Dr. J. C. Fretz spoke upon the temperature feature in tuberculosis and recommended that such temperature be taken every three hours for six days to assist in diagnosis.

Dr. John Spooner asked Dr. Wynn if there was any marked difference in percussion sound of both lungs in tuberculosis, and Dr. Wrmn said that the right bronchus is more voluminous and shorter, consequently the sound is greater on right side.

Dr. O. U. Carl related circumstance of two patients which he considered lobar pneumonia, who several months later proved to be tuberculous, and asked Dr. Wronn if he thought the disease was tuberculosis from the start. Dr. Wron said that he believed ther had croupous pneumonia from mixed infection, whicll merged into tuberculosis.

Dr. Lỵnn reported a case of supposed tuberculosis with hoarsencss, who recosered in Albuquerque. New Alexico. and asked "is this the proper climate in which to treat tuberculosis, and how soon should we decide?" Dr. Wymn said that hoarseness is an early and quite positive symptom. It may be late, however. Send away early if at all. You can cure here. Insist upon eggs, oxygen and milk.

Notion made and carriced that the invitation of the Commercial Club, to attend in a body the laying of corner stone of new Miami County Court House be aecepted. Drs. John Spooner, F. B. Carter and J. E. Yarling were appointed committee to arrange for marching. Moved and carried that sceretary prepare a list of membership of the society to be placed in the corner stone of the new court house.

> Adjonrned.
D. C. Rideyotr, Sec.

## SPENCER COUNTY.

The Spencer County Aledical Society met in regular session with Drs. Long and Long of Rockport on October 20. Neeting called to order by viee-president. Minutes of previous mecting read and approved. The members who were on the program being absent, the -ociety discussed some interesting cases by individual members. Two application- for membership, those of Drs. Kokomore and Bryant. were received and placed in the hands of the lioard of Censors.

Adjourned.
H. Q. White, Sec.

## FOURTH COUNCILOR DISTRICT.

The fourth anmal meeting of the Fourth District Medical Socicty was held at Madison, October 22. Mecting was ealled to order ly President Dr. Freeman of Osgood.

The program consisted of sixteren papers, two from each county society. Dr. D. R. Saunders of North Vernon read a paper on "The Business Side of Medicine," which elicited a great deal of discussion, several sceming to realizc for the first time that medicine had a "business side."
The association adopted a constitution and by-laws closely modeled after that of the state association, altered to fit local conditions. Owing to the fact that the state association meets in October, the date of the annual meeting was changed to May of each year.
The following offeers were elected for the ensuing year: President, Dr. H. H. Sutton. Aurora; vicepresident. Dr. Curtis Bland. Grecnsburg; secretary, Dr. James H. Shields, Seymour; treasurer, Dr. J. H. Green, North Vernon.
The next meeting of the association will be held at Seymour, May, 1909.
At 9 p. m. a banquet was given by the Jefferson County Medical Socicty at the Hotel Jefferson to the visiting physicians and their wives.
Adjourned.
George E. Deniy, Sec.

## EIGHTH COUNCILOR DISTRICT.

The Eighth District Medical Society held its semiannual meeting in Anderson on October 22. Seventyfive members and gnests registered, and a number of Anderson physicians later arrived and participated in
the festivities. who did not register, making the attendance nearly a hundred.
The mecting was called to order at 10 o'clock by Dr. Granville Reymard, and after the reading of the minutes of the previous meeting Dr. J. B. Garber, chairman of the committee on resolutions, presented the following, which was adopted hy the society:
"We, the Committee on Resolutions. appointed at the last meeting of the Bistrict Society, held in Portland, Jay Comity. Ind., April 16, 1908, beg leave to submit the following:

Resolcel, i. That we favor teaching by competent instructors, a thorough knowledge of self and sex to the students in the higher grades of the public schools.
2. The suppression of the advertisements in seeular and lay journals and newspapers offering relief for real or imagined sexual conditions or indiseretions.
3. Suitable instructions making quality rather than quantity the standard in family production.
t. We commend the present law which has to do with the prevention of diseases and the compulsory sterilization of the incurably insane, idiots and habitnal criminals."
Dr. G. W. II. Kemper of AImeic then presented the following resolutions. Which were adopted as read:
"Wimereas. A combination of the leading medical colleges of our state has been effected on a substantial hasis and placed under the management of the Indiana State University, with a bright prospect for a great future; therefore, be it
Resolvert: That the physicians of the Eighth Distriet of the Indiana State Medical Association here assembled, herebey express our gratification over the consummation of the work, and that we pledge our hearty co-operation and sympathy for the same, and that we will use all proper efforts to establish and maintain this great state instimetion; and, be it also
licsolced. That we request our legislators of this district to extend to this valuable branch of education all necessary legislation and financial aid required to make it one of the grand institutions of the whole country,"

Following the business session the society was addressed by Dr. William Lowe Bryan, president of Indiana University, on the subject of "Medical Co-operation." The address was one of the finest the society has erer listened to and besides giving an historic review of the development of our art, Dr. Bryan took up and considered a number of the general needs of the profession and the special needs of our state. He particularly pointed out the fact of the great neglect of the lmman animal while we are seeking for perfection in the development of the lower orders. Great sums of money are cxpended every year by the govermment and state in agricultural schools, and the cow, the horse, the shecp and the hog are benefieiaries of the state's munificence.
The medical profession in good part have only themselves to blame; the peculiar selfishmess and egoism that has developed in the fraternity has prevented all measures that co-operation alone can secure. The State of Indiana should appropriate a sufficient sum of money to give to the State of Indiana, doctors who are all that could be desired. It should establish a hospital that could at the same time afford proper treatment for the indigent and serve as a training school for those who are to be our successors. It should pay the teachers in the department of seience, in art, and in agriculture.

The state should make this medical school one in which the doctors of Indiana could have opportunities for advancement and learning liere at home that can now be obtained only at great expense of time and money in a visit to some so-called medical center.
Following Dr. hryan's address, commendatory speeches were made by Drs. Kemper, Perce, Keller, Green and Schwartz. These speeches considered the advisability of a non-partisan campaign in which the doctors should secure from the senators and representatives expressions as to their attitude in respect to the above needed legislation.

The President was authorized to appoint a committee consisting of one man from each county who would act as a chairman of a committee of three from each county society in an effort to secure for the human animal the rights and benefits that the state is giving the horse, the cow, the sheep and the hog.

An old fashioned chicken dinner, country style, was served at noon by the ladies of the Central Christian church and nearly a hundred doctors and guests sat down to a most excellent repast. After dinner there were seven other papers and addresess. Dr. H. A Cowing of Muncic, Ind., taking up co-operation in medicine as it would affect the individual to lis professional and financial hetterment. said many things that ought to sink into the minds of all doctors. He summed up the matter in a nutshell loy raying that the quickest way to kill competition is to make your competitor your friend, and that no co-operation wonld be practical mutil the doctors stopped that continnal and endless knocking of one another.

Dr. J. B. Fattic of Anderson considered the necessity of doctors solving some of the problems in regard to the doctor's own welfare which demand that he study himself as well as his text-books. Many physicians consider it an imposition when they are asked to prepare a paper for their local medical society, and instead of improving their own brain matter by a little original thought and investigation, they waste their time and burden the society with something copied out of a text-book, and many times the text-book is an old edition, already repudiated.

A paper by Dr. Fred M. Ruly of Union City and one by Dr. G. R. Green of Nuncie considered the practicability, the availability and the eost of rumning an automobile. The automobile question being one that is most scriously considered by the average doctor at present and first hand information heretofore has been untrustworthy. Their conclusions were that every doctor ought to buy an automobile, run it until the enthusiasm subsides, then sell it to some other fellow who has the fever, then buy a good horse and buggy and be content.

Dr. J. H. Oliver of Indianapolis told of the country practitioner. A review of the lives of many of our old family doctors would show the community that no other one person has had so great an economic and social value as that grand old man who day and night visited the scattering household and gave of his life and his love as much as he gave them medicine.

Dr. II. R. Alburger of Bloomington, Ind., professor of pathology in Indiana University, spoke of the necessity of more frequent postmortems. When a patient
gets well either the Lord is given credit for it, or it happens in spite of the doctor (so our encmies say). When a patient dies the cause of this death should not be left to guesswork and the physician censured by busy-bodies. The knowledge gained from our postmortem work has saved the lives of hundreds. The surgeon is a better diagnostician that the average doctor because he had the opportunity of "seeing inside"; he verifies his diagnosis or finds ont the truc cause of the disease and exploratory surgery in this manner has saved its hundreds more. Dr. Alburger also stated that one reason why few postmortems are held is the fear of the doctor that he will find his diagnosis to have been wrong. The failnres, however, will continue unless such evidence of his mistakes can be found and no other means or method can ever be had than that of postmortem work.
Dr. R. E. Brokaw of Portland, Ind., had a paper on "Suggestive Therapeutics," a much neglected subject of rital importance, since it seems desirable and necessary to prove to a patient that his leg is not broken, his kidney not aliseased, and death a matter of temporary aberration.

The next hneeting will be held in April at Nin. chester and the successful plan of limiting the papers to discusion of general and economic problems will be continued. An editorial in the Cincimati LancetClinic sends a meesage which is worth reproducing:

It is refreshing occasionally to note that some medical societies go out of the beaten track of listening to antiquated monsense compiled from various sources, and really consider the doctor's welfare. This welfare is angmented by a proper study of his relation to his patients and to the community from the cconomic standpoint. The Eighth District Medical Society of Indiana is one of these wide-awake organizations which frankly says: We have becn neglecting to consider some of the things that go to make our profession a pleasurable one, our pocket-book- healthier and our debtors fewer."
M. A. Austin, Sec.

## TWELFTH COUNCILOR DISTRICT.

The Twelfth 'ouncilor District Medical society met in regular sersion at Fort Wayne, Oct. 27, 1908, witi an attendance of approximately 200 , the largest in its history. An abundance of material presented for the morning clinic held at St. Joseph Hospital by Drs. Ridlon of Chicago, Allen of Indianapolis and Rosenthal of Fort Wayne. The afternoon session was particularly well attended, and the papers and dis-cussion- proved worthy of the attendance. The evening program was a most excellent one and was supplemented by a smoker, at which the district society members were the guests of the Fort Wayne Medieal Society.
The following is the program in brief: Morning session, Orthopedic Clinic at St. Joseph Hospital, by Dr. John Ridlon, Chicago; Dr. H. R. Allen, Indianapolis, and Dr. Maurice Rosenthal, Fort Wayne. Afternoon session: Reports by Drs. H. G. Nierman and L. P. Drayer, delegates to the International Congress on Tuberculosis; "Chronic Pericarditis and Cancer of the Heart," with specimen, by Drs. Fred Metts. Ossian, and B. W. Rhamy, Fort Wayne; "Paramyodn.
mus Multiplex," Dr. E. M. Van Buskirk, Fort Wayne; "Heart Block," Dr. Chas. Beall, Fort Wayne; "Lateral Curvature of the Spine," Dr. Joln Ridion Chieago; "Anemia of Pregnancy," Dr. L. P. Drayer, Fort W"ayne; "Differences in Anatomy of the Child and the Adult, Predisposing to Diseasc of the Former," Dr. B. D. Mrers, Bloomington, and "Strabisinus," Dr. Albert E. Bulson, Jr., Fort Wayne. Erening session: "Infant Feeding," Dr. Joseph Brememann, Chicago, and "Indications for and the Technic of Vaginal Cesarian Section" (stereopticon), by Dr. Reuben Peterson, Ann Arbor: Mich.

## BOOK REVIEWS

Why Worny? By George Lincoln Walton, M.D., Consulting Neurologist to the Massachusetts General Hospital. Cloth, pp. 275. J. B. Lippincott Company, Philadelphia and London, 1908.

- An admirable little treatise, well worthy of perusal by physician as well as layman, is here presented. The chapters and references dealing with the subjects of hypochondriasis, ncurasthenia and insonmia are particnlarly apropos and in decided accord with common sense in the broadest acceptation of the term.

Diseases of the Exe. Bỵ G. E. de Schweinitz, A.M., M.D.. Professor of Ophthatmology in the Cniversity of Pennstrania, and Ophthatmic surgeon to the University Hospital, ctc. Fifth edition, thoroughly revised. 895 pages, 313 ilmstrations. Cloth $\$ 5.00$. IV. B. Sannders Company. Philadelphia.

Such a well known text-book by such a distinguished anthor, teacher and dinician certainly needs no extended review notice. This fifth edition has been thoronghly revised and much new matter las been incorporated, which places the work fully abreast of ophthatmological progress. The anthor has devoted special attention to the methods of examining eyes, and the symptoms, diagnosis and treatment of ocular diseases have received the largest share of attention. A= in former editions, a chapter of over one hundred pages is devoted entirely to the rarious operations performed on the eye, and an appendix fully describes the use of some of the newer instruments of precision, and the method of localizing foreign bodies in the eyeball with the Roentgen rays. Though Ainerican and foreign authors of note have been freely quoted, the work bears the indelible stamp of the author in every authoritative statement, and the opinions ex-
pressed are based upon an extended experience ant . master's knowledge of the subject.

State Board Questions and Answers. By R. Mas Gnepp, M.D., Professor of Clinical Medieine at the Phiładelphia Polyclinic. Octavo volume of Gst pages. Pliladelphia and London: IV. B. Saunder Company, 1908. Cloth, $\$ 4.00$ net; Half Morocco, $\$ 5.50$ net.
A condensed work of this sort finds a ready place for those who are seeking for a digest of the usual trpe of state board examinations of today. Taken. as it is, from a number of state board examination. with preference given to the larger and more representative states, and utilizing only those of the past few years, the work becomes at once general and strictly modern in its adaptability. The answers are of neces. sity condensed and bricf, and repetition has been avoided to the greatest possible cxtent, while a commendable effort at classification renders the book even more time saving in its purpose.

Adenomyoma of the Uterces. By Thomas S. Cullen. M.B., Associate Professor of Gynecology in John= Hopkins University. Large octavo of 270 pages. with ilhnstrations by Hermann Becker and Angu-t Horn. Philadelphia and London: WF. B. Saunder= Company, 1908. Cloth, $\$ 5.00$ net; Malf Moroceo. $\$ 6.50$ net.
This volume is in keeping with the other publi-hed works of the anthor-a masterpiece of its lind. To his rich grnecologic and gyneco-pathologic experience the anthor has carefully added in his book the pul). lished results of the work of a selceted few, enough to render the work of some service for reference.

The plates and illustrations are most excellent and profuse, and taken with the gross and microscopic findings so vividly drawn, render the rolume as satisfactory to the student as to the practitioner. Enongh case reports are offered along with the operative and pathologic findings to illustrate elearly the subjects of the text. An interesting deseription is that offored of a specimen presenting in a single pelvis the following separate conditions: Subperi toneal myoma, adenomyoma, primary adenocarcinoma of the body of the uterus, prosalpinx and primary adenocarcinoma of the ovary of a totally different type from that occupring the uterns. The text conchndes with a summary containing in condensed form the essential facts upon the subject as they are now known.

The paper and type are admirable, the latter large and plain, and spaced where special emphasis is to be placed.

# Indiana State Medical Association 

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## ORIGINAL ARTICLES

FIRST AID TO THE INJURED.*<br>I. W. Short, M.D.<br>ELKIIART, IND.

Every case of injury or accident is a case by itself, and whilc we may follow in a general way a set rule, my experience has taught me that we should handle each case separately.

Purpose.-When we find an injured patient at the factory, shops, or by the wayside, we should give immediately such relicf as to prevent any chance of further infection, or increase the already existing injury; in fact, we should put our patient in the best possible condition to be moved with the best results, and so prepare him that he may be able to meet any contingency that may await him.

Scope. - If unconscious, watch your patient very carefully; distinguish between drunkenness and a purc injury; if vomiting, gently turn your patient on his side, lower the head to avoid getting any of the matter in the lungs, clear the mouth, nose and throat of any foreign substance; open up any clothing or resistance that interferes with the breathing, usually placing the patient in a reclining position on the back, with the head slightly lower than the body, where the conditions to air and surroundings are the best; guard against any chill, aid the circulation, quiet severe pain, and use every means at hand to prevent shock or collapse; control the hemorrhage; if there are open wounds, immediately dress them with gauze and cotton to prevent further infection; if there is fracture, so place the injured member that it may be moved with the least possible danger.

[^60]Instruments. - A good hypodermic syringe with at least three good needles, shears, needles and holder, artery forceps, several tourniquets, or rubber bandages, and an equipment of pocket instruments that one ordinarily carries, a ferv pliable thin boards or other material that can be easily adapted for splints.

Drugs.-The usual drugs that one would carry in a medicinc case, a full line of soluble hypodermic tablets, such as strychnin, morphin, nitroglycerin, atropin and apomorphia. It is always well to have in your case a supply of aromatic spirits of ammonia, digitalis, discs of nitrite of amyl, alcohol, chloroform and ether.

Dressings.-Cotton, gauze, different kinds of bandages, antiseptic powder, spools of adhesive straps, a can of sterile vaseline, catgut. silk, tubes of threaded needles with catgut and silk, and a pair of rubber gloves.

Fractures.-Always put a fractured limb in as nearly normal position as possible and thus avoid causing a simple to become a compound, or mutilating the tissues and increasing the severity of the case if it is a compound. If a compound fracture, cut the clothing away and cover the wound, or if a hole pack it with gauze; in fact, all wounds connected with any fracture should immediately be covered with gauze and cotton. Place over this a shingle or board or anything that will make a splint, well padded with cotton, and bind snugly around the injured member.

If a fractured rib, place a bandage of cloth or adhesive strap snugly around the body, the width of three or four inches.

Fractures of the arm, shoulder joint, collar bone or shoulder blade require, in addition to the above, a sling over the opposite shoulder, to take the weight off the injured member.

In fracture of the skull elevate the head, move your patient carefully, if there are any wounds
control the hemorrluage, and get your patient where lie can have permanent care immediately.

In fracture of the nose, if the hemorrhage is serere. pack both nares with gauze.

In fracture of the spine keep your patient on his back, as cren turning lim on his side may prore fatal. Keep him warm, and if necessary resort to artificial heat. Handle this kind of injuries with despatch.

Burns.-Carefully cut away all clothing. and aroid pulling any that adhere. If there is a large burned surface only expose a small area at a time. If the burn is caused from caustic, lye or ammonia, wash the surface freely with water or diluted rinegar. Dress burns with mild antiseptic powder. cover the surface well with sterile vaseline, and cover all with plenty of gauze and cotton, and bandage loosely. Watch for shock, control pain and kecp patient warm.

Shoch:-Shock and collapse are so nearly alike in many cases that it is hard to hare a dividing line, and I will treat both together.

In my experjence shock is one of the greatest things to be dreaded in severe railroad accidents, as it is usually more noticable in cases where the tissuc organs or boncs are badly crushed, while collapsc usially occurs spontaneously or from mental or intrinsic causes not connected with physical riolence and may follow apparently trivial causes, while both are of a reflex depression. Shock may be of all degrees from the most temporary faintness which will leave in a few minutes to a condition of vital depression which terminates fatally without any reaction.

Symoptoms.-Thesc at least can be referred almost solely to vasomotor paralysis of a reflex origin from the pcripheral nerres. The face becomes pale. there is pallor of the skin and visible mucous membrane, coldness of the body, dilated pupils reacting slowly to light, heart irregular with a weak, thready or imperceptible pulse, respiration irregular, breathing shallow and hard, mental inactivity, subnormal temperature, nausea and romiting. Again, the shock may be of such a type as to cause thic patient to be restless and excitable and eren uncontrollable, with irregular pulse and breathing.

We have another type, which is called delayed shock, in which the symptoms are practically the same and come on some hours after the injury, and may be due to concealed internal hemorrhage. If the slock becomes more pronounced we have coma, the surface becomes cold and covcred with perspiration, and death usually follows quickly. These symptoms are often noted in injuries to the liead or severe injury to the viscera, or gumshot wounds.

Often in the first aid we can in many cases prevent slock or alleviate it and avoid collapse. It the rery outset one must go cautiously, as there are sevcral things that can not safely be neglected. It is not well to establish reaction too quickly, as orer-action might be followed by secondary hemorrhage. Often patients are unable to swallow, and it is a poor rule to give a patient suflering from shock strong liquors, as it might bring on coughing and that in itself prove fatal. The same is true of inhaling such strong stimulants, as ammonia.

The patient should be laid flat on the back, or eren with the head lower than the body, or the extremities should be raised. In severe cases it is a good plan to bandage extremities from the tips to the body. Warm stimulating drinks if they are arailable are good. Aromatic spirits of ammonia well diluted may be given. Keep the patient well covered. Often artificial respiration or rubbing may be resorted to, and nitrite of amyl will often help to equalize the circulation.

The principal remedies with which to stimulate the activity of the heart are strychnia and tincture of digitalis in good-sized doses hypodermically. Nitroglycerin should be given with caution. The respiration may be helped by giving atropin, and if the patient is extremely restless give hypodermic injections of morphin.

Often in severe shock or loss of blood, or where the limbs are badly mangled, a prompt amputation of the mutilated part is important, as it will often bring about an improrement. It is a question in my mind whether whiskey should be given at all. If it is given it should be well diluted or giren hypodermically.

Hemorrhage. - Hemorrhage of the brain is better controlled by keeping the patient in a sitting position or with the head elevated.

In hemorrhage of the limbs cut away enough clothing to expose the wound, use tourniquet or rubber bandage or ordinary roller bandage above the wound. Never touch the wound except when absolutely nccessary. If the flow of blood is serere, place a pad or roller bandage orer the artery and bring enough pressure to bear to check it. After a few minutes, if the hemorrhage ceases, loosen up the pressure and only maintain pressure enough to control it. Elevating the limb will often help to control hemorrhage. A string or rope is not a good thing to use in controlling hemorrhage, and too long continued high pressure will often interfere with the recorery of the patient, as it will likely cause sloughing and tend toward gangrene. If unable to check the flow of blood it may become necessary to pick up the artery and tic it. or in rare
cascs where this is impracticablc, by taking a long curved needle with catgut or silk and going into the wound where the hemorrlage is severe, picking up the tissue and tying temporarily, the hemorrhage may be checked. In many cases packing the wound well with gauze will suffice.

In hemorrhage from the armpit, where the arm is mangled or torn away and you are unable to find the artery, any hard substance, such as a roller bandage or paper, covered well with gauze, may be pressed into the wound and bandaged tightly, or a hard substance may be placed in the artery back of the collar bone and the artery pressed down on the first rib.

Internal Ifemorrhage. - Move the patient gently and as little as possible. If the hemorrhage is from the skull have the head elerated, otherriise the patient should be in a recumbent position on the back, with the head slightly lower than the body. Hemorrhage from the skull often can be controlled or checked by using hard pads. of gauze and compressing tightly with bandages. In hemorrhage from the lungs or bowels apply cold wet cloths or ice packs externally, give morphin hypodermically, and if the pulse is weak give strychnin and digitalis.

Bultet Wounds. - Gunshot wounds as a rule are dangerous. Usually we have very little hemorrhage, though at first there may be a free gush of blood, then the arteries recede and the hemorrhage will cease. It is well to pack the wound with gauze, covering the surrounding tissue with gauze and cotton. If the hemorrhage is severe treat it as ordinary hemorrhage. If the bone is fractured use the same precaution as in other fractures.

In gunshot wounds we should be on the lookout for shock, which follows very rapidly in nearly every case, especially if the viscera or brain is injured.
Suspected Internal Injuries.-If your patient is in sercre pain give morphin hypodermically. 'fone up the hcart if necessary and watch the respiration. Kcep the patient warm; if necessary resort to artificial heat, and get him to the hospital or his home as quickly as possible, where you can give him permanent relief.

## SUMMARY.

A noted surgical writer has well said that the fate of an injured person depends very largely upon the acts of the surgeon in whose hands the injured person first falls; therefore, the necessity and value of prompt and efficient first aid needs no comment. Do not handle the patient or wounds any more than is absolutely necessary. Dress all wounds as nearly as possible antisep-
tically, using plenty of gauze and cotton. Fix all fractures in a normal position and in such shape that they can be moved with safety. Avoid shock and guard the respiration and circulation. Move the patient gently and carefully. Never touch the wound with unclean hands, and if there is dirt in the wound you will have less trouble from it by covering the wound with gauze and leaving it until you have a chance to give it careful and permanent attention. Keep the patient warm and avoid a chill. Be guarded in your diagnosis and prognosis, because sometimes apparently mild injuries prove fatal in a few moments, while many cases badly mangled and apparently fatally injured will recover. And, finally, the most essential thing to remember is to use good common sense and good judgment in each and every case.

## CYSTITIS IN THE FEMALE.

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## IN゙DIANAPOLIS.

Perhaps no other organ in the mechanism of the human body is more abused and less nursed than is the female bladder. From its structure, its function and its relation to other structures this organ is first of all predisposed to disease. On the other hand, it appears to possess a certain immunity which renders it less often the seat of disease than we would expect. It is possible that from its orn nature the bladder is tolerant of great injustice and so well able to recover or ward off infection and disease that we have until recently heard less of its diseases than of those of other organs whose treatment falls into the field of the gynecologist or surgeon.

