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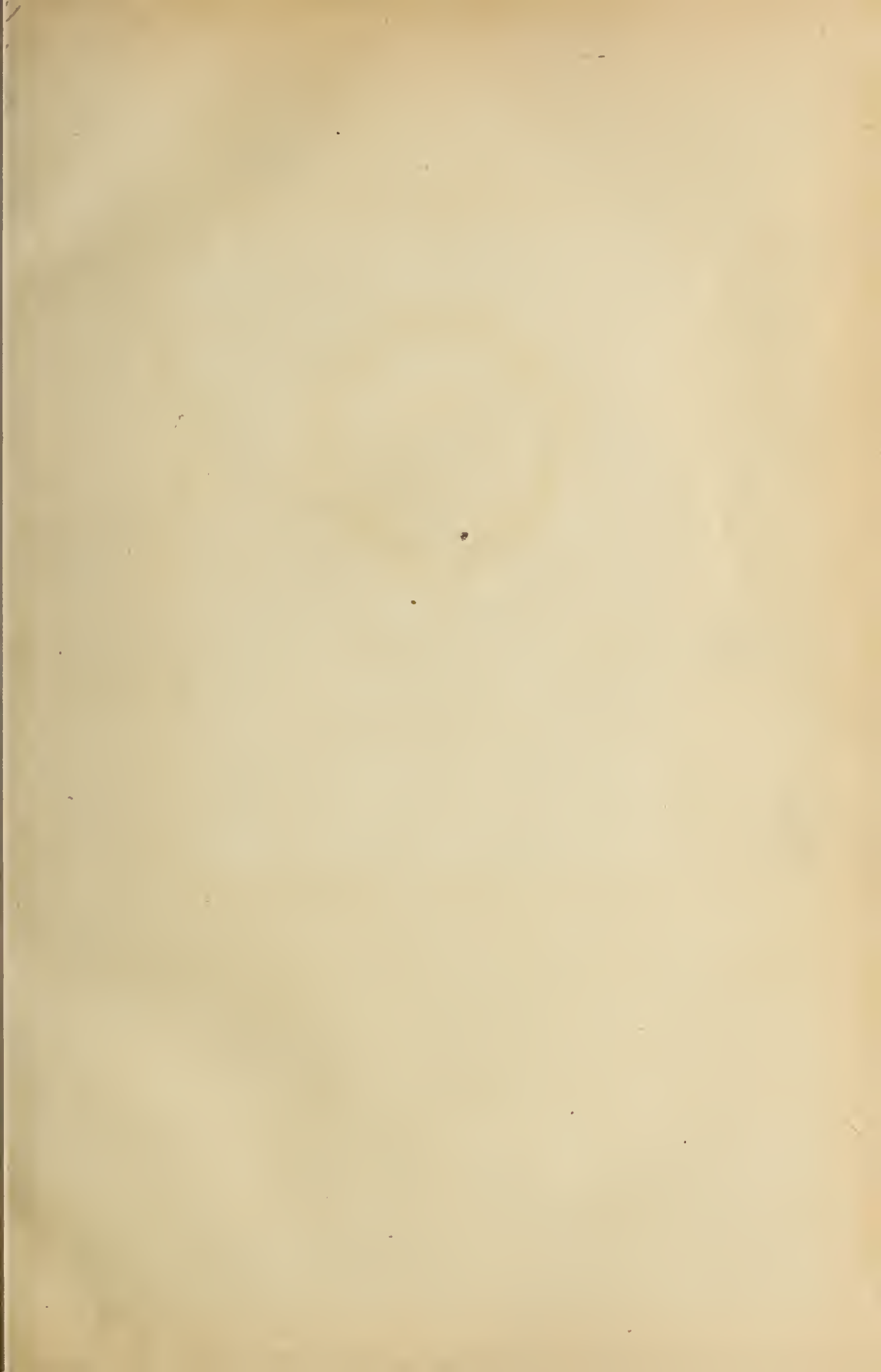


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The West Virginia Medical Journal

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Original Articles

A CONTRIBUTION TO BRAIN SURGERY—REPORT OF CASES.

Frank LeMoyne Hupp, A.M., M.D.,
Wheeling, W. Va.

*(Read at Annual Meeting State Medical Ass'n,
Elkins, October, 1909.)*

We have been told the most successful removal of tumors from the frontal, temporal, parietal and occipital regions, as well as from the cerebellum, the cerebello-pon-tile angle and the ablation of the gasserian ganglion, has invalidated the former dictum of Von Bergmann that "Brain Surgery is the surgery of the central convolutions only."

Certainly intracranial lesions, whether they are sudden or gradual in their onset, are among the most perplexing problems to be solved by the twentieth century medical man. Here, as in many other parts of the body, while promptness in ascertaining the exact nature of the offending cause is the great desideratum, yet this point should not be determined at the expense of the patient's best interest. A thoughtful tentative diagnosis coupled with sane and prompt surgical intervention, seems as applicable here, when there are any reasonable focal manifestations, as they are imperative, when the right lower abdominal quadrant is the seat of a life-threatening inflammatory process. Armed with accumulated bedside records, the topographical findings of the neurologist with his searching electrode; the ophthalmoscopic demonstrations of a choked disk or a beginning

optic neuritis, and the patient investigations of the pathologist in the dead house, and in the laboratory, make the achievement of brilliant results altogether possible in the field, which a few short years ago seemed inaccessible.

Take the subject of brain abscess. We know that if left to itself when the third period is reached, it is fatal. Early diagnosis followed by early operation yields most happy results. Of twenty-five cases reported by Macewen, upon nineteen of whom he operated, eighteen recovered. (Murphy)—"Delay in operating," says Collins, "until the appearance of unequivocal symptoms, or procrastinating by operating on the mastoid after the symptoms of brain abscess are evident is a far greater injustice to the patient than subjecting him to an exploratory trephine." Even an apparent moribund condition should not deter the surgeon. As Macewen remarks, "abscess of the brain," and may we add, other undisputed intracranial symptoms, pressure or focal, "like strangulated hernia, should not die unrelieved."

The intracranial tension enables the clinician to establish a diagnosis in these cases. Without entering into a detailed resume, the three cardinal symptoms will only be spoken of here; they are headache, vomiting, and choked disk, to which triad many observers add vertigo and convulsions.

Leszynsky in a scholarly article in Wood's Reference Hand Book of the Medical Sciences, describes this type of headache as one of the most constant and obtrusive symptoms. In exceptional instances, headache may be absent during the

entire course of the disease. But such a condition is very rare, the headache varying in intensity in different cases. Occasionally it may be of a mild character. As a rule it attains great severity, preventing sleep, and at times becoming so unendurable that the patient has been known to commit suicide. Sometimes the pain is paroxysmal, but more frequently it is almost continuous, with periods of great exacerbation. The headache is usually diffuse, but it may be limited to the forehead, parietal region, occiput, changing its location from time to time. The seat of the pain in the cranium does not necessarily imply that the growth is subjacent. When the pain is confined to the frontal region, it by no means indicates that the frontal lobes are involved, for such pain often occurs in cerebellar tumor. The presence of persistent occipital pain extending to the neck would lead us to assume that the growth is probably situated in the posterior cranial fossa. If the headache is limited to a circumscribed area, it most frequently corresponds with the location of the growth which has also involved the underlying meninges. If it be confined to one side of the head, the probability is that the tumor is on the same side. This is not an invariable rule, however. The pain is aggravated by everything that interferes with the cerebral circulation. It is thus made worse by psychical excitement, alcohol, coffee, muscular activity, coughing, straining at stool, sneezing, etc. It is universally assumed that the headache is produced by irritation of the numerous branches of the trigeminal supplying the dura. The dura may also be stretched and irritated as a result of intracranial pressure. If this be true, in the former condition, the pain would probably be circumscribed, while in the latter we would expect it to be diffused. Clinical facts, however, cannot always be reconciled with this view.

Neu* describes headache as one of the most constant, the most distressing, and earliest of symptoms. Putnam and Jacoby give it as present in 74 per cent of cases, Mills and Lloyd in 95 per cent, and Eskridge in 100 per cent. Gowers says it is rarely absent. It is usually more or less

continuous, with paroxysmal exacerbations. It varies in character and its intensity is increased by anything that tends to increase cerebral congestion. It may be general or local. General pain is probably due to the increased intracranial pressure pressing upon the meninges, as trephining often affords relief, but one may have a very small tumor and but little increase in intracranial pressure, yet the pain be intense; or there may be a large growth, and great increase of pressure, yet very little pain. Local pain is usually due to meningeal irritation. The locality of the pain is not always over the seat of the growth, for a cerebellar tumor is often associated with frontal headache, and cerebral involvement with occipital pain, or the pathological process may be on one side of the brain and the pain on the opposite side of the head. Usually when the growth is on the surface of the brain, the pain corresponds to the seat of the growth; when it is in the white substance, the pain is often frontal; when subtentorial, it is occipital; and when the growth is unilateral, the pain is on that side. When the pathological process is syphilitic in nature, the pain is worse at night. In other forms it is usually worse during the day. Neu further observes that the pain is usually less in children, due probably to the greater elasticity of the skull. There may be an intermission of the pain, especially after the administration of iodides, or it may last weeks or months, or until dementia destroys the power of its perception. While it is almost useless to speculate as to its causation, yet it is usually attributed to one or all of the following factors:—

1. Increased intracranial pressure.
2. Stretching of the membranes.
3. Effusion into the ventricles.
4. Variations in the cerebral circulation.
5. Direct involvement of the meninges.

Cushing observes in his scholarly article in Keen's Surgery, Vol. III, p. 223, that "vomiting may be absent or only appear at rare intervals, and it may or may not be attended with nausea. It often occurs irrespective of food; it is often projectile; it often occurs only in the early morning hours. I have seen, writes Cushing, cases in which the head could not be raised from a recumbent posture without immediate vomiting, though other symptoms were en-

*Neu of Indianapolis in *American Journal of Surgery*, p. 230.

tirely latent. This condition continued for weeks in one patient from whom a frontal lobe tumor had been successfully removed. Whether vomiting is due to irritation of a separate center in the medulla, or to stimulation of the vagus center itself, is associated with dizziness and due to auditory nerve disturbances from stasis, is not clear. When present it leads to rapid loss of weight and strength.

Choked disk is one of the most reliable signs of tumor, though it must be remembered that the cerebral edema in cases of Bright's disease may lead to changes in the retina—the so-called albuminuric retinitis—which are for the most part indistinguishable from it. In reality Cushing believes the process to be the same. The swelling may vary from a slight blurring of the edges of the disk, with tortuosity of the veins, to an intense swelling of the nerve head of seven diopters, accompanied with hemorrhages. The edema likewise often spreads out over the retina. It must be kept in mind that a high grade of choked disk is not incompatible with well preserved vision, as Hughlings Jackson first pointed out. Vision does not fail until the nerve begins to undergo atrophy. The two eyes are not always equally involved, though this does not offer much help in localization. An involvement of one eye alone, however, may be taken as a probable indication that the growth implicates the corresponding side of the brain and is not far removed from the back of the orbit. The choking from tumors which are remote—subtentorial ones, for example—is bilaterally equal."

Case I.—W. R. S., aet. 48. Horse-trainer, was referred to the writer's service in the City Hospital by Doctor Riggs of Cameron, West Virginia, May 11, 1907. There was no morbid family history; leucic infection denied, no history of traumatism, otitis media, suppurative process in nose or purulent pulmonic process. Patient had used alcohol in moderation. When following the exciting life incident to the race-track at Hot Springs, Arkansas, February 14th, he contracted an influenzal cold attended with a great deal of headache with some nausea and vomiting. These symptoms continued very annoying for two weeks. He attended the speed exhibits of his horses during this time and went to Okla-

homa March 3rd, suffering with a discharge from his nose and other grippy manifestations; the head pain continued and he lost flesh and strength. March 11th, without further provocation he was seized with his first convulsion, commencing, according to his wife's statement, in his left hand, arm, and shoulder. The convulsions recurred with rest intervals varying from ten to fifteen minutes for about thirty-six hours. Following this first day's experience with the spasms, he was much exhausted and drowsy, and there were symptoms of a wandering delirium. March 18th, his wife with difficulty began the journey with the patient from Oklahoma to West Virginia; once or twice he wandered from the car without his hat, and, when captured by a train official, he did not seem to have a clear understanding as to his surroundings. For three weeks after his arrival home, he slept most of the time. There was no disturbance of vision observable; complained of his head feeling heavy. During this period there was a variable degree of aphemia. While at the table he would ask for bread, yet reach with his knife and help himself to butter; exhibiting some annoyance because those at the table failed to supply his wants when repeatedly expressed. He knew the object on the table before him, but could not recall its name, nor picture it in his mind: the concept of the word was there, but he could not correctly express it. This condition of ataxic aphemia, described so graphically by Dana,* was not a permanent symptom, yet it did exist and occasionally was made manifest, and is interesting because the post mortem findings localized the lesion in the frontal lobe.

The spasms returned April 24th, and as observed by Doctor Riggs, were clonic and tonic in character and confined to left thumb, hand and arm, with a turning of the face toward the left shoulder, lasting one to two minutes without loss of consciousness.

Headache was a very conspicuous and troublesome symptom in the early history of this case and continued, with intervals of rest after the patient reached home, and during these intervals there was marked mental hebetude, deterioration of memory, confusion of thoughts and ideas, a fullness

*Cerebral Localization of Aphasia, p. 24.

and indescribable pressure in the top of his head as though the calvarium was rising from the brain; at times the pressure pain was intense.

This patient's first visit to the City Hospital was May 11th, when his symptoms were carefully observed for about ten days by Drs. John T. Thornton, H. E. Oesterling and the writer. We are indebted to Dr. Thornton for the subjoined clinical notes:—

May 17, 1907. Examination. The patient is a well-developed and well nourished white man. Muscles firm and subcutaneous fat abundant. No edema of eyelids or of ankles. Visible mucous membrane somewhat paler than normal. Sclerotics white. Tongue thickly coated with yellowish white fur. Odor of breath very foul.

Area of cardiac dullness not enlarged. Heart sounds clear and action regular. Apex 5th interspace and just within mid-clavicular line. The radial artery is slightly thickened and pulse tension is apparently a little high. Rate of pulse, 84, regular. Lungs negative.

The abdomen is somewhat prominent. It is flaccid and tympanitic all over. No mass palpable. No tenderness. Liver and spleen not palpable. Liver extends from 6th rib to costal margin.

The pupils are equal, about 3 mm. in diameter, and react to both light and accommodation. Movement of eye balls normal. No diplopia or strabismus. Field of vision, roughly taken, apparently normal. No paralysis of eyelids. Patient states that vision is impaired; but he can read with the aid of glasses.

The tongue is protruded in the median line without tremor, and there is no disturbance of speech. The patient can whistle and show his teeth normally. There is no paralysis of the facial muscles. Sensation for touch and pain normal everywhere. There is no impairment of muscular power, except in left hand and forearm where there is slight paresis. Stereognostic sense normal. Patellar reflex prompt on both sides. No ankle clonus. No Babinski phenomenon. Standing with the feet together and the eyes opened or closed, there is no swaying. Sensations for taste and smell normal. There is no discharge from nose or from ear. No tenderness over frontal sinus or over face or mastoid.

During the examination the patient had several convulsions. In every instance the spasm begins in the left thumb, gradually extending upward, involving mainly the hand and forearm, but also the arm, shoulder and neck, being confined entirely to the left side. The contractions are both tonic and clonic. The thumb is strongly flexed, the forearm is flexed or extended, the shoulder is jerked up and down, the head is turned to the left and the chin depressed. The head may move from side to side. There is absolutely no loss of consciousness. During the convulsion the pupils are moderately dilated, but there is no fixation of the eyeballs and no spasm of the eyelids. The duration of the convulsions varies from half to one minute. The patient states that at times there is a feeling of numbness in the thumb or hand shortly before the convulsion, which may be looked upon as the signal symptom.

The mental condition is abnormal. There is confusion of ideas and slow cerebration. There was an absence of chill or chilly sensation.

May 18, 1907. Blood examination. Erythrocytes 5,120,000. Leucocytes 8,100. Hemoglobin 95 per cent.

Eye report, as made by Doctor Oesterling, is as follows:

Vision: Right eye 20/30; left eye 20/40.

Pupils round, equal, 7 m.m. in diameter and respond sluggishly to light. Mediae clear.

Fundi: The optic nerve heads are reddened and the margin of the discs are indistinct. The veins are engorged and tortuous, their calibres being about five times that of the arteries. With the exception of a few small hemorrhagic areas below the left disc, the peripheral portions of the eyegrounds appear normal.

Recognizing that in making a diagnosis of any intracranial neoplasm, whether due to syphilitic arterial disease, or to some other etiologic factor, the absence of positive leucic evidence should have little negative weight, the iodide of potash was given promptly, 15 grs. every three hours for the first two or three days (Gowers) and increased gradually until from 60 to 90 grains were taken three times a day.

With this treatment together with hygienic measures—calomel and saline purga-

tion—his general condition improved and the interval between the spasms was lengthened and their severity lessened. He went to his home for a period of several weeks, but became steadily worse and re-entered the hospital June 29th, with condition as described. The character of patient's spasms can best be understood from the accompanying photographs which were taken by the writer several days before operation.



Fig. 1.—Case 1. During first twenty seconds of the convulsive paroxysm. Thumb in violent tonic and clonic spasm.



Fig. 2.—Represents the second stage of the spasm. Patient suffering but conscious. At times the fingers would grasp at left ear with such violence that on recovery from the convulsion, the bleeding lobe of the ear would exhibit deep lacerations from the finger nails.



Fig. 3.—Third stage of convulsion with beginning relaxation.

With Regard to Localization. The clinical picture here exhibited, characteristic of irritative disease affecting the right Rolandic area, made the possibility of an accurate topographical diagnosis evident.

John B. Murphy in Vol. II, on General Surgery of the Practical Medicine Series, editorially refers to the report of a successful operation for cerebral tumor in a woman of forty-four, by H. Smith in *Lancet*, June 16, 1906, and draws attention to a point in localization. "As a preliminary to many operations for tumor, abscess, epilepsy, etc., it is necessary to mark on the scalp the position of the chief fissures and especially that of Rolando. In text books, the upper end of this is said to be in the median line 2 in. behind the "bregma." Unfortunately, however, this latter term is used differently by different authors, for while in Jacobson's "Operations in Surgery" and in most anatomies, the name is given to the junction of the coronal and sagittal sutures. In Cheyne and Burghard's "Surgical Treatment" it is applied to a point midway between the glabella and the external occipital protuberance. Now in most skulls this midway point will be found to lie about $1\frac{1}{2}$ in. behind the coronal suture, and therefore there will be a corresponding difference in the position assigned to the Rolandic fissure according as we follow Jacobson's or Cheyne and Burghard's directions. As a matter of fact, the upper end of the fissure of Rolando lies 2 in. behind the coronal suture and therefore *only* $\frac{1}{2}$ in. behind the point midway between the

glabella and the protuberance. That this is its exact position may be verified by Reid's method of drawing a base line from the lower edge of the orbit backwards through the center of the external meatus and a second line at the posterior border of the mastoid process at right angles to the first. Where this second line intersects the median line of the vertex, lies the upper end of the fissure of Rolando, and it will be found to correspond with the position assigned to it by the former method. As in practice we have to deal not with the bare skull, but with the living scalp-covered cranium, on which it is not always easy to make out the position of sutures and fontanelles, it would seem advisable to leave the term "bregma" to the anatomists, and to determine the position of the fissure of Rolando by actual measurement with reference to the point midway between the glabella and the protuberance, verifying the result by "Reid's method." Cushing, however, thinks that those who have by long practice familiarized themselves with cranio cerebral topography, can mark out the main

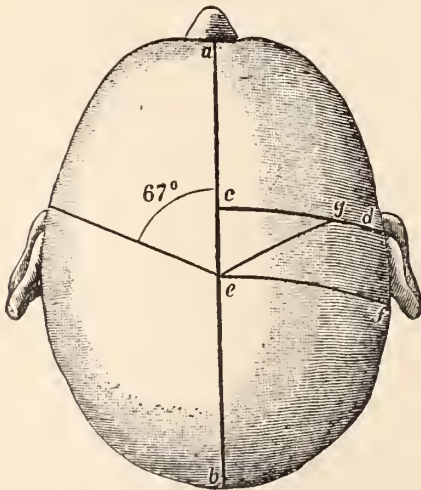
fissures on the scalp with no greater margin of error, than when measurements are employed. This, of course, applies to conditions demanding the flap opening, when the accurate determination on the scalp of the point overlying a given center is less essential.

*Spiller and Frazier in their exhaustive review of this subject write: "Palliative operations should be performed early in every case in which symptoms of brain tumor are pronounced, and before optic neuritis has advanced far, especially when syphilis is improbable or antisiphilitic treatment has been employed."

Operation. June 30th, after the fissure of Rolando had been located by the Bennet method, a large horseshoe flap was made in the scalp and pericranium with convexity downward. The button of bone was removed by an extra large trephine and the opening further enlarged with a rongeur. There was a profuse and annoying hemorrhage from a large diploic vein, but this was soon arrested with Horseley's wax, and a congested and non-pulsating dura exposed. The dura was divided and the cortical substance on either side of the fissure of Rolando bulged with so great force through the opening, that the brain tissue was soon lacerated. So accurately was the hand center located, that a sterile silver probe electrode applied to the cortex and a little beneath it immediately over the center of the opening, excited one of the typical spasms, beginning with the thumb contraction. Careful exploration with the needle, probe, and palpation over and through the broken post and precentral convolutions, failed to reveal any tumefaction or resistance. A small rubber tissue drain was inserted in the most dependent portion of the wound, and the flap replaced and sutured.

July 1. Patient made a good recovery from the anaesthetic and after complete consciousness was restored, said he was quite free from headache. There is complete left motor paralysis, but a response to plantar irritation.

July 2 to 7. Wound dressed daily. No infection. There is a marked hernia cerebri. There has been a complete cessation of the convulsive seizures and headache since



**Binnie has described the most easily remembered means of finding the fissure of Rolando and gives the credit to Bennet.

Fig. 4.—At right angles to the sagittal suture draw two parallel lines, the anterior of which (c-d) runs along the anterior margin of the external auditory meatus; the posterior (e-f) touches the posterior margin of the mastoid process. These two lines will be about two inches apart. On the anterior line take a point (g) two inches above the external auditory meatus, and from it draw a line (g-e) upward and back, to the point where the posterior line meets the sagittal suture. This oblique is about three and a quarter inches in length and corresponds to the Rolandic fissure.

**Journal of the Am. Med. Assoc.*, Sept. 1, 1906.
 *Binnie's *Operative Surgery*, p. 22.

the operation. Patient is irrational at times, will tear the bandage from his head, but for the most part is stupid, only answering questions in monosyllables. Pulse 80 to 110. Temperature 99° to 101°.

July 9, 1907. Temperature 103.1-5° (rectal), pulse 120. The patient is apathetic, but can be aroused, when he will attempt to answer questions. Articulation is indistinct. There is complete motor paralysis of left side of face and extremities. Sensation for touch and pain is normal. Pupils react to light. Tongue dry and thickly coated with brownish fur. Heart and lungs negative. Abdomen negative. At the seat of operation there is a protrusion of brain substance about 1½ in. in diameter. Urine is voided freely but involuntarily.

July 10, 1907. There is a small ulcer on the left cornea. An eruption of small discrete pustules is present over chest and upper extremities. The temperature remains elevated to about 102½°.

July 12, 1907. He is growing progressively weaker and the stupor is deepening.

July 13, 1907. He died at 5:50 p. m.

ABSTRACT OF AUTOPSY PROTOCOL BY
DOCTOR JOHN T. THORNTON,
PATHOLOGIST TO CITY
HOSPITAL.

The body is that of a well developed and well nourished white man. Rigor mortis present and general. Slight cadaveric lividity of dependent parts. No edema. On the right side of the head, behind and above the ear, there is a defect in the skull through which the brain substance protrudes. Pupils equal and 3 m.m. in diameter.

The membranes of the brain are smooth, grayish white in color and glistening. The blood vessels of the dura and pia are comparatively empty. The brain substance is of normal consistence and appearance. At the anterior extremity of the left cerebral hemisphere, just beneath the superior and middle frontal convolutions there is a cystic cavity 3 cm. in diameter filled with a clear amber colored fluid. This cyst is anterior to the anterior extremity of the lateral ventricle and apparently has no communication therewith. It has a smooth wall. Occupying the same relative situation in the right frontal lobe, there is an area 5 cm. x 5 cm. x 2.5 cm. of softened,

disintegrated, necrotic brain tissue, reddish white in color, extending to the lateral ventricle. This area presents no limiting wall, and the surrounding brain tissue is not indurated. The basal ganglia are not involved in the process. The right lateral ventricle is considerably dilated. Elsewhere the brain appears normal. Microscopic examination of the necrotic material shows fat globules, red blood corpuscles, nerve fibres and nerve cells.

Case II. Mrs. G. B. aet 39, married 21 years. There is no morbid family history—no history of epilepsy or other neuroses traceable in her antecedents. At the age of 10 she suffered with paroxysms of head pain and on one occasion sought relief by having her head shaved. There could not be established any history of leucic infection. Menstruation commenced at the age of 15, of the 28 day type, and always normal. Has never been pregnant. During the past year she has suffered with head pain, but never seriously, and not at any time interfering with her household duties. For eight weeks prior to the onset of her present trouble she acted as nurse to a member of her family, doing day and night duty, with little rest, and subjecting herself to the most strenuous tasks, until the death of the relative. No other recent mental worry. During the past year she had conducted the most voluminous correspondence with some western friends, often writing 20 and 30 pages at one sitting, and many of her letters containing long and purposeless poems, and did not exhibit any fine balance of mental strength or superior craftsmanship in either prose or poetry.

There was no history of trauma, and no refractive error. Prior to March 18, 1909, she seemed in her usual health, and had in no way excited the suspicion or anxiety of her husband, who was daily at her side.

March 18th. Complained of back and headache, and numbness in her left arm and hand.

March 19th. She became emotional and was in constant dread of some catastrophe, or the development of some terrible disease. She could not move her left arm, and her left leg seemed weak and hardly able to support her body. The muscles of speech were seriously affected, talking seemed very difficult, and the confusion of words as well

as ideas was pitifully apparent. She continued in this condition with the paralysis of the left side becoming appreciably worse until April 17th, when she was admitted to the City Hospital.

On admission, April 17, 1909—Fairly well nourished white woman, somewhat anaemic; muscles flabby; no edema of extremities; tongue coated with white; breath foul. Heart and lungs normal. Radial pulse of rather higher tension than normal and 90. Respirations 20. Temp. 99.4-5° by axilla. Liver and splenic areas not enlarged. Pupils equal and react imperfectly to light and accommodation. Eyeballs deviate somewhat to right side. Tongue is protruded slightly to the right side with appreciable tremor. Laughs and cries at trivial things, with intervals during which she repeats meaningless combinations of words. Her head is drawn to the right side and her face has the anxious expression of one suffering pain. She lies for the most part on her back, restlessly flexing and extending her sound right leg on thigh and on pelvis; so continuously was this motion kept up that the integument covering the knee was worn red and abraded. She is unable to recognize her husband or mother, has involuntary evacuations of urine and feces, and cries and resists any effort on the part of the nurse to feed her or to make her comfortable. Patient is absolutely unable to comprehend anything said to her. The stereognostic sense is quite obliterated. Sensation for touch and pain developed to an abnormal degree. There is marked impairment of muscular power over the left side of the body. Patella reflex exaggerated, especially on the left side. An-

kle clonus present. Babinski phenomenon well developed on the left side (see photograph).

There is no discharge from the nose or ears. No tenderness over the frontal sinus mastoid or over face; but a marked irritability is observed if any part of the body is touched.

The laboratory findings, as made by Dr. John T. Thornton, were as follows:—

Blood. Hemaglobin	----	90%
Erythrocytes	-----	5,060,000
Leucocytes	-----	11,000

Blood Smear.—Differential leucocyte count.

Polymorphonuclear	-----	59.2
Large Mononuclears	-----	12.1
Small Mononuclears	-----	21.2
Eosinophile	-----	0.2
Transitional	-----	1.3

Urine.—By catheter: Acid, 1032; scanty white sediment; microscopically negative; no albumen; no sugar.

The first ten days the patient would eat the contents of a light tray when fed by her nurse. Muscularly very weak; could with assistance be helped across the floor. Solution of iodide of potash given through nasal tube, having taken to May 18th upwards of 2000 grains, with no appreciable effect.

Examination by Dr. Oesterling revealed outlines of optic disc hazy and indistinct. Arteries enlarged, veins engorged and enlarged one-half, indicating intracranial pressure, and a degree of choked disk.

May 11. Use of left leg entirely abolished. No control of sphincters—patient awake night and day, and restless all the time. Temp. by rectum 101° F.; P. 112; R. 18.

May 12, 13, 14. Refused all nourishment by mouth. Stupid and unable to speak.

May 18th. Prepared for operating room. Sphygmo-manometric observations showed the systolic pressure 120 m.m. Away back in the 16th century Paracelsus held that Nature was sufficient for a cure of most diseases; art had only to interfere when the physician was tired or incapable. Then some remedy had to be introduced which should be antagonistic, not to the disease in a physical sense, but to the spiritual seed of the disease. The writer will most willingly confess to being incapable, but not weary in the well doing necessary to the relief of



Fig. 5.—The Babinski phenomenon.

this sufferer and her distressed friends. Hence the Doyen burr, the Giggli saw and the scalpel might be termed the "Acrana" of Paracelsus, to be applied to the "spiritual seed of this brain trouble" we were seeking to antagonize.

May 19. Operation. Ether administered by Doctor Thornton, who also made the most careful blood pressure observations throughout the entire operation; assisted in the operation by Drs. Andrew Wilson and W. H. McLain.

*The osteo plastic procedure of Harvey Cushing was carried out, which combined the following principles:

First. Of division between primary openings (Toison).

Second. Of incision by an advancing instrument from a single opening.

Third. Of making all cuts from within outward.

Fourth. Of leaving a beveled flap. For the control of hemorrhage from the scalp, Cushing's pneumatic tourniquet was snapped into position over a gauze cap from glabella to suboccipital region.

The simplest and most easily remembered method of finding the fissure of Rolando, suggested by Bennet, had been used (Binne Vol. 1, p. 21—see illustration) and this line had been previously scratched on the scalp with the knife. The horseshoe incision was made through gauze and soft parts down to skull, with the hinging base toward the temporal bone.

A primary opening through the thickest part of the exposed cranium near the parietal eminence, was made with a Galt trephine 2½ cm. in diameter, conical pattern. Bleeding from diploetic vessels was trifling.

Secondary openings were made with a Doyen burr at the upper anterior angle and the two temporal angles of the flap. A long handled blunt dissector, or dural separator of Kocher was introduced into the large trephine opening, and the dura was separated from the bone between the four openings. On withdrawal of the dissector the intra dural pressure was sufficient to press the membrane against the bone and thus prevent any considerable bleeding. The lateral edges of the bone flap were then cut down upon with a De Vilbis forceps, a short distance in each direction. A Gigli

wire saw was passed on a Cushing guide between the primary openings and the mesial and lateral edges of the flap were cut on a broad bevel, which step, Cushing says, is a most important detail, enabling as it does the subsequent solid replacement of the bone flap without danger of it being driven inward.

The flap was then forced back with the help of the Kocher elevator inserted at the edges, and broken across its thin temporal base, as emphasized by Hartley.

Fortunately, the base of this flap did not include the meningeal artery, hence there was no tearing of this important blood vessel.

At this stage of the operation, Doctor Thornton did not report any fall of the blood pressure, because there had been very little loss of blood, hence, as is often the case, there was no need of postponement of the operation for a second stage. The non-pulsating dura was next opened in a line concentric with the bone incision, and there was immediately an outpouring of clear limpid fluid, exhibiting a very much infected pia-arachnoid beneath. Here palpation and needle puncture revealed no definite tumor, yet the cerebral topography was perfectly clear and the fissure centralis determined without the assistance of faradization. Ample drainage was established by means of gutta percha tissue, the dura closed about the drainage opening; with care the bone flap was solidly replaced, and the scalp in turn accurately approximated and the tourniquet removed.

From the time of removal of the first button of bone to the finishing of the scalp suture was one hour. One-half pound of ether used. Patient left the table with a blood pressure of 120 and a pulse of 100. The highest blood pressure Sphygmographically registered was 140.

May 20. There was no serious after effects from the operation. For the first five days following the operation the dressings were repeatedly saturated with a clear transparent fluid. Wound healed by primary union. Patient was up in a chair on the 5th day after the operation, and the drainage was removed on the 8th day. She spoke in monosyllables and smiled when her husband approached her bed nine days following the operation. Connected words in short syllables in 12 days.

*See Keen's Surgery, p. 267.

June 9th to 25th. Up and out in an invalid chair, eating and sleeping well, and recognizing relations and calling them by name.

During my absence in Europe, Dr. McLain had charge of the patient and by a rigid process of discipline succeeded in breaking her of the habit of befouling her bed.

The patient now is travelling with her husband in the west, is able to read and write and converse well with her friends. Her paralysis of arm and leg have disappeared and she walks well with the help of a cane. Can read and write very well. Dr. Oesterling's examination reveals a clear eye ground.

In closing let me impress upon you in the words of Leszynski, the importance of the early recognition of these cases, and the well established fact and observation, that if decompressive operation, or palliative procedure, which relieves manifestly the tension, be not done, that optic atrophy, blindness and death will be the inevitable result in the majority of these cases.

CRANIAL INJURIES.

A REPORT OF THREE CASES, WITH ONE CASE OF SUB- DURAL CYST.

R. H. Powell, M.D., Grafton, W. Va.

(Read at Annual Meeting State Medical Ass'n, Elkins, October, 1909.)

Some recent cases of extensive fracture of the skull have tempted me to change the title of my paper, and present this report, trusting the liberty I have taken will be pardoned.

The cases which I wish to present are of interest by reason of the extensive injuries sustained, and their recovery in each instance. A report of the first case was published, together with a number of others, some time since, but I have included this case as being one of unusual interest.

Case 1.—Wm. J., 24 years of age, was admitted to the City Hospital, Grafton, on the night of Feb. 11, 1906, having been found lying unconscious beside the railroad track, where a passing engine had struck him. He could be aroused sufficiently to

answer questions intelligently, but would immediately sink into a stupor.

An examination of the skull revealed a depressed fracture posterior to and a little above the mastoid on the right side. To the left of the median line, about the region of the left frontal eminence, a roughened line could be felt apparently elevated above the skull.

He was immediately prepared for operation and a semilunar flap raised exposing the depressed fracture, which was at the posterior inferior angle of the parietal bone, involving a portion of the mastoid process. From this point a linear fracture extended anteriorly toward the frontal bone.

After removing the fragments of bone, covering a space the size of a silver dollar, an effort was made to trace the extent of the linear fracture forward. Becoming convinced that the fracture extended to the opposite side of the skull, and as the patient's condition was becoming very grave, this incision was hastily closed and a second incision was made beginning a little to the right of the middle line over the frontal bone and extending backward in a curved direction, exposing the entire parietal bone on the left side. On raising the flap a linear fracture could be traced across the frontal bone and extending backward to a point on the parietal bone just above the left ear; the entire line of fracture extending nearly two-thirds of the circumference of the skull. The upper fragment was slightly elevated, perhaps 1-16 of an inch.

Between the edges of the bone blood could be seen oozing out, and, believing the longitudinal sinus had been injured, I made a trephine opening to the left of the median line. On removing the button of bone a large quantity of blood escaped, and the patient's condition at once improved, although still very grave. After flushing with hot normal salt solution and packing with gauze for a time, the hemorrhage ceased.

After waiting to see if there would be any recurrence of the hemorrhage, the scalp incision was closed without drainage and the patient returned to bed. His condition at this time was such that we did not think he would survive until morning. The following morning, however, he had regained consciousness and his general condition had improved; from this time on he

made a rapid recovery, and within twelve days returned with his brother to his home in New York.

One feature in this case is of interest, as the patient developed double vision due to injury to the cortical centre on the right side controlling the muscular movements of the eye.

Case 2—Thos. S., 35 years of age, was admitted to the City Hospital, July 7th, 1909, having been injured by a rock weighing $6\frac{1}{2}$ pounds, which was thrown a distance of 150 feet, inflicting a jagged, open wound about two inches long at the hair margin above the right eye.

He was at once prepared for operation. On enlarging the wound, fragments of bone, with hair, sand, and a small fragment of stone about $\frac{3}{4}$ inch long and $\frac{1}{4}$ inch thick were found embedded in the brain; these were carefully removed.

A large fragment of bone extending to the middle line was removed with some difficulty, fortunately without injury to the longitudinal sinus; from the mid-line a linear fracture extended downward and outward towards the left orbit. Another large fragment, consisting of the outer portion of the superciliary ridge, together with the external angular process of the frontal bone and a portion of the orbital plate, was so displaced that the sharp edge of the orbital plate was projecting against the base of the frontal lobe of brain. This fragment was also removed, and the wound thoroughly flushed with hot normal salt solution; a quantity of brain matter escaped, although we were unable to estimate the amount. A gauze drain was inserted and the scalp wound closed, leaving ample room for drainage.

This patient's convalescence was somewhat prolonged, through the subsequent escape of brain matter, although at no time was there more than one degree elevation of temperature following the injury.

He is now apparently well, although it will be interesting to follow the future history of this case in order to determine the effect on his mental condition.

Case 3.—V. L., aged 11 years, was brought to the hospital late in the evening of August 14th, 1909, having been thrown from a horse; he was unconscious, but restless and crying out at intervals.

The scalp on the left side of the head was very much swollen, and it was impossible to determine by examination whether or not there was fracture of the skull, but, considering his condition, we thought best to operate at once.

A long curved incision was made, exposing the left parietal region, when a fine linear fracture could be seen extending from the lambdoid suture forward in a curved direction to the coronal suture, where it curved downward and backward to a point just above the left ear, where a marked depression existed, and a small triangular fragment of bone was entirely separated and depressed. This was removed, and binding the inner plate of the skull just posterior to the fragment depressed, the edge was removed with the rongeur, and a bleeding vessel secured.

At a point about the middle of the parietal bone another rather wide linear fracture extended transversely across the skull beyond the middle line. Fearing injury to the longitudinal sinus, a grooved director was passed under the skull toward the middle line from the opening below, but finding no evidence of hemorrhage the scalp was closed with a catgut drain at one angle of the incision.

For two days the patient was very restless and almost uncontrollable, but at the end of two weeks returned home apparently perfectly well.

SUBDURAL CYST.

I must beg your indulgence in reporting another case showing one of the remote results of cranial injury. I have been led to this through reading a very able article by Dr. Dudley P. Allen, of Cleveland, appearing in a recent number of *Surgery, Gynecology and Obstetrics*, on the "Late Manifestations of Intracranial Hemorrhage of Traumatic Origin."

In this article the writer says: "Only cases of hemorrhage are included, those of cyst formation being simply referred to, although cysts are doubtless the terminal stage of certain hemorrhages;" again he says: "Accumulating experience seems to emphasize the difficulty of distinguishing between the location of hemorrhage whether extra or subdural. One thing seems positive, if an opinion may be based upon the twenty-seven cases reported, and that is, that long delayed symptoms of cere-

bral compression indicate positively that the hemorrhage is subdural."

As we proceed with this report you will note the short period of unconsciousness, followed by a lucid interval, with unconsciousness supervening within 24 hours; one of the classical signs of intracranial hemorrhage.

Wm. A., age 50, occupation mechanic, was found lying unconscious in the printing office where he was employed; I saw him shortly after, and found him unconscious, with intermittent convulsive movements of entire body, stertorous breathing, dilated right pupil, and pulse 60; there was ecchymosis of left eyelids and cheek from a blow received some three days before while "on a spree."

He was removed to his home where I saw him the following morning, when he presented the following symptoms:

Temperature subnormal, pulse 60, motor paralysis of right arm and leg with partial paralysis of left side of face; the tongue was protruded straight with tremor, pupils reacted to light, and right pupil was slightly dilated; aphasia with slow hesitating speech; inability to write with left hand; seemed to understand when spoken to, but could not speak very intelligibly; right patellar reflex diminished, sensation present in right arm and leg, but motor paralysis complete. Examination of scalp revealed an old scar above left ear.

It was difficult to obtain a satisfactory history, but his wife stated that he had frequent attacks of severe headache, at which times he became violent to the point of insanity, and at these times drank to excess.

About 56 hours before his attack, he had had an altercation with his son who struck him in the left eye with his fist; the blow, however, was not sufficient to knock him down or cause loss of consciousness.

His vessels were markedly atheromatous, and not being sure of the condition, I kept him under observation for a period of three weeks. During this time there was a slight improvement in his speech, but the aphasia remained very marked.

I finally had him removed to the hospital, where, on the 15th of January, 1909, three weeks after becoming paralyzed, he was operated on.

On incising the scalp we experienced great difficulty in controlling the hemor-

rhage due to the atheromatous condition of the vessels; adhesions were found between the periosteum and skull in the region of the old scar, but no apparent injury to the skull.

After controlling the hemorrhage, a trephine opening was made just above the scar, over the motor areas, rather copious hemorrhage occurring from the diploe; on removing the button of bone, punctate hemorrhages occurred over the entire surface of the exposed dura, which was tense and pulseless.

I incised the dura which was somewhat thickened, with the immediate escape of a perfectly clear fluid, which spurted out for a distance of perhaps two inches.

The delicate pial vessels could be seen floating in the clear fluid, and with each pulsation of the heart more fluid escaped, until finally the brain came up to the level of the dura; the quantity of fluid was estimated at two to three ounces, and was evidently not encapsulated.

After smoothing the edges of the trephine opening, a catgut drain was inserted through the opening in the dura and brought out under the scalp, with the intention of permitting the escape of fluid under the scalp for absorption.

The scalp incision was closed with a small drain at one angle, on account of the oozing which was rather profuse.

The patient was returned to bed in good condition, and the same evening, while the nurse was arranging the bed clothing, she inadvertently touched the sole of the right foot when the patient moved the foot with a complaint of pain. After that, tickling the sole of the foot would cause reflex movements of the entire leg, but no voluntary movements occurred for about a week, when he began to move the foot and arm slightly with much effort. At the end of two weeks he could walk with assistance, and could move the arm. The aphasia had practically disappeared by this time and I was able to secure his personal history.

About twelve years before, while working as a driller on an oil well, he was struck on the side of the head at the point where we found the scar; and was unconscious for about fifteen minutes; he then resumed work for two hours, when he again became unconscious, remaining in this condition for twenty-four hours, after which he was

"sick" for three weeks. From that time he had frequent attacks of severe headache, becoming "almost crazy with pain," as he expressed it.

Persons who were acquainted with him said that at times he became violent and almost insane, which they attributed to his excesses.

I saw him on the street a short time since, walking with the aid of a cane. He could raise the arm from the side, flexing and extending it readily, but the hand remained contracted; his general health had been good and he did not suffer from headaches.

I regret that I did not remove more of the skull, believing that it would have resulted in a complete cure; but on account of the profuse hemorrhage from scalp, skull and dura, we thought it inadvisable to proceed further with the operation.

PELLAGRA—REPORT OF A CASE.

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The medical journals in the last few months have had so many articles on pellagra in them, that anything further on the subject would seem to be superfluous; particularly so if it could add nothing new to what has already been printed. My only excuse, therefore, is, that so far as I can ascertain there have been no cases reported in West Virginia, and if there is anything in the theory that this malady is caused by the consumption of maize and its products, it is possible that cases exist in the State which are unrecognized. It is because a case presenting the symptoms of this disease, and so diagnosed, has come under my observation that I wish to report it in our State Journal.

Pellagra is defined as "An epidemic disease of slow evolution, characterized by a complexity of nervous, gastric and cutaneous symptoms, which make their first appearance during the spring months, and recur year after year at the same season, remitting more or less during the winter months. It is confined almost exclusively to field laborers, and the more distinctive features are—(a) a remitting erythema of the exposed parts of the body; (b) marked emaciation; (c) profound melancholia alternating with mania." (Manson.)

"It is the accepted opinion of most students of the disease that pellagra is an intoxication due to using as a food Indian corn (maize), which, under the influence of unidentified parasitic growths (fungi), has undergone certain changes with the production of one or more toxic substances of a chemical nature." (Lavinder.) In connection with the etiology of this disease it is of interest to note that Doctors Siler and Nichols (U. S. A.) reporting on their study of cases at the Peoria State Hospital at Peoria, Ills., make particular mention of the fact that in the autopsies performed on patients dying of pellagra in this institution, two-thirds of them showed "marked and constant lesions of the colon, most of them being put down as amoebic ulcerations," and they call attention to the fact "that Neusser speaks of old and recent ulcers as a finding in pellagra;" then make the following significant statement: "As mentioned before, no physician, attendants or employees have developed the disease. This fact seems to us most significant in giving a clue to the nature of pellagra. Persons sound in body and mind did not contract the disease, although constantly exposed to it." So one is inclined to think that other associated diseases, poverty, dissolute habits, etc., are predisposing factors of great importance.

The symptoms are manifested by an erythema of the skin, with disturbances of the alimentary tract and nervous system. As a rule in the early spring the first disturbances are noted. It is stated that such prodromal symptoms as lassitude, vertigo, headache, general malaise and perhaps mild digestive disturbances may be present; muscular weakness of the lower extremities usually appears early; the urine shows no marked changes, though albuminuria not rarely appears toward the end of the disease; temperature generally shows no deviation from the normal, though toward the end may have an elevation; pulse may be quickened; functional heart murmurs often found late; the blood shows a secondary anemia frequently; knee jerks may be exaggerated and are generally unequal; pupils are sometimes unequal, frequently dilated. Mentally patients even at this early stage show mild weakness and depression.

As the case progresses the nervous manifestations are exaggerated. "Vertigo becomes more grave and prominent. Head-

ache occurs with a sensation of weight and insomnia; neuralgias are more frequent and severe; psychical manifestations are seldom lacking and usually have the character of melancholia; in light cases there may be simply a mental feebleness, slow cerebration, with mild irritable depression and aversion to any activity. This may develop into stupor. In severe cases there exists melancholia with anxiety, delusions of persecution and disturbed ideas on religious matters. Refusal of food and suicidal tendencies are common. Maniacal attacks with homicidal tendencies are less frequent. Melancholia may end in dementia. Defects of consciousness occur, and delirium of a melancholic character. The circular type of insanity as well as paranoia are said at times to be observed.