It is not that these conditions are new, but that there is and has been for a time a tendency to regard lightly diseases of this oryan in our eagerness to relieve by treatment of the generative organs. Winckel points out in his "Diseases of the Female Bladder and Urethra" that much that is now known of the diseases of these organs was known thousands of years ago and, having been forgotten, was rediscovered by late observers. Aëtius (502-5̃5 A. D.) described ulcerative affections of the bladder, and Paul of Egina ( $6: 0$ A. D.) treated diseases of the bladder by means of injections through a catheter. In the nineteenth century Simon devised a series of conical specula with obturators by which the urethra could be dilated to an extreme degree, and from that time rapid strides in the examination and
treatment of the bladder have been made. The awakening of our own surgeons to the importance and simplicity of this line of work is due rery largely to Howard Kelly, whose contributions to this department of the diseases of women rank with the most important of the past century.

True, we are all quick enough to recognize the symptoms of a diseased bladder when they are manifest, but how few of us stop to consider the numerous forces against which the bladder in the female must constantly guard. Cystitis implies an infection, the entrance of bacteria into the bladder, and their subsequent growth and development there. The principal object of this paper shall be to point out the factors which predispose to this infection. Among these we find, doubtless, the most important to be congestion. Both anatomically and physiologically the bladder in the female is prone to become congested. Among the anatomical factors are:

1. Position.-This varies witl its contents and the relation to other structures. In the healthy state the empty female bladder lies in the median line behind the pubes and in front of the vagina, rovered immediately over its fundus by the peritoneum, while the anterior wall for a part of its distance is deroid of a peritoneal corering. In the empty state the transverse diameter of the organ greatly exceeds the antero-posterior diameter, the antero-posterior walls being directly adjacent, while the transverse walls are widely separated. When the organ is distended it inclines slightly to the right side, and the fundus may reach the level of the umbilicus.
2. Size.-The average capacity of the female bladder is four hundred grams, somewhat less than that of the male bladder. Its minimum capacity is twenty to thirty grams, while the maximum is 3,320 grams (Fritsch).
3. Structure.-In the immediate structure of the organ we find the principal predisposition to congestion in the richness of its blood supply, which is derised from the resiculous superior and inferior branches of the arteria hypogastrica. The branches of these ressels form a thick capillary network which can be seen just beneath the superficial epithelium of the mucous membrane. The rertex is not so thickly supplied as the deeper parts.
4. Relation to Surrounding Organs.-This brings us into a field of importance as well as of neglect. It is so easy to orerlook some pelvic condition only to realize its importance after the bladder has been long congested and is thorouglily infected. Among these factors are the folloring:
(a) Urethra: The most frequent channel of entrance of bacteria into the bladder. Its length, its direction and dilatability make it also the channel for the introduction of foreign bodies into the bladder. It is pre-eminently the organ from which an infection may by direct extension reach the bladder, while its direct relation with the rulra and its indirect relation with the vagina, uterus and anal region render it especially liable to be involved when the supporting parts are the seat of infection.
(b) The ureters by their constant drainage of urine, which may carry infection to the bladder, form a frequent predisposing agency to infection of the bladder.
(c) Peritoneal carity: A general visceroptosis in many cases results in pressure on the bladder with attendant hyperemia. In addition to this, complete filling of the bladder may, from the same cause, be prevented. Relative to the peritoneal cavity, gravity must form a factor of more or less importance, as all free fluid gravitates to the lower abdomen, with consequent pressure upon the bladder, as in ascites, peritonitic, hematocele, etc. General or local peritonitis may result in involrement of the bladder by direct extension. Abdominal tumors must not be lost sight of in considering bladder symptoms.
(d) In the non-pregnant state, a perfectly healthy uterus becomes enlarged and congested at the menstrual period, producing congestion of the bladder. Among the diseased conditions we must consider endometritis, fibroma, polypi, sarcoma or carcinoma. Any malposition of the uterus is capable of producing an irritable bladder hy mechanical means; e. g.. in anteflexion the uterus is abore and around the bladder, the fundus and anterior wall often pressing directly upon the bladder. In retroflexion the body of the uterus, by being tipped backward, results in pressure upon the bladder by the cerrix. A general prolapsus produces pressure upon the bladder, with resultant congestion.
(e) The vagina and perineum are concerned more especially in cases that have suffered lacerations and as a result produce a cystocele of greater or less degree, which is not only a rery prolific cause in the production of cystitis, but a great hindrance in its cure, because of the accompanying difficulty or impossibility of completely emptying the bladder.
(f) Tubes and Oraries: Any disease or enlargement of these organs will result in more or less pressure upon the bladder, and they are certainly a rich field for the proeess of extension of a localized infection through adhesions. A colon bacillus infection may easily pass into the bladder
from the rectum, intestines or appendix in cases in which they become adherent to the bladder wall.

In the pregnant state there are two distinct periods in which the bladder must bear the brunt of pressure effects. These are during the first three months of pregnancy, when the growing uterus still occupies the pelvic carity, and during the last few weeks of pregnancy, when the gravid uterus settles by its orn weight into the pelvis. Hence the irritation of the bladder in the early months of pregnancy and its return in the last few weeks. In labor and the puerperium we have two distinct factors introduced-the first, the traumatism during the passage of the fetus through the birth canal, and the second, the use of the catheter.
The period which confines the patient to bed and requires more or less catheterization is the period from which a great majority of patients date the first attack of cystitis. Careful as one may be, the introduction of the catheter at this time into a bladder rendered sensitive by traumatism is responsible for a great majority of cases of cystitis. Many a patient comes to the physician for examination, thinking she has been lacerated at labor or has falling of the womb, and, much to the disgrace of the profession, she is often tamponed for a period of time, when in reality the trouble is a cystitis dating from this period of catheterization. Such cases following surgical operations are by no means unknown.

From a physiological standpoint wé have two important factors predisposing to congestion and disease; first, the bladder at all times contains urine which may in itself carry infection from the kidneys or ureters or it may be decomposed within the bladder, rendering it unhealthy; secondly, the peristaltic movements of the ureters and bladder keep it in constant motion and render healing of the surface slower and in some cases impossible without artificial drainage.

To the factor of congestion as a predisposing agent in cystitis we must add (2) retention of urine, which may be acute or chronic, resulting in overdistension or decomposition; (3) abnormal urine, as from elimination of drugs, toxins, etc.; (4) foreign bodies, and (5) neoplasms.

The pathogenic organisms which are the direct cause of cystitis are summarized by Ashton in order of their frequency: colon bacillus, gonococcus, staphylococcus pyogenes, streptococcus pyogenes, proteus vulgaris, tubercle bacillus, typhoid bacillus, mixed infection. These organisms may be present in the bladder without affecting the mucosa so long as its resistance is not
lowered, but will become active upon the development of congestion. An exception must be made to this statement in the cases of the gonococcus and the tubercle bacillus which it is now believed arc capable of attacking a perfectly healthy bladder mucosa.

The symptoms of cystitis have for a long time been held by the profession as so marked and classic as to ofler little doubt as to the diagnosis. Many times has this self-confidence resulted in painful and dangerous irrigations of the bladder when in reality there is a stone or an infection or both in the pelvis of the kidney, to say nothing of the grnecological diseases that are thus overlooked.
The onset of the disease may be sudden or very gradual even when the same organism is respon--ible for the infection. In well-developed cases (ff cystitis the cardinal symptoms are: (1) Frequency of micturition (and there is no cystitis without it). This varies in degree from a fer minutes to an hour or so, and may result in constant tenesmus. It is always accompanied by the more unpleasant condition of haring to empty the bladder on the first impulse. It is the first symptom to appear and the last to subside. (2) Pain, not always present at first, derelops some time during the disease. It follows micturition at first and later becomes more nearly constant. The pain is sharp, cutting, bearing down in character and when the bladder alone is involved does not radiate. (3) Bleeding may or may not follow micturition. (4) Pus, which is present in all true cases of cystitis, has so many sources that it may be confusing, as from the urethra, ureters, kidney or bladder. However, its presence in conjunction with the above symptoms points to cystitis.
The general symptoms in the acute state, as fever, rapid pulse, dull headache. loss of appetite, nausea and constipation, pass away with the acute state, and their persistence in chronic cases should always suggest something more serious, as retention of urine, tuberculosis, pyelitis, etc.
Diagnosis. - The presence of a milky urine passed frequently and with pain should always suggest to the practitioner the existence of a cystitis, and in a majority of cases the treatment will prove this suggestion correct. It is only the rarer cases which need further investigation to complete a diagnosis. No one is justified in treating for any length of time an acute cystitis without signs of improvement and neglect this investigation in the first step, whicl is the urine examination. In going about this procedure, if it is to be of real value in diagnosis, the patient should
not be allowed to roid the urine, but, after the parts are thoroughly cleansed it should be removed by a sterile catheter, thus lessening the danger of mistaking an admixture of leucorrheal discharge for pus and the smegma baeillus for the tubercle bacillus. This precaution will often obviate worry for the patient and the embarrassment of haring the patient get well after one has given her a grave prognosis. If the microscope reveals pus in the catheterized specimen there is a possibility that it comes from the kidner. The settlement of this question depends upon the seeond step-that of direct examination of the bladder, which consists of: inspection of the urethra, inspection of the ragina and perineum for evstocele, tear or congenital deformity, palpation, external, combined or internal should be carried nut. External palpation is made through the abdominal wall above the symphysis, himanual or combined with one hand above the symplysis and the other in the ragina. The latter will determine the existence of cystocele, the consistence of the bladder wall. the presence or absence of a tumor. calculus and. in most cases. of adhesions. The bladder may be explored with a sound introduced through the urethra, and finally the interior may be palpated directly by introducing the finger through the dilated urethra. The final diagnosis, however, in cases of persistent cystitis is made by direet inspection of the interior of the fladder wall. This is a process whieh falls distinctly under the head of surgical operations and should be earried out with the same precautions. Instruments, aceessories and field of operation should be rendered aseptic and kept so. A local or general anesthetic may be giren, dependent upon the sererity of the symptoms and the sensitivenes: of the patient. A 4 per cent. solution of cocain on cotton packed into the urethra will suffice in most cases. The patient may be placed in any one of three positions, the dorsal position with hips elerated by pillows, the knee chest position as adroeated by Kelly, or the exaggerated Trendelenberg position as recommended by Webster. All of these positions depend for their practicability upon the expansion of the lumen of the bladder by air. When the anesthesia is complete the urethra must be dilated for the insertion of the speculum. This is accomplished by means of some one of the many round solid urethral dilators, as Hegar's dilators in serial sizes. Any dilator working on the principle of all the forceps is bad enough for the dilatation of the uterine cervix and certainly has no plaee in operations on the urethra. When the urethra is stretched to the extent of about 12 mm . in diameter a round
mrethral speculum with cone in place is inserted, the cone withdrawn and the speculum left in place. Any residual urine is to be removed by one of the many instruments of suction made for this purpose.

The interior of the bladder is then inspected directly by the aid of light refiected through the speculum by a head mirror from an electrie bulb in the hands of an assistant, or perhaps better riith a light on a band on the head of the operator. By moring the speeulum about, the whole bladder mucosa can be inspected and the diseased areas made out. The beginner with the cystosope shonld disabuse his mind of the opinion, current until recent years, that the whole bladder mucosa is affected in cystitis, as the investigation of recent years prores that this is the exception rather than the rule. The pieture gained by the speeulum varies with the nature and severity of the infection and the stage of the disease. In acute eases most often the trigone is affected, but the inflammation may loealize in any part of the mucosa. The white areas beeome in color a pale red to a bloody red, the mueosa is swollen and the blood ressels, which in the healthy state are plainly risible, now are seen faintly or may become entirely invisible. Mueus is exuded from the surfaee. Many cases show an exudate of pus, and there may be central sloughing of the infected area. In cases of tubereulosis the areas are small, nodular, ragged and harsh in appearance with.a nodular or a sloughing eenter from which the inflammation extends, gradually shading off into the healthy tissue. Sueh areas may be single or multiple.

In the absence of these findings the persistence of the symptoms with pus in the urine would indicate that the trouble lies in the kidney. If there is a history of long standing trouble the chances of tubereulosis of the kidney are great. At any rate under these cireumstances one is jusiified in resorting to eatheterization of the ureters to loeate the true seat of infection. While yet in its experimental stage no one is justified in making a positive diagnosis in eases of long standing without resorting to the tuberculin test (by eutaneous application, not ocular), which is at least to be commended both from its simplieity and its harmlessness.

Differential Diagnosis.-The most common affections one is called upon to differentiate from cystitis are: neurosis of bladder, contraetion of bladder, pelvic tumors or other abnormal condition in pelvic organs, infection of ureters and kidneys, resico-urethral fistula and stone or forcign body in bladder.

Treatment. Prophylaxis.-As noted in the beginning of this article, the most potent factor in producing cystitis is congestion; therefore in preventing cystitis one should look to the relief of the cause of congestion. This is often due to some gynecological trouble. This trouble shoul:1 always be remedied by operation when necessary. Great care should be used at times when catheterization is neeessary. The catheter should be avoided when possible, and when finally resorted to the process should be considered in the light of a minor surgical operation and performed with the same aseptic precautions. A well regulated life, good food, abundance of water and the abstinence from alcoholic excesses all contribute to the prevention of disease of the bladder.

Active Treatment.--This varies with the stage of the disease. In acute cases rest is the essential faetor in contributing to recovery. The patient should during the first few days be put to bed and absolute rest insisted upon, the patient not rising to empty the bowels or lladder. It is in this stage that internal medication is of value. Urotropin is perhaps the drug that can best be relied upon to benefit more cases of blalder irritation than any other. It should be given in eapsules in doses of seven to ten grains about four times a day. Other drugs that are of value are santalwood oil, methylene blue, copaiba and salol: along with these a milk diet and an abundance of water should be given.

When the acute s.mptoms have begun to subside, and it is not wise to do it carlier, we may resort to irrigation, the patient remaining in bed and the irrigation given through a two-way catheter. Among the many solutions used the following will be found most useful: Sterile salt solution, boric acid (sat. sol.), permanganate of potash $1-5000$ to $1-1000$, silver nitrate $1-5000$ to $1-1000$ or even stronger. When these solutions are employed they should be used at lẹast twice daily and the bladder allowed to retain part of the solution for a short time, then upon its being voided the writer has found it raluable to introduce into the bladder an oily preparation, this to be retained. For this purpose I have employed with excellent results liquid alboline with twenty grains of bismuth sub-nitrate to the ounce. Liquid vaselin or boroglycerin may be used for the same purpose and in the same way. In cases where there is constant tenesmus which fails to rield to irrigations it is possible to 'give rest to the bladder only by artificial drainage. This is best done by making an opening through the anterior vaginal wall into the lumen of the bladder. The bladder is then irrigated, the fluid being
introduced through the urethra and escaping through the resicoraginal fistula. Upon recovery of the bladder the fistula can casily be closed by suturing throngh the ragina.

In tuberculous cases, or in cascs of other origin, which become chronic, topical treatment must be resorted to. This consists of inserting a speculum into the urethra and by means of a swab applying to the ulcerated surface a preparation of silver nitrate pure or the tincture of iodin. This procedure should be repeated abont every third day. If, after this, healing is not in progress. it becomes imperative to cut down upon the bladder, remove the ulcerated area and close up the opening thus made in the bladder.

Tuberculin in the treatment of tuberculosis of the-bladder deserves mention and a trial.
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## MYOCARDAAL FAILURE FROM CAUSES OTHER THAN VALTE LESIONS.*

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In this brief paper it is not my purpose to treat exhaustively on the subject of myocardial failure nor have 1 attempted to follow the definite rules of classification usually found in textbroks, but shall only bring out some of the more common and a few of the misleading points connected with this disorder. In the past few years metical science has made such marked and practical advance in the recognition and management of all infectious diseases that we, with some degree of pridc, point to our ability to handle this class in their acute form; but to certain changes induced by this class of discases in some of the organs or tissues, especially the vascular system. we still plead a degree of ignorance and admit our helplessuess to control. How frequently does chronic toxemia, especially that resulting from intestinal indigestion or faulty tissue metabolism, so insidiously but surely exert an injurious effect on the peripheral capillary circulation, raising in a chronic state the intracardiac pressure, or again chronic conditions of whatever origin may cause degenerative changes in the walls of the large blood vessels, particularly the coronaries or of the aorta at their origin, occluding the mouths of these vessels, and myoeardial failure results. In one instance from overwork of the leart muscle itself, or, what is more frequent, from faulty nutrition, resulting from degenerative changes in

[^61]the arteries supptying nourishment to the heart muscle. Of this last condition 1 might suggest that of the infections diseases syphilis and typhoid are hy far the most common.

It is well to bear in mind that often becanse of the frequent negative physical findings about the heart and the nature of the clinical symptoms pointing to some remote organ, as the kidnets, stomach or nerves as the primary seat of the disease, the diagnosis is most difficult. It is appalling that in so many patients in midille adult life, only after irreparable damage has been done to the myocardium, is the real nature or tendeney of their disorder recognized or fully appreciated. ITho in medicine would not advise eertain restrietions in the habits and occupations of a young man with ralyular endocardial disease? Why? Because the conditions are so plain and there is present the bugaboo murmur so needlessly alarming to the man who knows from statistics and his own personal knowledge that if the condition be not safeguarded there will follow myocardial degeneration, invalidism and premature death. Yet how little different the nltimate effect of the chronie toxie condition of whatever nature, espeeially when associated with habits of work causing hypertemsion, inducing vascular and myocardial legeneration - a condition which, after compensation is once brokem, is as a mone. less amenable to treatment than myoeardial failwre resulting from valve lesions. To be sure, valvular insufficieney is frequently met with in this class of patients, but only as the result and not as the canse of the myocarial condition, and when present is frequently aceompanied by a murmur, which, occurring as they do in the latter stages taxes the diagnostician to his utmost to directly separate canse from effect. The hmman organism recognizes no difference in the insult of an overload of toxin contained in the alcohol consumed by the drunkard and that conslantly filling the system of a tense and strenuous liusiness man who, by his constant mental effort, so disturbs his metabolism that a normal chemistry is most impossible, which condition is often made all the more damaging by the habit of irregular and rapid eating. Unconsciously this man is constantly saturating his system with toxic substances of imperfect digestion or metabolism. Both in reality are nothing more than dissipation, and the evil effeets of the latter are just as certain and even more disastrous than the former. Age and heredity, to be sure, are the common causes of degenerative changes in all the tissues, especially that of the heart and arteries. Yet why the increase of myocardial degeneration
in those comparatively roung. without specifie rhological history, and why should they eome to 11s in such increasing nombers braded as incurable cardiopath: : The fregrency with which we owelook a supposedly unimportant carly etiology of such a condition is second only to onr failure in many cases to interpret correctly the sympiomatology. The age of fo was immortalized by O:ler as the deadline of a perfect physical human organism. Y'et how often do we see men even at an carlier age who, after physical effort causing is strain of the myocardium which under normal condition should quickly disappear, show a leart which remains in a state of dilatation with tachyeardia. often arrhythmia, fatigue, dyspnea or slight edema-all symptoms and signs of myocardial failnre. How often a mild pneumonia or some simple infection is followed by this same condition! Could such happen to a healthy heart muscle: Possibly, but very unlikely, and a careful examination into the history will. in many, develop in the family a marked tendency to premature tissue degeneration. In such a ease a careful physical examination only confirms the history by dinding a leart enlarged, most often to the left, but sometimes to the right, which by change of position or after exercise will show a soft systolic murmur but little transmitted from its point of origin. In many of these subjects the arteries are recognized as being quite superficially placed. full and round. not tense, but often with thick leathery walls. All these things combine to show conclusively that the physical (flort or slight infection only precipitated the (risis and the real mischief had been going on in the vascular system for many years. This identical ease may, owing to change in the blood supply due to want of proper propelling force of the heart. or impermeability of the arteries of the norrous "rstem, manifest, first. marked change of temperament or, what is so frequently complained of, a chronic form of museular fatigue. or the accompanying renal symptoms may direet attention to the kidneys. Another of this class of patients we so frequently encounter is the man of middle life of active business habits, who previously, so far as we know, was in good health, who is suddenly seized with some acute infectious discase, particularly influenza, which is only of moderate severity. generally of the so-called catarrhal or bronchial type. Our treatment is only routinc. The acute condition subsides and we dismiss him as eured. The cough continues. Muscular fatigue is complained of and sleeplessness appears. The convalescence is not prompt or complete and the patient does not recover suf-
ficiently for him to do his ordinary work. The will be found flinching business responsibilities, becomes irritable with himself and all those about him. experiences a menfal lethargy, appetite and digestion may be normal, rarely is there loss of weight, although in some cases this is quite extreme and is thic first and only evidence of myoardial mischief. Color remains fairly good, but the vasomotor tone is unstable. Skin is relaxed and he perspires freely on making the slightest mental or physical effort. Examination shows still some moisture throughont the lung, but not enongh to explain all the symptoms, and after a siege of symptomatic treatment and disappointment we begin in earnest to climinate various possibilities. The constantly changing symptomatology encourages $u$ s to search for a common cause. By careful study the pulse rate, when at rest, is found nearly normal but easily excited and not of the best quality. The wave may be full but is not sustained. The tests of the functional capacity of the heart muscle show it to be decidedly wanting in strength or reserve power. The apical impact is feeble and scattered, often displaced inward from the left border of the cardiac dulness, which area is markedly quadrangular in outline. It is evident that you will have compiled sufficient proof to leave no doubt of a discased myocardinm and make plain the line of treatment.

Another type of myocardial patient met with is the man more adranced in years, yet not old, of thoroughly temperate habits except the work incident to the making and management of a succeseful businese, who giver no definite etiological history. Who on retiring at night notices on first lying down a little fluttering about the precordium or epigastrium, a mere eonsciousness of his heart action, lasting an instant-not long chough to cause any discomfort, but long enough to make a decided impression on the mind of the patient. This may not be repeated in months or for a year, but it undoubtedly marks the begiuning of mischicf, and sooner or later is repeated, possibly a time or two in the same evening or more frequently the patient is awakened from cound sleep by this sensation. Then comes the sense of dyspnea when the patient is making no physical exertion, for which the stomach is often blamed. The consciousness of the want of breath in this carly stage is not usually accompanied by an increased breath rate so common in the dyspnea or effort. The latter may be present in some cases or come in the terminal stage of others, but it is entirely absent in many. A past polyuria is not uncommonly associated with the
early history of this condition. There is some anemia and an indisposition to fake plysical exercise. Such a pationt omits his pleasures, finding them only in his office at work, which he now feeps needs all his energy. This he is content to dio and no more. In habit and often in appearance he has agel rapidly. His family insists he is not well. but he refuses medical attention.

These individuals. owing to the variability of the physical signs, fall easily into two classes. First, the slight built man of active habits and poor muscular derelopment will, on examination, be found with a distinet and apparently strong apical impact, an area of eardiae dulness more apparently increased than real. with a highpitched, rather abrupt short first sound. The aortic second sound also is accentuated and heard ofer the whole of the precordium. The rate of the heart's action may be rapid. but often slow, frequently rery slow when the patient is at rest. but easily excifed by excrece. This slow pulse rate. I might add, in this class of patients is pretty positive evidence, when direct toxic or reflex factors are eliminated, of fibrotic changes gning on in the muscolar walls involving some part of the auriculo-ventricular bundle of fibers. Arolythmia may be present, which naturally means involvement of the auricular walls, usually demonstrated by finding an increase in the transrerse area of dulness in the third interspaces. In these subjects the systemic arleries appear very lange and romed and are easily felt. sometimes quite visible, giving the impreswion of being extremely sclerotic. Whicle a careful examination will prove not to be true, but appeass so owing to their fullness and superficial location. The heart findings may prove misleading, as the accentuation of the aortic ralve closme is in part becanse of their nearness to and thimess of the chest wall, or because of the moderate dilatation of the first part of the aorta. The first sound apparently so strong is not so at all, but is only ligh pitehed and entirely without duration or muscular quality. This characteristic sound is especially significant of myocardial degeneration.

The other class is represented by the fullblonded plethoric man, greatly over weight, especially large in the abdomen, phlegmatic in temperament and usnally of sedentary labits with no anemia, few or no nerve symptoms, a urine variable in amount but more likely to show at times albumen and casts. Blood pressure is practically always very high, continuing late in the disease, eren when compensation is batly broken. Cough and dyspuca are quite prominent and appear carly. This in part explains why this rlass
of patient is so often mistaken in the early stages as suffering from pulmonary disorders. Nervous symptoms are conspichously absent as compared with the previous class. Physical examination shows the lungs, in many instances, to be more or less empliysematous. This condition, together with the abundance of subcutaneous fat, makes the physical findings about the heart very uncertain. No apical impact can be either seen or felt except occasionally with the patient lying on his left side, when it will be located, as a rule, much ligher than normal. This is one of the misleading signs. While the area of cardiac dulness in thesc cases is mostly impossible to outline, palpatory or auscultatory percussion generally shows a greatly increased area of deep dulness. On anscultation, as may be expected, the sounds are feeble and distant, but have distinct diagnostic characteristics. The first sound is low pitched, often with a prolonged and marked murmurish quality, heard, as a rule, best between the nipple and ensiform cartilage. It times a more distinct vibratory sound ending in a sort of a whet may be heard. Reduplications of the heart sound are not only frequent in this class but are often present as a very early symptom. Murmurs are much more common in these subjects than generally supposed and have a few distinct characteristies. They are always systolic unless complicated by relative aortic insufficiency. They seldom have any distinct direction of transmission, and as pericardial murmurs they rarely leave the precordial area. In the routine method of examination murmurs are absent by superficial. examination in a majority of cases, but can be developed in nearly all by a moderate amount of physical excrece, after which the patient should immediately lic flat on his back. By this means a murmur will be heard most often in the aortic area in a great majority of cases and any murmur previously present will be much intensified. The aortic second sound is always accentuated if the valve cusps themselves are free from disease, in deciding which the quality of sound from the aortic closure should be carefully noted in every case. While this sound is accentuated, it is seldom so heard at the apex as in the first class. Both the arteries and pulse wave are quite small, arousing little suspicion of the high tension so constantly present. While blood pressure in subjects of myocardial failure of non-valvular origin is in the vast majority greatly increased, yet in those cases due to aortic disease or resulting from acute infection the myocardium may fail very carly with reduced size of the impulse, or simple dilation and the blood pressure will be found
even below the normal. The heart rate, as a rule. is rapid and regnlar mentil the terminal stage or mutil its aurictes are involsol, although arrhythmia is present in some as an carly symptom.

Grarity edema is strikingly absent in both classes, being never present in the first and but slight in the lungs and liver of the last. In this last class of patients, while edema is sare, a recognizable cyanosis is often seen, sometimes only in the lips, and may be noticeable for many months or even years before the final breakdown. in all cases presenting clinical symptoms which make the diagnosis doubtful. This sign shonld be carefully watched for, as it may be very slight, but certainly of value. Pain in cither class of patients is exceedingly rare, considering the very great number, but when present and of a true anginoid character must be regarded as ummistakable evidence of discase involving the coronary ressels. But this symptom is always of interest to a diagnostician owing to the frequency with which it will be found as a result of other conditions. Of the nervous symptoms which so frequently in the begimning dominate the clinical pictures in myocardial subjects, making the diagnosis so difficult, I will add that a heart which responds promptly and miformly to all mental and physical clforts is more safely diagnozed as onc of pending myocardial failnre. In obese subjects an irritable heart may be present without physical signs for many years before the myocardial failure becomes apparent. The bacterial toxins, especially of inflinenza and other infections, often primarily irritate only the nerve or their centers; yet we constantly find both acting directly on the cardio-vascular tissues, the first acutely on the heart miscle, while the second is a common cause of arterial and myocardial degeneration. In regard to some stimulants, especially tobacen, the excessive use of which so often mask the diagnosis of begimning myocardial failure. while frequently a cause of irritable heart, it is weli to bear in mind that an already weakencl heart is much more susceptible to the elfects of tobacco than is one in perfect health. While many of the nerrous manifestations may come from myocardial failure, it is well not to forget that a part of such symptoms may be the result of an organic disease associated with the myocardial failure and not as a result. In suspected heart cases, with marked nervous manifestations, we should study more carefully for pulmonary or hepatic engorgement as well as observe carefully the quality of the first heart sound, the character of the pulse wave, the condition of the arterial wall and study repeatedly
the urime and test most thoroughly the functional capacity of the heart muscle and not attempt to make a diagnosis of ryyocardial disease by the use of the stethoscope alone.

## SUMCMARY.

1. Of all causes of non-ralvular myocardial failures, diseased coronaries are the most eommon cause.
2. Heredity is a most active factor, often being in marked evidence in two or three generations.
3. In many instances the carly symptoms of myocardial failure manifest themselres in some part of the ncrvous system, the kidneys or the stomach, and thereby lead the diagnostician far from the seat of the primary trouble.
4. Chronic infection or toxemia of any character forms the beginning in most chronic cases.
5. The overstimulation of the nervous energies operate first by maintaining an increased vascular tension, and, secondly, by exhaustion, making the individual more susceptible to toxic influences.
6. Hypertension, accompanied by overdistension of the arteries, is most active in causing arterial degeneration and myocardial failure.
$\therefore$ Hypertension, associated with a chronic toxic condition, predisposes strongly to arterial degeneration and myocardial failure.
7. Myocardial failure from causes other than valve lesions is much more serious, uncertain and difficult to restore, and may approach a stage of complete failure without pain, edema or the least evidence of renal involvement.
8. A tense and strenuous business life is nothing but dissipation, and among Americans is not only directly responsible for more domestic unhappiness, but a more potent cause of primary myocardial failure than any other excess.

## A FEIV IMPORTANT POINTS IN REGARD TO NERYOUS AND MENTAL DISEASES.*

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While the principles of medicine in general are making noticeable advancement and progrese, particularly in regard to the prevention of disease, and in the attempts being made to determine and devise means by which to enable Nature to combat and overcome pathological conditions, there is one branch that does not seem to be keeping apace, viz.: that part dealing with diseases of the nervous system, inclusive of the mental condition. In other departments of medi-

[^62]cine it will be found that various measures which have for their object the elimination of those factors acting as causative agents in the produetion of diseased conditions are being continuously instituted and carricd out. As a result we find that the ravages of many of the more virinlent diseases are not only being lessened, but are becoming to some extent eliminated, riz.: smallpox, yellow fever, malaria, tuberculosis, ctc. It is unnecessary to go into detail to point out wherein the ravages of these diseases have lessened, and to a certain degree been eliminated, or to indicate the various means and methods utilized to bring about such results. Attention nced only be directed to the interest that is being taken in one of them, namely, tuberculosis, to show what is being done. It is a condition engaging the vital attention not only of the patients affected, of the physician in charge, and of the immediate family, but also that of the surrounding community, of the local authoritics. and of those in charge of federal and even international affairs. It is difficult to form even a relative estimate of the time, energy and moner that is being spent in the endeavor to lessen and stamp out the ravages of just this one disease, so appropriately designated "the great white plague." Suffice to say it is occupying the time and brains of some of the best men of the world of to-day.

## hortality and freqeency,

If a disease carrying off annually on an average between 65,000 and 00,000 individuals in the United States alone demands so much attention. and will demand more and more so long as its ravages continue, should not another condition which carries off almost as great a number also demand a corresponding attention? The report of the United States government of the Bureau of the Census for 1904 gives the number of deaths annually from tuberculosis as averaging over 65,000 for the five years preceding, and the deaths from diseases of the nervous system as averaging over 60,000 . It must also be taken into consideration that for a discase which blots out the lives of this number annually there must be some ratio in regard to the average number aflicted who are either partially or wholly incapacitated from earning either their own livelihood, or providing for those who are dependent upon them, and as a consequence must be taken care of and thus become a burden. The same government report gives the enormous number of 199,773 as suffering from diseases of the nervous system and who are in institutions devoted to their care and treatment. In addition, there must also be taken into consideration those who. bccause of inherited mental deficiencies or of ac-
quired mental weaknesses, are burdened with a constitution which renders them incapable of taking part in the struggle for existence from the first, and thus, also, must be taken care of. According to the same report, there are of this number 12,000 given as being in and requiring institutional care and support. The cost of this care and maintenance amounts to about $\$ 25$,G00,000 amnually. While there is this large number directly under institutional management and control, it must be remembered that this is by no means all that are thus afflicted, since it can be readily ascertained that there is just as large a number who are being taken care of either hy private resources or eke out a parasitic existence as tramps, ragabonds, charlatans, criminals, ete.

## importance of subject indicated.

Recognizing these facts, it becomes at once evident that this is a question which deserves more attention than is being given it, and that it is not receiving the close study that its seriousness demands. The solution of the problem is unfortunately a most difficult one . more so probably than in any other branch of medicine, as there are so many different factors that come into consideration as cansative agents. It is only too true that in such a disease as tuberculosis the active causative agent is vastly different from those in the subject under consideration, for in the one we have the invasion of the living loody by a living organism, while in the other it depends more upon the action of outside agencies acting upon a constitution whose power of resistance is limited, or which possesses a susceptibility to those influences. But just as there are means being devised, measures being instituted and methods carried out which have for their object, and, as a matter of fact, succeed in lessening the ravages of tuberculosis and many other diseases of a kindred nature, so, also, can the lessening of the horrors of this condition be accomplished by the institution and adoption of proper measures. In order to indicate the probable and possible factors that will have to be taken into consideration in bringing about a solution of this problem, it will scarcely be necessary to go into details, but reference will be made to only a few of the more important ones.

## HEREDITY AS A FACTOR.

It can hardly be denied that of all the factors which take part in the development of this condition heredity is the most important, not in that it directly transmits the pathological conditions nuanifested, although even that can be shown to be true in some cases, but in that it transmits an endowment, taint or predisposition which
renders the individual particularly susceptible to outside deleterious influences or agencies. Here, perhaps more than in any other class of patients, one is able to perceive the enormity of the sentence imposed upon mankind when it was decreed that the sins of the parents should be visited upon the children even unto the third and fourth generations.

It is unfortunately impossible to give an accurate estimate of the frequency with which a direct hereditary connection can be established, for as yet no reliable methods have been generally adopted to place it upon a statistical basis, but its importance must be paranount when it is recognized that all authorities maintain it to be a predominant predisposing factor. Another condition that makes it difficult to ascertain the frequency of hereditary connection is the fact that only too often when inquiry is being made to obtain the hereditary history of a patient, instead of giving what information can be given, an attempt is made, not only by the patients themselves, but also by those in a position to furnish such, to refute any possibility of it, under the mistaken idea that a more favorable aspect of the case will be presented, or from some other motive unknown to the examiner. Broadly speaking, it may safely be said that from 60 to 65 per cent. possess such hereditary transmission.

## drug addiction as a factor.

Probably the second most important factor taking part in the generation and production of nervous and mental disturbances is drug addiction, the most prominent of which are alcohol, opium and cocain. Of all the exciting causes it seems probable that the injudicions and excessive use of alcohol takes the lead. But one must not lose sight of the fact that it is not always possible to determine definitely whether this drug addiction is to be regarded as a causative factor or as a partial manifestation of the disturbance, for it has been definitely proved that in many patients the latter is the condition existing. It is a well-established fact that the nervous system appears to be especially sensitive to the influence. of alcohol, and in many cases suffers to a much greater degrce than the other tissucs from the effects of habitual and prolonged use. But even here heredity must be taken into consideration, for the tendency to drink is often inherited. Its relation to occupation, social status and personal surroundings is only too manifest to require any detailed discussion. It is impossible to givè any reliable estimate as regards the frequency of its existence in this class of diseases, for it is a notorious fact that the statements of those addicted to its use are, as a rule, wholly unreliable,
and also because of the fact that some of those so addicted are able to conceal it from their surroundings for years, and it only becomes evident from some casual incident. But the seriousness of the effects of the prolonged or habitual addiction to drugs, particularly alcohol, does not limit itself to the individuals themselves nor indirectly to their surroundings, but is also manifested in the offspring, for such has been shown to be, if not the most prominent, at least one of the most prominent factors in the production of defective children, and in the transmission of a neuropathic or psychopathic condition.

## VENEREAL DISEASES AS A FACTOR.

Another prominent factor taking part in the production of the diseases under consideration is one that hitherto has not received the attention that the seriousness of its effects demands, and one for which the medical profession in general is to be lighly criticized and censured, because of its apparent indifference and apathy in regard to it. The action and effects of venereal diseases are so far reaching and in some cases so disastrous that it makes one shudder at the thought of the suffering it entails. It is a wellrecognized fact that gonorrhea is one of the most potent factors in the causation of diseases of women. It is a prominent factor in morbidly modifying the sexual life and functions of both sexes, to a degree as yet too little recognized and understood, and with too little attention given to it along that line. Morbid appetites and desires leading to morbid actions and habits.

To what extent syphilis is to be regarded as a causative agent it is difficult to say. So far as general parcsis and tabes are concerned, we know that the great majority of cases are the result of syphilitic infection, and the frequency of thesc two conditions alone is sufficient to stamp it with the brand of the strongest condemnation and to demand the consideration of methods leading to its extinction. But its action does not stop at this. While at certain stages its toxins seem to have a special predilection for nervous structures, yet throughout its whole course there is no organ or tissue of the body that is immune to its action, and its action is not confined to the individual infected, but is also manifested in the offspring. Its importance in this direction is at once evident when it is taken into consideration that at least 10 per cent. with certainty, and 15 or 20 per cent. probably, of imbeciles are the result of syphilitic infection in the parents.

FAULTY Training and education of children.
In the faulty training and education of chilJren is also found a most important factor in
the production of an unstable nervous and mental constitution. When we take into consideration the impressionability of the nervous system of children and their susceptibility both physically and mentally to external impressions and influences, it is not surprising that the effects resulting thercfrom are instrumental in shaping and molding more or less definitely and permanently their physical and psychical make-up. The most powerful and most lasting impressions are, as a rule, those coming from the ones in direct control and care, particularly when parental. Unfortunately, only too often there is present in these parents a nature but ill-adapted to educate and train their offspring, due, on the onc hand, to inefficiency and inadequacy and, on the other hand, to oversolicitousness and overanxicty. Unconscious of their own weaknesses and defects, they all too readily instil the seed of an imperfect judgment into the organism which they are rearing and molding. But this faulty education and training is found not only in the home or in the guardian, but also in the school. How frequently do we hear of certain children being stigmatized not only because they are in part out of harmony with their surroundings, but also because the teacher and fellowpupils fail to understand their character and constitution? It is difficult to determine definitely to what extent such faulty education and training are instrumental in the production of an unstable nervous or mental constitution, but the frequency of such disturbances at this time of life attributable to such causes is such as to indicate the necessity for a serious consideration of the question.

## CLASS of mamgrants as a factor.

Another condition which is regarded as a factor in this relationship is the class of immigrants that are being continuously dumped upon our shores. Just what is the relative proportion of such disturbances manifested as between those native born and those of foreign extraction is difficult to say, but Burgess of Montreal has shown that for Canada, at least, the proportion is decidedly higher in the foreign born, and it can be safely assumed that what is true of that country also holds true for the United States. And, furthermore, it is only too evident that the physical, as well as mental, status of so many of the class of immigrants that are being poured into the country is decidedly below the average.

## the struggle for existence as a factor.

Still another factor, because of its prominence, deserves serious consideration, namely, the influence of the high pressure of so-called civilization,
the orerwhehning desire to acquire an inaginary sutherency of this world's supplies. the inclina1 ion and tendency to live berond the means at command. the impetuous ambition to occupy the topmost heights in the social whirl, exert an inHuence which necessarily taxes to the utmost the menta! and plysical conditions of those engaging in the shrogle. The struggle for existence is more strenuons and vigorons at present probably than at any other stage of this world's history: and in the struggle as between one with better cudowments than the other, there is no question as to which wiil come off the victor.

There are many other factors which play a rôle either as predisposing or exciting causes in the production of this class of disturbances, such as prolonged illness, prolonged emotional strain, disturbed domestic relations, injuries, etc., but these come into consideration more in the domain of general medicine and are there dealt with: suffice to say that they only bring about the final breakdown.

## CURATIVE AND PREVENTIVE CONSIDERATIONS.

In the consideration of the question as to how axisting conrlitions can be remedied, or the agencies bringing about those conditions combated, it may be approached from two viewpoints, the one a curative, the other a preventive one.

## CURATIVE CONTSIDERATIONS.

So far as curative measures are concerned, one must consider those applied before admission into institutional care and those administered afterward. In regard to the latter not much can be expected berond what is being done at the present time. In this, as in every other form of illness, the best results are obtained the earlier curative measures are adopted, and in the great majority of cases they have passed beyond this early stage before the question of admission is ronsidered.

## PART PLAYED BY TIE GENERAL PRACTITIONER.

Upon the family physician falls the opportunity of applying those measures or administering those remedies at the time when the best results are to be expected. Few persons seem to realize the responsibility that devolves upon the general practitioner. While this seems to be an age of specialism and of specialists, they may all yield the position of honor to the general practitioner. He is the one who is called upon to face and meet first all the diseases and ailments in their incipiency to which human flesh is heir. He is the one called upon to give first aid, and, as a sule, only when he fails to give relief do the patients resort to those engaged in a specialty, and that these frequently fail also is indicated
hy the mumerons methods adopted by so many who, without any or very little preparation beforehand. endeavor to remore, and in some cases do, that which the physicians fail in. These methods are not always such as appeal to what appears to he just and honest, and some to be anything but reasonable, but there are some patients who will yield to such measures when more rational ones fail to make an impression. Great public prominence is often given to such cases. but we rarely hear mucli comment concerning the scores who receive no benefit or are even made worse. The injury in these questionable methods is in that they are carried to an extreme, are applied to conditions where they do positive harm and can not possibly accomplish any good. Amongst the foremost of these is Christian Science and allied principles. That it does good in individual and properly chosen cases is unquestionable, but that it can nullify the action and effects of a tubercular infection, of a diphtheritic infection, of a syphilitic infection, or, broadly speaking, of any disease in which there is a strnctural organic basis, is a condition befond comprehension, and the danger attending ihe assumption that such is possible, and the treatment carried out accordingly, is fraught with such direful results that those guilty of such indiscriminate methods of treatment should be made to suffer the consequence.

IREVENTIVE MEASURES FROM AN EDUCATIONAL STANDPOINT.
To the realm of preventive medicine must we look, however, for the greatest beneficial results in lessening the frequency of those disturbances. From this standpoint, education must be the iountain head of our measures to combat these conditions. Just as education has been, and is. one of the predominant means utilized to inculcate the principles and conditions which, when put into action, have lessened the ravages of all infectious and contagious diseases, so well illustrated in the crusade being carried on against tuberculosis, so also must reliance be placed upon education of the masses, of the conditions tending to produce abnormal nervous constitutions, ol abnormal functioning of an apparently normal one, and upon education in the measures to be carried out which will tend to lessen and limit the existence of those conditions, and when a proper conception of the gravity of existing conditions has been inculcated and appreciated more stringent measures can be readily instituted. The question of a more thorough education of those choosing the profession of medicine as a life work comes first into consideration along
this line. Considering the frequency and seriousness of this class of diseases, on the one hand, and the limited time and attention devoted to their study in the educational institutions in which such fundamental knowledge is acquired, on the other, it is at once cvident that one of the first steps to be taken is in that direction. The scientific sturly of psychology has not kept pace with that of other branches of medicine. Too little attention has been given to it, and as a consequence we know very little in regard to the normal mechanism of the psychological processes; how can it, then, be expected that pathoiogical processes will be any better understood, inuch less intelligently and scientifically treated? It is time that the institutions for medical education awaken to that fact and act accordingly. There are encouraging indications that some of these educational institutions are giving more time and attention to the study of psychology and psychological processes, both in the normal and abnormal, but still more is required.

As has already been stated, upon the family physician falls the responsibility of applying measures during the earliest stages of the disturbances, and to him must we also look for the diffusion of that education which must play an important rôle in the realm of prevention. He unconsciously becomes the fanily mentor. His knowledge of the physical and mental weaknesses and defects makes it possible for him to advise where another neither could nor dared. In his relation of confidential intercourse with the family he exercises an influence which but fcw, if any other, could reach. Consequently the necessity of being prepared to detect the danger signals, to advise and administer the proper prerentive measures, is so evident as to need no further discussion.

## treataent of hereditary influences.

In regard to the question of heredity, a close study of the situation reveals the fact that it is a most difficult problen to solve. It may seem harsh, unjust and exen inhuman to resort to measures which will involve personal rights and liberties, but when it comes to a question that not only entails the welfare of the individual and of the community at large, but also the welfare of future generations. there should not be an orerconsideration of those personal rights. While heniency can, and should be, shown to those unfortunates who possess constitutions that render them susceptible to such disturbances, for much can lee done to prevent their development, to lessen their intensity, and to ameliorate their conditions, yet when it becomes evident that the
propagation of the species means the propagation of beings whose physical or mental constitutions possess endowments and stigmata which must render them incapable of competing in the struggle for existence, and consequently make them a burden not only to themselves, but also to their enviromment, the question of sacrificing those rights slould be seriously considered. Viewing this question from an impartial standpoint, or as nearly impartial as it is possible so to do, does it not seem more just and humane to all concerned to limit the suffering and sorrow to the individual rather than permit it to be transmitted to those who unfortunately must bear the curse of their inheritance whether or not? To those who may feel justified in thinking otherwise, let them consider the hordes of tramps, vagabonds, criminals, etc., seattered broadeast over the land; let them visit the halls and corridors of our charitable institutions, of our institutions of correction and of penal punishment, and let them remember that at least 60 per cent. of this class have inherited a constitution which is responsible, in a great measure, for such a condition of affairs; then, perhaps, they will take a different view of the situation and be willing to admit that, at any rate, something should be done to lessen and abolish such human sorrow and afliction. There is no state in the Union but has some form of law to regulate the marriage act, rude though they be in some of them, but more stringent measures are necessary. Too many are permitted to enter the marriage state whose propagation can not fail to produce anything but creatures who are a burden to themselves and a curse to the community. Some states have established institutions for the custodial care of the feeble-minded, and these unquestionably are a great blessing to humanity, and, on the whole a source of public economy, but their number is far below what is required, and their influence is far too restricted. This custodial care and the question of the propagation of the species should not only include the fceble-minded and defective, but should also extend to those who have acquired a constitution or condition that must inevitably transmit its baneful influences to the offspring.

## PREVENTIVE TREATHENT OF DRUG ADDICTION.

What has been said of heredity applies almost equally to the question of drug addiction. Alcoholism, the most prominent and extensive of these, is receiving probably more attention than any other condition active in the production of nerrous and mental disturbances, but not for this reason. An active propaganda is being car-
ried on in rarious channels, having for its object the lessening and abolition of its use. Tarious methods are being utilized in an attempt to disseminate a conception of the baneful influences and dire results following excessive or prolonged consumption. Various legislative measures are being enacted, tending to lessen and prohibit its distribution, but more stringent measures still are necescary. When it becomes evident that an individual has so far lost the personal respect and morale that he owes not only to himself, but to his enriromment, when morbid appetites and desires have grown beyond control, it is only humane and just that they, too, should be placed under custodial care, which would exercise a supervision which can not be procured otherwise. This necessity is still further warranted in that too many are unable to control their ungovernable appetites even in spite of the personal remorse, in spite of the heartaches and suffering that they cause to others, and in spite of the imposition of fines and even imprisonment temporarily.

But there is another point to consider in this connection. It can not be doubted but that to the offspring of individuals whose bodies are continuously saturated with and bathed in alcoholic bererages, or other drugs, whose minds are dulled and stupefied, rendering them incapable of recognizing and realizing the curse they are, not only to themselves, but also to their procreation, is transmitted a constitution which is far below the average, and which so frequently manifests itself in the form of some neuropathic or psychopathic derangement, or even imperfect development. Bourneville has shown that in 1,000 cases of imbecility, alcoholism was present in the parents in at least 620. No comment is necessary in regard to the conclusions to be drawn, or the preventive measures that are indicated. It is sufficient to ask the question, Whether or not such creatures, for the mere gratification of their passions, should be allowed to propagate their species, which must inevitably bear the consequences and suffer the penalty of such an inheritance?

## TREATALFAT OF VENEREAL DISEASES.

The relation of renereal diseases in regard to causation has already been pointed out, and so far as treatment is concerned but little can be expected, more than is being done at the present time. There should, however, be more active steps taken, more energetic measures instituted leading to the prevention of its dissemination and to its abolition. It is time that the members of the medical profession were aroused from
their apparent indifference and apatly, and goaded to the education of the laity as regards the injurious actions and horrible consequences resulting from this evil. Its very insidiousness and privacy endow it with a relative degree of danger. Why should this class of cases be exempt from the publicity or quarantine any more than tuberculosis, smallpox, diphtheria, etc., for it is just as infectious, and, although the immediate effects are not, perhaps, so directly dangerous to life, ret its ultimate effects are many fold more productive of constitutional disturbances, and these, in turn, must involve the neuropsychical. It is time that the mantle of this false sense of modesty and secrecy be thrown aside and the condition placed upon its proper basis.

## RELATION OF ILLEGITIMACX.

Closely allied to this class of cases is another group of unfortunates who, while victims of the results of the gratification of their own passions, yet, on the whole, are deserving of more leniency and generosity than is, as a rule, meted out to them. It is a condition which involves not only the young and ignorant just entering upon that stage of life wherein they are brought to a realization of a special element in their nature, but it also involves those of maturer years, who, because of their knowledge and experience, should have exercised better judgment. It is a condition that will exist so long as there are indiriduals of the two sexes. It is a condition which is not to be countenanced, but condemned from every standpoint, and yet it is a condition which, when it does arise, is deserving of at least some consideration. The poor unfortunate who, in response to one of the most powerful forces in her nature, steps beyond the threshold of virtue and morality, becomes disgraced and shunned by all society, except, perhaps, a few vultures who hover about her only to feast upon her misfortune or intensify her misery, is called upon not only to suffer the pangs of hell herself, but also to propagate a being who throughout life must bear the stigma of illegitimacy. Is it to be wondered at that this is also a source of many admissions to our charitable institutions, or the source of many a degenerate, physically, mentally or morally? Here likewise education fails to accomplish what is desired. In spite of the fact that the principles of morality and virtue are inculcated into their minds from earliest childhood, in spite of the fact that the evil consequences which are almost inevitable should the step be made beyond the threshold of those principles, are observed day after day; month after month and year after year, yet its existence and
frequency have not lessened; consequently it is a problem which must be taken into consideration in the measures instituted for the lessening of the disturbances under consideration.

## DEFECTIVE IMMIGRANTS.

So far as the question of defective immigrants is concerned, it is gratifying to note that the requirements for admission into the country are being raised higher year after year, and it is only a question of time until a standard is reached which will place them upon a basis equal to that of the native born.