Muscular feebleness is marked and partial paralyses may occur, or even paraplegia and hemiplegia have been described. States resembling tetany may be seen sometimes, with paroxysmal-like, painful, tonic contractions of the upper and lower extremities in the half-flexed position. The gait is usually paralytic, occasionally paralytic-spastic, never, it seems, ataxic. Tremor of the upper extremities, head and tongue is recorded in many cases. The electric muscular irritability seems to show no constant deviation from the normal. Epileptiform seizures may occur, but definite attacks with loss of consciousness are very rare; more frequently it resembles cortical epilepsy, cramps in single limbs, short pauses in consciousness and vertiginous spells. The ocular phenomena already described are more likely to occur at this stage.

The skin sensibility seems to be irregular and of not great importance. Various paresthesias are frequently present. The skin reflexes are as a rule normal. The tendon reflexes usually show deviation from the normal, but are often irregular. In some cases they are normal, in most increased, sometimes weakened or lacking altogether. Differences in the upper and lower extremities and in the two sides are recorded.

Vaso-motor and trophic disturbances, besides the erythema, are often noted in the skin, such as general paleness, cutis anserina cold sensations and the like. Edema also occurs and capillary injections about the face. (Lavinder.)

The skin lesions appear generally on those portions of the body commonly uncovered and thus exposed to the sun: i. e., back of hands, fore-arms, back of neck, dorsum of feet, etc., though some claim that they may appear on the feet of those who do not go without shoes; in some cases the erythema encircles the neck and has given rise to the term "pellagra collar." The erythema is described as "dark red in color, with some edema; the patches soon become dark brown, with thickening of the skin which is associated with burning and itching and later with loss of sensibility. The epidermis then desquamates, the underlying surface appearing red and at times fissured. Vesicles and bullae may appear and breaking down, leave a condition not unlike moist or weeping eczema in appearance.

The more active skin manifestations are often followed by shrinkage and loss of elasticity of the skin, causing it to become parchment-like in appearance, or the skin may merely become thickened with pigmentation which increases with each recurrent attack." (Bull. Ill. State B. of H.)

The symptoms on the part of the gastrointestinal tract are in the beginning mild and antedate the skin lesions. The sensibility of taste is altered: appetite is lost and frequently pyalism is present. Examination shows a coated tongue with red edges; mucous membrane of mouth and gums is red, at times vesicles are present or even superficial ulcerations. Sometimes we find flatulence and vomiting, with epigastric pain. Generally there is diarrhoea, though at times constipation, the diarrhoea is frequently dysenteric, muco-sanguinolent with colic and tenesmus.

As the disease progresses "the stomatitis is aggravated, ulcerations are more frequent and, if not before, the tongue becomes now smooth and denuded of epithelium—the 'bald tongue.' The diarrhoea grows more persistent, sometimes sanguinolent, at other times and more often, it is serous. This serous diarrhoea is not seldom painless and very persistent." (Lavinder.)

Because of the symptoms in the case I report I will give the description of "Typhoid Pellagra" as given by Lavinder in an article prepared by direction of the Surgeon General of the U. S. Army.

"Not infrequently the fatal termination

may take place in what is called typhoid pellagra (typhus pellagrosus).

It is to be understood that this is not true typhoid, although this may at times be a complication of pellagra. Eberth's bacillus is not present and the morbid lesions show nothing characteristic. It should also be noted that nearly all authors seem to agree that this is not acute pellagra, and never occurs except at the termination of chronic cases.

The condition is described as one of profound prostration, dorsal decubitus, dry tongue, fetid breath, continuous fever, feeble, small, perhaps irregular pulse, and frequent bed sores.

The psychical condition becomes usually one of delirium, or perhaps partial stupor.

There is, in addition, a marked, general neuro-muscular irritability. The whole musculature is held in a condition of rigidity, almost to the extent of tonic contraction. In spontaneous motion there is perceptible tremor and a suggestion of incoordination. Speech is drawling, trembling, frequently of a nasal quality. The head, through the contraction of the neck muscles, is drawn backward, and now and then raised and moved convulsively from side to side. The facial expression is anxious and the facial muscles move with a tremor of fibrillary contractions.

The lower extremities are found in a strong condition of extension, with plantar flexion of feet. The tendon reflexes are increased and a simple percussion of the patellar tendon may result in a diffuse clonus of the entire limb, accompanied, perhaps, by a spasm of the whole body.

There may also be present hyperesthesia and increased reflex irritability of all the sensory areas. Pellagra is described as a feverless disease, but in this state the fever is constant and often high. Roseola is lacking. In most cases death occurs in one or more weeks, often in a terminal bronchitis."

Case report.

S. S.—Female. Brunette, age 26. American. Married. No children. Admitted December 9th, 1909; being committed by justice of the peace as being insane; suffering with hallucinations; history given that she had a similar attack some months before. At times maniacal, requiring morph. sulph. 1 gr. and hyos. hydrobrom. 1-100 gr. hypodermically several times a day to

keep her quiet. When at home had to be in a straight jacket and held. The alleged cause was worry with poor health; had lost markedly in weight; been in general hospital and had been curreted on two occasions.

When admitted the following notes were made:

Bedfast; very much emaciated; no elevation of temperature; pulse from 80 to 90, no heart murmurs; urine showed no abnormality; blood count not made. Had a vaginal discharge, which was not specific. Lungs showed nothing abnormal. There was an area of brownish discoloration on the dorsum of right hand and another just below the elbow on the left arm; the skin seemed to be thickened and there was a fine scaly exfoliation. Careful inquiry of relatives disclosed the fact that during the previous spring she had so-called eczema of the hands and arms; there were no signs of any lesions on face, back or neck or dorsum of the feet and we could get no history of there having been.

The tongue was coated, with bright red edges; the mucous membrane of the gums and cheeks was very red; ptyalism was marked; breath was very offensive. Had diarrhoea with greenish discharges, at times mixed with blood; the bowel discharges were exceedingly offensive.

The nervous symptoms were great restlessness and insomnia and she was at times quite violent; disorientation with auditory and visual hallucinations; when quiet enough to answer questions with any degree of accuracy said that she saw "two doctors, two nurses, etc.," when there was only one (diplopia). The plantar, patellar and olecranon reflexes were all much exaggerated; there were hyperesthetic areas over the epigastrium and lower extremities. Muscular weakness of the lower extremities was very marked.

The alimentary tract was thoroughly cleaned out; colonic irrigations of normal salt solution used; bismuth and triple sulpho-carbolates with krameria were given, and a mouth wash containing potass. chlorat. and liq. antisept. (U. S. P.). The diarrhoea was checked and the condition of the mouth rapidly improved; patient became quiet and got some sleep at night with no sedatives; mental condition cleared up so she talked and answered my questions.

Began to take nourishment well and gained in strength until she could sit up in bed. In the course of two weeks had improved so that she wished to get out of bed, but when she attempted to stand the muscular weakness of the lower extremities prevented her taking a step. If her weight was supported and she was encouraged to walk, she dragged her feet along as seen in cases of paraplegia. She complained at this time of marked tenderness of the spine in the dorsal region, and great pain in her feet if they were touched or even from the weight of the bed coverings. She was now taking Fowler's solution after meals and nuxvomica with gentian before meals.

This improvement continued for some three or four weeks and I felt very hopeful of her recovery. Suddenly her temperature ran up to 102 to 104; pulse varied from 112 to 130; an intractable serous diarrhoea set in and she became stuporous; mucous membrane of tongue, gums and cheeks rapidly developed ulcerations. The head was retracted, there were tonic contractions of the muscles of the upper and lower extremities with plantar flexion of the feet; at times fibrillary twitching of the muscles of face and neck; if touched she would groan and cry out as if it were excruciatingly painful, though her mental condition prevented any accurate information on this point. There was no roseola or any other symptoms of typhoid. This condition continued in spite of anything we could do for her, and her death occurred Jan. 30th, 1910, at 12:20 p. m. An autopsy was not secured.

This was, I think, a case of typhoid pellagra terminating a case that had probably existed unrecognized for a year or more. It is interesting to note, in relation to the theory of the use of maize as being an etiological factor, that this patient had not used Indian corn or its products, except occasionally as corn bread, but most of the other predisposing factors mentioned under etiology were present—poverty, unsanitary surroundings, poor health.

Free ammonia in the urine of a diabetic is a bad prognostic sign and its presence is a contraindication to operation in diabetic gangrene, for it shows the presence of beta-oxybutyric acid in the blood.—*American Journal of Surgery*.

VASECTOMY. ITS ETHICAL AND SANITARY LIMITATIONS.

C. H. Preston, M.D., Davenport, Iowa.

The right of the state to employ preventive measures against crime, even to the extent of depriving the criminal of life, if need be, is unquestioned; and that the state has also the right to protect itself against the defective classes is coming recently to be recognized. I believe it is not only the right but the duty of society to prevent, in so far as it may, the procreation of both criminals and defectives, such at least as are a menace to its welfare. The sterilization of these classes is a rational measure, destined without doubt to be generally legalized, under proper restrictions, and to prove far-reaching and effective in the solution of great social problems for the betterment of the race.

As a means of sterilization a good deal of attention is being directed latterly to the simple operation of vasectomy, a measure at once effective against impregnation, and so easy and safe as to be ideal but for certain ethical and sanitary limitations. These, however, are so momentous as to demand careful weighing by the medical profession before the measure is given its unqualified sanction.

Vasectomy is performed through a slight incision in the skin on each side, requiring local anaesthesia only. "Less serious," it is claimed, "than the extraction of a tooth," it does not confine the patient to bed, and does not impair his sexual power or pleasure. Before an operation so seductively characterized can safely be recommended for unrestricted adoption, its effects on society as well as on the individual must be considered. It is certainly a convenient sterilizing agency, but its place in legitimate surgery, I am convinced, will prove much more restricted than that now being inconsiderately claimed for it. Leaving, as it does, sexual desire unimpaired, along with the "power and pleasure of its gratification," it can have no effect in lessening the spread of the venereal infections, and so for those over whom the state has control—for such confirmed criminals and defectives *in custody* as may be adjudged fit subjects for compulsory sterilization—the more

effective measure of castration is plainly indicated. For such there is no question of consent or choice; and while, so long as they are behind bars, the less serious operation might suffice (if, indeed, either be there required), the possibility of escape or pardon must be taken into account, and the measure which will end the power to spread physical and moral infection, as well as the power to reproduce, should be taken by the state for its own protection. It is objected, however, that just because castration destroys sexual power, and because "all men worship at the shrine of Venus," it is "not acceptable," hence not to be considered! Shall we say that because all men love liberty they cannot forfeit their right to it? Shall the shrine of Venus be made the sanctuary of evil-doers?

An objection of somewhat greater weight is the fact that castration is somewhat more difficult than, and not quite so safe as vasectomy, and that it entails the loss of certain virile characteristics. The difficulty and danger are but slight, however, and in the class under consideration, their brutal instincts already in the ascendancy, the loss to the state would be little and the gain great if they were made "fat, lazy, and docile," in being made impotent for sexual evil. Indirectly, too, this more dreaded method of sterilization would greatly benefit the state as it would prove a powerful deterrent to crime. The habitual criminal class would avoid incurring liability to imprisonment, fearing almost more than death itself the forfeit of their power and pleasure..

For those in custody but not hopelessly confirmed, whether as criminals or defectives, compulsory sterilization by whatever method would, of course, not be thought of. For such vasectomy, if consented to, might perhaps be advisable. It would be a question, however, for a legally constituted commission to decide in each individual case, whether sterilization, leaving potency, were wise even for these.

Coming now to the consideration of vasectomy for those outside of prison or institution walls—its unrestricted employment by the general profession in cases desiring or consenting to the operation—the objection it appears to me, are grave, and none the less real that they have been put aside by high authority as no more weighty

than "a man of straw." There would be the gain of sterilization, it is true, but with it a needless sanitary and moral loss, since most fit subjects for reproductive inhibition would by their own lawless acts soon forfeit the right of choice and come into the class just considered. For the rest statutory provision could be made, legalizing vasectomy in special certified cases and prohibiting it in others. If it were done only to prevent the multiplication of defectives and the transmission of hereditary disease, the claims made for it might be justified; but that it would be only or chiefly so employed is too much to expect of weak human nature. It is admitted that vasectomy is already being substituted for criminal abortion. But abortion, except where imperatively indicated, is a crime against the state; so also is, or should be, vasectomy as well; their effect is the same. True, the latter is not technically murder, but the difference is sentimental rather than real. Race suicide will follow no less surely the prevention than the destruction of foetal life. If many, even in the more cultured classes, those to whom the race must look for its uplift and advancement, are ready, for their selfish ease, to brave the legal and physical dangers of abortion, finding doctors in plenty to aid them, must we not fear that many more will avail themselves of the relief of vasectomy if unrestrained and encouraged to do so?

First will be the society devotees, those who prefer dress and the social whirl to duty and the care of children, the seaside to the fireside, the ball-room to the home; wives who wish, and husbands who wish them to remain shapely and attractive—those in whom sexual dominates parental instinct. Next will come the profligate rich, those who, regardless of marital rights, find their pleasure in invading and destroying homes, seducers for whom the removal of all danger of telltale results will make their conquests easier and safer. The struggling poor, too, with more excuse but with results less disastrous, will be enabled to dispense with sexual restraint, to prostitute their wives, and to make their homes more or less childless; and the debauchers of the young will have their hellish task greatly lightened if they can assure their victims that no danger of disgrace will follow the sin of consent. As for the rapist, the advo-

cates of vasectomy agree, I believe, that castration is the proper treatment for him—in case he escape alive!

Plainly, then, for those not in confinement, vasectomy is a dangerous procedure, more dangerous morally than abortion, because physically and legally less so. And viewed from the sanitary standpoint the danger is no less real. If vasectomy outside institution walls be approved, the effect on sanitation will not be negative only, as for those inside—a neglected opportunity to control the spread of the venereal diseases—but a positive increase will result in the ravages of syphilis and gonorrhoea through the increased opportunities afforded, as I have shown, for sexual license. As physical pain warns and safeguards the body, so the fear of disgrace safeguards character and is not lightly to be set aside.

The sterilization of the female need not be considered here. The objections to her complete unsexing are greater, perhaps, and salpingectomy, the milder measure for her, is less dangerous than leaving to the aggressive male his power and pleasure shorn of responsibility. The same objections hold, however, though in less degree.

We must conclude, then, that while sterilization of confirmed criminals and defectives by the state is desirable and becoming an economic and stirpicultural necessity, it should be done only by the state, or with its express sanction, and that the half measure, vasectomy, which leaves the power to debauch and infect, should be but seldom employed.

Selections

DIET IN TYPHOID FEVER.

In a recent issue we presented the views of Dr. Register, who is a strenuous advocate of milk. Dr. Gordon R. Hall of Brooklyn, in *American Medicine* for May, presents some radical views on a fuller diet, which are interesting and worthy of consideration, although the profession will be slow in fully accepting them.—EDITOR.)

The milk diet came into general use some forty years ago, and acquired a firm footing with the medical professional.

Dr. Shattuck, of Boston, was one of the first in this country to break away from the established custom, and give a liberal diet. From 1886 to 1893 he found that of 233 patients carried on a milk diet, the mortality

was 10%. From 1893 to 1902, of 246 patients upon a liberal diet, the mortality was 8.45%.

In 1895 Bushuyev gave very liberal diet to 80 patients, while his colleague kept 74 others on fluids, mostly milk. The mortality among those fed with the liberal diet was 10%, while 12.1% of the liquid-fed patients died. In 1897 Bushuyev treated 318 cases on solid diet, with loss of 8.2%. Previous hospital mortality had been 12.4%.

In 1897 Dr. Barrs, of England, reported 31 cases with three deaths; and the fatal cases were unable to take solid food. None of the cases taking solid food early died. Much more testimony of the same kind could be quoted.

Having established the safety of a liberal diet, it is in order to view the shortcomings of a milk diet, and the superiority of the liberal one.

When a patient takes milk well it is an excellent diet, because it contains the essentials of a complete food, is easy to take, and is easily handled. It should never be given pure, but always diluted with lime or barley or oatmeal water, or be peptonized. Without the dilution, milk curds are likely to be found in the intestine, which are irritating to the ulcers and possibly productive of hemorrhage and perforation. Milk is a good culture medium. I have long been accustomed to cut off the milk whenever there was any considerable amount of abdominal distension. Milk is said to be poorly absorbed when the only article of diet, even in healthy adults. Forchheimer calculates that a well person weighing 120 pounds, resting in bed the whole 24 hours, requires 1925 calories. The feverish typhoid patients would require still more.

Two quarts of milk are about all a patient can take in 24 hours, continuously. These two quarts are a little less than 1,300 calories, 600 short of the normal need. Add to that the loss of muscular tissue as a consequence of fever, sometimes 1½ lbs. a day which must be compensated, and it is estimated that the deficit in calories amounts to about 50% a day. Typhoid may require 2,800 calories.

This starvation diet, then, in no way renews the waste of the disease, but leaves the patient to become weaker and thinner

as the poisons of the disease and the fever run their course.

Dr. Barrs believes that the ulcers cannot heal as readily with this deficient feeding, and that perforation is more likely. That the same conditions are requisite for healing in the intestines as anywhere else.

What are the advantages of a liberal diet? Typhoid is a self-limiting disease in that the fever disappears when the blood has in some way counteracted the bacilli and toxins which the system contains, and rendered it immune. Until such a time, and to hasten this time, the great effort should be to sustain the strength of the patient. It seems to be the general opinion of those who have used it, that the liberal diet does this. That the combined length of the disease and period of convalescence will be shortened, and the emaciation and weakness lessened, the comfort of the patient increased, and the death rate lowered.

The belief that hemorrhage and perforation would be more frequent with the liberal diet, has not been sustained. No greater per cent. of perforations has occurred.

Lenhartz has been feeding cases of gastric ulcer by the stomach, with better results than from the former treatment. Comparison has been made between diet in the presence of typhoid ulcers, and in cases of intestinal tubercular ulcers, the latter of which do not seem to be at all harmed by the forced feeding common in that disease.

Relapses should not be more frequent than with the milk diet, for they come from reinfection, not from food. Temporary returns or fever due to some intestinal fault, perhaps error in diet, or to some excitement, should not be carelessly spoken of as relapses. They occur not infrequently with sole milk diet and have been declared less frequent with the more liberal diet.

What is to be considered a liberal diet? Referring again to Bushuyev, I will detail the diet he employs in typhoid, which is the most liberal that I have seen.

At 7 a. m. a cup of tea and a roll. 8 a. m. 400 c. c. of liquid oat meal, wheat or barley gruel, with butter. At 9 a. m. one or two eggs boiled to suit the patient; 10 to 11 a. m., a glass of milk, half a cutlet and 160 grams of boiled meat. 12 to 12.30 p. m. 200 to 220 c. c. of soup, a cup of jelly, rarely preserves. 3 p. m. cup of tea and a roll. 6

p. m. cup of chicken or beef soup, semolina pudding or milk and a bit of chicken. 8 p. m. a glass of milk and a roll. During the night a cup of tea or coffee with milk, from 2 to 4 times, with from one to three ounces of wine or coffee and brandy in the morning.

Doesn't that read almost like a fairy tale? Yet hear what he says of it. "The general condition of the patients is far better than with milk. They are uncommonly wide awake at meals, even those very ill. Sit up in bed, beg for food, and eat with much satisfaction." I fancy that few of our neighbors venture as broad a diet, notwithstanding Dr. Bushuyev's confidence.

In the liberal diet, food is not urged upon the patient. He must take it willingly. Neither must there be a quick transition from a spare to a liberal diet.

Since September 1st, I have been on duty at the Kings Co. Hospital, and since Oct. 1st, also at the Brooklyn Hospital. I have had under my care in both places twenty-seven cases of typhoid up to November 1st.

A fairly liberal diet has been employed in most of the cases. For example: one man 27 years old received the following: At 8 a. m. cereal 3 oz., milk toast one slice, coffee 8 oz. At 10 a. m. soup 6 oz., one powdered cracker. At 12 m. poached egg on toast, and wine jelly 2 to 3 ounces. At 2 p. m. eggnog, 8 ounces. At 4 p. m. raw scraped beef one ounce in toast sandwich, and boiled rice 6 oz., with 2 oz. boiled custard over it. At 6 p. m. koumyss 6 oz. At 8 p. m. milk 6 oz. At 4 a. m. milk 6 oz.

Diet was varied in different cases according to conditions. In one case a scraped beef sandwich on one day, alternated with poached eggs on other days, with egg-nogs every day or two, the rest of the food being cereals, pea or bean soups, beef juice, hard boiled eggs grated and mixed with powdered cracker, custard, jelly, junket and ice cream.

The only fatal case was a man who died the day after admission; an alcoholic, very ill for two weeks before coming in, but having remained in bed, with dry tongue, tympanites, petechial spots, suppurative irido-cyclitis, and temperature of 105°. He had milk and albumin water while he lived.

* * * * *

The liberal diet was given in 18 cases.

In one case pure milk and albumin water. In another, milk for six days after admission, then liberal diet.

In all these cases except one the Widal was positive; and in that one rose spots, enlarged spleen and characteristic temperature assured the diagnosis.

Of 27 cases the abdomens were distended in seven. Six were distended on admission. The seventh had been confined to diet of milk and vichy after entering the hospital. This was changed to a liberal diet, and the distention soon came down.

Two cases were relieved by enemas. Another two cases were relieved, one in ten days and the other in a few days longer, without special medication or enemas, they being upon the liberal diet.

Out of 27 cases, 22 had no diarrhea; most required enemas. Of the rest, one had from 2 to 5 stools a day, some of the time, others fewer. Only one received drugs for this symptom. They became constipated afterwards. In all cases where diarrhea was present in those fed with the liberal diet, no change was made.

The tongues were dry on admission in six out of twenty-six cases. One of these dry tongues became moist in four days on a diet of milk diluted with water, whey, and gruels. One upon the liberal diet required 15 days, another 11. None of the tongues became dry after admission to the hospital.

I have taken the time from the probable onset to the day when the temperature reached normal and did not go above normal thereafter more than a degree or so, as a measure of the length of the illness.

In those upon liberal diet, the number of days was 15 to 17 (2); 18 to 20 (4); there being more at twenty days than at any other limit, and more than half of them coming within 20 days. One case with relapse continued 43 days. One, kept entirely upon undiluted milk and albumin water, became normal in 48 days, including a relapse.

None of you can be more sensible than I of the error one would make in reaching fixed conclusions from these few cases, and from such facts as I have presented. No two cases may have the same susceptibility or the same amount of poisoning. Habits, character of previous treatment, absence of treatment for some days after the onset of

the disease, and many other circumstances greatly impair the value of any classification of facts. Yet I have been interested in placing these cases side by side, and comparing them in my mind with cases seen in previous years. This has resulted in the following firm impressions:

1. That milk alone is not the best diet for typhoids.

2. That some such diet as I have outlined, is perfectly safe and more sustaining.

3. That there are fewer bad symptoms, such as dry tongue, distention of the abdomen and excessive diarrhea.

4. That the patients are more comfortable and better satisfied during their illnesses.

5. That convalescence begins rather sooner and the restoration is easier.

6. That probably there are fewer complications and deaths.

164 Clinton St.

MILK AS AN ETIOLOGICAL FACTOR IN TUBERCULOSIS.