## SOCIAL CONDITIONS.

In the various causative factors that have hitherto been considered, the conditions lave been such that remedial measures were not only possible, but quite probable, for somer or later public opinion will become alive to the necessity of exercising more energetic and stringent means to lessen such a source of sorrow and suffering to humanity. But there is another condition, so complex and so far reaching, involving so many different elements, that it is most difficult to determine which of those elements are the most dominant, or how they are to be regulated. It is the condition of affairs participating in the struggle for existence. Among the more prominent of these elements may be mentioned the continued high tension, pliysically and mentally, of those engaged in the struggle to kcep abreast of, or to supersede their fellow, the increasing participation of the female sex in vocations and occupations which formerly were limited to members of the opposite sex, the high nervous and emotional tension due to the increasing demands of the social whirl, the baneful influences resulting from the conditions leading up to and terminating in divorces, and many other closely allicd conditions. Of these there is one class particularly which deserves the severest criticism and censure. This is a class that is unwilling to exercise the care and attention that the fulfillment of the marriage vow entails, who resort to every means conceivable to prevent or intcrrupt the process of conception even at the risk of their own lives, a fatal termination of which is only too frequent. No one but the medical profession knows how many otherwise healthful lives are sacrificed annually, either directly or indirectly, from this cause, upon this altar of imaginary self-protection. Failing in the attempt to prevent, they chafe under its continuance, they shrink from the duty and care that it will necessitate, and too often they nurture an unkindly feeling toward the offspring, and too often place it into the hands of an entire
stranger to nurture, at a time when nothing is so essential to its healthful development as its natural nourishment and protection. Is it any wonder that under such circumstances there is brought into existence a being possessing a constitution but poorly supplied with the forces capable of withstanding the influences against whieh it must struggle?
These are only some of the more important factors instrumental in the production of nervous and mental disturbanees, which, as yet, do not receive the attention from this standpoint that their importance demands, and the consideration of which must concern the question of the lessening of this scourge of liuman health and lhappiness.

## discussion.

Dr. G. IV. McCaskey, of Fort Wayne: I will not take up any time in criticism, but will limit myself to the discussion of two or three points that will bear emphasis. One of the questions which the Doctor has emplasized very particularly is that of heredity. We all of us understand the influence of bad heredity on children and the different diseases resulting from it. Is the Doctor has said, it is not the disease per se which is usually transmitted, but the hereditary tendency; some condition embryonic in its origin, some condition of the nervous system or other organs which makes that individual more susceptible to disease. More particularly is this true of nervous discases, and that is what we are now considering, and we would like to impress the position which the medical profession should fecl and exercise toward the unfortunate class of society, because we know if we could control these conditions during the development, during the prenatal period, much could be accomplished. Oliver Wendell Holmes said: "Our education begins a century before we are born." It certainly begins several months before, and the early months and years are certainly important in the development of the nervous system. Usually the effects of inebriety are nervous diseases and venereal diseases and a large class of other discases, and I want to emphasize our obligation. We should feel our obligation on this question and do our part to educate the public and make them understand the importance of the prevention of these diseases.

The question of drug addiction is an old and time-worn one. We do not understand the phenomena of it. We understand its far-reaching importance, and we are perhaps doing what we can. It is true with drug addicts and with those suffering from venereal diseases we meet with the progeny suffering from disordered nerves. We may feel the desire for gratification of those tastes and passions implanted in us by Nature; however, I believe it is our duty to
press along these lines and educate the public up to the point of a reasonable degree of control being extended over society in these things which are undoubtedly a menace and which are producing disastrous results upon the body.

The Doctor mentions the responsibility of the general practitioner in the carly recognition and treatment of nerrous diseases. I would like to emphasize this point, also. As the Doctor has said, practically crery case of nerrous disease first falls into the hands of the general practitioner, and it is often true that it gocs on perhaps because the physician fails to recognize the disease in its incipiency. It is true of the heart. lungs, ctc.. as well as of the nerves and mental diseases. After the case has developed into insanity the problem is a very different one, and it is astonishing how many cases of severe insanity could be successfully treated by timely measures. Those slight deviations from the normal mental state of the individual should have more importance attached to them by the family physician than has before been done, and the family physician should see that they do not go on to pronounced cases of insanity.

I agree with the Doctor in a gencral way that the integrity of the social body is more important than the individual. It is a fundamental principle of our government, "the greatest good to the greatest number." We must restrain individual liberties in order to get best results for the general public, so I betieve there is a limited class in which this is profitable. I think it is a little premature, perhaps, to press this, other than to attempt to educate up to the point where they will recognize its importance and take the measures to effect their control. The same is true of renercal diseases. The whole problem is of a difficult claracter and I fear it will be sercral generations before the profession can be anything like a unit, and still longer before the public can be made to sec the necessity of the public dealing in this way. The whole subject of nerrous and mental diseases is extremely interesting, and is the necessary result of the extrenely stremuous life we are living, and we see it on every hand; nerrous systems breaking down and people suffering from overstrain because of the strenuousness of modern life, and while we see things that ought to be done we have got to more slowly. This means almost a revolution, so we must more slowly, cducate the profession first and the public at the same time, if possible, because they need it.

Dr. Albert E. Sterne, Indianapolis: I want to corroborate the propositions which the essayist has set forth, but I want to emphasize in particular two things. The first of these deals with the popular idea that mental diseases particularly arise from natural causes. That is especially true in the beginning of mental diseases. When a mental disease arises it has a
basis. It makes no difference whether or not there i.: in that disease an organized pathology; there is a plysical basis from which this case arises, and it is our duty to recognize that, and it is a delusion that mental diseases are hearenscint or hell-scnt, as the case may be. Another question of extreme importance I want to speak of. There is no doubt at all that heredity and hereditary influences play a considerable rôle in the manifestation of discase. At the same time we should recognize that there can be no doubt of the fact that by preaching this doctrine of heredity, pure and simple, we as a profession are doing a great deal of harm. We should recognize heredity, but we should be very careful of impressing too strongly upon the progeny that he or she will suffer by a disease because the parents suffered from that disease. I am thoroughly convinced that many a man and woman has committed suicide because the idea was engraved on their minds that because some ancestor has committed suicide that he must have that tendency. And, gentlemen, we must understand that discases are not actually liereditary. No disease is hereditary. That is, if we understand the proper derivation of the word "hereditary," namely, that such a disease exists from the prenatal conception. We have a tendency, but no disease is hereditary as such, not even syphilis. When syphilis exists in the orum it is acquired syphilis, and there is a vast difference betwcen congenital diseases and inherited diseases. I want to emphasize these things particularly, because we can do a great deal of damage in putting too muclu stress on heredity: We must educate the people, but we can accomplish a great deal of harm by the tactless use of our knowledge about the true aspect of this question.

Dr. F. B. IVynn, of Indianapolis: The great thing in medicine at the present day is prevention. We are prone to think of prevention as applied to such discases as are of known germ origin-diphtheria, tuberculosis and such dis-cascs-and the sanitarians are certainly accomplishing a great work in this line. Now it appeals to me that there are other fields in which prevention is just as possible, and I should place preventive medication under three heads: First, the prevention of communicable diseases; second, the prevention of social conditions-improvement of social conditions, educational derelopment and the like, and, third, I should make it apply particularly to those diseases from the use of various insanitary articles which are used either as drugs or medicines. That is a good thing, and all concede that the future of medicine is along the line of prevention, and the doctor of fifty years in the future will be a very different man, because he will be paid really for preventing disease rather than to cure it. I just want to refer to the third thing. namely, the question of drug addiction. I came near miss-
ing this meeting because just before I started I was risited by a lawyer who requested that 1 should go and talk to a man who was a subject of the cocain habit, having acquired the habit by the nee of an atomizer or something of that sort. I am afraid lie is a ruined man. I believe as practitioners we should take that home with us, because we are prescribing cocain and morphin and because in one way or another we have heen in part responsible. I know that it is true that these habits are acquired through the use of patent medicine, but how often do we prescribe remedies for cough in which there is opium, and our patients get the prescription refilled again and again, and so without our knowledge these habits are being formed. I never prescribe morphin without I give it myself. I believe you ought to prescribe these things yourself and not write prescriptions for people to have filled over and over again, and so with cocain.

Dr. F. F. Hutchins, of Indianapolis: There is another feature in the mental and nervous diseases that it does not seem to me has been touched upon. It is true there is a physical basis, but I do not belicre that physical basis is a diseased one. The patient may be a man of genius perlaps; it may be that he began wrong, was badly trained. If that is it, this trouble lies in the hands of our educational fraternity, the early educators in the schools, but that ought to be combined with the physician's influence, because in this environment lies the situation at the present time. If there is one thing we need in these cases of neurasthenia it is the old-styled faculty of common sense-it is good common horse sense. We have these cases coming to us with distorted jdeas and opinions which seem to us ridiculous. What is the thing at fault? It is simply the inability to see themselves as they are. If, instead of trying the varions forms of hypnotism, sending them off on trips-if we would simply take these patients and on the idea that "a little knowledge is a dangerous thing" work the thing out on a sensible basis, and say to them if you have this idea you must give a reason for it. Have them reason out these ideas and see that these reasons bear the light of investigation. If they can not do that in the conversation, have them keep a book, a ledger, and have them keep an account of every idea and have them present the reasons for and against and then $g_{0}$ to some person and sit down and reason it out with them on the ground of common sense. Many of these brains are simply twisted-warped-and if we have hereditary strain we can not help that. We can not take that strain off of these people, and we have got to train up these brains to meet it and that can only be done by developing the reasoning faculties.

Dr. George T. McCoy, of Columbus: I just want to speak one word. The question of heredity has been brought out very fully and the ques-
tion of early training has only been hinted at. I believe that the early training of the child has much to do with its history thereafter. and at the risk of being called an old fogy I will say that I am opposed to the kindergarten for that reason. You educate the mental, and I would much rather that my children spend their time making mud pies and wading the creek than attending kindergarten.

Dr. G. II. II. Kemper, of Muncie: There has been something said in the paper, and rery particularly too, in regard to the alcoholic question. And I. notice that heredity in this day always hits the boys and not the girls; so I am inclined to think that with the man inclined to the habit that it is the example he sets for his sons. He takes his boys to the saloon. He does not take his daughters. We talk a great deal about the alcoholic question-and I am not a Prohibitionist, never voted the Prohibition ticket-but in the last few years I am wonderfully down on the saloon and I want to see the day come when the saloon is banished. It is one of the rents of hell for the habit of intemperance and for every other vice and crime that has been mentioned in these papers liere to-day. God help us to vote it down!

Dr. A. C. Kimberlin, Indianapolis: Some one has said that if parents would buy skates for their children instead of books they would have a much happier family. There is a story of a certain king in whose family there was a tendcncy to insanity. The king had one son. He educated this son separate and independent from any one who was predisposed to insanity and did everything that medical skill could devise to protect his son. He kept liim away until he reached his maturity, when he was suddenly seized with insanity. Certainly we have to stand aside for heredity. Drug addictions, etc., become causes. Jeverything that plays with the powers of reason is most disastrous, but, as Dr. Hutchins has emphasized. the victims are those who have been well trained, of good social standing, and we have to go back to a family evidence of an unbalanced inind, and there is a predisposition that we must take account of. Tet we should be exceedingly carcful in making representations to the case. They respect you and they esteem you as their friend, and what you say is not manifest then, but we find the influence of it later.

Dr. Charles F. Neu: I have nothing in addition to add to what has been said. As mentioned in the paper, the coming thing is prevention, and the first step is the question of education. I ${ }_{q}$ quite agree with Dr. Sterne that it would be most injurious to impress upon any individual the influence of heredity. The first point is educating the physicians themselves. That is where it should begin in order that we may be in position to recognize the progression of these more marked things which are to follow.

# THE JOURNAL <br> OF THE <br> INDIANA STATE MEDICAL ASSOCIATION 

Devoted to the Interests of the Medical Profession of Indiana
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## EDITORIALS

THE FIRST IEAR OF THE JOURNAL.
With this number Tine Journal closes the first year of its cxistence. Appreciating, as we $d o$, the difficulties that were encountered and the obstacles to be overcome in the establishment and maintenance of such a periodical, we feel justly proud of the record. Starting in with less than half the capital required to finance such an enterprise, and being compelled to accept proffered individual financial responsibility for the balance, the Association is fortunate in now having a jonnal which is closing the first fiscal year without a deficit and with prospects for the future which augur well for an increase in its size, an improvement in its quality and a widening of its sphere of usefuluess.

In the beginning it was thought hazardous to print evcn 48 pages each month, owing to the large expense of such a journal, and the small dues and correspondingly small amount of money arailable for publication expenses. But with the exception of one month The Journal has regularly contained from 56 to $i 2$ pages, and the arrangement and mechanical work has made it equal to, and in most instances better, than any medical journal published.

During the year there have been published 54 original articles, 11 special articles, 18 district society reports. 182 county society reports, 59 death reports, $2 \pm$ book reviews, the proceedings, program and announcements of the Indiana State Mcdical Association, and numerous general editorials, editorial notes, communications, personals, news notes, etc. The Journal has regularly carried a full page devoted to a county society directory, a page devoted to a list of the officers and committees of the Association, and a half-page deroted to a list of the officers and announccments of the district societies. It has also printed the program and announcements in adrance of the Association's annual meeting.

Each month a large number of sample copies of The Jourxal, accompanied by a letter soliciting memberships for the Association, have
beell sent to physicians not identified with any medical society, and letters running into the hundreds have been sent county society officers in connection with the work of organization. Work upon a biographical index of all of the plyssicians of the state has also been started.

The advertising has been above criticism, and in carrying out the policy of not accepting objectionable or nostrum advertising it has been necessary to refuse proffered contracts amountirg to over $\$ 3,000$. The determination to publish a journal clean in its advertising pages has not only met with the approval of all rightthinking doctors, but it has also met with the approval of the better class of advertising patrons who are glad of an opportunity to be placed in a distinctive class that obtain position through merit and fair dealing with the profession.

The editorial and business policy has been to conduct all the affairs of The Journal in a manner to the best interests and credit of the Association and the medical profession of Indiana. The business affairs have been placed on a system whereby a large amount of work can be carried on with the least expenditure of time and money and with the greatest degree of accuracy. A system whereby all reports and correspondence is filed and carefully checked makes it possible to reduce errors to the minimum.

The editorial expressions in The Journal have been uttered in a spirit of endeavor to uphold the principles which should be sanctioned by cvery progressive and conscientious physician.

For the many cordial words of general appreciation of Tife Jourval and its work which have come from every section of the state, the editors are very thankful. For the very few complaints that have been entered the editors fcel regrct, even though they realize that it is an impossibility to please every one. The editing and management of a medical journal is no easy task, as any editor of experience will testify, and the man does not live who can edit any kind of a periodical and not have some one think the effort unproductive of any good. The more fearless the editor is in expressing views in the interest of truth and justice, the more surely he will court the displeasure of those who profit directly or indirectly from courses of action contrary to those approved by the editor, or who are chronically in a state of dissatisfaction with everybody and everything. Some people are only happy when they are fault-finding, and the medical profession is not yet composed of only those who are always satisfied and never displeased.

The editors of The Journala realize that their work can be improved upon, and in their desire to add to the value of what is being done for the Association they have solicited and profited by the suggestions and advice of numerous influential members in the Association. They are in particular indebted to the members of the Council, under whose immediate eontrol The Journal is published, for valuable advice. They also feel grateful for the cooperation of many county society secretaries in efforts to make The JourNal what it is intended to be, a journal in whicle every member of the Association should feel a sense of personal interest and pride.

Beginning with the January number, it is expected that The Journal will appear regularly with 64 pages and upward, and an effort will be made to improve the quality of material furnished the readcrs. But to obtain the best results the editors should have not only the encouragement, but the active assistance of all the members of the Association. This can be shown in no better way than by an exhibition of enthusiasm and interest in the work of the county society, and insistence upon a report of the work of the county society and its members for publication in The Journal, as also a report of things personal connected with the medical profession. It can also be shown by an active interest in the effort on the part of the editors to secure increased advertising patronage, upon which entirely depends the possibility of enlarging Tife Jourval.

The Journal is owned by the members of the Indiana State Medical Association, and in a very large measure its success depends upon the support the numbers of the Association give it. The editors are willing to put energy, time and thought into the work of producing a good, clean, practical and up-to-date medical journal, but they solicit and deserve suggestions and friendly criticism of their work, and cordial cooperation from those who are equally interested with the cditors in giving the Indiana profession the best journal that can be produced under the existing conditions. What has already been accomplished in the short period of one year is a credit to the Association, but we should not be satisfied with anything but better results for the coming year. ITe should all put our shoulders to the wheel, to the end that at the close of another year we may say that the progress of the county society, the Association, and Tire Jourval has been steadily forward in the direction of larger and better things.

## ETHICS OF COMPULSORY OPERATIONS.

In its issue of Nov. 14, 1908, the Literary Digest presents a criticism from The Hospital (London, October) upon the recent action of surgeons of the Cook County Hospital who, because of parental opposition, were forced to appeal to the court for an order directing the amputation of a boy's arm because of gangrene following a fracturc.

The English organ comments thus: "We should not like to question the accuracy of this paragraph, but as it stands it is a little startling to British ears, accustomed to a large degree of personal freedom, and impatient of official intcrference in matters affecting the individual as opposed to the collective health. However important it may be to secure obedience to medical crders, it seems doubtful whether-cven in the ideal republic-the enforcement of a surgical operation should properly come within the jurisdiction of a court of law. The action of the Chicago court in this instance, although certainly in the best interests of the 14 -year-old boy, savors somewhat of a violation of the liberty of the subject. To perform an immediate operation, without waiting to obtain permission, upon a hospital patient whose condition is one of extreme urgency, is one thing; but to resort to compulsion (whether legally sanctioned or otherwise) when persuasion has failed is quite another. For his own sake, as well as in the publie interest, an ignorant person can be isolated against his will if he breaks the law, or if he becomes afflicted with mental or infectious discase, and education and vaccination also can (with more or less success) be thrust upon him, but the time scarcely seems ripe for compulsory operations."

Although unacquainted with the details of the casc further than has been outlined above, yet we have every confidence that the radical measure adopted was resorted to only as a dernier onc, and with life-saving intercst at heart. So that onc is at a loss to understand the justice of so narrow a view as that taken by our English cousin. Could he for one moment consider that in as capably conducted an institution as the one refcrred to, with a service covering thousands annually, a surgeon would proceed thus with any other purpose than that of saving the life of his patient? And why should such a patient be allowed to die from the toxemia of his gangrenc, be it the result either of his own or another's ignorance or wilfulness, any more than a suicide should be allowed to carry out his own wilful destruction?

Too us it woukd seem an indication of the good Felles and broad judgment of our courts that they should issue such a decree, the more promptly the better, and by following any other course than the one pursued both judge and surgeon would be derelict in their respective duties towarl mankind.

## THE ETIOLOGY OF CANCER.

In opening the symposium on cancer, at the second triennial meeting of the International Society of Surgery, held at Brussels last September, Roswell Park took a very decided stand in behalf of the parasitic etiology of cancer, and adduced some very convincing evidence in support of his viert. Like many another, he believes ${ }^{1}$ that, when we consider the 40,000 deaths anuually in Germany, and as many in the ['nited States, from cancer alone, the subject is worthy of even more persevering investigation, and he feels that enough is being at present accomplished to warrant encouragement. That more progress is to be expected from the study ly the clinician than by the pathologist is more or less patent to all, because it is the former who comes into personal contact with the disease in its early and living forms. Furthermore, and by reason of such contact, the observant clinician, Park declares, can not fail to note the striking cridences of infectivity of the process. The alacrity with which the profession accepts the infectiousness of many other diseases, as leprosy, syphilis and several other distinct clinical entities whose parasites either are not known or ${ }^{\circ}$ do not meet the requirements of Koch's postulates, as scarlet fever, measles, smallpox, malaria or yellow ferer, and yet refuse to accept a similar origin for cancer, the essayist would attribute to the blind faith of the pathologist in the teachings of Virchow and his followers. The laboratory man is so engrossed in the study of the crolution of this attractive cell, the theories of its evolution and life history that he is led to ignore its clinical course and picture. Two hundred and fifty years ago Tulpius, the Dutch anatomist, made the statement that "cancer is just as contagious as inflammation of the eyes." In 1:30 Junker maintained that cancer is contagious, and Harrey declared that tumors strongly resembled parasitic productions in the regetable kingdom; statements founded on the broad observation of great men of the past.

[^63]Although transmission of caucer by direct contact often occurs, as from one lip to the other, or from contiguous surfaces of the bladler, yet immediate contact is not always necessary, as is instanced by cancer of the stomach produced by swallowing regetations from an esophageal cancer, or cancer of the lung from esophago-tracheal cancer.

Indeed, Park takes the stand that time is wasted, progress delayed and regular pathology made ridiculous by considering the disease from any other standpoint than an infectious one, and "would simply pay a surgeon's compliments to those who find it necessary to imagine a specific cancer cell of spontaneous origin, or a parasitism of epithelial cells, and those who seriously believe any cpithelial cell can become a parasite or act like one from any innate tendency or intrinsic cause." He cites a recent personal experience concerning a woman of 55 with cancer of the uterus, who lives in a little farmhouse where she has within a short time cared for a father who died of facial cancer, a sister dead from mammary cancer, and another relative who must have had cancer of the stomach; "what explanation," he asks, "can be offered for such a sudden local epithelial rebellion except by an invasion by some outside intruder?"

From the clinical standpoint are offered the following reasons for beliering in the infectivity of cancer:
(1) Direct transmission from a diseased to a previously healthy area, as from lip to lip, or during operation, as when tapping for cancerous ascites.
(2) Cancer à deux, as from wife to husband, from patient to laundress.
(3) Cancer houses, i. e., homes in which there hare been so many cancer deaths as to suggest strongly that the dwelling is infected.
(4) The epidemic appearance of cancer within definite boundaries.
(5) Metastases, in which the infection has been transferred by the germ-laden cell, these metastases occurring earlier and more frequently in organs without a capsule, as the mamma, tongue or pharynx. Likewise the remarkable growth-energy of the cancer cell must come from an external source which is closely connected with the capacity for penetration and infiltration of the surrounding tissues.
From the experimental side there are to be considered: (a) The analogy of tumors in the regetable kingdom, and the character and course of all sorts of tumors of the lower animals. (b) Epidemic appearances of cancer among animals
many times reported and instanced by Gaylord's recent observation of cancer cages used in the Buffalo Laboratory. (c) The very interesting work done in the actual transmission of unmistakable malignant tumors between animals of the same species, by Loeb, Jobson, Hanan, Nowinsky, Moran, Jensen, Gaylord, Clowes, Beebe, Crile and others on carcinoma and sarcoma in cattle, rats, mice, dogs and rabbits, these studies including the questions of inoculability and subsequent immunization from such tumors. (d) Occasional successful causation of tumors by injection into animals of human products. (e) The general bchavior of the disease, namely, its resemblance to other known infectious conditions, with reactions to certain scrums, its tendency to hemolysis, its belarior to transfusion. its cnding by some terminal infection, and all the other well-known evidences of infectivity. (f) The same tendency to metastasis, with the same cxplanation as occurs in other infections, and the same rare tendency to spontaneous retrocession which has been noted in human cases. (g) The practically complete demonstration that in animals it is an infectious disease and the unaroidable inference that if it be so in them it must also be in man.

Unfortunately the only evidences of transmission between human bcings must be clinical. since sentiment prevents that experimentation which might settle the whole question. This the essayist holds to be a false sentiment and belicves that hardened and condemned criminals should be subjected to such investigation, and be thus made to render their tribute for the bencfit of others. Indeed, he asks why they should be brutally executed when something of great ralue might be learned through them.

If cancer were a constitutional disease, there would be about as much use in operating as in amputating the foot of a gouty patient, while as a matter of fact thousands have been cured by early operation, and recurrence has only been the result of early metastasis or late operation instead of the reverse. Healthy tissues seem inrulnerable to the cancer parasite, the causes predisposing to the acquisition of the disease, including whaterer impairs the powers of resistance, chief among which is the tissue degeneration duc to obsolescence of organs or general senility.

The omnipresence of the cancer parasite obligates us to the same prophylaxis that would obtain for any filthy disease and the same preventive measures should be adopted as for any contagious disease. While an adrantage in treat-
ment is at hand because of the fact that at first cancer is a local discase, yet unfortunately it is "a disease without a symptomatology of its own," and is recognized only by signs which are nsually recognized at a period too late for the radical cure by surgical measures, as yct the most reliable therapeutic measure.

While exception might be taken to so radical a stand as that assumed by Park, yet, in the main, his logic is sustained, and at present the outlook for the conquest of this terrible scourge seems mofe promising by regarding the disease as infectious in origin than otherwise. The excellent progress being made along the lines of bemolysis points toward such an etiology and bids fair to give us the clue to early diagno-is that is afforded by tuberculin in its realm. the absence of which diagnostic aid has been so unirersally recognized and so much lamented.

## EDITORIAL NOTES

We wish for you all a merry Christmas and a happy and prosperous New Ycar.

Trie Association dues for 1909, amounting ${ }^{-}$to the large sum of one dollar, must be paid some time luring January. Why not pay now?

Trife Association assessment is due and payable January 1, and becomes delinquent Februar: 1 , when the names of all those who have not paid will be canceled from the mailing list of The Jourvil. Get busy and send in your dollar now. Your county secretary is ready to receive it and will undoubtedly forward it at once.

This number of The Jourxal contains an index for the year. It will prove raluable for those members who wish to bind their journals. We hare a few back numbers which we shall be pleased to send to those who wish them for completing files. Write us stating numbers desired and enclose postage to cover cost of mailing.

If every physician who reads a paper before a county society would make a short abstract of his paper and hand the same to the secretary of his society for use in making a report for The Jourval, our department deroted to society pro-
ceedings would be much more interesting and complete in its record of the work done by the county societies. It would also save the county socicty secretaries much work.