Results of Investigations by the German Imperial Board of Health.

In Heft 10 of *Research Work in Tuberculosis*, issued by the German Imperial Board of Health, A. Weber answers the query as to the danger threatening mankind from the use of milk and other dairy products derived from cattle with tuberculous udders, by publishing a report based upon the totality of official investigations as announced in Prussia, Bavaria, Saxony, Wurttemberg, Baden, and Hesse. The data thus obtained are of extraordinary interest to medical men, and may be considered profitably in greater detail than is possible in the ordinary journalistic review. Moreover, it is hoped that the author's presentation of this, as yet unsolved problem, will serve as a stimulus to similar research by others.

The collection of material for the present elaboration of our subject was so arranged that the government veterinaries in the states (Prussia, etc.) mentioned above were requested to locate cases where individuals had used the fresh or raw milk from cows with demonstrably tuberculous udders. Such cases were then reported to the county (*Kreis*, or district) physician, whose business it then was to investigate what ac-

tion the use of such milk had upon the health of its consumers. The results were reported to the Imperial Board of Health, thus enabled to continue further analysis and investigation. Physicians and veterinaries not holding official positions were to be suitably interested and encouraged in such work.

The task of the Imperial Board of Health was, above all else, the bacteriological examination and demonstration of appropriate material with regard to the presence in the diseased tissue of tubercle bacilli of the *typus bovinus* (*Perlsuchtbazillen*), or of the *typus humanus*, or finally, whether it was tuberculous at all. For, in the first condition alone is it absolutely demonstrable that the ingestion of milk and the tuberculous lesion have any etiological relativity, the presence of bacilli of the *typus humanus* indicating infection from a human, not from an animal, source.

During the period from the beginning of the year 1905 to April, 1909, 113 cases of udder tuberculosis were reported to the health board, viz, sixty-eight from Prussia, fourteen from Bavaria, six from Saxony, six from Wurtemberg, ten from Baden, and nine from Hesse. In round numbers, 628 persons had used the milk from these cows, most of them for a considerable time. In forty-four of the 113 cases, the statement was made that cooked milk alone was used. These cases, however, (though separated from the others) are correctly included in the statistics, for it is very dubitable that such milk was always really cooked and that for an adequate period of time. The supposition also is valid that an animal thus gravely affected with tuberculosis could serve in other ways as a source of infection endangering the lives of those in its vicinity whether animal or human. In the remaining sixty-nine cases; it was frankly stated that the milk and milk products were ingested raw and, *in toto*, by 360 individuals (151 children, 200 adults, and nine whose ages were not given). If these 360 persons, two only were indubitably infected with tuberculosis because of the use of this milk. Both cases were children, one 22 months old; the other, 15 months. Both showed diseased cervical glands, and tubercle bacilli of the *typus bovinus* were bacteriologically demonstrated by culture and by the inoculation of rabbits and cattle. Other morbid

phenomena, however, were absent. Both children are alive, and, when examined two and one-half and one and one-half years later, showed robust development and looked well. In these two cases, the tuberculous lesions of the udders were far advanced and the children, for a considerable period of time (one and one-half years and one year) had been fed with it, the milk—though occasionally mixed with that from another cow, hence, somewhat diluted—always being administered raw. Furthermore, in both instances the milk was used raw by all members of the families; in one, by the parents and two other children, respectively four and five years of age; in the second family by the parents and six other children, aged three, four, seven, eight, nine, and twelve years. All of these individuals were healthy.

In addition to the two positive cases, there are mentioned a number of doubtful ones, in which, according to Weber, there is, or has been, suspicion of an infection due to bacilli, bovine in type, but where bacteriological examination could not have been done. Here, also, the abnormality consisted in swellings of the cervical glands in children; in single cases here and there the county physician mentioned his suspicion of an infection of the mesenteric glands. A feature common to all these cases is that in a second examination, made after a lapse of months or years, no progress in the glandular lesion was demonstrable; on the contrary, there was either regression or else complete cure in the majority of cases, so that it happened, now and then, that the examining physician had grave doubts of the correctness of his original tuberculosis diagnosis.

Naturally, the possibility is not excluded that, in one or other cases, infection was followed by cure. On the other hand, it must not be forgotten that an almost involuntary tendency exists to attribute glandular swellings in such families to tuberculous infection; also that in childhood, glandular tumefactions of a nontuberculous origin are frequent phenomena.

In a sequence of the cases reported where the morbid conditions were attributed to tuberculosis, it was demonstrated by repeated and more careful examination that said lesions were not of tuberculous nature. Of special interest is the case reported by

Zwick, in which two children of the same family presented tuberculous lesions apparently due to the use of milk, the agents of infection, however, having been demonstrated as bacilli of the human type, the lesions, etiologically, were of human origin. In nine cases (eight adults, one child), members of one family, the sputa were examined showing at the time of examination by the county physician, signs of pulmonary disease. Moreover, the total number of cases included persons suffering from pulmonary disease long before the ingestion of raw milk was begun. In seven of these cases the inoculation, usually repeated several times, of guinea pigs with the expectoration gave negative results in the search for tubercle bacilli, thus excluding any infection by the milk route. In the two remaining cases, tubercle bacilli were demonstrable, but of the human type; both patients were adults, while the children using the same milk presented no phenomena indicative of injury due to the milk. Hence, in these two instances also, the assumption that infection was due to the use of milk had no warrant.

Of 360 individuals using the fresh (raw) milk from cows with tuberculosis of the udders, there were, therefore, but two instances of positive infection; twelve cases classified as suspicious, but, up to the present time, without positive demonstration; the remaining 346 individuals (among them, 136 children) showing hitherto no recognizable, injurious influence of the milk upon their state of health.

Of the 268 cases (those previously mentioned excepted) in which the milk from cows with tuberculous udders was used but (according to statements made) in a cooked condition, instances of swelling of the cervical glands were also found, viz., in twelve of 133 children, and in one of 135 adults. The number of cases in which tuberculosis was suspected, was here, as a matter of percentages, even greater than where this milk was used uncooked.

Weber emphasizes some cases, particularly manifest, in which, for example, a nursing child was given now the raw, now the cooked milk from a cow with tuberculosis of the udder, the child remaining healthy.

It is pointed out, furthermore, that perhaps a number of the individuals observed

had tuberculous foci in the glands, without development of phenomena in evidence thereof, but it must be accepted as based upon the results noted in the summarized investigations that invasion by bacilli of the bovine type leads in a proportionately small number of cases only to an infection.

Weber, therefore, arrives at the conclusion: "The danger threatening mankind from the use of milk or dairy products derived from cows with tuberculous udders is extremely slight in comparison with that directed against his environment by a patient tangibly ill with tuberculosis of the lung or phthisis."

The summary of these investigations favors also Koch's view that in warring upon tuberculosis, measures directed against its transmission from man to man play the most important and essential role. As is well known, Robert Koch was led to this conclusion by the conviction, gained in experimental work, that the bacilli causing tuberculosis in cattle were not identical with those causing tuberculosis in man, and that their distinction was possible. He and his followers could show that tubercle bacilli, bovine in origin, are rarely found in man, and then only in the tuberculous lesions which, by their location, point to an invasion of the germs along the digestive tract. The results of these experimental investigations coincide well with those of the summary of official research.

It is much to be desired that the conditions of health of the individuals observed in the summary be kept in view for a number of years, that the objection or opinion may be controverted that their tuberculous infection is merely latent, developing after a time into pulmonary tuberculosis. At any rate, it must be admitted that it is extremely odd, if the bovine bacillus, considered by many investigators as particularly virulent for mankind, may remain for years in such a number of young individuals without developing a single case of tuberculosis of the bones, articulations, or meninges. The tuberculogenic microbe passed from man to man shows, however, no tendency to spare its victims so unexceptionally.—H Kossel in *Deutsche medicinische Wochenschrift*, February 24, 1910, via *N. Y. Med. Journal*.

Correspondence

JAPAN AND THE JAPANESE.

YOKOHAMA, JAPAN, Jan. 10, 1910.

Editor West Virginia Medical Journal.

We are now at our last stop in what is termed the Orient, and it is the universal verdict that the last is the best. We had, as I wrote you, a most cordial welcome at Manila, but that of Japan far excels it. At every stop from Nagasaki to this place our greeting has been of the most enthusiastic and warm-hearted character. No one need doubt in the slightest, the quality of the friendship felt for our people by all classes and conditions here. The demonstration has been simply overwhelming and touching to a degree. Let me describe a few of its features. We shall take Nagasaki, as that was our first landing, and it was there that we lost our hearts to the Japanese. As we steamed into the harbor we were met at quarantine by the port health officers. After an inspection of the passenger list, and a personal inspection of all the passengers by as polite and courteous a party of gentlemen as ever did a job of this kind anywhere, we were sent up to our anchorage. Arrived there, the scene was inspiring. Although it was raining in torrents—this was December 29th—the water all around us was alive with steam launches and boats of every description, fairly hid in festoons of Japanese and American flags intertwined, with evergreens at every masthead. Whistles were blowing, flags dipping, and from a float a short distance away, rockets were let off about every half minute. These, of course, could be heard only, until they exploded. Then, out of the curling smoke would appear, sometimes, two small flags, United States and Japan, with little parachutes to buoy them up, at other times two figures, a man and a woman, waltzing, would float out of the smoke and sail slowly out of sight, pictures of grace indescribable. From an official launch, covered with bunting, came up a delegation of city officials to formally welcome us to Japan and to offer us every facility for making our visit one of pleasure and profit. When this ceremony was over we were taken ashore in the neatest, cleanest steam launches ever. As we stepped on the dock we were greeted by a great company of citizens in silk hats

and frock coats shouting welcome, and waving flags. Further along a great throng of the general populace had gathered, and there the enthusiasm of welcome was at white heat. Shouts and cheers and a forest of waving flags made us almost doubt if it could really be we that had evoked this feeling. The sturdy little veterans that humiliated Russia could not have been received more heartily on their homecoming. On reaching the street nearly 600 "rickshaws" started with us to make a tour of the town. Then began a veritable triumphal march. The streets were lined with people, men, women, children and babies, the boys being especially numerous and vociferous. The two flags were displayed at every doorway. Strings of flags, of lanterns, of evergreens forming the word "welcome," were stretched across the main streets about every twenty or thirty feet, the rickshaws carried two flags, and in all the bye streets and poorer quarters, every house had an American flag displayed. Sometimes these were evidently home-made, and occasionally a group of small boys would be seen holding up a horizontal streamer on which some one of them had scrawled the word "welcome." It seemed as if there must have been more U. S. flags in Nagasaki that afternoon than in the whole United States. After visiting the great camphor tree 20 feet or more in diameter, and an ancient temple, our triumphal march ended at the U. S. Legation, where our consul, Mr. Deickman, received us informally but with great warmth and cordiality. We were pleased to find that our former incumbent of the position, Prof. Birch, is still pleasantly remembered. That evening we were entertained by the Dramatic Club, at their hall. The performance was indescribable, but the costumes were gorgeous, the music rather further along the road towards melody than the Java variety, but lacking the quality of timbre, although a good deal of wood was used in its production, the acting fierce and pacific by turns, but on every hand and all the time the delicate attentions of our entertainers were profuse and delightful. The next day, which was bright and pleasant, we visited the venerable Suwa Temple, which is reached by a long flight of stone steps. In the grounds adjoining, a dancing performance, by the genuine Geisha girls, and a fencing and wrestling exhibition, the

jiu jutsu, were provided for our entertainment. This wrestling exhibition was very wonderful. The dances were to the same brand of music that had entertained us the night before. A temporary stage, prettily decorated, had been provided, and the beautiful and elaborate costumes of the dancers, their graceful movements and poses, their comely features and dainty figures were fully equal to the conceptions previously formed in our more or less excited imaginations. That evening a grand lantern parade, the first one given since the one that celebrated the return of their army from the Russian war, was given as a special mark of honor to us.

This sort of reception followed us everywhere, not so extensive in most places, but in one, at Osaka, it was far surpassed in one of its features. Osaka is a city of over a million inhabitants, and for three hours in the forenoon and two in the afternoon we passed through one continuous jam. Thousands of police kept a little passage way open for the "rickshaws," through mile after mile of streets jammed with shouting, cheering, flag waving people. It seemed more like a great political parade crowd in New York than anything else. From first to last I should say that on this one occasion I was reviewed by not less than 300,000 people. Nagasaki is the great tortoise-shell manufacturing center. We sailed for our next stop, Kobe, on the last day of the year, and spent New Year's day on the "inland sea," reaching Kobe on the 2nd. This is a large city and is celebrated for its manufactures of cloisonne and satsuma. It is on a plain at the foot of high, precipitous hills, almost mountains. The usual series of temples is to be seen but a great bronze Buddha is the most interesting thing here. From Kobe to Osaka, where we got our overwhelming greeting, is about an hour's ride by rail. This is a great manufacturing city, and next in size to Tokyo. The great castle here is more than 300 years old. In the walls are some immense stones, rivalling some of the Egyptian monsters. The great five-storied pagoda and the great bronze bell stand next in point of interest. The former was built about the year 600 A. D., is of wood beautifully carved. The latter is quite modern; it stands in a building near the pagoda, and is said to be the largest ever cast, weighing about 150 tons.

Next we go to Kyoto, the capital of Japan, until about 40 or 50 years ago. Besides the usual round of temples, Shinto and Hindu, we saw the process of making the cloisonne ware. Our next point was Yokohama. From there we made side excursions. One to Kamakura, where the great bronze Buddha stands, or rather sits. It is 50 feet high, was once inside a temple which was washed away by a great tidal wave years and years ago. Next, to Tokyo, the present capital. A rickshaw ride to the parks, the imperial castle, and then the great review on the military parade ground. This is an annual affair, occurring on the 8th of January. The Emperor, with the Prince Imperial, Gens. Oku, of Mukden, and Nogi, of Port Arthur fame, passed in review about 35,000 of the flower of Japan's army. A special tent had been erected for our accommodation, where we could be quite near the imperial party. It was a great occasion and one not soon to be forgotten. An afternoon reception was also given by Count Okuma at his residence and grounds. His beautiful collection of orchids and other rare plants was thrown open to view. Athletic contests and dances and feats of Japanese jugglery were also shown. The Count is one of the ablest of the modern Japanese statesmen, and was a leader in Japan's newer statesmanship. He is now an old man, and retired from public life, living the life of a sage counsellor to his people. A five hours' ride from Tokyo brings us to Nikko. A Japanese proverb says: "Do not use the word 'magnificent' till you have seen Nikko." The station is 1745 feet above sea level, but the mountains all around rise one or two thousand feet higher. A wonderful growth of cryptomerias, trees somewhat like our sequoias, covers the mountain sides, and avenues, many miles in length, with double rows of them, planted more than 300 years ago, extend in various directions. These trees are very tall, straight and beautiful. Some are 6 or 8 feet in diameter, and they must be 200 feet or more in height. Here are the tombs of Ieyasu, the founder of the Tokugawa dynasty, and his grandson, Iemitsu, the greatest of the Shoguns. No words can describe the marvellous architecture of these wonderful buildings, their magnificent carving, their gorgeous gilding and coloring. They are Japan's most wonderful contribu-

tion to the world's architectural treasures, and rank with the palaces and mosques of Delhi and Agra, and with the pagoda and temples at Rangoon. These and the great flights of stone steps up the mountain sides, with their heavy stone balustrades, represent such a vast aggregate of human labor and skill that one wonders how it was ever accomplished. This was the work of the 17th century, about the time we began our course of destruction of our own noble forests. What the condition and state of our country would have been in this year of grace 1910, had the Japanese instead of Europeans discovered and settled it, would be food for much pleasing conjecture, but surely one thing might safely be assumed. Our noble forests would not have been so ruthlessly sacrificed. And yet these Japanese build almost everything of wood.

The cities of Japan are the paradise of the shopper. The beautiful silks, porcelains, bronzes, wood-carvings, tortoise-shell work, cloisonne, satsumia, damascene, linen and silk embroideries, that are to be seen on every hand are enough to satiate the appetite of the most inveterate devotees of the bargain counter. Courtesy, good nature and untiring willingness to accommodate customers are everywhere shown. Under these influences, it becomes, indeed, almost a joy to exchange one's "lucre" for ownership of some of the many artistic and beautiful things that are displayed on every side.

The Japanese are eminently endowed with the artistic temperament. In almost everything they do, this highly developed faculty for dainty decorative effect shows itself. Among their most noticeable traits are a refined and altogether charming politeness, courtesy, readiness to oblige and desire to please. They are quick and alert, mentally as well as physically. Eager to acquire new or progressive ideas; industrious and sober. I did not see a single intoxicated person during the entire tour of the islands. Another very noticeable thing was the absence of beggars, a striking and most welcome variation from all of our other Oriental experiences, China alone excepted. They evince a surprising degree of interest in educational matters. The large university at Tokyo is sought by students from all parts of the empire. Especial importance is attached to the acquisition of foreign lan-

guages. English, French, German, Russian, Korean and Chinese are taught, and those who expect to enter a business or commercial career are expected to acquire proficiency in all of these.

As a race, the Japanese are undersized, but well developed and vigorous. Their women are modest, graceful and pretty, and with their dainty costumes and demure demeanor, exceedingly attractive. As a people they seem to have a great partiality for America and Americans. They regard us as benefactors and sympathizers in their aspirations for higher development and progress. It was with feelings of genuine respect and unstinted admiration that we bade adieu to Japan and her hospitable people.

L. D. WILSON.

CONTRACT PRACTICE.

Editor West Virginia Medical Journal.

MORGANTOWN, W. VA., JUNE 10, 1910.

I liked your editorial on contract practice. I have done contract practice for the M. & K. railroad for over seven years, and I find it a good thing for the doctor and a better thing for the employee. The work insures a reasonable average return for services rendered. It assures the employes good service at a nominal cost.

I find that the married men receive very much greater service than they pay for, while the single men pay for more than they get. This is not bad, for the whole thing is looked upon as a kind of insurance among the men. "If it don't do me any good, it will help some other poor fellow out." This is the way they express it.

The M. & K. employes pay 75c per month for single men and \$1.25 per month for married men and their families. This includes free treatment for all medical cases, all accident cases, and many simple surgical cases. But our regulations expressly state that "these privileges are not extended to those who are injured while violating the laws of the land; nor for injuries or diseases brought on by alcoholic excesses, nor for venereal diseases. Employes who refuse vaccination will not be treated free in case of small pox, but will be charged double the usual fees for medical calls.

"Those who are injured at their work are treated till well, or for one year. Those

taken ill with disease are treated till well, or for three months after they cease to work for the company. Prescriptions for alcoholics shall not be asked for. When the attending physician wants the patient to have alcoholic stimulation, he will prescribe it.

"Any employe who habitually uses alcoholic beverages is liable to summary dismissal from the services of the company.

"Obstetrical cases are charged extra."

I find where conscientious service is given the contract arrangement is satisfactory to all concerned. I am not much of a socialist, but I believe that it would be a good thing, everything considered, for most of the medical and surgical work to be done by contract. For example, if a doctor would have one hundred families at \$2.00 per month, it would insure each family good service and not drain their resources in case of prolonged sickness. On the other hand, it would give the doctor an income at least as good as a college professor, and he would have ample time to study or recreate. This subject has more than one side.

But lodge practice at \$2.00 or \$3.00 a year has no place for entertainment in any sensible man's brain. Yet I have known good men who have joined lodges to get this work—and when they had rendered strictly first-class service to the lodge members for a while, dropped out, but carried much of the work with them. In other words, they have done this as an ethical and cheap method of advertising.

C. H. MAXWELL.

THE KIND OF A RESOLUTION THAT OUGHT TO INSURE SUCCESS.

Here is the New Year's resolution of the manager of a California public service corporation:

To respect my work, my associates, and myself. To be honest and fair with them, as I expect them to be honest and fair with me. To be a man whose word carries weight. To be a booster, not a knocker; a pusher, not a kicker; a motor, not a clog.

To have my expectations of reward on a solid foundation of service rendered; to be willing to pay the price of success in honest effort. To look upon my work as opportunity, which should be made the most of, not as a painful drudgery to be reluctantly endured.

To remember that success lies within myself—in my own brain, my own ambition, my own courage and determination. To expect difficulties, and force my way through them; to turn hard experience into capital for future struggles.

To interest myself heart and soul in my work, and aspire to the highest efficiency in the achievement of results. To be patiently receptive of just

criticism and to profit by its teachings. To treat superiors and equals with respect, and subordinates with kindly encouragement.

To make a study of my business duties; to know my work from the ground up. To use system and method in all I undertake. To find time to do everything needful by never letting time find me idle. To value time as a miser does dollars; to make every hour bring me dividends in specific results accomplished. To steer clear of dissipation, and guard my health and body and peace of mind as my most precious stock of trade.

Finally, to take a good grip on the joy of life; to play the game like a gentleman; to fight against my own weakness, and to endeavor daily to develop in manliness and business capacity.—*Exchange.*

ATLANTA ANTIVACCINATIONISTS.

A noble band of would-be antivaccination martyrs, who were willing and anxious to sacrifice themselves on the altar of principle and smallpox, held a meeting in Atlanta a few days ago. Their dream was rudely interrupted and their pipes put out by Dr. J. P. Kennedy, the vigilant and energetic health officer of Atlanta, who walked into the meeting place, and catching the eye of the president of the antivaccination society, announced that he was a health officer and was there for the purpose of seeing that every one present was vaccinated. He was supported in his assault on the sacred rights of personal liberty by a number of police officers. After the martyrs had recovered from the first shock of surprise they became very indignant and the health officer was denounced in no uncertain terms. On taking a census of those present it was found that two-thirds of them were already protected by vaccination and some of them had been vaccinated only recently. Presumably these were loudest in their protests. The names and addresses of those not vaccinated were taken, and after a grand-stand play in the local courts the vaccination will be made unanimous. City Health Officer Kennedy is to be commended for his prompt action in thus forcibly calling the attention of those misguided individuals to the fact that they were not only violating the ordinances of the city, but were endangering the lives of their neighbors and friends by not being vaccinated and by attempting to influence others against vaccination.

Assert your individuality. Dare to be singular. Do not take your cue from others. Dare to be laughed at. Don't run with the crowd. Any dead fish can swim with the tide.

When principle bids you stand upright, it is better to break than to bend.

"They are slaves who dare not be
In the right with two or three."

Stand by your convictions, and even those who sneer in your face will honor you in their hearts. Courage, like honesty, is the best policy. What would the nightingale care if the cold toad in his dark shadows croaked at her singing. And what need you care for the sneer of those who grovel upon earth?

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor*.

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WHEELING, W. VA., JULY, 1910.

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

If the JOURNAL does not reach you by the 10th, drop us a card.

The next annual meeting of our State Medical Association will be held in Parkersburg on October 5th, 6th and 7th.

If you want to bind the third volume of the JOURNAL, send to us for title page.

THE FLY.

The numerous tribes of insect pests that from time immemorial have occupied their all too abundant leisure in pestering, at hours seemly as well as unseemly, and in ways sundry and diabolical, that much occupied and long-suffering part of creation called the human race, have of late had presented to them the novelty of a new experience. Their hitherto patient victims have waked out of their lethargic submission to their peskiness, and are showing a spirit of resentment and hostility that promises at least a modicum of trouble for these tormentors.

The pleasure one feels in discovering evil traits in those towards whom one's enmity is directed, is being amply supplied by the results of inquiry and investigation into the life-habits, environment and moral nature of these pests, which some of our human kind, who are wise and learned enough to do so, have been aroused to make. An actively hostile crusade has at last been undertaken against them, and, armed with coal oil and chemicals, a reckoning such as they have never dreamed of is moving swiftly upon them. No consideration is to be allowed for the half-pious thought that as objects dignified by the peruspension of creative power, their place in nature should be respected and approved. Destruction, on the contrary, as wide and complete as the spirit of devastation can compass, with total extinction as the only condition that could fully satisfy the demands of inflamed resentment, is now the aim and purpose. No more does the gentle spirit of Uncle Toby allure us from our fell intent. The offender caught now, finds no open window provided for his exit to liberty. No amiable postulate, that "the world is large enough for both of us." It no longer is.

While the tribes brought to the bar under this indictment are as yet but a few, their individual members are legion. The mosquito stands convicted of propagating malaria and yellow-fever, and it would be rash to assume that these were the limit of its malefactions. An Italian has just announced that pellagra, until now supposed to be caused by eating unsound maize, is communicated by the bite of certain species of the gnat. But it is the omnipresent house fly, *musca domestica*, of which we wish to speak. The season for its active propagation and greatest capability for harm is now here, and a few words concerning the habits, the danger its presence menaces, and some of the well approved methods for its destruction should be opportune.

The fly is a filth insect from first to last. It is propagated in filth, and lives on filth all the days of its life. Stables, manure-heaps, offal and garbage accumulations are its breeding-places. The eggs are laid in these offensive collections, are hatched out as larvae or grubs, and from these are born the full-grown insects. There are never any half-grown flies. The fly is an emi-

nently sociable creature. It is partial to the society of human beings. Its appellation, house-fly, is most appropriate, as it almost always selects for its settled habitation the dwellings of men. They soon abandon an untenanted house. Who has not noticed how clear of these creatures churches are when first opened after the week's closure, and how soon they begin to collect as the congregations gather—to the no slight disturbance of that peaceful lull of worldly feelings that softly steals over the listeners as the sounds of sermon and lesson grow faint, as if "by distance mellowed."

These offensive creatures revel in all manner of filth, swarm in outhouses, on dead animals and excreta of all kinds. Their feet and bodies become contaminated with whatsoever they crawl over or feed upon, and being exceedingly active, they scatter whatever of contagion they thus accumulate far and wide. A tuberculous sputum on the street, or the excreta of a typhoid or diphtheritic patient, collects a group of them, and next thing, they are settling down in some one's kitchen, pantry or dining room, crawling over the food, sipping the cream or milk, alighting upon the baby's lips or infecting its nursing bottle; or instead, visiting the corner grocery, shedding their accumulations of filth and germ life on sugar, fruits, vegetables, and what not. How many cases of typhoid, scarlet-fever, diphtheria, or tuberculosis that seemed so mysterious and unaccountable have been caused in this way, who can tell? All remember the sickening record of the Chickamauga army camps during the Spanish war. There is another way in which flies convey and distribute disease germs. They suck up and swallow with their filth-diet all manner of germs and spores. These pass through their bodies and are expelled with the excreta, unharmed and still capable of germination and virulence. Hence, the annoying and disgusting fly-specks that are deposited by the million on food, fruits, cooking utensils, kitchen and dining tables, ceilings, chandeliers, window-panes, in fact on everything in and about the house, are likely to contain, and in numberless instances do contain infective germs in countless numbers. A writer in a recent number of the *National Geographic Magazine* gives some startling facts, the result of his investiga-

tions on this phase of the subject. A fly was fed at 9:23; between that time and 11:26, a little more than two hours, it passed its excreta twenty-four times. The interval between evacuations varied from one to fifteen minutes, the average being four and a half minutes. Of the twenty-four evacuations, ten contained spores, the number varying from one to "very many." "No wonder," he remarks, "that fly specks are common if the fly evacuates once in five minutes all day long." When we consider that flies in feeding on the excreta of such patients swallow millions of typhoid or tubercle germs, that these lose none of their virulence in passing through their bodies, and that they are deposited in the excreta on just about everything we eat, drink or handle, is it any wonder that once in a while, cases of disease spring up when contact with the contagion cannot be traced. Such danger is especially great when flies have access to milk. This is an ideal culture material, and a few germs dropped or washed from the body of one fly may develop into millions in a few hours?

The deductions to be drawn from a consideration of these facts are very obvious. Flies should be kept out of our houses, and especially out of sick rooms, and from contact with, or access to the persons and excreta of the sick. They should be kept away from all articles of food and drink. Their breeding places should be destroyed or disinfected. Kitchen, dining-room, pantry, as well as the stable and premises should be kept scrupulously clean. Cleanliness and flies are to a considerable degree incompatible. A circular recently published by the American Civic Association gives a number of practical hints on these matters which cannot be too strongly commended. "Screens for houses and food. Keep garbage receptacles securely covered. Remove stable manure every three or four days, or disinfect with lye, chloride of lime or crude carbolic acid. To clear a room of flies, heat a shovel or any similar article, and drop thereon 20 drops of carbolic acid: the vapor kills the flies. A better and cheaper plan is to put a spoonful of formalin in a gill of water and expose it in the room. Another is, to dissolve one dram (60 grains) of bichromate of potash, which can be obtained at any drug store, in two ounces (about four tablespoonfuls) of

water, add a little sugar and place the solution in shallow dishes about the rooms."

A vigorous and earnest campaign conducted on these lines will accomplish wonders in ridding the household of this insufferable pest, and will conserve the health and comfort of the inmates in a degree by no means yet fully appreciated.

L. D. W.

REORGANIZATION OF THE AMERICAN MEDICAL COLLEGE OF ST. LOUIS.

Believing that the time for sectarianism in medicine has passed, the Trustees of the American Medical College of St. Louis, at a meeting held on June 6th, 1910, unanimously decided that, in the future, the American Medical College shall be conducted as a REGULAR College of Medicine.

New Officers were elected as follows:—James Moores Ball, M.D., Dean; J. J. Link, M.D., Treasurer, and W. T. Burdick, M.D., Secretary.

The 38th annual session will open on September 5th, 1910, and continue for nine months.

We are glad to see this mark of progress. There is no need of eclecticism, homeopathy, or any other sect of medicine, although we have undoubtedly learned something from each.

MILLIONS SPENT ON FRAUDS.

Fake Consumption Cures Cheat Public Out of \$15,000,000.

Over \$15,000,000 annually is poured into the coffers of those who exploit and advertise fake consumption cures, according to a statement issued to-day by the National Association for the Study and Prevention of Tuberculosis; and for this vast sum the victims receive nothing in return, but are often permanently injured and in the majority of cases cheated out of the chance for a real cure. Worse still, most of this money is paid by those who can least afford it.

The National Association has investigated several hundred so-called "cures" and "treatments" for tuberculosis now being advertised throughout the country, and finds that more than \$3,000,000 a year is being spent in soliciting the patronage of the public. On examination, it has been found that the great majority of these "cures" contain harmful and habit-forming drugs, such as morphine, opium and chloroform. None of them will cure consumption. The only cure for this disease that has ever been discovered is the combination of fresh air, rest and wholesome food. All of the "cures" that attempt to destroy the tubercle bacillus without these or to stop the progress of the disease in some mysterious way are branded as frauds and impositions.

Three classes of "cures" are distinguished by the National Association. In the first class are included devices and drugs which can be bought for any sum ranging from ten cents to five dollars at a drugstore. The United States Department of Agriculture has just issued a bulletin in

which some of the most used of these drugs and remedies are analyzed and condemned. The second class of "cures" includes the "institutes," "professors" or companies of "doctors," who for a consideration guarantee to cure consumption by some secret method of which they are the sole proprietors. There are nearly one hundred and fifty of these institute frauds in the United States, cheating the people out of millions of dollars annually.

In the third class of "cures" are placed a number of home-made remedies, which either through ignorance or superstition have been advanced as treatments for tuberculosis. Some of these are, onions, lemons, rattlesnake poison, coal dust, lime dust, pigs' blood, dog oil, milk "strippings," and even alcohol. These will not cure consumption declares the National Association. No drug, gas or other material has yet been discovered, which, when eaten, inhaled or injected into the body, will kill the germs of tuberculosis. Fresh air, which contains more oxygen than any substance known, will destroy these germs of tuberculosis, if it is breathed continuously for a long enough period, and if rest and wholesome food are employed at the same time to build up the body.

THE HENRY PHIPPS INSTITUTE FOR THE STUDY, PREVENTION AND TREATMENT OF TUBERCULOSIS.

Mr. Henry Phipps of New York has selected the University of Pennsylvania to carry on the work of the Phipps Institute. Mr. Phipps has already acquired ground in Philadelphia on which will be erected a hospital for this purpose. The extent of the benefaction exceeds \$5,000,000.

The report of the Committee appointed to consider the future policy of the Institute has been approved by Mr. Phipps and the Trustees of the University.

The work will be divided into three general departments, each of which will be presided over by a director. For the Directorship of the Laboratory, Dr. Paul Lewis, now of the Rockefeller Institute, has been selected. For Directorship of the Sociological Department, Mr. Alexander M. Wilson, of the Boston Association for the Relief and Control of Tuberculosis. Dr. H. R. M. Landis has accepted the appointment as Director of the Clinical Department.

In addition to a board of eight directors who will be directly responsible to the Trustees of the University, an Advisory Council has been created and will meet annually at the Institute. The following have accepted the invitation to serve as members of this body: Dr. Samuel G. Dixon, Harrisburg, Pa.; Dr. S. McC. Lindsay, New York City; Dr. William H. Baldwin, Washington, D. C.; Dr. Hermann M. Biggs, New York City; Dr. William H. Welch, Baltimore, Md.; Dr. Theobald Smith, Boston, Mass.; Dr. Gideon Wells, Chicago, Ill.; Dr. Simon Flexner, New York City; Dr. James A. Miller, New York City; Dr. Lawrason Brown, Saranac, N. Y.; Dr. Henry Baird Favell, Chicago, Ill., and Dr. James Pratt, Boston, Mass.

REPORT ON THE ALCOHOL CONGRESS.

Alcohol and alcoholism are two of the real and substantial enemies of moral, artistic and commercial progress of the human race, according to the report of the United States delegates to the Twelfth International Congress on Alcoholism, made public by the State Department recently. The delegates were appointed by Secretary Knox as one of his first official acts. The congress was held last July in London, and twenty-five governments were represented. Three departments of the United States government were represented by delegates, the State, Navy and Treasury. Twelve representatives went abroad, and all of them signed the report, the finding of which is to condemn the drinking habit as dangerous to public health and morals and subversive of national, moral, commercial and military greatness. While the congress urged the necessity of imposing the most rigorous restrictions on the sale and traffic in alcoholic liquors, it regarded as equally important the need of educating the younger generation to a true knowledge of what alcohol is and what its effects on the human system are. The delegates believe that the numerous recent discoveries as to the harmfulness of drunkenness, and even of "moderate" drinking, also, should be set before children in order that they may see the danger of the practice. The value of this method of combating the growth of the liquor habit is emphasized in the report. While acknowledgment is made that the organization of associations of juvenile abstainers is useful, it is declared the chief reliance should be placed on scientific temperance education in the public schools as a means of ridding the public mind of errors about the effects of alcohol and substituting the facts that science is declared to have evolved about the use of the beverage, even when taken in small doses. The United States, according to the report, made an unusually good showing in its exhibits. Germany also was to the fore with a particularly fine collection of colored charts showing the effect of alcohol on the body, the family and on society.

AMERICAN DRUGGISTS SYNDICATE.

In the Department of Pharmacology of *The Journal A. M. A.*, April 9, the American Druggists' Syndicate is again discussed. It appears that this co-operative "patent medicine" concern has lately increased its capitalization to two and one-half million dollars, and is trying to dispose of some of its newly created stock to physicians. *The Journal* says that the indignant protests that have poured in from the medical profession could be no more numerous if the Lydia Pinkham or Orangeine people should ask physicians to purchase stock in their respective companies. In its appeal to physicians, the A. D. S. issues a booklet in which the vast profits that have been made from the sale of some of the most widely advertised nostrums are called attention to. The physician is asked to purchase stock in the A. D. S. so that a competing line of "patents" may be marketed and the medical men thus participate in the profits accruing from the sale thereof. According to the book-

let, the A. D. S. remedies are to be offered by the druggists to all customers who ask for some other line of "patent medicines," and the statement is made that according to "leading druggists" it is possible to sell an A. D. S. product to seven out of ten people who call for other preparations, while the three people who object to a substitute may be won over to the A. D. S. product "through intelligent literature [*sic*] to be given them with the packages they insist on." The physician, by purchasing stock in the A. D. S. is "given an opportunity to share equally with druggists in the profits derived from the sale" of A. D. S. remedies. As to the ethical side of the question, the A. D. S. booklet says that "old worn-out, moth-eaten notions of ethics" should not prevent physicians from participating in profits such as come from the sale of A. D. S. products. In another part of the booklet the physician who persists in dispensing his own remedies is made the subject of a story that apparently contains a veiled threat. It describes how two druggists, in a town where such a physician lived, brought the medical man to time by hiring a "bright and competent physician to write free prescriptions and make free professional calls." The prescribing physician, according to the story, went to the druggists in a few weeks and promised to be good. Says the A. D. S.: "This is intended only as an illustration of what could be done by pharmacists in extreme cases, if they found it necessary, as it was in this instance." *The Journal* expresses the opinion that such a story is not likely to engender a very kindly feeling between druggists and physicians. The booklet as a whole, is characterized as being, in the words of a correspondent, "truly a monumental bit of impertinence."

A NATIONAL HEALTH DEPARTMENT.

406 Prospect Street,
New Haven, Conn., June 11, 1910.

Editor West Virginia Medical Journal.

Buying newspaper space appears to be the latest method of opposing a popular movement. Within a few weeks, three enormous advertisements, by a so-called "League for Medical Freedom," have appeared in newspapers throughout the country urging people to write their congressmen in protest against the Owen bill for a National Department of Health. Much to the amusement of congressmen, these advertisements have resulted in numerous telegrams, based on the absurd idea that the Owen bill aims to regulate the practice of medicine.

The result may be to aid, rather than hinder, the progress of the health movement. Already newspaper editorials—such as that which recently appeared in the *New York Times*—resent the buncombe of these advertisements.

But besides adding to the "gaiety of nations," this incident has created an appetite among the general public for more knowledge as to what this opposition signifies.

As president of the Committee of One Hundred on National Health, which was challenged in these advertisements, I wish to emphasize the following facts:

First. As the enclosed bulletin of the Committee of One Hundred indicates, the real strength of the opposition evidently comes from commercial interests, such as the quack medicine interests and others who have reason to fear the Pure Food and Drug Act. While Christian Scientists and other "drugless" cults are denouncing drug doctors and denouncing a "medical trust" which does not exist, these cults are themselves playing into the hands of a drug trust which does exist.

Second. Under our constitution, the Federal Government could not, if it would, regulate the practice of medicine.

Third. The Owen bill contains no provision aiming to regulate the practice of medicine.

Fourth. Section 8, in the Owen bill, the section authorizing the establishment of "chemical, biological and other standards," has been eliminated entirely from the bill, although only a heated imagination could have construed this section as attempting to regulate the practice of medicine.

Fifth. Senator Owen did not prepare his bill at the instance either of the American Medical Association or of the Committee of One Hundred on National Health. It is true, however, that the American Medical Association and the Committee of One Hundred heartily endorse the bill in preference to any of the other numerous health bills now before Congress.

Sixth. The Committee of One Hundred on National Health is not a medical organization. It did not originate with the American Medical Association, but with the American Association for the Advancement of Science. It is allied with the American Medical Association only in the same sense that it is allied with labor organizations, farmer organizations, life insurance companies and various other agencies which are working to improve public health.

Seventh. While opposed to fraudulent quackery, which is always imposing "fake" medicines and cure-alls on the public, the Committee of One Hundred on National Health is not devoted to any particular school of medicine to the exclusion of others. Curiously enough, it was a Christian Scientist who moved the appointment of the Committee of One Hundred. Many members of our committee have been noted for their independence of conventional medicine, among them being ex-President Eliot of Harvard University, Mr. William H. Allen, Mr. Bok, editor of the Ladies' Home Journal, Mr. Horace Fletcher, Dr. Luther H. Gulick, President G. Stanley Hall, Mrs. John B. Henderson, Dr. J. H. Kellogg, Mr. S. S. McClure of McClure's Magazine, Dr. Richard C. Newton, who has also called attention to some merits in osteopathy, and Mr. Nathan Straus. I may add that in my report on "National Vitality" to President Roosevelt, I put myself on record as favoring "medical freedom." I can endorse almost all of the position on that subject taken by Mr. Flower.

Eighth. A Department of Health in America, like the Department of Health in Germany or anywhere else, will have better things to do than regulate the practice of medicine. It will regulate the misbranding of foods and drugs (there's the rub!), the pollution of streams, the inspection of meats and quarantine, and will obtain and distribute information in regard to health of

human beings just as the Department of Agriculture does in regard to the health of hogs and cattle.

When the "League for Medical Freedom" suddenly appeared on the horizon, our movement had encountered substantially no opposition except among quacks and quack medicine proprietors. On the other hand, our movement has the support of the President, of both political parties, as expressed in their platforms, of scientific, philanthropic, medical and labor organizations and the granges, as well as the life insurance companies, of Dr. W. H. Wiley of the Bureau of Chemistry and of General Walter Wyman of the Public Health and Marine Hospital Service. The general public will find it hard to believe that these endorsements, especially the hearty endorsement of the life insurance companies, can be in the interests of a "medical trust."

For further information, I would refer the reader to Bulletin 41 of the Committee of One Hundred about to be issued (address Drawer 45, New Haven, Conn.) to the Senate reports (Nos. 1 and 2) on hearings on S. 6049 (address Senate document room) to House reports of hearings on health bills June 2-6 (address document room House of Representatives) to Senator Owen's speeches (address Senator Owen) and to my report on National Vitality (Senate document 419).

Very sincerely yours,

IRVING FISHER,

President Committee of One Hundred on National Health.

BEWARE, O YE DOCTORS.—B. O. Flower (Christian Scientist) of Boston came to town yesterday. He came prepared, too, copying the method of Prince Tokugawa, the illustrious Japanese who left here last week, with a "canned" interview, which he had dictated and which was typewritten, and which he handed out eagerly to every one who called at his office in the Metropolitan Building and made a noise like a reporter.

Mr. Flower announced that he was strongly opposed to doctors, at least to all the doctors of America who were members of the American Medical Association, and as Flower said himself that a great majority of doctors were in the association it was apparent right at the start that he was in for a big fight, and didn't blanch at the prospect.

Speaking generally, Mr. Flower says that doctors charge too much and are aiming at political influence, but particularly, as he candidly confessed, his objections were that doctors other than those of the allopathic school were not recognized sufficiently, and that the Owen bill, now before the Senate, contemplated a still greater recognition of that school. Flower is not a doctor of any school, but he admits that he has had a leaning since childhood to the homeopaths.

On the door of his office in the Metropolitan Building is inscribed "The National League for Medical Freedom," and Mr. Flower's carefully prepared interview states that the league was formed for the purpose of fighting the proposed establishment of a national health bureau.

This bureau, which would be created by the

Owen bill, Mr. Flower declared, would intrench in power the "doctors' trust."

One insurgent interviewer, departing entirely from the rules of the "canned" interview, wanted to know what the doctors' trust was, and Mr. Flower interjected the explanation that it was the great body of doctors who charged for their visits.

"Why," said Mr. Flower vaguely, and with a wide, sweeping gesture, "all those doctors who charge the poor men for their visits charge them a fixed price, no matter how poor they are—the patients, I mean."

The opening sentence of his "interview" claimed for the new league the membership of homeopaths, osteopaths, Christian Scientists, and anti-vivisectionists, and gave a list of members of the advisory board, made up chiefly of residents of Chicago, Kansas City and other Western cities.

His little philippic teemed with such gentle expressions as "medical autocracy," "engine of oppression," "monopoly-seeking medical men," "despotism in medicine," and it seemed as Mr. Flower talked on that the doctors of the country were pretty close to carrying away the National Treasury or something like that.

However, as he continued, it appeared that there was no fear of that as long as the National League for Medical Freedom, organized yesterday, was in the field. Incidentally, President Flower stated for the league that the new organization was well equipped with funds to carry on the fight.

Senator Robert M. Owen of Oklahoma, who introduced the bill which contemplates the establishment of a national health bureau or department, when seen yesterday did not seem to be unduly excited about the possible opposition threatened by Mr. Flower's league.

"That kind of talk is all nonsense," said Senator Owen. "There is nothing in it. My bill doesn't contain a word about curtailing curative methods; it seeks only to further preventive methods."

Mr. Flower admitted unblushingly that he was the leader of the third great movement of the world's history.

"There was the political movement for democracy in politics and the religious movement for democracy and toleration in religion, and now the medical movement for democracy in medical matters," he explained, and when he was asked about the formation of the new league he pictured it as a sort of spontaneous movement against the awful tyranny of the doctors.

"I was asked to take the presidency," said Mr. Flower, of Boston, "and I took it."—From the *New York Tribune*, May 16, 1910.

CONFERENCE OF THE COUNCIL ON MEDICAL EDUCATION—(Concluded)

Provision for Educational Standards in a Model Medical Practice Act.

DR. N. P. COLWELL, secretary of the Council on Medical Education, Chicago: No practice act can be considered a model which does not provide for a single board of medical examiners, or a single authority for the enforcement of its requirements. Nor can it well be considered a

model unless it provides that the members of this board are to be selected because of their special qualifications for the duties involved, rather than for political or other reasons. Unless these two points are safeguarded, any provision for educational standards will be of limited value.

The requirement of graduation from a reputable medical college, as shall be determined by the board, affords a double assurance that all applicants granted licenses are well qualified to practice medicine. First, a medical college which the board knows is reputable has certified to the applicant's fitness to practice medicine by having granted him its diploma; and, second, the state board has subjected the applicant to its examination, which must have been satisfactorily passed before the license is granted.

Report of the Committee on Revocation of License and Penalties.

1. Should the State Licensing Board have power to revoke a license; if so on what ground? Yes, subject to an appeal by the defendant to the district court.

2. Should such revocation by the State Board be subject to the review of the courts; if so, should this include only a review of the proceedings of the Board, or should the review include the questions at issue and the evidence introduced? Yes, on appeal, in which case the courts should review the proceedings of the Board and consider the merits and all the questions at issue in the case, with the thought of justice to all concerned and the further thought of protection of the public.

3. Should a model medical practice act impose a penalty for obtaining money from patients through false representation, as well as for practicing medicine without a license? Yes, the medical practice act should impose a penalty for obtaining money from patients through false representation. Such penalties, if possible, should require restitution as well as fines and imprisonment. Such penalty should be as severe, or more severe than frauds in banking or insurance.