Many news notes, personals, and society reports are received between the first and the tenth of the month with request that they be published in the current number of The Journal. Occasionally it is possible for us to publish this late arriving copy, but as a usual thing our forms are arranged early in the month and our printers cither refuse to use late copy or use it on the understanding that it will delay the mailing of The Journal. We, therefore, earnestly urge all contributors to send in copy before the first of the month.
$W_{\text {e are now }}$ compiling, at considerable labor and expense, a biographical index of the physicians of Indiana. Such an index will be of great value to all officers in carrying on organization work, and it is almost a necessity for The Jourxal. The county society secretaries have been asked to assist us in the work of securing a list of all of the physicians in the state, and the proof sheets recently mailed to secretaries for correction and revision have begun to come in. We wish to thank all those who are giving us such cordial and painstaking assistance in carrying out our plans. The work is in the interest of more effective organization and will indirectly prove of value to the entire medical profession.

Beginning with the next issue, The JourNaL will publish a series of historical articles on "What Indiana Has Done for Medicine" under the authorship of Dr. G. W. H. Kemper, of Muncie. No man in the state is better able to write the medical history of Indiana, and, while the editor of The Journal feels personally responsible for draughting Dr. Kemper into this laborious work, it will be a source of satisfaction to all to know that the duty has been assumed by one so descrredly qualified. Fortunately Dr. Kemper has in his possession or knows where he can obtain the data concerning the early medical history of the state. In a few years it might be impossible to secure this data, and we are, therefore, fortunate in being able to make it a matter of permanent record.

Altogether too many deaths from diphtheria are reported in Indiana. Physicians and public should know that antitoxin is a specific in the
treatment of diphtheria and that a death from diphtheria in almost every instance means that either antitoxin was not administered, or, if administered, was not given early enough or in sufficient doses. It should be borne in mind that the state now furnishes antitoxin for use in the treatment of patients too poor to pay for it. The remedy may be obtained in almost any town or village and can always be secured in any of the cities of Indiana. By telephoning or telegraphing to the nearest city or large town it is possible to secure antitoxin in any community in Indiana within a few hours. There is, thereforc, no excuse for not using this life-saving agent in any case of diphtheria or suspected diphtheria. It should also be remembered that antitoxin is a preventive measure when administered to those who have been exposed to diphtheria. The intelligent use of antitoxin should practically do away with our reports of deaths from diphtheria.
$\mathrm{I}_{\mathrm{t}}$ is the unusual and new things which attract attention and are of interest. Therefore, we hope we may have more of the new and unusual things related to the practice of medicine and surgery for report in The Journal. Interesting case reports, descriptions of new methods of treatment or operation, descriptions of new instruments or appliances and criticisms of prevailing methods are all solicited for publication. The average so-called "original article" is nothing more than a compilation, often times copied word for word from some well-known text-book, though a comprehensive review of the literature on a certain subject and conclusions drawn therefrom may be considered an original article wortly of the attention of any thoughtful student, and, therefore, entitled to a place in medical journals. But the man who really can say something which is worth space in a progressive medical journal is in the minority and often times, through his own modesty or other reason depending upon himself, he is not heard. It is such men The Journal would like to hear from.

An agreeable and smooth-talking woman is introducing to the medical profession and public of Indiana a preparation styled "Peptol," whick. is reputed to contain "130 food units per ounce - 65 pure, highly emulsified vegetable oils and 65 perfectly dextrinized starches and sugars." The remedy is advertised as a health giver and recommended in extravagant terms as a tonic and tissue builder in the treatment of a large number of diseased conditions. On the back of
the circulars which are distributed is the statement "Watch the papers for notice of the Peptol demonstrations to be given this week at the downtown drug stores." The fair detail woman entrusted with the duty of introducing the preparation to the medical profession naively admits that Peptol was once commercialized and extensively advertised in the public press, also that the home of the preparation is Battle Creek, where numerons fake breakfast foods and nostrums owe their origin, but with seeming saint-like candor she solemnly declares that now the preparation is to be exploited as an ethical production which physicians will be pleased to recommend to a suffering public long awaiting such a marvelous lealth-giving remedy. We shall be interested in knowing how much encouragement the medical profession of Indiana will give to this scheme to boost a preparation clearly intended to be advertised and sold like patent medicine, and probably containing as little virtue.

Tire treatment of alcohol and drug addictions seems to be a favorite scheme for graft in the medical profession, if we are to believe the reports from certain "jag cure" institutions that claim to sccure ncarly all their patients from physicians at a specified price per patient. One J. B. Stewart, not unfamiliar to readers of The Jourane, is now writing from Indianapolis to physicians offering to pay $\$ 25$ for patients referred and claims to have the only known forinula that absolutely cures alcohol and drug addictions. Indiana physicians will do well by themselves and their patients to stcer clear of any "jag cure" institution which has to offer a commission for patients referred. Incidentally we desire to say that The Journal carries the advertising of three sanitariums that make a specialty of treating alcohol and drug addictions. These institutions are owned or controlled by reputable medical men who are members of the state societies in the states in which they live (members of the Indiana State Medical Association in one instance), and we believe that they can be trusted to give patients and physicians due consideration without the necessity of resorting to graft. If we thought they were running institutions on the order of the one run by Mr. Stewart heretofore mentioned we would cancel their advertising contracts at once. Ethical institutions, presided over by not only ethical but competent medical men, deserve and should reccive recognition and patronage from the medical profession, and The Journal carries the advertising announcements of some institutions of that character.

Murine, a nostrum widely advertised on bill boards and fences and in the daily press as a positive cure for sore eyes, and its promoters, the Murine Eye Remedy Company, have been exposed in The Journal of the American Medical Association, November \%. An analysis of Murine shows that it is essentially an aqueous solution of borax, 12 grains to the fluid ounce, and contains a trace of golden seal. Its actual cost to the promoters should not be to exceed 5 cents a gallon, though the retail price to the public is $\$ 1$ an ounce. During the Chicago session of the American Medical Association, the promoters of this nostrum attempted to work the medical profession and lead the public to believe that Murine was accepted as an exhibit at the A. M. A. session. The daily papers of Chicago contained an invitation for the entire medical profession to visit the Murine exhibit at the Murine offices, or send addressed cards to insure delivery of samples of Murine. The announcement concluded with this misleading statement: "The demand at the Exhibition Hall was so great as to render this notice necessary." Perhaps a few gullible doctors swallowed this bait, hook and all, for in advertising to the general public the promoters of Murine enlarge upon the approval which physicians accord their preparation. In addition to their Murine interests, the Doctors McFatrick (James B. and George W.) are presumably the whole faculty in a school of spectacle fitters operating under the name of the "Northern Illinois College of Ophthalmology and Otology." This institution confers no fewer than seven degrees, and the catalogue emphasizes the statement that the diplomas "frame handsomely." The success of this combined nostrum business and college lies in lumbugging and deluding the innocent, and it is said that the promoters have grown rich from the practice.

If Tife Journal fails to reach one of our subscribers we generally hear of it very promptly, and usually with a suggestion that the name lias been taken from the mailing list by mistake. We wish to say that whenever we receive the dnes, which include a subscription to Tife Journal, from any member of the Association, we at once enter that member's name on our subscription list, and it remains there until the end of the fiscal year. As the journals are all addressed by machinery, we are positive that every subscriber has a journal addressed to him each month. It should be remembered, however, that occasionally a journal will go astray in the mails, and each month a very few journals have the ad-
dresses rublocd off while passing through the mails, and until we hear from members who liave failed to reccive their journals we are unable to remedy the trouble by sending duplicates. We invite all members to write us concerning failure to secure The Jourivil, as also concerning incorrectness or change of address. It is as much to our interest to have a correct mailing list and aroid errors as it is to the interest of other members of the Association, for. while we are pleased to make corrections and supply duplicate journals to replace those miscarried or lost in the mails, every time we do this it means extra work and extra expense, both of which we try not to have unnecessarily. Next month the dues for 1909 become payable, and ercry member of the Association who desires to kecp his hame on the mailing list of Tife Jouraal after January 31 should see that his dues are sent in prior to that date. A by-law of the Association provides that the fiscal year shall be from January 1 to December 31, inclusive, and that all asessments become due and payable on January 1 of each year. It also provides that if dues are not paid on or before February 1 membership is forfeited and the name is canceled from the mailing list of The Jourail. We desire to remind the members that this by-law is a necessity now that we have The Journal, published at large expense, and the regular mailing of which, according to the postal laws, must be to subscribers only. Furthermore, the one dollar assessment of the Association can and should be paid by any member almost upon demand, and nothing but carelessness should prevent any member from paying his assessment when due. Those who are habitually forgetful or careless about this should attend to the matter at once while it is fresh in the mind. Tie a string around the finger, if no better way offers, to remind you that your Association assessment, including subscription to The Joursal, is due and payable in two weeks, but that it will be accepted and credit giren now. Promptness in this matter will save us all much unnecessary embarrassment, inconrenience and labor.

## CORRESPONDENCE

## A DAY IN THE VIENAA CLINICS. (by a fort wayne phisciclan.) Vieña, Not. 8, 1908.

To the Editor:- The surgical clinics here are at the height of their activity, and material is so abundant that they are especially rich in
quality, and one finds liimself lamenting that he can not be in several places at one time. In order to show some of the work that is being done, I will endearor to briefly describe a sample day's work done with some of the surgeons and pathologists. Beginning in the early morning with

Eiselsberg.-He leads in surgical reputation in Austria (and Germany, too, for that matter, for he was offered the ron Bergmann chair in Berlin after von Bergmann` death) and continues his unusual brain surgery. He is able to practically demonstrate the diagnostic value of radiography in locating brain tumors. Case 1. -Craniotomy orer left parietal region. Large lorseshoe bone flap lifted. Hinge portion of fiap exsected and flap replaced. Scalp sutured and patient returned to bed for seren days until dural adhesions take place. A second operation will then lift the dura with the bone flap, at which time the tumor will be remored. Case 2. -Craniotomy with remoral of cerebellar tumor. The electric bone drill that he uses looks like a miniature "jumping Coulter" plow. The plowshare portion passes under the inner table. while the blade portion is a revolving drill that cuts a clean furrow very rapidly. I was shown this case the day prior to the operation and am promised another examination after his recorery.

Zuckerkandl.-There is no surgeon in all Europe who equals Zuckerkandl in perineal prostatectomy, and it is my opinion that he has no supcriors in other genitourinary surgery outside of suprapubic prostatectomy. He is using more catgut and not as much silk as the other operators here use. I find him more conservative, and, if possible, even better than he was three years ago. Case 1.-Perineal prostatcetomy. Perineum was opened by the extra-urethral route. Prostatic capsule incised. Prostate fixed with screw retractor and cnucleated in toto. Fascial plains (elerator fascia) sutured back into place. Drainage done entirely through urethra. The prostates after remoral look identically like the ones remored en masse suprapubically. Case 2. - Nephrolithotomy. Right kidney. Kidneer delisered. Opened on long axis upper one-half of kidney. Finger introduced and small stone delivered. Two $x$-ray pictures, both perfect. Kidney sutured with interrupted catgut, deeply; replaced. and wound closed with drainage. Case 3.-Nephrectomy for suppurative nephritis following nephrolithiasis. Incision made directly through to perinephritic fat. Kidney was markedly adherent and could not be delivered, so he
exsected it from the renal ressels and ureter The skiagrams show accurately the stone locations compared with the opened kidney. Muscles were apposed and kidney fossa drained with rubber tube and gauze. Case 4.-Carcinoma of bladder inrading left trigone. Resection of half of bladder, including left ureter and left trigone. Ureter transplanted to right side. Peritoneal cavity opened and closed during operation. Bladder mucosa brought up and fastened to abdominal wall. A two-way drain introduced and carity packerl with iodoform gauze.

Wertheisi.-In pan-hysterectomy (abdominal) for carcinoma uteri, Wertheim is inimitable. Case 1.-.Showed the operation being done with only the hands used as retractors. After the uterus and adnexa were remored down two inches into the ragina you could see the ureters lriilging orer the space between the sacroiliac srinchondrosis and their insertion into the bladder. Case 2.-IVas a removal of both tubes and oraries (hydro. s.) per raginam. He enters the peritoneal cavity through the vesico-uterine fold of peritoneum rather than through the Douglas pouch. Wertheim says that he reverses the order that is usually done relative to the abdominal routes, i. e., he prefers the abdominal route in malignant cases and the raginal in nonnalignant cases.

Stoerk.--Tienna is admitted to be the center of all the world for gross pathology. Stoerk, who has been an assistant of Weichselbaun's for many years, we have at $4 \mathrm{p} . \mathrm{m}$. in gross patholngy (in English). To show the quantity of material, I made a count and found that we had nine bodies represented, showing fifty-nine portions of pathology therefrom. One especially interesting case showed syncytioma when an liysferectony was done, yet there was metastasis in alnost every organ of the body; especially in the iungs. Another was a brain abscess due to the spirillum leptothrix (one of four known cases). There are many cases of brain abscesses due to middle-ear infection that are successfully operated upon.

The day closes with an address in the evening be. Finger on "The Spirochocte Pallida in Its Telation to Syphilitic Inoculation" before the American Medical (branch) Society here. He made demonstrations in many ways, the dark field being one of the most perfect ways of seeing the pallida spirochæte. Finger's life-long investigation of syphilitic inoculation, autoincculation during different stages, animal (ape)
inoculation and immunization period, made his lecture so authoritative that one readily sees in him a greatness that has resulted from untiring investigation. Charles E. Baryett, M.D.

## DEATHS

Rolla IV. Bula, M.D., Philadelphia University of Medicine and Surgery. 18:0; died at his home in Indianapolis, November 10, a year after a surgical operation, aged 60.

Johx Marier, M.D., Cincinnati College of Medicine and Surgery, 1863; dicd at his home in Mount Ternon, Ind., October 19. from cereliral hemorrhage, aged 82 .

Thonis J. Richards, M.D., Jefferson Medical College, Philadelphia, 1868; a reteran of the Civil War; died at his home in Clear Springs, Ind., October 1 in, from paralysis, aged 86.

Williaj R. Schooxover, M.D., Kentucky School of Medicine, Louisville, 18:6; of Warsaw, Ind.; physician to the Winona Assembly; died in the Northern Indiana State Hospital for the Insanc, Longeliff, Logansport, Norember 12, aged 68 .

William Field Wood, M.D., Queen’s University, Kingston. Ontario, 1891; a member of the American Medical Association; formerly president of the Mishawaka Physicians' Club; died at his home in Mishawaka, October 20, from tuberculosis, aged 41 .

Dr. Joserif Weeks died at his home in Mechanicsburg Nov. 14, 1908. He was born in Orange County, New York, Sept. 1\%, 1820, and began the practice of medicine in 18ti. He came to Mechanicsburg in 1856, and resided there until his death.

Jacob D. Hapate, M.D., Cincinnati College of Medicine and Surgery, 1878; chief of the medical staff of the Richmond division of the I'ennsylvania System; died at his home in Richmond. Ind., October 29, from the effects of a fall down a stairway, aged 56.

John E. Harris, M.D., Louisville Medical College, 18i0; a member of the Indiana State

Medical Association, and a member of the board of pension examining surgeons; for two years citr editor of the Louisville Evening Post; died at his home in Bloomington, Ind., Nor. 5, 1908, aged 64 .

Dr. C. M. Grivis of Martinsville, died Nov. 10, 1908. Dr. Graris was born in Ohio, and at the outbreak of the Ciril War entered the serrice, serving throughont the war. He was at one time a prisoner at Libby and Andersonville. He practiced medicine in Martinsrille for twentyfive years.

Dr. Elihu T'. Mesdenhill, of Newcastle, died Nor. 14, 190s, after an illness of five weeks, aged $6 \pm$ years. He was a prominent physician of Henry County, and had practiced there for thirty-four years. He graduated from the Ohio Medical College in $15: \%$. He was a charter member of the G. A. R. Post. For many years he was secretary of the Pension Board, and also county health officer. He was born in Montgomery County, Jan. 25, 1814. At the time of his death he was a member of the Henry County Medieal Society and the Indiana State Medical Association.

## PERSONALS

Dr. R. H. Ross has remored from Kokomo to Galreston.

Dr. J. F. Powell, of Greentown, has located in Garrett.

Dr. S. D. Black, of Brazil, has mored to Los Angeles, Cal.

Dr. Marion Goss, of Rockville. is reported to be seriously ill.

Dr. A. T. Griffin, of Brazil, has located in southern Illinois.
1)r. A. F. Sisith, of Waupecong, is now practicing in Tokomo.

Dr. J. H. Ross. of Kokomo, is spending the winter in Winter Haren, Fla.

Dr. Joserinine M. Mitcielel, of Lafayette, las returned from a trip abroad.

Dr. R. Q. TaviNer, of Huntington, was elected coroner of Huntington County.

Dr. F. R. Mongan, who located in Kokomo a few montlos ago, has remored to Anarga, Ill.

Dr. James K. Moss, of Ashboro, who has been suffering from typhoid fever, has recovered.

Dr. John M. Kitchex, Indianapolis, is ill in the Methodist Hospital with cerebral hemorrlage.

Dr. J. R. Huxter, of Huntington, has been appointed clief surgeon for the C. B. \& C. Railroad.

Dr. Cilarles E. Stose, of Shoals, has been appointed secretary of the Martin County Board of Health.

Dr. Apollos F. Pifillips, Corunna, has returned from Europe and opened up for practice in Fort Wayne.

Dr. Charles S. Mack, La Porte, coroner of la Porte County, has announced lis intention of rcsigning and entering the ministry.

Dr. R. J. Clark, of Monticello, a member of the 'Thite County Medical Society, is seriously ill, suffering from malignant prostate.

Dr. D. W. Stetenson, of Richmond, eouncilor for the Sixth District, is taking a short postgraduate course in the eastern cities.

Dr. Wallace Grayston, formerly of Marion, has located in Huntington and has announced that he will limit his practice to surgery only.

Dr. Harry C. Sharp, Jeffersonville, for eleven years physician at the state reformatory, has retired and has been succeeded by Dr. Harry P. Smith, Kokoino.

Dr. E. B. Mumford, Indianapolis, has been appointed special physician of the city board of health to supervise the inspection of contagious and infectious diseases.

Dr. Helene Knabe, Indianapolis, head of the state bacteriological laboratory, has resigned, taking effect December 1. Dr. J. P. Simmonds, St. Louis, is announced as Dr. Knabe's successor.

Dr. Charles A. O'Brien, Fillmore, has resigned as physician and coroner of Putnam County. Dr. Walter R. Hutcheson, Greencastle, has been appointed to fill the uncxpired term as county plysician.

At the annual meeting of the DeKalb County 'Teachers' Association, held November 28, Dr. C. S. Stewart, of Auburn, delivered an address on the subject "The Examination and Care of the Eyes of School Children."

Dr. Henry Herr, a member of the Daviess County Medical Society, and local surgeon for the B. \& O. S. W. Railroad, of Washington, Ind., was united in marriage with Miss Lillian Stone, also of Washington, October 27.

Dr. Charles N. Consbs is taking the Pasteur treatment in Indianapolis, as the result of being exposed while administering chloroform intermittently to control the convulsions of a patient suffering with hydrophobia whom he had in charge.

Tire members of the Committee on Legislation of the Fifth District Medical Society secured, during the recent campaign, pledges from all candidates from Brazil County to support all measures upholding the efficiency of our boards of. health and the continued non-partisan management of all the state institutions.

## NEWS, NOTES AND COMMENTS

Tue Fort Wayne Hospital Training School of Nurses graduated a class of six on Norember 25.

The midwinter meeting of the Northern TriState Mcdical Association will be held at Ann Arbor on Tuesday, Jan. 12, 1909.

Dr. Frederic Bresif, of Boston, has been appointed superintendent of the New York Postgraduate Medical School and Hospital. Before assuming the position he will derote some time to a study of postgraduate instruction and hospital administration in the various Imerican medical centers.

Dr. Nichols, late of Andrews, Ind.. on Nor rember 18 , through his attorneys, pleaded guilty to the charge of practicing medicine without a licensc. He was fincd in the sum of $\$ 25$ and costs. This charge was made against him by the Huntington County Medical Society.

Tue Caroline R. Sharp Club, a philanthropic organization of some of Kokomo's best women, entertained in honor of the Kokomo Academy of Medicine at the home of Mr. and Mrs. J. M. Leach on the evening of November 30. It was a notable social event; besides a large number of physicians, several members of the legal profession and the clergy were present. A program of music and short talks on "The Model Wife" and "The Model Husband" enlivened the occasion.

The Vigo County Medical Society has becu carrying out the postgraduate course of study and is now well along in the second year's work. In addition to this, we have had some extra work which has been very interesting. One evening Dr. Schell introduced a guessing contest. He brought up to the meeting four cases of incipient leart lesions. Each member present made a physical examination of the patient and wrote his diagnosis on slips of paper. Afterward these slips were collected, read and compared by Dr. Schell.

Tire agents of the Board of State Charities have in the past year been very successful in securing a large number of good homes for dependent children who are public wards. There are still a large number of desirable children available for placing in suitable homes. Doubtless there are many families that would make a lome for a child. An important part of the board's work is to bring the homeless child and the childless home together. The board solicits the cooperation of all who are interested in securing proper homes in families for children. For further information address The Board of State Cillrities, State House, Indianapolis, Ind.
"Thenty Iears in Persha" is the title of an interesting volume by Dr. John G. Wishard, director of the American Presbyterian Ilospital at Teheran. Dr. Wishard is well known in In-diana-which he still calls home-and his clear, straightforward narrative of personal experiences in the land of which he writes will have a double interest to the Hoosier readers on this arcount. The author has enjoyed exceptional advantages in the way of gaining information for his work, as his position at the head of the hospital has put him in very close touch with the highest authorities in Persia, as well as with the people. Dr. Wishard is a brother of Dr. W. N. Wishard, President of the Council of the State Medical Association, and a son of Dr. IV. H. Wishard.

Complinentary to Dr. L. A. Simmons, on Wednesday, November 11, the eve of his departure for permanent residence in Florida, the Howard County Medical Society gave a dinner in the private dining-room of the St. Francis Hotel. While given in honor of one of the oldest members of the society, for whose departure gencral regret was expressed, the dinner proved an enjoyable affair and one of good-fellowship, probably in that respect the most profitable meeting of the year. The sole occurrence to mar the occasion was the hasty adjournment caused by the calling of Dr. Simmons to his home because of serious illness of a member of his family. liesolutions commendatory of Dr. Simmons, introduced by Dr. J. O. Garr, were adopted.

The annual banquet and election of officers of the Ifuntington County Medical Society will
take place December 17. Prior to the hanquet an opening and public meeting will be held at the Court House, at which time Dr. Charles H. MoCully, of Logansport, councilor of the district and vice-president of the Indiana State Medical Association, will deliver an address entitled "Twentieth Century Bondage." He will treat the subject in a way that will interest the public and profession alike. A general invitation to the meeting has been extended to the public and a special effort has been made to obtain the attendance of the city council and other public officers. The list of the speakers and the subjects assigned are: "The Profession as Seen by Others"-The Minister, Prof. W. P. Hart; The Teacher, Rev. II. H. Dennison; The Doctor, Mon. S. E. Cook; The Lawyer, Dr. R. F. Frost. Mr. Mugh Butler, editor of the Huntington IIerald; Mr. O. W. Whitelock, editor of the Huntington News-Democrat, and Mr. Thad. Butler, editor of the Huntington Morning Times, will speak on "The Press in Relation to the Medical Profession."

## SOCIETY PROCEEDINGS

## ALLEN COUNTY.

## FORT WAYNE MEDICAL SOCIETY

(Meeting of Oct. 6, 1908.)
Society met in regular session at St. Joseph Hospital, with 33 members present. Meeting called to order by secretary, in the absence of president and vice-president. Minutes of previous meeting read and approved.

Dr. Kane presented a mounted specimen of extrauterine pregnancy. Fetus five or six weeks old. Glycerin gelatin mount.

Paramyclonus Multiplex.-Case exhibited by Dr. Kane. He said that only sixty-eight cases are found in literature. Patient, young lady, age 23, born in United States, third child of parents in good mental and physical health at the time of her birth. Had typhoid fever thrce years ago, with complete recovery. About six months later she was awakened at night by violent convulsive movements of the shoulder muscles of both sides. These movements were clonic in character, at the rate of about 100 a minute, and almost ceased when patient's attention was at tracted. No regular system involved. This first attack has been followed by others at irregular intervals. Subsequent seizures have involved the muscles of the thigh down to the knee, particularly the quad riceps extensors. The facial muscles have never been involved. The convulsive seizures last from a few minutes to several hours, and vary from one to a dozen a day. During the past summer she has been quite free from the attacks, but during September they returned. The examination of this case was carcfully made becausc of the liability of confounding
this condition with hysteria; but have failed absolutely to demonstrate any of the stigmata of the latter condition.

The only history having any bearing on the ease is that the mother has had nervous prostration. Father died of typhoid fever. At the time of examination patient weighed 97 pounds, temperature 98.2 , pulse 100 , respiration 18, blood pressure $110 \mathrm{~m} . \mathrm{m}$., hemoglobin 60 per cent., reds $4,000,000$, whites 14,000 . Skin and deep tendon reflexes are plus. Reaction to the normal electrical formula. No inversion of the color fields eould be demonstrated, except a slight contraction of the left, but Dr. Bulson, who made the examination, stated that no importance could be attached to this in the absence of other stigmata of hysteria. Attention was first called to this condition by Friedrich in 1881. The disease is characterized by the clonic muscular contractions occurring mostly in the body and limbs, rarely in the facial muscles. The eontractions are short, sharp, very rapid, unsystematized, may occur on both sides of the body, so do not oecur synchronously or rhythmically, may be disseminated or localized, and may involve a single muscle or a whole group of muscles. The muscles most often involved are the supinator longus, biceps, trapezius, quadriceps femoris, semitendinosis. Active movements are not at all hindered, but seem rather to control the spasm, the opposite is true of the emotions. The twitchings are lessened if attention is diverted. The tendon phenomena are generally increaserl. In many cases trauma, fright or an infec. tious disease precede the onset. Unverricht has described a particular form of the disease, characterized by its combination with epilepsy. Mocbius and Strïmpell have doubted the independence of this condition and are inclined to regard it as a form of hysteria, but, as has been stated, this case has failed to show stigmata of the latter condition. Patient was presented for inspection.