4. What should be the penalty for practicing medicine without a license? Should it be fine, imprisonment, or both? Both fine and imprisonment.

5. What should be the penalty for falsely representing one's self to be a legally qualified physician? If this question be interpreted as implying that the one thus falsely representing himself also attempts to practice under such misrepresentation, he should be subjected as suggested in the answer to question three.

6. Should revocation of license be temporary or permanent? Either permanent or temporary, depending on the evidence and public welfare.

7. Should unprofessional conduct or criminal abortion be considered a justifiable cause for the revocation of a license? Yes.

8. What other causes should justify revocation of license? Perjury while on the stand as expert witness.

9. What penalty should be imposed on limited practitioners who exceed their functions? The same penalties as those for practicing without any kind of a license.

Importance to the Public of the Proper Enforcement of Medical License Laws.

HON. HARRY OLSON, Chief Justice Municipal Court, Chicago: The American Medical Association is rendering the public most important service by its efforts to secure a uniform and high standard of medical education and licensure in all the States. The intelligent and thoughtful layman is encouraged by the progress made by the association in this regard since 1904. The wonderful progress of medicine in the last thirty years has increased the need of a thorough education of those who contemplate its practice. The machinery to enforce the medical license laws should not be in the Board of Health. That body has its hands full with the questions of public sanitation, quarantine, and occasionally, it is said, politics. There should be a separate body composed in the majority of medical men, but it would do no harm to have a lawyer on it, which should control not only the licensing of physicians, but the requirements of the accepted medical colleges and the requirements of preliminary education for entrance on the study of medicine as well. This body should have power on complaint and after giving due notice to hear evidence as a court and to determine whether a license once granted should be revoked for conduct involving immorality in the practice of medicine, and such offenses as dishonesty, conviction of crime, addiction to drug habits, etc. The power the Supreme Court of this State has to disbar a lawyer on a proper showing made to him by the State's attorney, the Bar association, or an individual, after notice and after a hearing of his dishonesty, is a tremendous factor in purifying the legal profession and in keeping its dishonest members within bounds. The licensed lawyers who were convicted during the ten years that I acted as a prosecutor in the criminal courts of Cook county were promptly disbarred by the Supreme Court. The physicians who served in the penitentiary promptly on their discharge resumed the practice of medicine, even though the crimes they committed involved falsification of vital statistics, and in one case, though the indictment was based on the charge of conspiracy to obtain money by false pretenses, the court and jury were of the belief that a murder had been committed. Without examining the law and decisions of the courts of this State, it would seem that the local medical profession had been derelict in the matter of its failure to present evidence to the State Board of Health against those members of their profession licensed in the State who ought to have forfeited their right to practice by unprofessional or dishonorable conduct. * * * The statute should be amended to state plainly that a license might be revoked for malconduct as a physician, which malconduct should be specifically enumerated in the statute. Conviction of a felony should be added as one of the causes.

The Attitude of the Medical Profession Regarding Medical Practice Laws.

DR. HENRY B. FAVIL, Chicago: The majority by far of the members of the medical profession

have no concern or no conscious interest in medical practice acts. Elevation of the rank and file of physicians in point of fundamental education and practical efficiency clearly rests with the medical profession. To declare any candidate eligible who has a diploma from a recognized medical school; to recognize medical schools on the basis of fictitious presentation and fraudulent methods, and then to complete the test by an examination which any man with a good memory and no medical training can easily pass, is not only futile, but in the highest degree iniquitous. The more clearly the elements of qualification and competency can be set forth, the greater will be the influence among the minds of the public.

The early history of reform movements may be a necessity marked by arbitrary and restrictive measures. As a feature of permanent and well-constructed society, however, that custom which rests on widespread intelligence is the only custom which can be expected to endure. The merits of the suggestions which I make are three. (1) The highest degree of individual freedom; (2) the highest standard of classification as a guide to public judgment; (3) limitation of the stamp of approval or employment by the State to individuals whose qualifications have been actually determined. I believe that there is but one ground on which to justify the interest and agitation in the matter on the part of the profession. That ground is protection of public interests.

Report of Committee on Optometry.

DR. GEORGE W. GAY, Boston: The committee believes most emphatically with the medical profession that as a rule a medical training is indispensable for a proper treatment of the eye on account of the close relationship between the eye and other parts of the body, and between eye symptoms, like headache and poor sight, and general constitutional conditions. Without medical training and with nothing but his crude untrained observation how will the optometrist be able to tell the presence of deep-seated intraocular disease? The optometrists have few, if any, proper schools and those already in existence are not officially recognized by the optical societies. The great State of New York has but one school of optometry and that is located in Rochester, the city of New York having none.

Furthermore, an overwhelming majority of the optometry or optical schools consists entirely of correspondence courses of a few weeks or months, giving a degree in which the title "doctor" is apt to figure prominently. The price of these courses varies from five to twenty-five dollars and usually includes a handsomely engraved diploma. Optometry is a trade, not a profession. Like that of the optician, it is learned as are many trades, the watchmakers, for example, by working in a shop as an apprentice for a time, then perhaps as a journeyman, until able to set up business for himself. No special preliminary education is required, and he earns his living while learning the business. This is a very different experience from that of learning a profession, as that of an oculist, for instance, which requires several years of preparatory study before entering the medical school term of four years, then the hospital

course and the post-graduate course, to say nothing of the considerable expense involved in this career of the practitioner.

Report adopted.

Medical Expert Testimony.

DR. L. M. HALSEY, New Jersey, presented the report of this committee.

As the result of a recent canvass made by the Committee on Medical Legislation of the American Medical Association it was found that of thirty-five States heard from only two, Michigan and Rhode Island, had statutes regulating the admission of medical expert testimony to the courts. In summarizing its work the committee offered the following suggestions:

1. Give the courts the common-law power to charge the jury on the expert evidence.

2. Also give them the authority to call experts of their own motion under certain conditions, said experts to be paid by the county in which the case falls.

4. Resort more frequently to medical commissions and to the custom which obtains in ordinary consultations.

4. Let the courts allow to serve as experts only those who are properly qualified and let them be treated as gentlemen in court, abolishing the custom, too prevalent in some places, of badgering and insult during cross-examination.

Could these suggestions be adopted, there would be little cause for complaint as to the character of medical expert evidence in our courts. Expert medical testimony would occupy a higher standard of excellence than it has ever done before, one commensurate with its importance and its universal demand.

Report of Committee on Conclusions and Plans of Action.

SECRETARY GREEN presented the following report of this committee:

1. *Resolved*: That it be the sense of this Conference that opticians be licensed as such by the State Medical Boards, and that Dr. Gay's pamphlet be endorsed and ordered distributed.

On motion, this resolution was adopted.

2. *Resolved*: That the Conference recommends the passage of bills S. 1017, H. R. 6184, Sixty-first Congress, first session; S. 105, H. R. 4305, Sixty-first Congress, first session; S. 4745, H. R. 16892, Sixty-first Congress, second session; also the bill to increase the Medical Department of the United States Navy.

On motion, this resolution was adopted.

3. *Resolved*: That the Conference recommends the passage of the bill for the relief of the estate of late Assistant Surgeon W. H. Miller, U. S. P. H. and M.-H. S., and recommends the passage of legislation in the interests of the personnel of the U. S. P. H. and M.-H. S.

On motion, this resolution was adopted.

4. *Resolved*: That the Conference recommends that State food laws be so amended as to provide that advertisements of food and drug products correspond with the labels; and that the drug section of the model pure food law conform as closely as possible to the National Food and Drugs Act.

On motion, this resolution was adopted.

5. *Resolved*: That the Conference heartily endorses the position taken by the President in his message to Congress in regard to national health legislation, and urges on Congress the passage of legislation looking toward such ends.

On motion, this resolution was adopted.

6. *Resolved*: That the Conference endorses the control by State Medical Examining Boards the standards of medical education, and also endorses the standards of education, both preliminary and collegiate, recommended by the Council on Medical Education, but it is the sense of the Conference that adherence to these standards should not be allowed to result in the destruction of a single sectarian board.

On motion, this resolution was adopted.

On motion of Dr. Halsey, the report was then adopted as a whole.

The Conference then adjourned *sine die*.

State News

Dr. R. T. Davis of Charleston, on his recent return voyage from Europe on the steamer Lusitania, was called on to assist Dr. Jos. Poin-ton, the ship surgeon, in an abdominal operation on a steerage passenger. The steamer was said to be making a speed of twenty-five and a half knots an hour during the operation, which was unfortunately unsuccessful, the patient dying in five hours.

* * *

Dr. Jas. McClung of Richwood, Vice President of our State Medical Association, is an active candidate for the State Senate. He has our best wishes for his success. Politics in some parts of our state are rather strenuous. We learn that a riot was narrowly averted at one of the doctor's meetings.

* * *

A damage suit of considerable interest to the medical profession is now going on in the Federal Court at Charleston. The estate of E. P. Mucklow is bringing suit against the Pennsylvania Casualty Co. relative to the death of the party named, supposedly of traumatic pneumonia.

Mr. Mucklow was riding on a C. & O. train, which left the track near Thurmond. The claim was made that his chest struck against the back of the seat in front of him. It was a hot summer day and he walked around the scene of the wreck in the hot sun for two or three hours, became overheated, then drank twelve or fifteen drinks of whiskey, sat on Dungen Hotel porch in the cool of the evening in his shirt sleeves and cooled off very rapidly. Went to Charleston that night; had a rise of temperature the next day, Monday, which continued Tuesday; nevertheless he went down town and attended to his business, and Tuesday night left for Philadelphia.

Wednesday night he had a chill, Thursday morning he called in a physician, who found acute lobular pneumonia of the right lung, and in four days from that time he was dead.

Exhaustive post-mortem was made at the instance of the Penna. Casualty Co. All the posterior portion of the lung was solid and sank in

water, and the anterior portion was crepitant and floated in water.

There were two dark skin spots on chest wall, but no ecchymosis of the tissues underneath. The plaintiff is endeavoring to prove that the man died of traumatic pneumonia, while the defendant attempts to show that he did not. The case is one of the most bitterly contested of its sort that has happened for a long time.

* * *

Dr. W. H. Tompkins has returned from St. Louis, where he attended the meeting of the American Medical Association.

* * *

The State Board of Examiners for Nurses has recently had a meeting in Charleston. Among those present conducting the examination were Dr. L. V. Guthrie, of Huntington; Dr. Chas. M. Scott, of Bluefield; Dr. T. H. Haskins, of Wheeling; Dr. George Lounsbury, of Charleston, and Dr. J. M. Sites, of Martinsburg, W. Va. There were 47 nurse applicants.

* * *

Dr. L. V. Guthrie, of Huntington, the Superintendent of the West Virginia Asylum, was one of the contestants in the New York-Atlanta automobile races, driving a Columbus Firestone car, which pitched over a 15-foot embankment near Lexington, Va. Fortunately no one was hurt. At the time of the accident Dr. Guthrie was 3½ hrs. ahead of the schedule time. J. E. C.

* * *

Mrs. Dr. Gaston of Parkersburg died in May after a short illness. The profession generally of the city met and extended to Dr. Gaston our sympathy in his bereavement.

* * *

On June 6th, Dr. F. P. Hatfield of Parkersburg died of uraemia.

* * *

Dr. Love of the A. M. A. is visiting the profession in the interests of the Journal, and incidentally hopes to benefit our local society.

* * *

Dr. S. L. Prunty, late of Wood county, has located at Little Hocking, Ohio.

* * *

Our health officer reports that there are no fresh cases of variola.

* * *

Dr. Clarence Casto is recovering from his illness—arthritis of knee joint.

* * *

The report of the Carnegie Foundation in Medical Colleges has attracted considerable interest. After a while the entrance into the profession will be so difficult and the aim of the higher education so lofty that few except those well provided with means will be able to reach it, and when reached the man enters upon his profession well up to 26 or 28 years of age.

W. H. S.

Society Proceedings

LITTLE KANAWHA AND OHIO VALLEY SOCIETY.

PARKERSBURG, W. VA., June 21, 1910.

The Little Kanawha and Ohio Valley Medical Society met at the Chancellor Hotel on May 5th. Nine present. As neither of the gentlemen who were expected to read papers was present, there was a general discussion of cases reported by those present.

The Secretary reported that he had received a circular letter relative to the passage by Congress of the Owen bill. The Secretary was requested to write our Senators and Congressman urging their support of this bill to establish a Department of Health. This he reported later had been done and replies received.

On June 2nd Society met at the Chancellor Hotel. Twelve members present.

Dr. Robinson read a paper on some of the injuries and diseases of the hip, which in a brief and interesting manner discussed the more frequently met diseases and injuries. The paper was fully discussed by several of the members present.

Dr. McGuire had on exhibit some specimens of hookworm passed by a resident of this state who went to Oklahoma to settle on a government claim, returned here in bad health and was passing these worms. He returned to that state shortly after and was lost sight of.

Dr. Robinson exhibited a specimen of dermoid cyst lately removed from a patient. It was interesting because of the large, well formed teeth it contained.

Dr. Sharp read a concise and well-formed paper he had compiled on the hookworm disease, especially as it is found in America—*Uncinariasis Americana*—showing the frequency of the disease in the South, also in Porto Rico.

On June 6th, Dr. F. P. Hatfield, of this city, died at Cairo, W. Va., of Bright's disease (uraemia), from which he had suffered some time. Our society met at Dr. Stout's office and adopted appropriate resolutions.

No meetings will be held in July and August.

W. H. SHARP, Secy.

RITCHIE COUNTY SOCIETY.

HARRISVILLE, W. VA., June 4, 1910.

Editor *W. Va. Medical Journal*:

On the 19th day of May, 1910, nine physicians of the county of Ritchie, and Dr. S. A. Cunningham, of Marietta, Ohio, met at Harrisville and organized a society to be known as "The Ritchie County Medical Society." Dr. A. P. Jones, of Pennsboro, was elected president. We have 25 licentiates in the county and the enrollment in the society is now 18.

Fraternally,

C. W. REXROAD, Secy.

Outlook

BEWARE OF THE FLY.—He breeds during the warm months of the year in the filth of the barnyard, in the manure of the stable, in the excrement of the privy, in the decaying garbage at the kitchen door.

He feeds on the filth from all these places, on the spit of the consumptive, on the festering wounds of men and beasts, on the bodies of dead animals.

He carries the filth from everything he touches, and may be covered with millions of death-producing germs. He may carry the dread germs of typhoid fever or the germs of consumption.

He flies from the privy to the fresh milk on the cellar floor, from the barnyard to the clean dishes of vegetables on the dining-table, from the spit of the consumptive to the nipple of the baby's bottle, from the garbage can to the lips of the sleeping child, from the dead body to the fresh fruit.

KEEP OUT THE FLY.

Screen your doors and windows.

See that no flies enter or leave the privy.

Cover the dishes and keep them covered.

Store the manure where flies cannot reach it, and remove it frequently.

Put your garbage into cans and keep the cans tightly closed.

Prevent flies from breeding by allowing no filth or dirt to accumulate around the house, the stable, the barn or the yard.

Pour kerosene oil into the drains and kill the eggs of the fly.

WHERE THERE IS NO DIRT OR FILTH THERE WILL BE NO FLIES.

BEWARE OF THE FLY!

—*Medical Review of Reviews.*

Miscellany

SCHOOL HYGIENE.

Supt. Wm. H. Maxwell, of New York City, said at the last annual meeting of the National Educational Association at Indianapolis, March 14, 1910: "The teachers are getting down to practical business methods now, and the convention just closed marks a new era in educational life in the public schools and colleges of the United States. We will see as a result better and stronger children, morally, physically and mentally. For ages teachers have been evolving this plan and now it is almost certain to be given adoption by the majority of the nation's schools. Pure air and good exercise have been overlooked in the attempt to develop gray matter. Now we will work on the theory that gray matter will not develop in a body which is physically unfit to furnish nervous energy to the brain."

Dr. Gulich, director of hygiene in Russell Sage Foundation School, said: "Health is becoming

stylish and therefore will prevail. The American school is largely responsible for the whole world turning toward hygiene. We no longer stand in fear of the great plagues of the world; we are gradually turning away from disease, not curable but preventable disease, because it is becoming fashionable. The American mind has turned to living in the suburbs, pure air for children, individual drinking cups, water proof shoes, vacations, larger salaries, increase in conscientious ease—all tending to promote good health."

G. D. L.

FAITH CURIST CONVICTED.

For permitting his 6-year-old son to die without medical attention, Thomas A. Gibson was convicted of involuntary manslaughter in Quarters Session Court before Judge Kinsey, January 6. Gibson is a follower of the self-styled "divine healer" of Faith Tabernacle at Second street and Lehigh avenue. Dr. Jesse A. Bolin, former coroner's physician, testified that the child had been suffering from chronic nephritis with edema that had distended the abdomen almost to bursting. This condition had existed for three months and when the child's abdomen was tapped in performing the autopsy, three gallons of water were removed. The defendant's only excuse was that he did not believe in doctors.

A CONSERVATIVE HOUSE.

Some of the members of the medical profession would open their eyes could they look over the files of the Denver Chemical Mfg. Co., manufacturers of Antiphlogistine, and see the many, many requests for window hangers, store advertising, etc., which they are constantly refusing. This company could get an almost unlimited amount of advertising, good advertising, too, at no expense, except for the printing of the cards or booklets, if they did not have too great a pride in the honorable position which they occupy as purveyors to the medical profession. Perhaps they feel the ethical requirements of their position more keenly on account of the personnel of the company. Half the members of the board of directors are physicians who have spent each of them many years in active practice, the president of the company being an ex-president of his State Society, and the head of the advertising department is himself a physician, and was for many years the secretary of his County Society.

With such a personnel, it is not surprising that the advertising is not only strictly ethical, but even ultra-conservative in spirit.

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Original Articles

REMOVAL OF THE PROSTATE.

E. O. Smith, M.D., Cincinnati, O.

Prof. of Genito-Urinary Surgery Ohio-
Miami Medical College, Genito-
Urinary Surgeon to the Good
Samaritan Hospital.

(Read to the Ohio County Medical Society,
March, 1910.)

Consideration of the subject, prostatectomy, resolves itself into four heads:

Indications for the operation.

The operation.

The after treatment.

The end results.

Indications.—Hypertrophy of the prostate seldom produces symptoms before 45 years of age, and rarely develops after 70. More than 50 per cent. of men who have reached 60 years of age have enlarged prostates, while not more than 15 to 18 per cent. of these suffer from the disease.

It is not enough to know that the patient has frequent micturition and some enlargement of the prostate gland to at once advise removal of this gland. Each individual case should be considered and studied from all points of view before giving final advice to the patient. In the first place it must be determined whether or not the prostate gland is the cause of the trouble.

The changes in the gland come on so gradually and insidiously that it is difficult to state at what time the disease began. On account of this there must be quite a

period of time elapse between the beginning of the changes and the appearance of the first symptoms. Most patients present themselves for treatment after 55 years of age, although there are a few much younger. My observation has been that those men who are suffering from enlarged prostates and are still under 45 years of age, do not have a true senile hypertrophy, but have had for many years a chronic prostatitis, usually of gonorrhoeal origin.

The symptoms produced by an enlarged prostate gland are those due to an obstruction to the outflow of urine from the bladder, plus the conditions and symptoms that may arise from residual urine which may sooner or later become infected.

The first symptom is usually that of frequent micturition, soon attended with a difficulty of starting the flow and the lack of force to the stream, while straining does not improve matters. Dribbling from the meatus after urination often occurs. Retention does not occur in all cases, but it frequently is the last phase of the symptoms. Hemorrhage into the bladder is not an infrequent complication, and may be very slight, occurring only at long intervals, or it may be very profuse.

The patient is not annoyed very much by the increased frequency of micturition until his sleep is being seriously disturbed, or until the calls for micturition are complicated by extreme urgency, any delay causing much pain and possibly involuntary passage of urine. He may try to relieve these symptoms by self-catheterization, but will be disappointed.

About the time that nocturnal micturition becomes troublesome there will in most

cases be found some residual urine, the quantity varying greatly. The quantity of residual urine has no direct bearing on the indications for operation. There are many patients who have but little residual urine, whose condition is such that operation is closely indicated, while others carry a large quantity of residual urine for a long time without much disturbance. But let that urine become infected and cystitis develop, which is very frequently the case, and then residual urine is a positive menace. Urinary antiseptics will not counteract the bladder infection because the bladder is never entirely emptied.

Retention may occur, and by the use of saline cathartics and hot sitz baths be relieved, not to recur for many months or years, or even catheterization will not have to be repeated for a long time.

Pain is not a prominent symptom of simple hypertrophy. The patients often speak of a sense of weight or discomfort in the region of the perineum. It may be referred to the hypogastrium, back, penis, or the thighs. If the pain in the lower extremities is very severe it is suggestive of malignancy. Vesical calculus often adds to the discomfort of the patient with an enlarged prostate.

Hematuria is not a complication of all cases, and, as mentioned before, may be either very slight or very profuse. In a few cases spontaneous hemorrhage may be so great as to produce a marked anemia. Repeated hemorrhage, whether it be due to catheterization or is spontaneous, and whether the loss of blood be great or small, is a sign that active measures should be adopted, as it is a condition that tends to grow worse instead of better.

Having considered briefly the important symptoms of hypertrophy of the prostate, the next step is the examination of the gland. On account of its situation it is not an easy organ to examine, and what we find at the time of operation is sometimes very different from the impression received from physical examination.

We have but three methods of examining the prostate; the catheter, the finger in the rectum, and the cystoscope.

When a catheter introduced into the bladder shows a distortion and lengthening of the urethra and the presence of residual

urine, one can almost be positive of the presence of an enlarged prostate.

With the patient in the knee-elbow position and the bladder empty, the prostate can be felt with the index finger in the rectum. In the large majority of cases where the gland is causing trouble this enlargement can be easily outlined, and at the same time it can often be determined whether the gland is of the adenomatous or fibrous variety. There are some cases where the prostate feels almost normal in size from rectal examination, but the hypertrophy has taken place in that part of the gland which is in contact with the bladder wall, and thus it is beyond the reach of the examining finger. If the patient is thin and the abdominal walls lax, suprapubic pressure with the other hand is helpful to a more satisfactory digital examination.

Cystoscopic examination should be attempted in all cases. There are some cases in which the cystoscope can not be introduced, owing to the distortion and narrowing of the urethra. With the cystoscope once in the bladder, and by the use of the retrograde lens, a very good view of the bladder in the region of the internal meatus can usually be obtained. Irregularities in contour and their location, as well as the presence of calculi and the condition of the bladder wall, can be observed.

Hypertrophy of the prostate must not be confounded with contracture at the neck of the bladder. This is a condition where there is a rigid contraction of the ring of muscle about the vesical neck, lessening the urethral orifice, and in time producing a vesical pouch with retained urine. Keyes has described it as "a contraction of the neck of the bladder which occurs in both young and old. The chief cause is a chronic posterior urethritis. In some cases it is perhaps caused by stone in the bladder. It is so common in later life that it might almost be ranked with arcus senilis and the fibrotic arteries as one of the evidences of the crystalization of age." Whenever a patient has a chronic posterior urethritis that does not respond to treatment, and it is associated with an imperative urination, marked dysuria, and possibly some retention of urine, he has in all probability a contracture of the neck of the bladder. It is this condition that accounts for most of the cases diagnosed as "hypertrophy of the

prostate" very early in life. It is very important that this condition be differentiated from prostate hypertrophy, as the treatment is very different.

Having made a careful differential diagnosis and clearly demonstrated that the patient's symptoms are due to an enlarged prostate, when should the gland be removed? This question has been answered by stating that operation is indicated when palliative measures fail. The question then naturally arises, How long shall palliative measures be relied upon? We know that there are many old men who have large bladders, with an acid cystitis, who use the catheter every four or five hours without either pain or distress. These patients have been doing this for years, and many of them will continue in the same way for years to come, and probably will not suffer any more inconvenience than what attends the carrying and introduction of the catheter. Most of these patients began this practice some years ago, before the surgery of the prostate was as well understood as it now is. This class of cases will become smaller and smaller with each succeeding year, as there are but few practitioners who would advocate such practice at this time. Granting that there are some men who do use the catheter for years without apparent damage to themselves, who can predict at the beginning of the catheter life which cases will accept this kindly and which ones will not?

Palliative treatment of any kind should not be persisted in until there is ammoniacal cystitis with renal infection. If the symptoms are growing worse and the residual urine increasing in amount in spite of the treatment, operation is indicated.

The patient often accepts his condition as incident to advanced years, as a sort of matter of course, and is reluctant about seeking medical or surgical advice until the pathological condition is far advanced. If he has a sensitive, contracted bladder, with alkaline urine and a cystitis, there may rapidly develop a form of urinary fever that will terminate fatally, if the catheter is frequently used. It must necessarily be used quite often in these cases, because the bladder capacity is lessened and there is an increase in frequency of the desire to urinate. If the condition of the prostate is such that it makes it necessary to empty

the bladder by the use of the catheter every two or three hours, it is time to remove the offending gland. Even though the patient should use the catheter without apparent damage for a time, the conditions that make its use necessary are gradually growing worse and the patient is growing older. It requires no argument to prove that a man 60 years of age, with prostatic trouble, is a much better subject for operation than the same man will be ten years, or even one year, later.

Prostatectomy performed upon a patient of middle life, who has a good heart, good kidneys, good arteries, and who is not anemic, would be an operation of but little risk. This condition being one of advanced life, but few of the patients in whom a prostatectomy is indicated have healthy circulatory and urinary organs. They do not take kindly to anesthetics, and often suffer severe shock. All of these things must be borne in mind when advising operation. Yet the surgeon who refuses to operate and give even the desperate cases a chance for relief from this miserable condition, shirks his duty. It is not always necessary to at once do a radical and complete prostatectomy in these exceedingly bad cases. There is usually a violent cystitis and an infection of the kidneys which can be relieved by simply drainage of the bladder through a suprapubic cystotomy. This can be done under local anesthesia, thus avoiding the dangers of the anesthetic and the shock of a greater operation. After the patient has been relieved of his cystitis and general urosepsis, his general condition has so improved that the prostate can then be removed much more satisfactorily and with less danger. It is also important to know the functional activity of the kidneys.

In this, as in all other operations, the patient's ideas must be considered, whether they be correct or incorrect. We can only advise. With the improvement in the technique of this operation, and the proper selection of cases, we can promise our patients more and they will not look upon removal of the prostate gland as an operation of last resort, but rather an operation for relief. Then cases will come to the surgeon earlier than now and before serious cystitis and renal infection occur.

The Operation.—Having decided that removal of the gland is indicated, the choice

of operation, the method of removal is the next most important question. The suprapubic route is preferred by some surgeons, while others operate exclusively through the perineum. In England the former method is the more popular and Mr. Freyer uses it altogether with very satisfactory results. In this country both methods are followed, but the perineal route is the one preferred by a great many American genito-urinary surgeons. Personally, I prefer the perineal route, and think that it has some advantage over the suprapubic method. Even though the gland is of the large adenomatous variety, it can be enucleated and removed through a straight vertical perineal incision by the aid of tractors in the bladder and prostate forceps. The best instrument for this purpose is a medium-sized vesical calculus forceps. After the posterior urethra has been opened and the tractor placed in the bladder, an assistant can hold the gland against the enucleating finger in the wound. If the capsule is firm and tough it may be necessary to incise it. Having loosened a part of one lobe from its capsule, the calculus forceps can be introduced by the side of the finger. Guided by the tip of the finger, it can be made to grasp that portion of the gland that is now released and hold it firm while enucleation is completed. In many cases it is possible to dissect a goodly part of the prostatic urethra from the gland and leave it in situ. Without releasing the grasp of the forceps on this portion of the gland, it can be delivered through the wound. The same procedure applies to the other lobe. After the largest portions of the gland are removed, careful examination should be made for small portions that might remain. These can be dissected loose with the tip of the finger, aided by the use of a dull curette or gall-stone scoop manipulated with the other hand.

What I have said so far applies admirably to the encapsulated adenomatous gland, but the non-encapsulated fibrous or fibroid gland is much more difficult of removal. Some are so hard and fibrous and so devoid of capsule that they can not be enucleated and must be cut away with scissors or prostatic rongeur forceps.

The rectum must not be injured, else a recto-perineal or recto-urethro-perineal fistula will be the result. Such an injury can be avoided by putting one or two fingers of

one hand into the rectum while the other hand is being used to begin enucleation, which should begin at the lower or rectal side of the gland.

Coagulated blood can be removed from the bladder with calculus forceps, as it is very important to have the bladder free from large clots. The bladder is now freely flushed out and a two-way metal drainage and irrigating tube introduced.

Drainage and continuous irrigation of the bladder is much more satisfactory after perineal section than after suprapubic prostatectomy. This can best be accomplished by the use of a double-flow drainage tube, such as I present to you now. This simple and useful instrument was devised by Dr. Hamar, of Indianapolis, assistant to Dr. Wishard. This instrument is easily introduced and the continuous irrigation can be established and controlled at will. It has a large outflow, permitting of the escape of blood clots from the bladder, which is very important. There is a decided advantage in having this instrument made of metal. After it is introduced into the bladder and you are satisfied that there is nothing obstructing the outflow from the bladder, gauze can be packed into the prostatic cavity very firmly, to control hemorrhage, without fear of compressing the drainage tube, as sometimes occurs when rubber drainage is used. This tube is held in place and the wound protected by applying liberal dressings of gauze externally, after which the patient is returned to his bed and continuous irrigation of the bladder is kept up for twenty-four to forty-eight hours. The gauze packing should be removed within forty-eight hours after the operation. Warm, sterile olive oil injected into the bladder will find its way into the gauze, thus making easy removal possible. Having removed the inflow tube, with the larger tube still in place, a smaller rubber drainage tube can be introduced into the bladder through this metal tube, which can now be drawn out over the rubber tubing. This rubber tube is fastened in place and serves the double purpose of continuous drainage and interrupted irrigations for a few days, after which it should be removed and a medium-sized catheter introduced into the bladder through the urethra and anchored in place. This also acts as a continuous drainage tube and the bladder can be irrigated through it

as often as is necessary. Drainage through the urethral catheter should be continued for one or two weeks. Of course, it is to be removed, made clean and re-introduced several times during this period. After a few days there will be but little urine escaping from the perineal incision, and it is therefore given a chance to heal more rapidly than if most of the urine was coming that way.

As most of these patients are advanced in years and have some residual urine, it seems to be of great benefit to put them to bed for three or four days before operating and drain the bladder with a urethral catheter. If there is cystitis, a few irrigations through this drainage tube can easily be done, lessening the dangers of infection later. This also accustoms the bladder and kidneys to a continuous drainage, thereby possibly lessening the shock of operation. If the patient is well advanced in years it is of great benefit to him to introduce during the operation, or immediately following it, a pint or more of salt solution into the circulation by means of hypodermoclysis. Immediately after the operation is completed the patient is allowed to breathe oxygen, which clears up the mucus from the respiratory tract and overcomes the excessive carbonic acid gas in the circulatory system, thereby lessening the immediate danger of the operation.

Some advise getting the patient out of bed within twenty-four hours after the operation. This is unnecessary and is risky in the old man with bad arteries. It must ever be borne in mind that this is a major operation.

We all appreciate the danger of pneumonia, which can be avoided by turning the patient on one side, then the other, and by raising the head and thorax.

End Results.—Mortality from prostatectomy is less than that which occurs within the first two months of catheter life. The perineal route has a mortality of about 5 per cent., the suprapubic somewhat greater. The mortality is becoming less and less, on account of the improved technique, and the patients are coming for operation earlier, before their constitutions are debilitated from pain, loss of sleep and sepsis.

If the rectum is carefully avoided during the operation, and the gauze packing is not

allowed to remain in place too long, urethro-rectal fistula will seldom follow.

If the compressor urethrae muscle is not injured there is but little likelihood of incontinence of urine following the operation.

Epididymitis sometimes follows the operation, and may cause an abscess, which either opens or is opened through the skin of the scrotum.

Stricture of the prostatic urethra seldom occurs, and can be avoided by the passage of sounds through the urethra at intervals for a month or two after the operation.

Sexual potency is undisturbed in a vast majority of cases.

The large majority of these patients who have had their prostates removed live very comfortably, having had their lives not only made comfortable, but having had many years added.

When the general profession fully realize that the mortality from prostatectomy is far less than from catheter life, then will fewer patients come to us with infected bladders and bad kidneys. It required a great many years to establish the fact that appendicitis is largely a surgical disease. The same opposition has to be overcome regarding the prostate, and when it is, the results from prostatectomy will be even more gratifying and satisfactory than now.

THE LAW IN RELATION TO THE PHYSICIAN.

Hon. A. M. Cunningham, Elkins, W. Va.

(Read at April Meeting of Barbour-Randolph-Tucker Society.)

Mr. Chairman and Members of the Barbour-Randolph-Tucker Medical Society:

It is not only a pleasure, but a distinction, to address one of the great learned professions, and I feel honored at being called upon to speak to the members of this profession upon the subject of the "Law in Relation to the Physician."

Permit me to digress by saying it is a singular thing that of the trinity of learned professions, which has always been in the closest touch with humanity—the church, medicine and law—the latter is the only one the members of which are not distinguished by a distinctive initial title following their names in print, correspondence, etc., which is accepted by the world and in common usage. This, no doubt, is owing to the fact that

many lawyers have not attained the degree LL. D., and not all are even formally LL. B. Many have obtained their admission to the bar through study and service in the law office alone, and many good and renowned lawyers there always have been and are among these.

The divine, even if not a D. D., is dignified by "Rev." Our medical brother is distinguished by M. D., and, by the way, suppose he commonly dubbed himself, instead, "Doctor of Medicine," "Professor of Surgery," would it be a more exuberant splurge than is Attorney and Counsellor-at-Law? The civil engineer is C. E.; even our toothsome friend is marked D. D. S., and the alleviator of beasts by D. V. S., but the limb of the law remains merged in the common run by the meaningless "Esq."

A few years ago an article appeared in a periodical, entitled "Points of Legal Etiquette," in which it was said: "John Smith, lawyer, intuitively dislikes to be addressed or to address his brethren in written communications as 'Esq.' He realizes that he is a member of an ancient and dignified profession, and also that even his coachman (if he is lucky enough to have one) is an 'Esquire' by a corrupted usage which can not be eradicated, and without any personal vanity, he feels it is due to his profession that its members should be addressed in written communications by a title which is distinctive, short and convenient, and may not be appropriated by laymen."

Would the other two heads of the trinity of the professions suggest a better and more distinctive initial for the lawyer, by which he may be known as commonly as "Doctor" and "Reverend" and "Doctor of Divinity?"

It has been said, however, in behalf of the lawyer, that "the greatest trust between man and man is the trust of giving counsel." I am not inclined, however, to think that this is true. I think the greatest trust between man and man is the trust reposed in the physician or the surgeon in alleviating man's suffering, but the pre-eminent trust is that in the Divine in guiding man to the last and everlasting life.

I feel certain that you will pardon this digression thus far, and now I will attempt to address and advise you upon the "Law in Relation to and Touching the Physician." But just a word more:

In order that the physician may be the

more useful in relation to the patient and to the family into which he goes to alleviate suffering, or to assist in assuaging disease, the relations should be as sacred and be kept as inviolate as the chastity of his own wife and daughter, and as pure and as sacred as his own home and domicile. The physician who for a selfish purpose, advancement or aggrandizement, or for any pecuniary purpose, discloses his relations, his treatment or the causes for his visits to the home of the patient, does not follow the ethics of his profession, nor does he place himself within the pale of the law that provides for him immunity from testifying without the consent of his patient, as to the treatment or the ailment for which treatment is prescribed. A like statute applies to ministers and lawyers. And this confidence thus reposed in the members of either of these professions should at all times be kept sacredly in the breast of the divine who is giving spiritual consolation, the doctor with respect to his patient, and the lawyer advising with respect to the financial and business interest of his client.

Chapter 50 of the Code of West Virginia prescribes:

"A physician or surgeon without his patient's consent concerning any communication made to him by his patient which is necessary to enable him to prescribe and treat the case, is incompetent to testify about any such communication given to him by his patient."

It has been stated that the lawyer and the minister maintain and keep this compact of the law more strictly than some of your profession. And it is to be hoped that all of the members of the profession of medicine will at all times avail themselves of this statute, which protects them in the proper performance of their duties, and precludes them from testifying without the consent of their patient, and without disclosing the mode of treatment or the cause or causes for which the patient is treated. The dignity and the honor of these professions demand that these provisions made for them, which are wisely prescribed, should always be taken advantage of by their members.

There can be no doubt that the physician, when dealing with the human body, and the many ailments and diseases to which it is subject, occupies the most important position of any of the professions. The doctor should always respond when called upon to

administer to suffering humanity, whether he is paid for the service or not. Such acts of humanity always inspire respect and confidence. Lawyers are often brought into requisition by the courts, whose officers the court claims them to be and who are truly such to the court, to defend men charged with crime, who are often found to be not guilty, under the aid, advice and representation of such counsel.

The physician degrades his profession in aiding the druggist in selling intoxicating drinks, in violation of Chapter 32, Section 7, of the Code of this State, and thereby makes him a criminal, whether he is convicted for the offense or not.

"If any physician shall, for the purpose of aiding a druggist or other person in the violation of any of the provisions of this chapter, or otherwise, give such prescription and make such statement falsely, he shall be guilty of a misdemeanor and fined not less than fifty nor more than two hundred dollars."

Then, under Chapter 58, Section 9:

"The physician should always promptly attend when summoned by the justice of any court having jurisdiction, to inquire into the mental condition of any subject brought before such court of justice."

There is a provision under this chapter by which he is to be paid by the County Court a reasonable compensation.

Under Chapter 63, Section 31:

"Every physician or surgeon shall, in a book to be kept by him, make a record at once of the death of every person dying in this State upon whom he has attended at the time of such death, setting out as far as practicable the circumstances required to be recorded by an assessor respecting deaths."

And then it further provides that he shall give the assessor, whenever called upon to do so, a copy of such record, and that every justice and coroner shall keep a like record, and for a neglect and failure to perform any such duty, a physician or surgeon or justice or coroner shall forfeit \$20. Do the members of this Society, as such physicians, carefully comply with the provisions of this section?

The physicians of this State, and as individuals, should comply with Section 23 of Chapter 150 of the Code, with respect to reporting to the Board of Health the registration of marriages, births and deaths, and the vital statistics, and assist that board in making its report.

Every physician should be registered, under Section 24 of Chapter 150, as well as accoucheurs, and the physicians of this Society, as well as all others, should see that the latter are regularly registered and qualified to practice that part of the professional art.

It is the duty of every physician who is a regular practitioner to use his every effort and endeavor to have repealed Section 14 of Chapter 150, with respect to granting license to the itinerant physician; such so-called physician vending his drug, nostrum or ointment at the end of his illuminated wagon, is worse than the shyster who tries to practice the profession of the law on the street corner, and is a malignant growth and ulcer that should be removed by the Legislature of this State.

I desire to especially direct the attention of this learned and honored profession to Section 29 C of Chapter 151 of the Code, which provides:

"It shall be unlawful for any dentist or other physician to administer chloroform, ether, or any anesthetic whatever whereby sleep or total loss of sensibility may be produced, to any female person unless in the presence of some third person."

The penalty for violating this provision is a fine not exceeding \$100, or confinement in the county jail not more than sixty days, or both. How many of you violate this provision?

The case that gave rise to the enactment of this statute was the case of the State vs. Perry, from Jefferson County, in this State, reported in Forty-first West Virginia Supreme Court Reports, page 641, etc., and the case is like this:

Miss Rose J. Johnson, daughter of a prosperous farmer of that county, had been suffering from insomnia, was nervous, had neuralgia, and went from her home to the office of Dr. Perry, who was practicing in the country. There she asked Dr. Perry, who was a veteran of the Confederate Army, to administer to her suffering; and the doctor, in order to give her temporary relief, made up a mixture of chloroform and ether and poured it over a small handkerchief in a small glass, and asked her to hold it to her nostrils. And while he was engaged at some other work, and not fully realizing her weakened condition from her suffering, she fell asleep. He aroused her; his office was adjoining his

home, with a door leading into his office from his house; two windows were in front. The doctor's wife came in while she was sitting by the open window, and conversed with her, and every part of the office could be seen from such windows, and after she had gotten sufficient strength to go home, she related to her mother that she had been mistreated by the doctor; in fact, stated to her that she had been raped by him.

The doctor, upon his trial, denied these statements made by her on the witness stand, and offered to prove by experts of renown that the result which occasioned her belief that she had been outraged came from an hallucination following the use of the chloroform and ether. But this evidence was not allowed, and he was convicted and sentenced to fourteen years in the penitentiary, but the Supreme Court of Appeals of this State refused to allow the conviction of Dr. Perry to stand. While it is true that the doctor escaped the penal sentence of fourteen years in the penitentiary, and he was a man who had theretofore been honored, and was learned in his profession; had accumulated some fortune, but spent it all in his defense; was a man of spotless character and reputation, yet the stigma of a trial and conviction, although set aside by the Supreme Court of Appeals, and through it was awarded his liberty; and from the report and the opinion made by the Supreme Court of Appeals, he was wholly guiltless, the rest of his life he was ostracized from society, lost his practice, and was compelled to remove from the county, although an old man with a wooden or cork leg, who doubtless never succeeded in again building up a practice, and the disgrace of his trial followed him to the end.

Therefore, this profession should be most careful in administering any anesthetic to any female, producing sleep or insensibility, without some reliable third party being present. You can see what it means to the doctor who does this without the presence of some third party, because, in looking up the authorities, I find that the result of the administration of these anesthetics to the female frequently results in the belief or hallucination that while insensible the doctor administering the same has been guilty of improper conduct with her.

Any good work on medical jurisprudence, such as Beck's or Taylor's, one of which every physician should have, will give the doctor all the information that he needs with respect to the "Law in Relation to the Physician." Medical jurisprudence is defined to be:

"That science which applies the principles and practice of the different branches of medicine to the elucidation of doubtful questions in courts of justice."

There is so much that can be said upon this subject that it would tax your patience to go far into the question.

The medical profession has been lately criticized by reason of some of its members acting in the capacity of medical experts, and it would appear, I am loath to say, that this has been brought about by the enormous fees that have been offered and paid by some of the states and by defendants in criminal cases. But I am pleased to know that the physicians of this part of the country have not been so criticized, and I am one of those who believe, in fact, we are taught by our legal works, that medical evidence is that science which teaches the application of every branch of medical knowledge to the purpose of the law; hence its limits are, on the one hand, the requirements of the law, and on the other, the whole range of medicine. Anatomy, physiology, medicine, surgery, chemistry, physics and botany lend their aid as necessity arises; and in some cases all these branches of science are required to enable a court of law to arrive at a proper conclusion on a contested question affecting life or property. Numerous cases can be determined only by recourse to medical knowledge. The medical expert, when placed on the witness stand, is called upon not only to state medical facts, but also to express an opinion on the special facts of the case under examination and consideration. He may be examined as to conclusions of scientists drawn from particular experiments; he may be questioned as to the health of a particular person whom he has attended; he may be asked his opinion as to the probable cause of the death of a person; he may testify as to the presence of poison in the stomach; and generally give an opinion on medical facts as observed by himself or on facts observed by other persons and given in evidence.

Not long since, in the trial of a case wherein I was conducting the cross-examination of a witness, I asked the doctor what injuries or symptoms he had found in the man who was suing my client for damages. He replied, "I found no objective symptoms, but did find subjective symptoms." I was "stumped," but my law partner took up the examination and asked him what he meant. He said, "Well, I mean that I could not find any symptoms of any injury, but the subject complained; that is what I mean by objective and subjective symptoms." And when I asked him if he could not find *any* injury or symptoms of any injury, he replied rather reluctantly, I thought, for he was a witness for the plaintiff, "No, I could not." Although his answer was reluctant, I have had more respect for that physician since, for it was principally upon his evidence that the defendant won the case before the jury.

Medical experts at all times should stand in the relation of a witness to the absolute facts seen or heard, because their evidence is many times more important than the eye-witness. Profound legal medical experts' evidence, as well as a chain of circumstantial evidence, never lies, while the eye-witness may lie.

Medical men have always been of great assistance to the courts in the proper administration of the law and of justice thereunder, and they should always be highly regarded, and they always will be thus respected and regarded.

There is no definite rule laid down as to the degree of skill which the medical expert should possess in order to testify; it is sufficient that he possess the average ability of members of his profession. I believe that the physician ought to be paid for his knowledge when it is brought into requisition, but that pay should never swerve the physician from his line of duty and truthfulness.

As showing the usefulness of the physician in bringing to justice the murderer is an interesting case at Norwich, England, in 1850:

"A female child, nine years of age, was found lying on the ground on a small plantation, quite dead from a wound in the throat. Suspicion fell upon the mother of the girl, who, upon being taken into custody, behaved with the utmost coolness and admitted having taken her child to the

plantation where the body was found, whence the child was lost while going in quest of flowers. There was found in the woman's possession a large knife, which was submitted to a careful examination; nothing was found upon it, however, with the exception of a few pieces of hair adhering to the handle, so small as to be scarcely visible. The examination being conducted in the presence of the prisoner, and the officer remarking, 'Here is a bit of fur or hair on the handle of your knife,' the woman replied: 'Yes, I dare say there is, and very likely some stains of blood, for as I came home I found a rabbit caught in a snare and cut his throat with the knife.' The knife was sent to London, and with the particles of hair, submitted to a microscopic examination. No trace of blood could at first be detected upon the weapon, which appeared to have been washed; but upon separating the horn handle from the shaft, it was found that a fluid had penetrated into the socket, which was found to be blood, certainly not the blood of a rabbit, but bearing a resemblance to that of a human body. The hair was then submitted to examination. This hair was found by the microscopist to be that of a squirrel. Now, round the neck of the child at the time of the murder there was a tippet of squirrel's fur. This strong circumstantial evidence was deemed by the jury sufficient to convict the prisoner, and while waiting execution she confessed her crime."