Dr. M. I. Rosenthal reported several cases and presented a number of specimens.

Specimen 1. Ectopic gestation with fetus five or six weeks old in tube. This specimen was removed from a woman who had been well except for the fact that there had been atypical menstruation. An examination revealed a tunor in the cul-de-sac, and diagnosis of ectopic gestation was made, and patient brought to the hospital and operated on immediately. There was no bleeding, and no blood in the belly. Dr. Rosentlal said that these cases ferquently die of shock, and not from hemorrhage. The mortality is due to the infection accompanying this condition. Do not wash the belly in these cases, but wipe out the blood clots. and if the shock is marked pour salt solution into the belly.

Specimen 2. Fibroid from uterus. This case was also pregnant about four months, though she had menstruated slightly between times. The tumor was causing pressure on the bladder. On examination tumor was found in front of the uterus and to the left. It is not good practice to make a forcible examination when liable to find ectopic gestation. Diagnosis was either ectopie gestation or pre-existing tumor, but on operation it proved to be a subserous fibroid. This would have afforded obstruction to delivery. The peritoneum was split and the tumor shelled out. It is a question in these eases as to whether it is wiser to remove or to leave and make a Cesarean section
later. Following the operation there were no uterine contractions, and no indications of abortion.
specimen 3. Growth from finger. This growth was quite dark, and still shows some black. This was removed from the finger of a lady, age 18 years. There was a question as to its malignaney. Had it been malignant, amputation of even the arm would have been useless. The tumor was movable over the tendons, and was a fibroma molluscum.

Dr. Rosenthal spoke on some of the results to be obtained in operations for carcinoma. (1) Carcinoma of breast. He remored the entire breast and pectoral muscles, and other end of elavicle. He took off, also, a gland from rein about the size of a bean. She has been practically well since, the operation having been done four or five jears ago. This shows that this little gland was the last, or was inflammatory in its nature. She had a large metastatic growth under arm. She has also had recurrence or another carcinomatous nodule over one of her ribs, this was removed in Chicago, and is now well.

Dr. Rosenthal also reported a case of operation on advanced carcinoma of the uterus in an old lady, who is now doing nicely after three years and a case of multiple fibroma of the uterus, which was removed on account of hemorrhage and pressure. There is a tendency to myoearditis in these cases of multiple fibroma of the uterus.

Dr. Rosenthal presented a case of cholelithiasis, in a man suffering from biliary colic. This case had been operated and gall stones remored, with drain in place. He prefers that these cases diain four or five weeks rather than close prematurely. He makes it a habit to sew the tube into the gall biadder. Old stones are a menace because of mechanical effect, cholemia inflammation and absorption of pus. There is also danger of rupture, and on account of secondary effect as producing or tending to produce carcinomatous degeneration in immediate and neighboring organs. As to recurrence of gall stones after operation, Dr. Rosenthal said that if you get all the stones they will not recur. The only case in which he had a return he feels quite certain that one stone was left.
Dr. Rosenthal reported a case of a woman suffering from binary colic, who was operated on about five weeks ago, fifty-eight stones being removed. The sinus is expected to close in about another week. The danger of gall stone operations is about the same as ordinary appendix operations if seen early. The presence of considerable pus in gall bladder or stone in common duct adds to the danger. The common duct is about two inches long. In case the stone is impacted in the common duct he believes it is less dangerous to open the duodenum.
Dr. Rosenthal reported several appendix casen, as follows:

1. This case on examination per raginum showed pelvic abscess. This was opened and drained, and two days later she was operated and appendix removed.
2. Man 50 years of age, liad an attack of appendicitis lasting over one week. Operated.
3. Every evidence of intestinal obstruction manifested; abdomen markedly distended, and patient romiting fecal matter. On operation found bands of adhesions, and appendix was diminutive, but gut :o bound down with adhesions that same conld not be cleared. An intestinal anastomosis with Murphy button was made, and patient is expeeted to recover.

Dr. Blosser presented a case, a young lady, whose scalp was torn off April 9th. Attemapts were made to place the scalp on the head again, but they were futile. Skin grafting was then tried, and ethyl ellorid spray used as anesthesia in removing grafts from her body. The grafts from the patient herself were the only ones that took, and Dr. Blosser believes that this was due to patient's immunity to infection present.

Dr. Porter reported a case of typhoid perforation, with operation, and said that the case is progressing nicely, and is expeeted to recover.

In opening the discussion Dr. B. P. Weaver said that only 5 per cent. of unopened eases of ectopic gestation die from hemorrhage per se.

Referring to the case of tumor removed from the little finger, Dr. Porter said that the fact that it was movable over underlying tissues does not prove that it was not malignant. He said the faet is that these melanosarcomata are not attaehed for a long time, and sometimes never attached. These tumors for a long time have potentiality of malignanes without manifesting it, and after a long time suddenly show malignant tendency. He believes the microscope should be used.

Speaking on fibroma in pregnance, Dr. Porter said that it is quite right to remove fibroid from the pregnant uterus. He referred to a case in whieh he had removed a fibroid from pregnant uterus, and the case went on to term, and patient has since given birth to another child. On the question of the growth of fibroids in presence of pregnancy he said that some grow and some do not grow, still others seem to grow but do not. The rapid increase in the size of the uterus lifts them up so that they are more noticeable. Any fibroid large enough to attract the attention of the patient should be removed.

With reference to the case of appendicitis where anastomosis of the colon was made, Dr. Porter said he believed that the abscess originated from rudimentary appendix, and that this appendix had been damaged by inflammation. He also spoke on the danger of plugging of the button in cases where it was used in the colon, and said that the stools should be kept liquid.

Concerning these cases of ectopic gestation, Dr. Porter said that Dr. Rosenthal is to be congratulated on making the diagnosis of estopic gestation before rupture or abortion. These cases in which this condition oceurs, as a rule, have had a diseased tube, and the faet that the tube is diseased and pregnancy present is sufficient cause for removal.
Dr. Rosenthal said, in closing, that the appendix ease in which anastomosis was made was in extremis, and therefore a more deliberate anastomosis was not made. It was a case of appendieitis obliterans He also said that the tumor removed from the finger was fibroma.

A vote of thanks was given the Sisters for the luncheon prepared.

Adjourned.
J. C. Wallace, Secretary.

## (Meeting of Oct. 13, 1908.)

Society met in regular session in the assembly room, with sixteen members present.
Peritonitis from the Standpoint of the Anesthetist was the title of a paper by Dr. J. H. Gilpin, in which he said that a patient with acute peritonitis
requires mueh more skill to anesthetize correctly, and is in muel greater danger from the anesthetic than one with an incompensated leart lesion. One of the first and most important rules to follow is to use as little anesthetic, drop by drop, as is necessary to produce complete anesthesia, and no more. To a large cxtent the patient is more or less anesthetized by the toxins of his pcritonitis and consequently needs much less ether than with most other conditions. In fact, diffuse peritonitis and acute pus formation in the abdomen ean be diagnosed almost without cxception by the manner in whieh they take the anesthetic. Not all deaths are due solely to the peritonitis or the operation, but some blame must be laid to the anesthetic. Both ether and ehloroform have exactly the same effects; both depress the heart, although chloroform more so than ether, and it is to this that death is due, and not to paralysis of respiration. Acute peritonitis is the most dangerous and dimcult condition for whieh an anesthetic is given, and the surgeon should inform the anesthetist when such a eondition is present.

In discussing tas paper, Dr. Van Buskirk said that he had had more experience with chloroform, and with this you are more liable to notice the tongue dropping back into the pharynx and giving trouble. He said that the surgeon is often to blame for long anesthesias, as he does not get to work promptly, nor does he work as rapidly at times as he should.

Dr. Weaver said that in cases of acute peritonitis the plan of attaek should be, in the vast majority of cases, to get in and do what is to he done and then get out as rapidly as possible. He advoeates that the serubhing-up process of the patient be started as early as possible, therehy saving valuable time. Just enough, and not too mueh, anesthetıc should be used. The first consideration should be the patient and then the convenience of the surgeon and the anesthetist.
Dr. Beall said that he helieved that chloroform is contraindieated in aeute diffuse peritonitis on account of the damage it does to the organs. Ordinarily these cases are pale and not much cyanoseu, as shown in color of skin, but when the surgeon makes his incision and the blood flows you ean readily see that they are affeeted by the anesthetic. He disagrees witi tue statement that ether is a depressant. Before the belly is opened the pulse is good, but after the helly is opened the pulse is not so good. The patient should be thoroughly asleep, for the reason that when not asleep the reflex aetion caused hy opening the abdomen will be more than if thoroughly asleep.

Dr. Gilpin said, in closing, that if enough ether is given you will get fall in blood pressure. He also said that hoth ether and chloroform are depressants.

Intestinal Obstruction Caused by Meckel's Divert-iculum.-Paper read by Dr. Allen Hamilton. Patient, boy, aged 6 years, admitted to Hope Hospital Nov. $24,190 \%$. Three days hefore admission child complained of pain in abdomen, whieh become rapidly worse and was severe ever since; vomiting began, first food, then bile, and later fecal matter; there was absolute constipation, neither catharsis nor enema bringing away gas or feces. Child was in collapse and almost moribund, temperature 98 , pulse 115 and very weak, abdomen markedly distended and tender chiefly in region of umbilieus. Case appeared hopeless, but, as death was rapidly approaching, operation was de-
eided upon. On opening the abdomen I found the distended gut led down to the pelvis, where, within a few inches of the ileocecal valve, was an obstruction. A Meckel's diverticulum was present, the tip of which was attached to the mesentery of the ileum surrounding a loop of small intestine. Both diverticulum and ileum adjoining were gangrenous. The diverticulum was removed, and a Murphy button put in.
Meckel's diverticulum is the remains of the vitelline or omphalo-mesenteric duct that in the early weeks of fetal life connects the intestine with the umbilical vesicle. Normally the abdominal wall is closed by the sixth week of intrauterine life, and this duct atrophies, only a cord being left connecting the gut with the umbilicus; as the fetus develops this, too, disappears and the intestine is left free. In one human subject in fifty, or thereabouts, the duct fails to become obliterated and remains present in a more or less incom plete condition. As an exciting cause, trauma plays a part, as well as do digestive disturbances, flatulency and overeating. The symptoms are those of any obstruction, later that of peritonitis, but it is remarkable in how many cases appendicitis is closely simulated.
In the discussion. Dr. Weaver stated that he believed the diverticulum should be amputated when at all possible and future complications thus avoided.
Dr. Mouser stated that he had seen four cases; three cascs were eaused by bands, the other formed an obstruction by cyst. He said this condition is a physical stigmata and indicates that the child is not finished.
Dr. Van Buskirk saitl he had seen two cases postnortem, one where the diverticulum had detached itself from the intestine and formed a small cyst in conjunction with the umbilicus.
In closing, Dr. Hamilton said that there is no question but that the diverticulum should be removed if the condition of the patient warrants such a procedure.

Dr. K. K. Wheelock gave a talk on his observations while in Boston doing the clinics there. He said it was a very good field, and advised members to pay boston a visit for the purpose of clinical investigation.
Dr. W. W. Carcy gave a short talk on his experiences in Boston while in attendance on clinics there. Ife also spoke of his observation whle attending the Tuberculosis Congress.

## (Meeting of Oct. 20, 1908.)

The society met in the assembly room, with thirty. five members present. Minutes of two previous meetings read and approved.
Postoperative Hernia.-Dr. M. F. Porter reported a case which he had operated for postoperative hernia, following operation with drainage, and also operated for removal of appendix as well. On opening the abdomen he found the lower abdomen a mass of adhesions, and discovered that he had to deal with femoral and inguinal hernia. The intestines and omentum were bulging out. In closing the opening, he lifted up Poupart's ligament and reached under, grasping the internal oblique, bringing it down under Poupart's ligament, and then brought down the external oblique. There was no tension, inasmuch as there was no strength in these muscles. He did not break up the adhesions, because they were not causing any trouble. Dr. Porter wished to call attention to the procedure in this case of pulling down the muscles
under Poupart's ligament and pulling the muscles over the inguinal and crural rings at the same time.
Syphilis of the Nervous System was the title of a paper by Dr. G. Van Sweringen, in which he considered early involvement of the nervous system in syphilis; the frequency of syphilis of the brain and cord; etiology of nervous syphilis; the pathological changes in carly syphilis, to which can be attributed many of the vague nervous symptoms; the similarity of tabes dorsalis, paresis and cerebrospinal syphilis, with the pathological changes in each, showing the reason for failure of antispecific treatment in tabes and paresis, and the good results of this treatment in cerebrospinal syphilis; a case history of the last-named disease, illustrating the result of treatment. He made a plea for early diagnosis of nervous syphilis in order to get the best result from antissphilitic treatment, i. e., before any destruction of nerve tissue has taken place and most of the symptoms are due to pressure, and the institution of large doses of potassium iodid and mercury until symptoms are controlled, then tonic doses of mercury.

Dr. Beall contributed a pathological specimen of syphilitic arteritis.
Dr. Porter opened the discussion by saying that the practical point is that after a gumma has produced changes in the tissues the trouble cannot all be cleared up. K. I, will clear certain lesions, but the results of these lesions may be permanent. He had one case of chancre of the lip which was not placed on treatment until diagnosis was certain. After a length of time the chancre got well, and in about six weeks a facial palsy and nervous manifestations presented. Patient was put on K. I. and Hg. and after abont two years of this treatment he recovered.
Dr. Rhamy said that syphilitic induration of the lung shows usual picture of fibroid degeneration.
Dr. Gilpin said that it is hardly fair to state that all cases of paresis are due to syphilis.

Dr. B. Van Sweringen reported a case of paraplegia which was rather sudden in manifestation. The patient was put on very active antisyphilitic treatment, with no results for a couple of months. The patient ceased treatment, and has recovered in a great measure. Dr. Patrick, of Chicago, diagnosed this case as one of rapidly developing tabes. This patient is now able to do work as rural mail carrier.
Dr. Morgan said some years ago he reported a caze as having got well under K. I. This patient did well for a year, but now he has returned to Fort Wayne to die. It is now about three years since the patient was apparently well.
Dr. Carl Schilling said that about a year and a half ago he was called to see a case with symptoms of hemiplegia. This patient was put on active antisyphilitic treatmenc. A short time ago he was called to see this case, which was suffering from severe pain in abdomen, which grew more severe, followed by death in a few days. Postmortem showed perforating ulcer of the duodenum, also gummata in kidneys, liver and pancreas.

Dr. Weaver spoke on the question of trauma bringing out syphilitic tendency. He spoke of the case of a man who fell, and eleven days later there was inability to urinate, and later loss of control of bowels, also paraplegia. He developed a hematuria, and was put on K. I., and is now taking 90 grains t . i. d. He is now able to control bowels and can walk. Patient has been on antisyphilitic treatment three months.

Dr. Weaver moved that this paper of Dr. Garrett Van Siweringen be referred to the state society. Carried.
1)r. W. 1). Calvin gave a furtlier report on the ease of Mr. L.. slown here some time ago, in which there was incoordination, spastic gait and local ancstlesia. He was put on K. I., 150 grains, and Dr. Calvin has lately received a letter from this man, written by himself, showing that this was a case of syphilis of the nervous system.

Dr. Harice said these eases slould he followed up and treated and they would get along better.

Discussion was closed by Dr. G. Van Sweringen.
Gastric Trouble in Different Diseases was the title of a paper by Dr. A. E. Fauve, in which he said that hunger is the result of general cellular work and the lemand of material for reconstruction, while appetite i. the setting in action of the digestive forecs, mostly gastric. As diseases in which the appetite was affected he named orippe, influenza, malarial fever, tubereulosis with ligh temperature, septicemia and typhoid fever. In high temperature, as we find in septicemia, especially when it lasts several weeks, we often find the separation of soluble ferments and hydrochlorie acid. In general the percentage of hydrochloric acid lowers gradually with the elevation of temperature. This dimimution is especially more sensitive in infectious fevers, as we find it in pneumonia, typhoid fever, septicemia and articular rheumatism. In pernicious anemia the gastrie secretion diminishes slowly; if we examine the gastric contents after a test meal we do not find any hydrochloric acid nor soluble ferments, but only a mucous seeretion. In those cases the gastric digestion is absent, and the intestinal digestion diminishes gradually until death takes place. The heart function plays an important role in the digestive process. In patients suffering from cardiae affections you will find with all the dietetic precautions you may lake the gastrointestinal digestion will be gravely compromised by the effect of the myocarditis. The venous stasis of the gastrie mucosa will suffice to diminish the secretion of the gastric juice, while the mucous secretion increases; the same symptoms take place that we find in chronic gastritis, the gastric digestion will be retarded, and all stomachic medication will be useless. In this class of eases a eardiae remedy, such as digitalis, will be very effective if employed in time. Certain skin diseases if they are not caused by digestive troubles are kept up or exag. gerated by them, and under the influence of a better gastrointestinal digestion we see these skin affections diminish and even disappear.

Paper was discussed by Dr. B. Van Sweringen.
Idjourned.
J. C. Wallace, Secretary.

## (Meeting of Nov. 3, 1908.)

Society met in regular session in the Assembly room with twenty-one members present. Minutes of prerious mecting read and approved.

Abscess of Frontal Lobe of Cerebrum.-Case report by Dr. M. F. Porter. Patient referred by Dr. Grayton. The patient was brought in about one weck ago, witl abscess of frontal sinus. A sinus had formed above the eye from which a piece of bone had been removed about the size of the end of the finger. Pacient complained of pain in the back of the head and neck. Frontal sinus was opened in the usual way and cleaned out, and drainage establislied througls nose and eyebrow, but the pain in back of head con-
timued. For the last week his had practically normol temperature. In consultation Irr. Me.Caskey agreed with diagnosis of meningitis, although the only evidence of this condition was a little sluggishness of pupil, myosis and nystagmus. On November 3 patient was in semi-comatose condition, pulse 140 . respiration 40 to 50 . Exploration was advised, and an opening made in the frontal sinus. Pus was found to come from the upper outer angle. A closer ras amination revealed that the posterior wall of the sinus was gone and granulation tissue bulged through. An opening through this revealed an abscess in the frontal lobe of the cerebrum, which contained about all ounce of pus. This abscess is now draining througis the frontal sinus. Whether this procedure will ac complish the desired results depends on whether thrombophlebitis is present. (Patient died eighteen hours after operation.)

Dr. S. H. Havice reported two cases of ocular disturbance following the use of tuberculin in the eye for diagnostic purposes.

Opening the discussion, Dr. Chas. G. Beall sair] that it is generally admitted at the present time that we do have some bad results from the use of the tuberculin test. It has been demonstrated that anything stronger than a 1 per cent. solution is dangerous. Both of these cases of Dr. Havice have interstitial keratitis, resulting, no doubt, from an old syplrilitie lesion which has been irritated by the tuberculin. Dr. Beall does not think that Koch's old tuberculin should be used at all, because its strength is not exactly known. The precipitated tuberculin should be used. The test slould not be repeated in the same eye, for the reason that there is a hypersensitiveness produced.

Dr. Wilking asked Dr. Havice if by diseased eyes he included refractive errors as well as inflammatiry troubles.

Dr. W. W. Carey reported having heard at the Tuberculosis Congress at Washington a report by a man who had used the tuberculin in the eye in 800 eases and eame to the conclusion that nothing was gained by it.

Dr. MeOscar said that we do not know what changes have taken place in the old serums, therefore only fresh products shound be used.
1)r. Weaver stated that the solution should be a glycerin free product. The question arises, what is al normal eye, and does the general practitioner know one when he sees it?

Dr. L. T. Rawles said he liad had some bad results. He instilled a $1 / 2$ per cent. solution in the eye of a child 14 years of age, no reaction resulting. In fifteen days he again instilled a 1 per cent. solution in the other eye, which caused a violent reaction in both eyes.

Dr. Havice, in closing, said that the one case hat ulcero vaseular keratitis. He also said that an eye that lias simply a refractive crror is practically a normal eye. He said that a drop of tuberculin in an eye did not produce a positive diagnosis.

Dr. W. D. Calvin suggested the advisability of it physicians' club, and physicians' building, and asked that a motion be made that a committee be appointed to look the matter up and report to the society as to the advisability, plans, ete., of building to be built aml owned by physicians for meeting place, to hol.l library, museum, social rooms, ete.

Dr. McOscar made a motion that a committee of five be appointed, Dr. W. D. Calvin being chairman, to attend to this matter and report to the society. Motion earried.

Dr. B. P. Weaver, chairnan of the committee appointed to review papers on collections, fees, etc., reported as follows. We recommend that:

1. (a) A common collector be retained in the form of a reputable law firm for all accounts placed for eollection. (b) Such collector be required to keep a list of delinquents, to we revised at eertain frequent intervals, and a copy of such list be furnished each member of the soeiety.
2. Owing to increased cost of living, equipment, and eost of securing a medical education, that medical fees be maintained at a ligher standard.
3. A definte pereentage of the eommon collections be appropriated to a fund for the establishment and maintenance of a permanent home for the Allen County Medical Society.

Motion carried to table this matter for two wecks. Adjourned.
J. C. Wallace, Secretary.

## (Meeting of Nov. 10, 1908.)

Society met in regular session at the Lutheran Hospital with thirty members present. Minutes of prerious meeting read and approved.

Dr. B. Van Sweringen presented three specimens, as follows: The first was a large fibroma of the uterus, associated with an ovarian cyst the size of a eocoanut. The case was presented bccause of its rarity, as only a few instances of such association could be found in a rather lasty search.

The second specimen was a prostate removed after the evacuation of a large prostatic abscess which had burst through the capsule and burrowed forward to the perineo-scrotal angle. The question of the advisability of the removal of the prostate under such circumstances was discussed. It was removed in this case because it was thought impossible even in clean cases to prevent the woumd from becoming infceted, and the infecting organism in this instance did not seen to be very virulent.

The third specimen was an appendix remored the night before, after an illness of seven hours. The patient began to have colic at 2 a. m., which eontinued at irregular intervals until operated at 6 a. m . When examined at 4 p. m. the pulse was normal and there was no rise in temperature. He had romited and was suffering considerable pain. Abdominal palpation revealed some tenderness over the appendix but no rigidity. The specimen shows the beginning of a severe inflammation, but no gangrene or perforation, and is presented as a case in which one of the classical symptoms (rigidity) was absent.

Cesarean Section was the title of a paper by Dr. B. Van Sweringen, in which he detailed three cases operated on at the Lutheran Hospital by Drs. Duemling, Porter and himself. The first was made neeessary by the presence of adhesions between the uterus and abdeminal wall following drainage after the removal of a gangrenous appendix. The second was a ease of placenta provia centralis. The third was a eontracted pelvis with a bischial diameter of $21 / 4$ inehes. All of the mothers made good reeoveries and all of the babies are alive.

These cases were made the basis of a plea for the more general employment of the operation, especially
in cases presenting minor degrces of pelvic contraction in whom a high forceps operation becomes necessary. It was argued that the fetal mortality was certainly less in Cesarean section than in high forceps, and that aceidents resulting from injuries to the head by the forceps were wanting in the former operation. The maternal mortality and morbidity, it was pointed out, is perhaps less after section than after high forceps. In a woman with the history of one severe disastrous labor the question of Cesarean section should be very carefully considered as she approaches her second confinement. Placenta previa and abdominal adhesions were also discussed as indications for seetion.

Present Status of Indications for the Use of the Forceps was the title of a paper by Dr. H. A. Duemling. He said that elanges of almost revolutionary character have taken place in obstetric science within the last decade. The trend of these changes have been largely toward minimizing the injury to the maternal parts. To understand the proper use of the forceps, he said it is well to study their action. The forceps as well as any other instrument is an amplification of the hand or fingers fitted to the object in view. The forceps therefore may act in four different ways, viz., tractor, compressor, lever and as a rotator. During traetion there is always a certain amount of compression and leverage, and usually more or less rotation. The forceps therefore can not be used as a tractor only. but at the same time becomes a lever. For the least traction, i. c., force, the pull mmst be in the axis of the parturient canal. From $\bar{i} 0$ to 80 pounds of tractile foree should be considered the limit. Forceps in its action somewhat copies the normal scheme. When applied it eompresses the head and by the resistance offered by the structures is in turn mould $\ddagger$ to conform with the maternal parts. In other words, when traction is applied, eompression begins, and when traction eeascs, compression ceases-both as regards forceps or maternal parts. The amount of compression is in relation to the amount of traction. Avoid compression and consequent paralysis of various nerves caused by forceps slipping, by placing your foreep blades properly, and do not begin traction until firm hold is secured. When foreeps is used as fulcrum it must be understood that the intrinsie usefulness depends entircly upon the fulcrum used. The pendulum morement must not be used without traction. Forceps are dangerous rotators. It is permissible to rotate a head with the forceps and using them as the fulcrum. Too firm a hold on the forceps prevents rotation. If the tractile force, howerer, is applied close to the lock the head will make a normal rotation.

Indications for the use of forceps may oe two fold: Those in the interest of the mother and those in the interest of the child. The most important indication for the use of the forceps is found in actual or relative uterine or abdominal inertia. A fetal heart beat at 100 , prolonged for a minute, is a positive indication for the speedy use of the forceps. A good rule is to apply the forceps in the second stage of labor whenever (in head presentations) the presenting part remains stationary for two hours.
Dont's.-Forceps must not be applied unless os is fully dilated. Forceps must not be applied unless head is engaged in the superior strait. Forceps must not be applied until membranes have ruptured.

Forceps mute not to applied in impossible positions coin moterior. Forcers mus: not te applied unless bead is of arerage size. Forceps must not te arplied when di-proporion tetween bead and relric canal is Tï) §reat.
Ofening the disucsion, Dr. E. J. Mrobear said that in the narrow or contractet pelvis we hare the mos: urgert demand icr Cesarear section. If it can be demoritrasel thas it is less bazardous for the mother in placerta preria io beliver br Cesarean section, ihen this meshor :hould be usec. Ho said be bas trin in the bati: of twing =cokiry metisa of forceps in aur cirection. In cases of accipito foltericr, if the pelris allows the boa $=0$ pess, then the sott parts shou! mot 3 lacorated If any Cofere in birth co child
Dr. Drayer seates itat he tal recertly read of a me:h ri of conirolling temorrhage in Flaseria freria by fu*ing a ligature on the uterine arieries umill after the dolivery an? tion letting is loose He says if this can to doune then the terme condacenia praria cencralis can be atamioned. He has one case of rlacenta prasia centralis in which the mother died in cre hour atte= cslivers. He said he would preier premature delivers at the severih or eightis month. Iet, as the case gres on to iull term, be would adrize Cesarean rezion. Thrombus iollows perineal lacerations, bui cervical lacerations are not so dangerous.
Dr. Hamilton said that complicasions are rery liable to fillow Csarean section. He gives the following rules for call for forceps, that he has been in the habit of following: Ii the bead bas bsen on the perineum for ore hour, appls forceps; aiter the greates: diameier has teen passed and no adrance aiter two houre, applr forcep. It the second stage is on and no pregrese ior three hours, apply iorceps. Then the case is in labor, Cesarean section is as farorable if not more so than before labor has jet in, on account of the cervix being open for drainage.

Dr. H. V. Sweringen said he bad had no experience with Cesarean secion, but that he had had some cases in which be thinks be would have been able to save the baby if Cesarean section had been periormed.
Dr. Harice said he has had three cases of placentia prexia. In the first the bate died, second baby lived, and third died in delivery.
In closing, Dr. B. Van Sweringen said, in regard to ligature of the uterine arters, it is unwarranted, first, becanse it is unneceriart, and, second, because it has a tad efiect on the child

Dr. Duemling suggested the use of the McGraw elastic ligature for uierine arterr.
Drs. Beall, Calrin and Dancer also discrseed the papers.

Dr. Beall mored that these papers te reierred to the state societr. Carried.

Vote of thanks was given the uarses for the Ene lusch.

Aljourned.
J. C. Waitace, Secteiary.

## (Meting of Nor. IT, Igos.

Societs met in the Circuit Court room, with thirtyone members and about one hundred risitors present. Tle pafer oit the evening was by Dr. J. 5. Hurty, sectetary of the siate Poard of Health, on the subject "Tue Medical Insesction of School Children," in which be said:
"Ou: of the 1.332 Echool children who died during the jear 190\% I heliere that 30 per cent. oi them were murdered by the state, and I also believe that $60 \mathrm{f} \in \mathrm{r}$

Fer cent. of all school children a: the present time need phrsical examination."

Dr. Hurty teran his lecture br telling of some fersomal experience in which he knem of children who tell back in their studies. grew lisiless and Enally so carelest that they droppet out of sight aliogether, when it was iound aiterward that the litile ores wers -utiering with porsical defects which precluded their keeping up with ibeir bealthy fellows.
"In France, Encland. Switzerland, Germany, HunEary, Ausiria, Jorwar, Swelen, Roumania, Japan, Egp: South 1 merica ama erea in dartes: Pussia, medical inspection of shools is in sorce, but here in Indiana, where we teliere we have the Evest schcol Erstem in the world, we allow our chileren io sufut and die. all fin tje want ci a little cate and atteztion upon the fart of the state. Br a simple medical inipection of the chaldren many Lumereds of lires could be saved each rear, and ret we cre tha: we -ate no mones with which to do the wori "
Dr. Hurt sererely scored the school bcards of the state ior their carelessness along those lines. He statal ibat while be was in Mexico he was taken on a risi: to the public schonle, and the rer first thing he ran actcos was a phr-ician upon his periodical inspection of the school children. "These Greasers," said the doctor in fine sorn--ibese Greazers whom we despife-could ieach us something in charitr; cruld teach us that unless we look aiter tie children we are cocmed."
Dr. Hurty also told of a visit made to the public schcols in Terre Haute, and said: "In a risit to one Ethool in Terre Haute I found one child with pulmonary tuberculosis: sereral with diseased tonsils, seteral with sore edes, several with deiective rision, a number with curable diseases, but who were sure to die if leit to their fate, set when I called upon the Feople to put down this awiul thing by medical in. -pection of the children, business men who were supposed to possess real acumen for business stated to me that there was no moner for the purpose."

The speaker scored such a system, tore it in:o sbreds. and from eren the economical point of riew showed that the state would sare thorzands upon thousands of dollars annualls.

At the conclusion of Dr. Hurtro ミ address, Dr. H. O. Brugseman, secretary of the board of bealth, made a chor talk and told how the department of health was Eecking to provide for melical inspection of the school children, but stated that the old crs of "no moner" Wa: made each time the authorities were approached. -Then the prople tecome aroused the moner will be icrthcoming:" said Dr. Bruggeman.
Dr. A. P. Buchman, president of the board of healih, in a short speech, went aiter the school boaral and called on the people to force the beard to provile for such an inspection. "Tinless rou go aiter tile school board with Poosereltian clubs:" zaid Dr. Buchman, for will gez nothing done, but ii rou do go aiter the toard and keep aiter it perhap we may secure some prorision for the saving of the lives of the litule ones:"

The discussion then became general and was participated in by the Rer. A. K. Zartman and others who were present.

On motion of Dr. Bulson a rote of thanks was exitnded Dr. Hurtr.
Adjourned.
J. C. Waluace, Secretary.

## CLAY COUNTY.

The Clay County Medical Society met in regular session at the office of Dr. Hollingsworth, in Brazil, Nov. 26, 1908. Mceting called to order by president. Minutes of the last regular and one special meeting read and approved, including final reports of committees.

Diphtl:enia was the title of a rery carefully prepared paper by Dr. L. M. Weaver, of Staunton. He rigorously adrocated prophylaxis, warned against the kissing habit among the sick and convalescent, and urged the early and thorough use of antitoxin.

Discussion was opened by Dr. J. F. Smith, followed by several others, who complimented the author on the completeness of his presentation of the subject.

Hydrophobia was the title of a paper by Dr. Will iam Palm, of Harmony. He gave an excellent historieal diagnosis between true rabies, tetanus and pseudo-rabies. He adrocated prompt suction and cautery of the lacerated wound, caused by the bites of animals, and the Pasteur treatinent for demonstrated cases.

Discussion was opened by Dr. L. L. Williams, who also reported details of a recent case which is yet under treatment.

The papers of Dr. Dilly, of Brazil, and Dr. Vandion, Clay City, were continued to the next regular meeting to be held December 17, at waich time Dr. James, of Cory, will give an account of his recent travels in Europe.

Adjourned. G. W. Fisley, Secretary.

## DEARBORN COUNTY.

The Dearborn County Medical Society held an open session and banquet at the Lawrenceburgh Commercial Club rooms, Tuesday, Nov. 24, 1908, to which the doctors and their wives were invited. In the absence of the president, Dr. H. H. Sutton, of Aurora presided. Drs. D. E. Johnson, of Moore's Hill, and O. S. Jaquith, of Lawrenceburgh, presented the subject of "Diphtheria," Dr. Jaquith confining his paper entirely to the treatment, while Dr. Johnson called attention to the well known fact that all epidemic diseases as they occur throughout the country prevail in cycles of mild and severe form, and that possibly our splendid mortality statistics in diphtheria at present might in a measure be due to a mild form of this disease. The discussion following was rery free, some of the ladies taking part. The early use of antitoxin was the treatment universally recommended. Dr. Jaquith laid special stress on the inhalation of oxygen gas in laryngeal diphtheria, stating that it gave marked relief in the attacks of suffocation. Dr. Ford, of Aurora, in a paper on tuberculosis, gave some excellent advice as to the management of the disease. This paper was discussed by Dr. Smith, of Lawrenceburgh.
The banquct followed the regular program, and added much to the pleasure of the evening.

Adjourned.

## II. H. Sutton.

## ELKHART COUNTY.

The Elkhart County Medical Society met in regular session at the Elkhart Academy of Medicine, Nov. 5, 1908. Minutes of previous meeting read and approved. The election of officers for the coming year resulted as follows: President, Dr. Fred. N. Dewey; vice-
president, Dr. Herbert K. Lemon; secretary, Dr. Allen A. Norris; treasurer, Dr. N. Ophelia Stauft; censor, Dr. Daniel L. Miller.

First Aid to the Injured was the title of the first paper on the program, by Dr. I. W. Short. (Paper appears in this number of The Jorucial.)

Cystitis was the title of a paper read by Dr. E. D. Stuckman, in which he said that cystitis, or inflammation of the bladder, is caused by traumatism, retention of urine, or extension of inflammation from adjoining parts. The most characteristic and common symptom is frequent and painful micturition, chills, ferer, sweating and head symptoms, caused by the absorption of decomposed shreds of sloughed membranes. Urinary findings usually acid, specifie gravity 1005 to $101 \overline{5}$, smoky tinge; microscope finds blood and pus corpuscles. Prognosis good in most cases. Perfect rest and quietness form an important part of the treatment. For sympathetic rectal tenesmus morphia or belladonna suppositories may be used. As approprite medieinal treatment he mentioned hydrobromic acid, diaphoreties, diuretics, the sulpho-earbolates, ealeium sulphide, sodium salicylate, and frequent washing of the bladder with boric acid water.

In the discussion, Dr. J. C. Flemming said that it las long been proven that it is bad practice to probe bullet wounds to any great extent. In abdominal wounds where an operation is indicated it should be done early. In eystitis some of the newer drugs are very useful. Many of the so-called cases of malaria, that are in reality cystitis and resist all treatment, need drainage. Urotropin is a splendid medicine in many of these cases.

Dr. M. M. Eckleman said that he was of the same opinion as the previous speaker with reference to the probing of gunshot wounds. In his eight years of experience as physician for the poor he met many of this class of cases, and had much better results if the wounds were not probed. In fractures he suggested that the fracture be reduced as early as possible, and not wait for developments. He would suggest the use of an anesthetic in all cases of fracture, in order to produce complete relaxation. He suggests the use of adrenalin instead of strychnin in shock.

Dr. J. A. Work, Sr., said that in cystitis the cause should be removed, and in most cases the disease will get well. The diet is an important factor in treatment. Many of these cases are large meat eaters. To put them on a regetable or cereal diet will make is great difference in our cases.

Dr. I. W. Short said that in severe cases of cystitis the patient should be put to bed and kept quiet. Irrigations in many cases will be of no service.

Dr. A. A. Norris, speaking of the diagnosis of crstitis, said that it is generally not difficult. Tuberculosis of the bladder is secondary to tuberculosis of the testicles or of the kidneys. Washing out the bladder is good prac..ce in many of the cases if the technic is right. Salol is very useful in many of these cases, perhaps better than formin.

Dr. W. A. Neal said that in the acute cases of cystitis he found many years ago that from one-half to a grain of nitrate of silver to an ounce of water is the best wash he has used. He rarely failed to give relief when this solution was employed.

Dr. J. A. Work, Jr., said that chronic cystitis divides itself into two classes, with and without pus.

In the former nitrate of silwer is useful，while in the latter where there is much pain he adrises the use of very large quantities of normal salt or boracic aede solutions．
Dr．J．B．Porter，with reference to the treating of fles wounds，said that it would be well to omit sutures in this class of cases unless where a cosmetic effect is desired．Better results are obtained by dress－ ing the wound without suturing．As to cystitis，in general very little is accomplished by washing the bladder ont．In acute cases nitrate of silver serves best，used in weak solutions．In chronic cases wash－ ing will often make them worsc．In fact，balsams and ererything else often do no good．Hyoseyamus lidedrobromid is useful in the prostatic varicties．
13r．E．M．Hoover said that where there is frequent micturition and tenesmus，atropin and hyoscyamus hydrobromid are useful．

Dr．A．H．Snapp，in discussing the subject of cystitis，said that he first used medicines internally， and then resorted to irrigations if the former gave no relief．He always puts his patients to bed，and can not understand why some physicians object to quiet－ ness．

In elosing the discussion，Dr．I．W．Short stated that he adrocated the hot sitz bath in cystitis．He stated that a fracture should be reduced as soon as the patient is in a comfortable or permanent place． No one should try to reduce a fracture upon the street or in a place that is not suited．Make the patient as comfortable as possible，remove him to his home or to a hospital，and then reduce and dress the fracture．

The socicty adjourneu to meet December 3，when it will hare a public meeting on the subject of Tuber－ culosis．Speakers outside of the profession are in－ rited to participate in the program．
Adjourned．
George IV．Spoiln，Sccretary．

## GREENE COUNTY．

The regular meeting of the Grecne County Nedical Soriety was held at Switz City，Nov．12，1908．Min－ utes of previous meeting read and approved．Com－ munications from Owen，Monroc，Daviess and Sullivan Countics were read，regarding their fee bill and the possibility of adopting a uniform fee bill in the second district，all reporting favorably except Sullivan County．
lapers were read by Drs．Lukenvill，of Marco；Mā－ lett，of Switz City，and Mason，of Bloomfield，on ＂Epilepsy；＂which covered the subject thoroughly． There werc eighteen members present，and a good meeting was enjoyed．A banquet was served at Hunt＇s Tavern in the evening．The next meeting will be held at Bloomfield，Dec．17，1908，and the subject for dis－ cussion will be apoplexy．

Adjourned．
F．A．Van Sandt，Secretary．

## GRANT COUNTY．

At the regular meeting of the Grant County Medical Society，Dr．M．L．Harris，of Chicago，talked on ＂Tuberculosis of the Kidney．＂His talk was one of great instruction．
Dr．Jos．Maurer removed a submerged tonsil，ex－ plaining in detail his method．
Adjourned．
O．W．McQuown，Secretary．

## HANCOCK COUNTY．

The llaneock County Medical Socicty met in regular session in the small court room at Greenfield，Inil．， Norember 5．Society called to order by President C． A．Barnes．Mimutes of previous mecting read and ap－ proved．The Board of Censors reported favorably ors the applications of Drs．M．M．Adams，E．A．Hawy，E． E．Mace and F．W．Creagor，and on motion they were elected to nembership．The following cases were pre－ sented：Membranous Croup，Dr．Milo Gibbs；Pem－ phigus，Dr．Allen；Tuberculosis，Dr．L．B．Griflin； Tuberculosis，1）r．Adams；Epithelioma，Dr．E．R． Gibbs．
The election of officers for the year 1909 resulted a，follows：President，Dr．C．A．Barnes；rice－presi－ dents，Drs．Allen and Milo Gibbs；secretary－treasurer， f．R．Gibbs；censor，Dr．Griffin．
Adjourned．
E．R．Gibbs，Sectetary：

## HUNTINGTON COUNTY．

The Huntington County Medical Society met in regular session on the evening of Nor． 10,1908 ，with an exceedingly large attendance．

Dr．G．M．O＇Leary presented the paper of the eve－ ning on＂Anesthetics．＂The essayist confined himself entirely to ether and chloroform．At the outset ine stated that many of our schools graduated men who were absolutely ignorant of the elementary principles of anesthetic administration or with a very imperfect knowledge at the most．He discussed the wide differ－ ence of opinion as to the several anesthetics，conclud－ ing that each had its place；that the men who are familiar with both are in a position to obtain better results than those who are only acquainted with one， and that in regard to all anesthetics much more de－ pends on the skill and experience of the anesthetist than on the nature of the anesthetic or the inhaler used．The safest ancsthetic is nitrous oxid，the death rate of which is 1 in 100,000 ．The essayist gave the history of chloroform anesthesia，describing the best methods and preferring the drop method using a Schimmelbusch mask．He discussed the pulse as a guide in cnabling the anesthetist to determine the stage of anesthesia．This could be relied on in adults but not in children．In children the breathing is of greatest importance．The various accidents and com－ plications were discussed．His experience with chloro－ form has been very satisfactory．In three hundred cases in hospital service all but three were chloroform．

Taking up ether，the essayist discussed its history and the various methods of administration．He pre－ ferred the semi－open method with a Blake improved inhaler．He discussed the method of administration with its complications．The contra indications of ether anesthesia were enumerated and their treatment discussed．He took up the preparation of patient be－ fore and after anesthesia．Urine should be cxamined． Lavage of the stomach following anesthesia is now being used as a routine procedure by some surgeons．

In the discussion，participated in by all present，the paper received favorable comment．A wide difference of opinion and preference for either of the drugs was very erident．

Committee consisting of Drs．Morgan，Clokey and Krebs was appointed to arrange for the annual ban－ quet to be held Dec．17， 1908.

Adjourned．
W．H．Krebs．

## KOSCIUSKO COUNTY.

The society met in regular session Tuesday, Novem ber 19. Dr. F. H. Foster, of Warsaw, read a paper o: "The Chemistry of Bile Formation of Glycogen and Urea;" Dr. E. E. Haworth, of Claypool, on "Carcinoma of Bile Passages and Liver;" Dr. L. W. Ford, of Syracuse, on "Cholelithiasis, Symptoms and Treatment," and Dr. P. G. Fermier, of Leesburg, on "Amyloid Dis eases and Cirrhosis of Liver." These papers were discussed by, Drs. Burket, Foster, MrcDonald, Anglin, loung, Bash, Leedy, Haworth and Howard.
Resolutions were adopted requesting the Representative from the Thirteenth District and the U. S. scnators from Indiana to use their best efforts to cooperate in the effort being made to concentrate United States health bureaus into one department and to eventually establish a department of health.
The amendments to the constitution and by-laws read at the last meeting were adopted. These amendments ineluded an increase in the annual dues. They are thercfore now $\$ 3$ a year, which includes the State Association dues.
Adjourned. C. Norman Howard, Secretary.

## MADISON COUNTY

The Madison County Medical Society met in regular session at Summitville, Nov. 24, 1908. Society called to order by president, Dr. W. A. Boyden.
Five Atypical Cases of Typhoid Fever was the title of a paper by Dr. L. F. Mobley.

Smallpox as the Busy Physician of To-Day Sees It was the title of a paper by Dr. E. V. Boram, in which le said that whereas at one time smallpox eaused onetenth of all deaths, the results of vaccination as a preventative have been so suecessful that, with our present knowledge no one need acquire the disease. He attributed the usual mild form occurring in recent years to the results of this protective measure, and beliceres it is a well proven fact that no other disease possesses a speeific so eertain in results. Councilman's experiments in the inoculation of monkeys and his elaims as to the discovery of a specific germ of infection were discussed, as were also the contagiousness of the disease and its mode of transmission. The writer mentioned an instance where an indiridual acquired smallpox from a vaeant house in which the disease had existed many months before, giving this as the only known source of infection in that case, thus illustrating the great length of time the coutagion may be dormant. The incubation period of seven to fourteen days, and the characteristies of the eruption and its passage through the successive stages, beginning with the scarlatinous rash on the second or third day, followed by papule, resiele, pustule desiecation, and desquamation were discussed in enumerating the symptoms and in reference to the diagnosis. The umbilication of the resicles as they change to pustules, and the appearance of eruption in palms of hands and on soles of feet were mentioned also in speaking of diagnosis. He insisted on frequent bathing, especially after the pustular stage, as it limits the spreading of scales and adds to the patient's comfort. He diseussed methods supposed to limit pitting, including absence of light, administration of caleium sulphide and opening of pustules. Early puncture of pustules be believes has proven most useful in his
cases, although no method sueceeds in many cases. The methods of disinfection of houses and furnishings were given in closing the paper.

- Idjourned. B. H. Cook Secretary.


## NEWTON COUNTY.

The Newton County Medical Society met at Brook, Ind., Nov. 20, 1908. Dr. T. E. Cotten reported cases of vulvar edema accompanying pregnancy in the fourth month, and malaria. Dr. C. C. Bassett reported a case of kinking of the ureter, with subsequent operation and finally the extirpation of the kidney. Dr. Frank Kennedy also reported a ease of broncho pneumonia. Patient, a female, age 62 years. The usual symptoms were manifest; coarse râles heard over all parts of the lung. On the third day of the disease patient ceased to cough, and within an hour or two aied from a hemorrhage, the blood issuing from the mouth in a great stream. Death came at once after the hemorrhage began. No autopsy was secured. It was the opinion of the speaker and the society that an aneurism of the transverse aorta had eroded through the trachea and burst, causing the enormous nemorrhage and death. Dr. Reeker, the president, reported a case of puerperal eclampsia, which called forth a general discussion. Many theories for the condition were adranced, and the treatment received sull consideration. The next meeting of the society will be held at Brook, Dce. 18, 1908.

## ORANGE COUNTY.

The Orauge County Medical Society met in bimonthly session at Orleans, on Nov. 10, 1908. Although not a large number of nembers were present, some interesting reports of unusual cases were presented. Resolutions were offered on the death of one of the members of this society, Dr. Franklin P. Ifunt, of Leipsic, which oceurred on Sept. 22, 1908.

The next meeting will be held at French Lick on Jan. 12, 1909, and a large attendance is expected.

Adjourned.
S. F. Teaford, Seeretary.

## POSEY COUNTY.

Posey County Medical Society met at the Court House in Mount Vernon, Ind., Friday, Nov. 6, I908. Meeting called to order by Dr. Wm. M. Holton.
Minutes of previous meeting read and approved.
Application of Dr. K. C. Fitzgerald, of New Harmony, was presented. There being no objection, he was admitted.

It was moved and seconded that the by-laws be amended so as to provide for quarterly meetings, subject to the call of the secretary, as follows: Poseyville in mid-winter, New Harmony in the spring, Wadesville in the summer, and Mt. Vernon in the fall.

Dr. S. W. Boren, of Poseyville, read a paper on Puerperal Eelampsia. The paper described the condition in full and included a report of eases. The view that the condition is a manifestation of toxemia of pregnancy was adhered to and a description of the attaek was minutely given. The etiology was considered. In the methods of treatment given, special
attention was dirccted to prophylaxis, and routine examination of the urine was insisted upon. Treatment of the attack should consist of sedatives, elimivation and supportive measures.

Discussion was participated in by Drs. Holten, Hall, Hicks, Fullenwider, Rawlings, Henderson, Ramsey and Hall. A number of eases were reported and there was a free interchange of ideas. The discussion showed that calomel was a favorite remedy in cases in which time permitted its use. Chloroform and morphin were apparently the favorite sedatives, with chloral and reratrum close seconds. Opinion differed concerning the advisability of hurricdly emptying the uterus. Elimination by any and all means was agreed to be of prime importance.
The writer of the paper is to be congratulated on his thoroughness, and that great interest was taken was manifest by the earnestness of the diseussion.

Adjourned.
C. L. Rawlings, Secretary.

## VIGO COUNTY.

The Vigo County Medical Socicty met in regular session Oetober 27. Dr. A. C. Kimberlin, of Indianapolis, occupied the evening with a clinical lecture on "Blood Pressurc." After thoroughly explaining the technique and the different apparatus used, the Doctor demonstrated the Janeway and Erlanger instruments on the cases present. The cight cases embraced different kinds of heart and kidney lesions and furnished sufficient varicty to show the different degrees of blood pressure. The lecturer was kept busy until a late hour answering questions.
Adjourned. Charles N. Combs, Secretary.
The society met again December 17, and Dr. T. Victor Keene, director of the Pasteur Institute, of Indianapolis, addressed the meeting on the subject of "Hydrophobia." Dr. E. S. Niblack reported a case of hydrophobia in a boy, 12 years old, who had been bitten three months before; the boy dying within four days of the first symptoms. In view of the rabies scare in Terre Haute this meeting was of timely interest. A resolution was passed asking the council to pass an ordinance requiring all dogs in the city to be muzzled for all time.
The following changes have been made in the membership lately: Dr. E. M. Glaser, transferred to the Franklin County Society; Dr. A. G. Rogers, transfcrred to the Henry County Sueiety, and Dr. C. A. Ray, of Cory, Ind., suspended for non-payment of dues.

Adjourned.
Charles N. Combs, Secretary.

## NORTHERN TRI-STATE MEDICAL ASSOCIATION.

Thirty-fifth semi-annual meeting of this association will be held at Ann Arbor, Mich., Tuesday, Jan. 12, 1909. The following is the program: "Neurological Clinic," 9 a. m. to 10 a. m., Dr. C. D. Camp, from the university; "Clinical Methods of Examining the Insanc, with Cases," from 10 to 11 a. m., Dr. A. M. Barrett, from the university; "Gynecological Clinic with Surgical Operations," from 11 to 12 a. m., Dr. Reuben Peterson, from the university; "A New Factor in the Diagnosis of Gastrie Ulcer," with lantern-slide demonstrations." Dr. A. W. Crane, Kalamazoo, Mich.; "The Early Diagnosis of Gastrie Cancer," Dr. L. Breischer, Detroit, Mich.; "Intestinal Tuberculosis, with Report of Cases," Dr. G. W. MIcCaskey, Ft. Wayne, Ind.:
"Why Mastoiditis Is Sometimes Misunderstood," Dr. Emil Amberg, Detroit, Mich.; "Some Phases of the Treatment of Syphilis," Dr. Jeremiah Metzger, Toledo, O.; "Further Observations on Cancer," Dr. Geo. IV. Crile, Cleveland, Ohio; "Incipient and Atypical Graves Disease," Dr. Chas. G. Jennings, Detroit, Mich.; "Sone Common Misconceptions of the Symptomatology of Aneurisms of the Thoracic Aorta," Dr. Robert B. Preble, Chicago, Ill.
The faculty of the university and the local profession will entertain all the visiting physicians. A large attendance is anticipated. Every member is expected to bring at least one risiting physieian.

Goerge W. Spohn, Secretary.

## NINTH COUNCILOR DISTRICT MEDICAL ASSOCIATION.

The regular annual meeting of this society was held at Crawfordsville, Nov. 10, 1908, with sixty members present. The doctors were weleomed to the city by the Hon. Jere West, Judge of the Circuit Court, of Montgomery County. This was responded to by President Chittick, who delivered his annual address.
Ocular Manifestations of Renal Toxin was the title of the first paper, by Dr. J. D. Hadley. This was discussed by Drs. W. G. Swank, of Crawfordsville; H. Woolery, of Bloomington; J. R. Etter, of Crawfordsville, and W. S. Walker, of Lafayette.

Direct Digital Examination of the Eye was the title of a paper by Dr. H. E. Greene, of Crawfordsville. The essayist proposed to examine the eye by using the tips of the index fingers directly upon the cocainized eye. The paper was discussed by Dr. John Sickler, of Frankfort, and Dr. George F. Keiper, of Lafayette.

The Treatment of Salpingitis was the title of a paper by Dr. W. H. Williams, of Lebanon. This paper was discussed by Drs. W. G. Swank, of Crawfordsville, and W. S. Walker, of Lafayette.

The courtesy of the floor was extended to Dr. Homer Woolery, of Bloomington, to explain the use of Flexner's serum in the treatment of cerebro-spinal meningitis. Its merits were discussed by Professor Burrage, of Purdue, and Drs. W. S. Walker and W. R. Moffitt, of Lafayette.

The House of Delegates having adjourned, Dr. E. A. Gilson presented a resolution from the Fountain County Medical Society looking to the better protection of physicians' bills than now enjoyed under our present laws. The physicians are expected to see their senators and representatives in the forthcoming session of the Legislature and seeure the passage of such a bill. The Committee on Legislation of the Indiana State Medical Association is asked to cooperate.

Dr. J. N. Hurty, the guest of honor, addressed the meeting on "The Medical Inspection of School Children." The paper was discussed by Drs. E. A. Gilson, of Covington; Professor Burrage, of Purdue; G. W. Miller, of Covington; G. F. Keiper, of Lafayette, and A. R. Tucker, of Noblesville. It was ordered that the Committee on Public Policy and Legislation submit the sense of this meeting concerning the inspection of school children and teachers to each legislator in the coming session of the legislature.
The election of officers resulted as follows: President, Dr. Charles Chittick, Frankfort; first vice-president, Dr. John C. Webster, Lafayette; second vicepresident, Dr. S. L. Ensminger, Crawfordsville; secre-
tary, Dr. Geo. F. Keiper, Lafayette; assistant seeretary, Dr. Roy Gerard, Crawfordsville; treasurer, Dr. F. A. Tueker, Noblesville.

It was ordered that hereafter the soeiety meet in May beeause of the meeting of the Indiana State Medieal Association in Oetober.

Dr. A. R. Tueker, on behalf of the Hamilton County Medical Society, extended an invitation to meet in Noblesville next May. It was unanimously aceepted.

At 6 o'clock, at the Masonie Temple, a banquet was served, at whieh a number of toasts were proposed, to whieh happy responses were made.

George F. Keiper, Seeretary.
ELEVENTH INDIANA COUNCILOR DISTRICT MEDICAL ASSOCIATION.
The second annual session of this association was held at Wabash, under the auspices of the Wabasin County Medieal Society, on the afternoon and evening of Oet. 22, 1908. The afternoon session was devoted to the business and seientific program, the evening session to the banquet at which both the doctors and their wives were present. During the afternoon session the visiting physieians' wives were entertained by the ladies of the Wabash County Medical Society.

The afternoon meeting was ealled to order at 2:30 p. m. by the president, Dr. C. H. MeCully, of Logansport. All the eounties of the distriet were well represented. The minutes of the previous meeting, held at Logansport, were read and adopted as read. The secretary-treasurer, in his annual report, said that, beginning with a membership of seventeen, in less than one year the association has grown so that it now has a paid-up membership of forty-nine. A defieit amounting to $\$ 43.39$ was reported, but with the expeeted inerease in membership it was thought that all expenses of the association ean be met. Report adopted.

Upon suggestion of the Chair the seeretary read that seetion of the Constitution whieh provides that only those members of the distriet association were entitled to all the benefits and privileges of the assoeiation who had paid their annual dues of $\$ 1.00$ before the beginning of the annual meeting.
Dr. Lorin Smith, Wabash, chairman of the arrangement committee, reported that the visiting ladies were to be entertained at a musieale and reception by the ladies of the Wabash County Medieal Society and that all proper arrangements had been made to entertain a goodly number at the banquet in the evening. Report of the eommittee adopted and the committee diseharged with thanks.
On motion, duly carried, it was deeided to hold the next meeting at Marion, May 20, 1909.

The secretary was instrueted to send a message and greeting of good will to the Ninth Distriet Assoeiation, which was then in session at Anderson.
Election of offieers resulted as follows: President, Dr. J. Spooner, Peru; secretary-treasurer, Dr. M. H. Krebs, Huntington.

Dr. Ader, Somerset, presented resolutions concerning the vending or selling of any kind of patent medicine, also the treating of persons by any form of eleetricity or massage by any one except a regularly licensed physician or surgeon, and requesting Congress to pass a bill, with suitable penalties attaehed, to prohibit the same. The resolutions were referred to the Committee on Publie Poliey for aetion and with instruetions to report at the next meeting. The ques-
tion of having the coroner a licensed physieian was also referred to the Committee on Public Poliey and Legislation.
Acute Intestinal Obstruction was the title of a paper presented by Dr. W. L. Grayston, of Marion. The essayist urged the importance of early diagnosis and the thorough study of initial symptoms. He stated that surgeons were liable to negleet the study of diagnosis and resort too eheerily to the exploratory investigations of lesions in the abdominal cavity. On the other hand, many lives would undoubtedly de sared if all physieians realized the futility of wasting time in the effort to settle diagnostie problems when the fecal eurrent and perhaps the blood are stopped by mechanical eauses demanding instant operative proeedures. High mortality is due to delay in making the diagnosis. The three types of obstruetion ordinarily aecepted are, first: mechanieal (the most frequent eause of an acute obstruetion); second, the adynamic or paralytie form; third, the dynamie or spastic form. The last is rare and few cases reported. Pain is generally the first symptom. It is severe, may be continuous and oecasionally inereases by paroxysmal eolic. It is praetically always present, unless gangrene has oecurred and the patient gone into eollapse and stupor. The pain may be diffuse, as in volvulus, or loealized, as in various forms of hernia in the presence of eonstricting bands. Initial pain may subside and be followed by seeondary pain due to peritonitis.

Vomiting follows quiekly on appearanee of pain, and rarely precedes pain, espeeially in eases of high odstruction. It begins within the first twelve to twentyfour hours and persists until the end, unless the obstruction is relieved. It is aceompanied by nausea, hieeough and eructations of gas; is eopious, and consists of stomach eontents; may beeome bile stained, and finally has intestinal odor. Causes of vomiting may be, first, reflex; second, may be due to septicemia; third, vomiting due to aetual obstruetion in the lumen of the bowel. It is still a question whether anti-peristalsis does oeeur and is the eause of fecal romiting.

Complete obliteration induces absolute constipation, even when the obstruction affeets the upper bowel. Peristalsis below the site of the lesion seems to be inhibited by reflex aetion. Contents of the rectum and lower eolon may be washed out by enemas, but, as a rule, there is no spontaneous evaeuation of intestinsl gases or of feces.
Tympanites may be present in a moderate degree, but when peritonitis has developed as a seeondary eomplieation the distension becomes more general and may be very great. The shape of the abdomen is ehanged and the least asymmetry should be earefully studied.

It is important to diagnose obstruetion, its location and eharacter. The most eommon site is the lower quadrant of the abdomen. Intussuseeption chiefly found in the young; very eommon in the ileo-cecal region; most frequent in some portion of the colon. Volvulus is most apt to oecur in the signoid colon, especially in the aged. A differential diagnosis of the various forms of obstruction is usually diffieult and often impossible, and if the diagnosis can not be established with a fair degree of eertainly within twelve to twenty-four hours, open the abdomen aseptically and inspect its contents.
The treatment depends on the form of obstruetion. Operations should be done not only for the relief
sought. but also in a mamer that shall leave a minimum of post nperative sequelæ of all kinds. Bloo.t clots left in the abdomen will produce adhesions at that point. Handle the intestines as little as possible, aroid unnecessily tearing of the peritoneum in separating adhesions and above all prevent the spread of pus. Cover the denuded parts by peritoneum. The denuded small bowels are the most dangerous. It is an error, frequently made, to open the abdomen, relieve the obstruction and allow the fluid contents above the obstruction to pass down into an empty healthy absorbing gut below, and simply kill the patient by the lethal dose. The bowel should be opened above the point of obstruction, should be drained of its poisonous contents and later use larage into both afferent and efferent loops.

In the discussion, Dr. J. I. Gilbert, of Logansport, said that pain is most always the first symptom of obstruction, though sometimes it is absent altogether. He cited a case where a patient had passed a gall stone and immediately the obstruction of the bowel was relieved, yet this patient never had any pain. But pain is an important early symptom, and is often a gnide as to the location of the obstruction. There can be sudden pain which is due to a partial choking of the bowel. This may last an indefinite period and then may be followed by a distinct pain due to a tearing of the inner coating of the bowel. Pains are often excruciating, even before the patient is seen. When a doctor is called in such a case lie should make his diagnosis and then operate. The most important part of the treatment is to drain.
Dr. C. L. Wright, of Huntington, said the diagnosis is the most important part to be considered. Wheu you have the symptoms, the next question is, "What is the cause of the obstruction?" Stercoraceous vomiting only can determine it. The reflex peristalsis and vomiting are the only sure symptoms to go by.
1)r. Gilbert, of Logansport, said: "I do not believe that stercoraceous vomiting can determine the matter. If we wait until the pulse begins to fail, our patient is already lost."
Dr. Wright, of Huntington, said: "How are you to know, if these symptoms of reflex peristalsis are not seen?"
Dr. Stevens, of Logansport, said that he was called to see a ehild fifteen months old and found the case very difficult of diagnosis. The case resembled more a bilious colic than anything else. The child was immediately operated, obstruction relieved, and he was able to report a prompt recovery. If we wait for continuous romiting he belicves we wait too lung, and even the knife would be of no avail.

Dr. McCully, of Logansport, said: "There is no age limit. Extremely old and extremely Joung patients bear operations best. Conditions ought to be recognized early and there should be no hesitancy on the part of the doctor."

Dr. Grayston, of Marion, in closing the discussion, said that it is a mistake to let the case go until romiting is profuse.

Ocular Manifestations of Constitutional Diseases was the title of a paper read by Dr. H. B. Hill, of Logansport. There is no special histologic tissue in the eye, and it is subject to pathologic processes similar to those in other parts of the body. Its circulation, nutrition and nerve supply are parts of a universal system and it must suffer with other members.

Secing is a muscular act, and as such sight feels the stress of fatigue, nerve exhaustion, slock, debility or toxemia, and is subject to weakness, blurring ob suspension, under their mfluence. The anatomic characteristics rendering the eye liable to nutritional circulatory and inflammatory disturlsances are: The cormea, lens and vitreons lave no blood vessels, the iris floats in the aqueous and glides over the lens capsule, the retinal arteries are end arteries, the smallest in the body, and are subject to changes of intraocular tension. With constitutional disturbanees of nutrition, the cornea, lens and vitreous will be affected quickly. With arteriosclerosis or endarteritı the minute retinal arteries give way under lessened intraocular tension. Inflammatory conditions which attack the iris easily cause adhesions between it and the lens capsule.

Syphilis, rheumatinm, neplritis, gonorrhea, leukemia, anemia, rachitis, hysteria, gout, smallpor. searlet fever, measles, lead, alcohol, tobacco, and quinin toxemia, and many other diseases have their ocular complications. Bright's disease presents early and late ocular symptoms which are often means of diagnosis, and judging to some extent the progress and prognosis of the disease. Edema of the integument of the lower lid is an early symptom. Hy peremia of the papilla and retina, retinitis, neuritis, neuroretinitis, choked dise with nearly complete blind ness are symptoms of uremia as are atroply of the optie nerve, or detached retina. Retinitis is not an early symptom of Bright's disease, but is often the first to lead to a diagnosis. The disease affects the blood vessels as an arteriosclerosis, and the retinal changes follow their deterioration. Retinal lesions are usually symptoms of advanced nephritis, due to contracted kidney, and make their appearance after a period of ligh vascular tension, when elimination is beginning to fail. Prognusis is grave, even in acute nephritis following exanthemata or complicating pregnaney, and the loss of vision may be permanent. Patients with chronic Bright's disease, under the best care, live one to two years after retina infiltration.

Combination of retinal disease and uremie amblyopia are rare. Diabetic cataract may occur at any age and disappear if the sugar disappears from the urine.

In acquired syphilis, iritis occurs in the second to the ninth month after the infection, sometimes as late as the eighteenth month. In two-thirds to three-fourths of the cases both eyes are aflected. It is of exudative, plastic type and sometinescomplieated by severe cyclitis. It rarely recurs after complete recovers. Chorioiditis and retinitis occur from the sixth month to two years after the infection, occasionally as late as the fourt! year. They are prone to be chronic and recurrent and to cause a secondary atrophy and blindness and affect both ejes. As tertiary lesions, oculomotor paralysis in connection with locomotor ataxia is frequent. Lesions anywhere in the cranium cause optic neuritis. Congenital syphilis oceasionally shows iritis in secondary stage, corresponding to same in acquired syphilis in the second to fifteenth month, and chorioiditis from the sixth month to the third year. Later keratitis, the most frequent manifestation of inherited syphilis, makes its appearance from the sixth to the fifteenth year. It runs a rery chronic course, almost invariably in both ejes, one after the other, and is sometimes complicated by iritis.

Rheumatic eye diseases present themselves, usually. after long periods of genern ${ }^{1}$ rheumatic infection, as iritis, scleritis or tenonitis. These may occur with the acute inflammatory attack but are more frequent with relapses. They must be diflerentiated from syphilis, gonorrhea, gout and traumatism. Pain is more severe, attacks last longer and are less affected by treatment and more apt to relapse than other forms of iritis. Tenonitis is quite like an attack of rheumatic arthritis; swelling, chemosis, painful motion, and tenderness present themselves. Iritis is very apt to be followed by posterior synechix or cyclitis.

Nervous diseases have ocular symptoms that are important indications of acute inflammation or deep seated degenerative processes and are frequently important as guides in diagnosis.

The fundus presents an important opportunity for the study of circulatory conditions in their relation to the central nervous system and general blood pressure by means of the ophthalmoscope, which instrument, with the perimeter, should be in as general use as the stethoscope, sphigmograph and the hemometer. Profound neurasthenia or epilepsy, caused by eye strain, the slight inconvenience of easily tired eyes, the permanent, total blindness, following acute hemorrhage from the stomach, bowels or uterus, the transient dizziness or scotoma of indigestion are extreme examples of possibilities to be considered in relation of ocular to constitutional disease, and illustrate the futility of intelligent practice of medicine too closely specialized.

Dr. Jordan, of Wabash, called attention to the impairment of vision, scintillations, ocular hallucinations and eye pain associated with migraine; the protrusion of the eyes, abnormal winking and imperfect closure of lids in exophthalmic goitre; the contracted pupils in irritation of the brain from tumors, abscess, hydrocephalus and meningitis, and dilatation of the pupils when pressure increases from these causes and occurring preceding and following death; the distortion of color and form sense in epilepsy and hysteria; and the open or staring expression of the eyes in somnolence, coma vigil, insanity and abstraction of the mind.

Dr. Hoffman, Logansport, said Stevens, of New York, has called attention to the inclination of the head in those prone to consumption. They have eyes adjusted for a plane much higher than the horizon. Fewer people lose their mind from blind ness than deafness, the ratio being 4 to 1 .

Dr. Stevens, Logansport, said that the best practitioner is the one who makes the best use of the specialist. The field is too large and takes in too many different sciences for one man to master them all.

Dr. Gilbert, Logansport, said the best specialist is the one who makes the most use of the general pratetitioner. A doctor should have ten years of general practice before he specializes. The general practitioner should use the ophthalmoscope. With this you can see the circulation and other things, and we ought to use the ophthalmoscope and be more familiar with the cye.

Owing to the absence of Dr. H. M. Hall, of Camden, his paper was presented and read by the secretary. "The Diagnosis and Treatment of Penumonia in Children" was a thorough and exhaustive résume of the entire subject. He first discussed the anatomy of the chest and its bearing on physical signs in pneumonia.

The forms, broncho and lobar pneumonia were taken up in reference to symptoms, subjective and objective, with physical signs and modes of onset. He divided the various trpes of broncho-pneumonia into, first, very acute, or acute congestive; sceond, capillary form; thind, the ordinary form. In the secondary forms of bronchpneumonia he discussed those complicating pertussis, measles, scarlatina, diphtheria, in fluenza and ilcocolitis.

He discussed at lengtl the classical symptoms and gave the differential diagnosis between lobar pueumonia and broncho-pneumonia. He discussed the subject of treatment under prophylaxis and general management.
Prophylaxis.-It becomes our duty to impress our clientele with the fact that a constant per cent. of moisture in the air, about 60 per cent. of saturation, is more important than a high temperature; an ample supply of fresh air than the price of a little coal; that extra bedding and a moderate degrec of heat in the well ventilated sleeping room are among the best of investments; that wholesome food and plenty of it when properly selected for the individual are much cheaper and better than doctors' and undertakers' bills. Further than that we can not strongly impress them that a cold may be and often is only the precursor of a pueumonia of the most dangerons type to children, and that its treatment and the removal of the predisposing cause of recurrence is of the greatest importance.

General Management.-Given a case of pueumonia. the patient should first be given a warm bath with soap and water and thoroughly dried. The surface of the skin should be made to glow during this drying, and the extremities should be warm. A cotton jacket should be applied to the chest, and if the temperature is high or the nervous symptoms prominent, cold sponging or the cold pack should be used, with ice to the head and spine. The surface should be kept pink; if necessary, by the use of mustard paste locally. No poultice should be permitted, as it prevents the radiation of the heat and by its weight impedes respiration and the pores of the skin are closed by it. When the fever is high or the child is nervous phenacetin may be given in 1 or 2 grain doses every four hours. If the cough is severe or the pain much in evidence Dover's powder in occasional doses is useful, but should be only used as needed.
The child should be kept in a well-lighted and ventilated room and in a reclining posture most of the time, but its position should be changed frequently to avoid any tendency to hypostasis. In order that the supply of oxygen be more certain the child should be often carried to another room, and the sick room freely ventilated. The medicine should be given separate from the food to avoid aggravating the anorexia. If the stomach is not able to digest the food it should be predigested and given at longer intervals than the usual periods of three hours. It should be kept in mind that much water is being evaporated from the surface, and water should be given at frequent intervals, and when stimulants are indicated wine or brandy may be added to the water as needed. If there be fermentation in the stomach and bowels a grain of calomel in divided doses, followed by a saline or castur oil, and a few doses of the sulphocarbolates will usually correct the error if the feeding be at the same time properly adjusted.

So far as medical treatment, with the hope of aborting the process is concerned, there is too little
evidence at hand to give it muck credence. As a general proposition, in the usual ease, the routine attention to the feeding, digestion, elimination and the adequate supply of fresh air of proper and even warmth and humidity, and the plentiful use of water, intemally and externally to supply the body uceds and keep the temperature from becoming hyperpyrexic fultils the indications, and the use of drugs shoutd be reserved for the combat of special symptoms as they arise. We have a self-limiting disease to deal with, for whieh drugs do not have any solective action, but we have also a patient for whom muel can be done by proper nursing and eareful well selected feeding, and who is liable to develop weak points in his struggle with a relentless foe, for which we can do much if we we the stomach for nutritional purposes so long as possible, and an areme for the exhibition of drugs only when there is a definite indication to be met. We will derive better results from an active stomach than from one that is nauseated; from eold than from antipyreties and nerve sedatives; from mustard repeated every three or four hours to the surface than anolynes and expectorants; from inlalation of vapors, at of creosote, than from opium for the relief of the irritation of the mucous surfaees. All these measures are useful when other means fail, but are seldom available for routine use as the simpler means. In secondary cases and at the erisis of lobar pheumonia the patient should be very (arefully watehed for cardiace or respiratory failure and alcohol used freely and such other drugs as neened hypodermically.

In the discussion Dr. (iithert, Logansport, said the practice of medicine is truly an art. It is said that medicine has become more of a seience every day. It is partieularly true in this disease. In the majority of instances we ean diagnose the disease upon entering the room. Give the patient all possible chances of getting fresh air. Give plenty of water and try to obtain perfect relaxation. If the head is low mucus and saliva will run out of the month.

Dr. Fankboner, of Marion, said that in this disease we have one that requires more outside of drugs than any other disease. The case shoubd be treated according to the temperament of the patient. It has been a good many years since I have given drugs in this discase, and in children I do mot think of giving alcohol. There should be nothing on the chest more than a cotton jacket. No poultices. My whole idea is not to give very mucla medicine, but plenty of trenh air and grood mursing.

Dr. Kirds, of Hmatington, said in the treatment of pneumonia the less drugs you use the better off your patient is. Watels the heart. If the heart and circulation continue good your patient will almost always pull through. Use cardiac stimulants very sparingly and as long as the heart and circulation are good leave them alone. If you keep on stimulating the heart you will in the long rme weaken it, and when there is actual meed for cardiae stimmations your heart will not respond or respond very fechly to the stimulants. The temperature is of no use as a guide as to the severity of pneumonia in chidden. It is a well known fact that chidren with a very high temperature continue to sit up and play. My own child, with a temperature of 100 j per rectum, evidenced no apparent discomfort and was at play.
On motion the treasurer was directed to pay the stenographer the sum of $\$ 5$ for the work of reporting the meeting.

In the evening the members of the association, with their wives and gnests, to the number of 110 , sat down to partake of a most sumptuons banquet furnished by the Wabash County Medical Society. Dr. McQuown made a most pleasing and witty toastmaster. Throught out the evening, between musical selections, the asso ciation was ruturtained by a number of toasts.

Maubice: II. Krebs, Semetary:

## BOOK REVIEWS

International Clinics. Quarterly. Vol. 3. Eightcenth series, 190 s . P1, 298, Cloth. Price, $\$ 2,00$. J. 13. Lippincott Company, Philadelphia and London. In this volume appear contributions on treatmont, medicine, surgery, gynecology, pediatrics, orthopedics, peychiatry, nemrology, ophthatmology, rhinology ant pathology.

As worthy of especial montion we would name scott's article on perforation in typhoid, adenoma of the thyroid gland, by (., P. Mnhler; diarrheal disorders of infants, by J. H. M. Knox, and Jellifle's clinical lecture on general paresis. As to the part played by naso-pharyngeal adenoids and enlarged tonsils in the etiology of appenticitis, Kretz's position seems to us al trifle strained.

Pbactice of Memeline for Nerbes. By George H. Hoxie, A.M., M.D., Professor of Internal Medicine in the University of Kansas, ete. With a chapter on the Technie of Nursing, by Pearl L. Laptad, Principal of the Training School for Nurses at the University of Kansas. Cloth. Pp. 284. W. B. saunders Company, I908.
As stated in the author's preface, this work is intended for those who care for the sick, either professionally or in the home, as an aid to the medical attendant. Believing that the function of the nurse is neither to diagnose nor prescribe, little space has been given to dillcrential diagnosis or remetial dosage.
practical points in pathology, bacteriology, hygiene and propiylaxis are mentioned along with the nurse's part in therapy. (ertain trivial inaceuracies appear, and the chapter on surgical nursing would seem to hase been written by one not as familiar with its technic as might be desired. Following a coneisely written chapter on "The Care of the Patient and Sick lioom," ocrar one on "Emergencies," and an appeudix.
Diskases of Infants and Children. The new (2d) edition, revised. A manual of Disease of Infants and Children. By John Ruhräh, M.D., Chinical I'rofessor of Diseases of Children, College of Physiciams and surgeons, Baltimore. Second Revised Edition. 12mo volume of $4: 23$ pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Flexible leather, $\$ 2.00$ net.
An exeellent little treatise on the subject is here presented in condensed form, which makes a handy little reference volume for both student and practitioner. By virtue of such eondensation, questions of etiology; pathology: dillerential diagnosis, etc.. are rather cursorily dealt with.
A most timely section on the subject of medical inspection of sehools proves a worthy addition to the previous edition, and references to pediatric literature have been brought thoroughly up to date.

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