Then, on the other hand, I desire to call attention to the great and scientific usefulness of the physician in determining the innocence of a woman charged with the murder of her husband, as is recorded in the 19 American Law Register, 608, by Doctor Piper:

"A man had been killed by a bullet through the head, shot from a pistol in the hand of his wife. The charge was that of wilful murder, resting upon the alleged statement that he was shot while lying asleep in bed. The woman had two razor cuts in her throat, and was also wounded by a pistol in her side. She stated that her husband had attempted to murder her, and in this attempt had inflicted these wounds, and that in the scuffle she had snatched the pistol from his hand and had shot him through the head, as above stated. His body was found lying at the further side of the room from the bed, where, as she said, he fell upon being shot. In the charge it was also alleged that her wounds were self-inflicted. Dr. Piper says: "The question presented to me for solution in the first place was as to which of the two parties the blood on the sheet belonged to. If to the wife, then she was innocent of the crime charged; if to the husband, then she was guilty. Preliminary to the examination of the blood spots themselves, I took the blood from the arm of the accused, and constructed tables for measurement of the corpseles as described in my drawings. Next, search was made in the blood from the spots on the sheets, and the corpseles found were arranged in similar tables. The last step in this part of the process was to make a similar examination of the blood on the carpet where the head

of the dead man lay when he was found, and also of the blood spots on the sheets on which the *post mortem* was made. A number of corpuscles were found here also, which were arranged in the tables as above. Upon measuring the first and second tables, those from the arm and those from the sheet from the bed, the corpuscles were found to average very close to each other, while between these and those in the other tables, which, of course, came from the man, there was quite a measurable difference; the first measuring the 1-3340 of an inch, and the other the 1-3080 of an inch.

"The conclusion arrived at from the result of the measurement was confirmed by the substances found in the blood on the sheet where the woman's head lay, as she testified, and which, therefore, must have come from the wounds in her throat."

There is so much that can be said about the usefulness of the physician in relation to a proper verdict and just judgment of courts of justice—I may say the subject is almost inexhaustible—that I will not further tax your patience on the subject.

Then I am informed that Judge Dayton, of our Federal Court, will at your next meeting address you, and I can promise you that his address will not only impart to you information that will be most useful on this subject, but will be learned, able, interesting and entertaining, and he is much more able than I to address you on this subject.

Permit me to add that I deem it not only a pleasure, but an honor, to be called upon by so learned and scientific a profession to address you on this subject, and if I have in any way given you anything new or have imparted any information to you which will be useful, I shall be very much gratified.

PENALTY OF DEATH.

C. H. Maxwell, M.D., Morgantown, W. Va.

"Don't take your attention from the patient for a moment, under penalty of death." This was our lecturer's injunction on administering anesthetics. He held, and it is true, that the anesthesia was of as much importance as the operation. For if the operation is important, the anesthesia is bound to be of equal importance. If the operation is difficult, the proper anesthesia is the surgeon's first assistant. If the patient is not properly anesthetized, the surgeon is handicapped. If there is not enough the operation is delayed. If there is too much the danger of collapse is great. And if there is not proper care the fumes will so irritate the respiratory organs that bron-

chitis and pneumonia are liable to follow, or the kidneys are irritated, and trouble comes through them. Many times, no doubt, when the death certificate is made out, it reads: "Pneumonia following operation for gall-stones," when if we really knew the cause the certificate should read: "Pneumonia caused by an unskilled anesthetist." Every doctor should be skilled in this work, but this is impossible for obvious reasons. But in every community there should be an understanding among the physicians that some one among them should make a special study of this subject, and all the doctors call him in to administer the anesthetic for them. He thus could acquire a high degree of skill, very much to the benefit of the other doctors and the public at large. You have no doubt seen the anesthetic given in a manner that it was only providential that the patient ever withstood it.

Another thing, the anesthetist should have pay commensurate with his responsibility. How does it look for the surgeon, whose work is no more important, to get \$100 for an operation, and the family physician get \$5 for giving the anesthetic?

A word as to anesthetics. For my part, I believe that, everything considered, chloroform is the safest and best. There is a mixture that was used by the Egyptians 7,000 before Christ, and the formula has recently been recovered from the pocket-book of a mummy, the hieroglyphic formula of which is A. C. E. This formula is all right in its place, but its place should still be in the pocket-book of the Egyptian mummy.

Many surgeons seem to overlook the fact that their own final results depend largely on the skill of the anesthetiser. A patient that comes out promptly from under its influence without vomiting, or nausea, or physical or mental depression, with no subsequent bronchitis, has much better show of final recovery than the one who has been almost drowned with the anesthetic, and who has persistent nausea and vomiting and bronchitis or pneumonia. We need more skilled men along this line, and very much greater care from those who are unskilled.

I remember having two appendicitis cases to be operated on. I had anesthetized the first one and the surgeon had operated on him. When I started the anesthetic on the next one the surgeon came in to see how I

was getting on. He was not satisfied with the slow progress of getting the patient asleep. He was anxious to get after that other appendix, and he said: "Hurry up, doctor, you are too slow." I said, "I am looking after the patient, and 'hurry' is the one thing that should not be done in giving an anesthetic."

TYPHOID FEVER.

It is my belief that more patients are starved to death during typhoid fever than die of the disease, or of over-feeding. A patient should have a variety of food; besides milk and buttermilk, he should have rice, cornstarch, custard, toast, soft eggs, coffee, tea, cocoa, fruit juices, soups and broths. He should have them in abundance. Many patients can not take milk when well, and should not be compelled to do so when sick. Besides, milk is not always digested and the chunks of curd that pass on through the canal act as irritants on the inflamed bowels. The patient is much better off from a variety of food. Those doctors who keep their patients on a low diet have long-drawn-out cases. During the time when the digestive powers are in abeyance artificial digestants can be given freely. Feed the patients better; but your doctor bills will not be so big. Don't give a cathartic after the first week. You will do more damage than good. Many cases of relapse or death are caused by cathartics. Indeed, one author says: "Don't give a physic in the later stages of typhoid, under 'penalty of death.'"

OPIATES.

A Case in Practice.—Patient, 78 years old, pain under right shoulder blade, fever 102 degrees, pulse 95, respiration 50, rales abundant on right, persistent cough, with blood streaked sputum. Diagnosis, pneumonia. Whiskey and strychnine for stimulants, morphine to slow respiration and give the respiratory organs a rest. Respirations drop to 30, cough abates, and expectoration lessens. Patient shows cyanosis. Apomorphia to stimulate the secretions. Then we have an inhibition of respiration and cough by morphine, and stimulation of the secretions by apomorphia; result, a dead patient in a few hours.

Case II.—Baby 2 months old, cough, fever, restlessness, rales over the chest, persistent crying; diagnosis, broncho-pneumonia. Local application and morphine to

stop its continuous crying. Result, death in a few hours.

Moral.—Don't use morphine in pneumonia, under "penalty of death." I feel sure that the death rate would be less if we would never give a dose of opium in pneumonia. It is true it slows respiration and checks secretion, but it does not help remove the cause, but really aggravates the condition. We have many remedies that really aid nature to throw off the disease, and we should use them, and not fool the patient and ourselves by covering up the conditions, and not removing them.

I am not sure but morphine may have something to do with the production of empyema. One doctor said: "I give 15 grains of calomel at a dose in beginning pneumonia, and keep the patient comfortable with opiates." He reported six cases of empyema in a year.

INCONSISTENCY.

I can not understand how the American Medical Association *Journal* can carry full page advertisements of proprietary remedies, and at the same time its Council on Pharmacy condemns these identical remedies as unscientific, unethical and practically worthless. Surely this inconsistency will ultimately be corrected, or *The Journal* will suffer the "penalty of death" of the esteem in which it is now so widely held. I also can not understand why a subscription to *The Journal* makes one a member of the American Medical Association.

"Five dollars, please; no questions asked."

(This has lately been corrected.)

NAMBY PAMBY.

It is as much our duty to fight at times as it is to dispense pills. It may not be necessary for us to be pugilists and lambast things with our fists, but it is our duty to stand up for the right with voice and vote and pen and make ourselves felt in the community. When we see things that need to be downed we should not be the last ones to tackle them.

"Goody-goody" doctrines have been preached so long from the pulpit and Sunday School that we have forgotten that back of order and law is physical force. Moral suasion is good, but it must sometimes be pounded in with a big stick.

"Take that, you namby pamby sky pilot," said the bully, as he slapped the cheek of

the preacher. Thereupon the preacher turned the other cheek and said, "Slap that one," and he received a slap on the other cheek. "Thus have I shown you my priesthood," said the preacher. "Now I will show you my manhood." And he laid off his sacerdotal robes and proceeded to demonstrate his manhood in such cyclonic manner that they had to pick the bully up two minutes later in a quiescent state. This was the kind of sermon he needed, and the kind that he understood, and the kind that is more efficient than the 29thlies. That is the kind of sermons that are efficient in many places and on many occasions. This is the kind that Christ preached in the temple, and is the kind that preachers as a class have tabooed entirely. They forget that Christ set two examples: one of meekness and love, and the other of strength and anger. He raided the temple much like a squad of police would have done, and used more vigorous means. People forget that He took a cat-o'-nine-tails and flogged the gamblers out of the temple and upset the card tables, and kicked over the chairs with as much vigor as any college mob playing rough house. Anger and righteous indignation are sometimes efficient stimulants to our duty. If we would imitate Christ in our dealings with corruption and vice we might be a greater force in the community. Too many of us are afraid of hurting some one's feelings. We are afraid we will insult some one. We forget that those who think rightly will not be offended, and those who need vigorous treatment will have greater respect for us if we thump them hard when they need it.

We can not afford to be timid observers of the corruption and political and social rottenness on all sides without lifting our voices against these crying evils. We must be counted among the fighters against everything that lowers the general welfare, or suffer the "penalty of death" to our better natures.

"SCRIPS."

While passing a group of men on the street, I heard one of them say: "I am awful dry; I need something. If I can find some damned doctor to write me a 'scrip' I will get a quart."

This set my ears a-tingling. Why not stop and inform him I was a doctor and could write it for him? Isn't it the doctor's

place to help the needy? And wasn't this man in great need? Didn't his being hanker for alcoholic solace? Couldn't I have made him happy in a minute? And shouldn't I produce happiness in others when opportunity offers? But I failed to act the Good Samaritan, and passed on.

Yet it set me to wondering why this man, decent enough in appearance, should speak in this opprobrious manner of the doctors? Why was this feeling in his heart? How did it get there? What chain of circumstances had caused him to use the term, "Some damned doctor?" Had the doctors been remiss in their relations with him? Why did he feel as if they were a sort of necessary evil? I wondered if this feeling had lodgment in the bosoms of many people. I wondered if we had conducted ourselves as a class that people thought that way about us. My mind kept running along this line till I got to my office. I had hardly seated myself when he came in, and I said: "You are looking for him, are you?" "For whom?" he said. I answered, "For one of the damned doctors." He seemed a little surprised at the abrupt manner with which I had received him, but he had brass enough to make his way, so he said, "I want a 'scrip' for a quart." I answered, "You can't get it here. If that is all you want our conference is ended." He wanted nothing else, and sullenly descended the stairs.

I can understand how a man with perverted ideas of moral integrity could write a prescription for whiskey for one who is not in the need of alcoholic stimulation, but for a doctor who has been trained in all the elements that go to make up a strong manhood, to put his name to a prescription for intoxicating liquor is beyond my comprehension, especially when he has every reason to know that the man is not in need of it, and wants it only for drinking purposes.

This same doctor may be one of the very highest standing in the estimation of his professional brethren, and whose character is above reproach, but he can write out the prescription for a quart of alcohol without the least compunction of conscience, or of apparent lowering of his professional ideals. This same man would call it a grave insult if you were to question his veracity or insinuate that he was dishonest. Yet he will write out the prescription with the "abso-

lutely necessary" clause attached, and never once prescribe how this absolutely essential medicine is to be applied.

I know this is getting along lines we should tread gingerly. It is a serious thing to question the motives of our professional brethren. I have strong feelings along the line of writing prescriptions for alcoholics, and no doubt am unable to see things as I should. But this prescription work is a great curse. It is wonderfully hard to draw the line, to tell who should and who should not be served. The doctor who can get good service from alcohol should prescribe it; we should not say him nay. That is his business. We should not interfere. If he can warm a patient up with whiskey, let him do it. If he can cool him off with alcohol, all right. If he can break a cold with brandy, O. K. If he can cure indigestion with wine, by all means use the wine. If he can produce renewed vitality with beer, beer let him prescribe. If he can carry the typhoid patient, the pneumonia patient, the measles patient, the heat-stroke patient, the frost-bite patient, the consumptive, the neurasthenic, the hysteric, the diabetic—if he can carry these all over safely on alcohol, of course, let him do it. But how can he conscientiously say on each of his prescriptions that the alcoholic is "absolutely necessary?" How about those doctors who rarely or never make use of these remedies, and have very successful outcomes?

This is an important question. The strong, virile, self-reliant, conscientious man can write prescriptions, and he can refuse. But there are some of us who are weak along the line of saying "no." To those of us who are weak, this is dangerous ground. A lot of hail-fellows, well met, collect around us and clamor for a "scrip," and in a moment of weakness and accommodation, we yield. This may be repeated and repeated, until the "absolutely necessary" clause becomes to us a meaningless phrase, and we are unwilling but potent factors in prostituting the profession and degrading our own patrons. This is a serious matter, especially when we see our State going surely and rapidly dry. Some of us who have always lived in wet towns will have this problem forced upon us in an aggravated form when our towns go dry, and the thirsty souls pour into our offices to plead for a "scrip." Happy is the man who has

strength to turn down every demand. "The best way to write them, is not to write them."

"I want a 'scrip' for a quart, my baby is sick," demanded the unhappy father of the mewling child. "How old is your baby?" asked the doctor. "It is two weeks old," was the reply. Did he get the whiskey? Yes; the doctor wrote on the prescription that it was "absolutely necessary." Some of you know the doctor. He has great faith in the efficiency of whiskey for all kinds of illness, especially the sicknesses that go with two-weeks-old babies.

We can not afford to dally with this evil. We must stand up squarely against putting our names to the "absolutely necessary" clause under "penalty of death" to our professional integrity.

TRACHOMA.

T. W. Moore, M.D., Huntington, W. Va.

Trachoma, Hirshberg tells us, was known to the Greeks two thousand years ago, but it was not until the time of the Napoleonic wars that it became epidemic in Europe. Particularly was this noticeable after the return of the armies from Egypt, and by many it is believed that it was first brought into Europe from that country, where granulated lids are always present. When the soldiers became disabled by the disease they were sent to their homes, thus spreading the infection among the women and children. The disease exists endemically through portions of West Virginia and Kentucky and seems to have been brought into these sections by the soldiers in our Civil War. I find numerous families where the grandparents, parents and children have been afflicted, but I have so far been unable to trace a case that existed prior to 1861, and, judging from the numerous pensioners who have always been residents of these sections, and who invariably date their first attack of sore eyes to their term of service in the army, I have come to the above conclusion. You know the Federal army had a great many foreign soldiers, and trachoma was very prevalent in Belgium, Austria, Holland and portions of Germany at that time.

Small bodies have recently been discovered, and as they are constantly present in fresh cases of trachoma, and have been

found in no other disease, are supposed to be the specific cause of granulated lids. These bodies, which are probably protozoa, are smaller than any cocci, and are found massed together in the cells. Infection takes place only by the transfer of secretions, and is not air-borne, as was once taught. This is shown, as Collins tells us, by its direct communication to nurses and physicians by the mere splashing of water from trachomatous eyes into their eyes while treating these patients. This also explains its epidemic character when introduced into barracks, boarding schools, asylums (particularly orphan asylums), and in rural and tenement districts, where the residents live in close contact, using the same towels, wash basins, two or three sleeping in the same bed; and further suggests methods of prophylactic treatment.

The disease makes its appearance in two forms, what is known improperly, I think, as the acute form, where there is much inflammation, with its accompanying swelling, redness, pain, lachrymation, photophobia and usually a muco-purulent secretion. Where the swelling is very great a diagnosis is often extremely difficult. The patient comes complaining of dust or a foreign body in his eye or eyes. You find the condition as described above; the granules are often hidden in the engorged conjunctiva; the increased secretion and probably the history pointing to an acute blenorrhoea. Fortunately, in the greater number of cases the granules can be seen by everting the lids, thus rendering the diagnosis easy.

We also find trachoma in a more insidious form, the patient sometimes not being aware that he is afflicted until pannus develops sufficiently to interfere with vision, and occasionally presenting himself for glasses to remedy this defect. This latter, which is designated the chronic form, is only slightly infectious, due to the very limited amount of secretion, whereas the acute form is very apt to spread because here the secretion is very abundant, and for that reason very easily transmitted.

Nearly always both eyes are involved, although cases do occur where the disease has lasted for years and remains confined to one side. Why the other eye has not become affected is not easily explained.

Fuchs says: "It is probable that trachoma is essentially a chronic disease, and that in

the acute cases there is super-added a second infection with bacteria, which, like the gonococcus or the germs causing catarrhal ophthalmia, are competent to cause acute inflammation of the conjunctiva." This, I think, coincides with the observations of nearly all authorities, who now generally believe that all cases are chronic from their incipiency.

The complications and sequelae are what renders this disease the terrible scourge that it seems to be wherever it is endemic. Among the former the most frequent is pannus, which is the result of mechanical irritation, to which is added direct infection. The formation of a lymphoid tissue in a structure like the cornea, devoid of any normal lymph-tissue, serves to show that a trachoma follicle is not a mere hypertrophy of pre-existing lymphoid tissue, but that it is a new production for the purpose of defense against the attacking organism (Collins). We also have corneal ulcers, which usually form at the edge of the pannus, but sometimes within it. These are very apt to leave permanent opacities which interfere with vision if in the pupillary area. In fact, the pannus itself may leave a permanent haziness of the cornea. Then we have the distortion of the lids, due to the cicatricial contraction that forms as a result of the healing process. This is sometimes ectropion of the lower lids, but more frequently an entropion or turning in of the lid margins, both upper and lower, causing the eye lashes to turn in and brush or scratch the cornea. In many cases this can not be remedied and the poor victim is forced to live a life of continual suffering or discomfort.

The treatment (again quoting Collins) depends on getting rid of the follicles by rupture, absorption or compression atrophy, and all successful therapeutic procedures can be shown to be based on one or the other of these processes.

My favorite method when the granules are prominent and the inflammation not great is expression with Knapp's roller forceps and then brushing the surface forcibly with a one to five-hundred bi-chloride solution; after the reaction from this has subsided, usually in about one week, I touch all the visible granules with copper sulphate stick. This application is made every other day, and I have the patient use

at home, three or four times daily, a prescription of witch hazel and solution of suprarenalin. This must be continued until every trace of granulation disappears. If the patient comes to me when there is much secretion or corneal ulcers, I use two or three drops of 2 per cent. solution silver nitrate night and morning. If there is much congestion or iritis I am very fond of hot fomentations. If iritis exists, of course, atropine solution in 1 per cent. must be used sufficiently often to keep the pupil dilated. In the form in which we find a violent inflammatory condition I insist on hospital confinement and treatment. In old cases, where granulations have disappeared and there is that white lymphoid tissue I adhere wholly to rubbing the affected surface with the one to five-hundred bi-chloride solution, as the copper sulphate is apt to over-stimulate the formation of scar tissue with its terrible sequelae.

In closing permit me to say that I know of no other disease in which a prognosis is more difficult or uncertain, for where treatment is too soon discontinued, but, as Fuchs says, even without any known cause under appropriate treatment properly carried out, a suddenly occurring supplemental attack can in a short time annihilate the results of months of treatment. It is only the slightest cases, or those that come under treatment early, that are completely cured. In other cases there are left sequelae, which are accompanied by a permanent impairment of the eye.

Theobald says: "The treatment of this affection yields far from satisfactory results, and even in the most favorable cases must be long continued to be effective. Moreover, relapses are of common occurrence, and for this reason it is well to give a guarded prognosis as to the future." And Edward Jackson: "It is impossible at the outset of any case to tell when treatment can be safely suspended, and its premature suspension may be followed by complete relapse. Occasionally cases are permanently cured, and in a few weeks, oftener in a few months; but many cases need occasional applications for years. A safe prognosis will be absolutely non-committal."

Trachoma, then, is a disease which is distinguished by its duration, extending over years, and which in many cases renders those who are attacked by it half or

wholly blind. If we add to this the fact that because of its infectious nature it is exceeding apt to spread, we shall understand how for those regions in which it is endemic it is a veritable scourge (Fuchs).

SEXUAL EXCESSES.

L. B. Rupert, M.D., Nuttallsburg, W. Va.
(*Read at May Meeting of Fayette County Medical Society.*)

The point, gentlemen, I wish to make is that a large majority of the people indulge in the sexual act too often when they are not able. I have thought for some years that this is a field that is poorly tilled, and that it should claim more of our attention toward the education of our patients. In so many of our cases we would find sexual excesses the cause of the pathological condition. We should teach our nervous patients the great harm that results from too frequent copulation. I can not help but believe that if we should follow the old saying, "do it only once a week," we would live to be 104 years old, and especially would we enjoy better health mentally, and get much more out of life than many do, merely from the fact that sexual excesses produce sexual neurasthenia and emptiness in life, and these patients fall into that state of moral apathy which is characterized by the suspension or complete loss of every noble sentiment.

The too frequent exercise of the act of copulation leads directly to anemia, malnutrition, asthenia of the muscles and nerves and mental exhaustion. The subjects become pale, melancholic and unfit for mental or corporal work, and no doubt each of you physicians can number by the dozens, especially the married ones after a certain period has elapsed, cases of vaginitis, endometritis, metritis, ovaritis, etc., which the continued congestion caused by such excess produces far more often than we think. At the time of orgasm all the sexual organs are so congested that it produces diseases of the genitals and the nervous system.

It is surprising how closely related in their results are alcoholism and sexual excesses, and how prematurely old we become from excesses in either. It is said the brain "dries up" and the patients can not concentrate their thoughts, and at the good old age of 70 but few can claim to possess the

virility that all may hope to retain who indulge the sexual appetite temperately in earlier life.

No doubt if we did our duty toward our nervous patients in teaching them the harmfulness of excessive copulation, very many more of our people would feel vigorous in old age, and many more birds would want worms at a riper age than is now the case, and happier would our people be in their declining years with a much stronger mind and a capacity for pleasant thoughts other than sexual.

I honestly believe our asylums are to-day crowded with patients from sexual excesses. Let us do our duty and teach our patients the harmful results of such excesses, and if all physicians will do their duty in this respect I will guarantee the human race will be happier and mentally stronger. Oh, give us a people of strong and healthy minds and of temperate habits in all things, and you will find people happy and cheerful and with a light step, even long after the meridian of life is passed.

Selections

MEDICAL ETHICS.*

By Frederick C. Shattuck, M.D.,

Jackson Professor of Clinical Medicine in Harvard Medical School, Boston.

The subject of my remarks this evening is not of my choice. It was assigned me by the higher powers for reasons I do not presume fully to understand. I cannot believe that you are peculiarly in need of instruction in medical ethics, and I know that I am not specially qualified to give it; but having from my youth been brought up in habits of obedience I cannot break away from early and long training, and—you must take the consequences.

Of several definitions of ethics in the Century Dictionary, I have selected the following as perhaps best meeting our requirements of the evening as I conceive of them. "Ethics is the doctrine of man's duty in respect of himself and of the rights of others." Ethics thus formulates right conduct and

aids us to see the light; but we must constantly strive to be led by it. Intellect and character are very different qualities, too rarely coexistent in their higher degrees in the same person. One or the other may be highly developed, or less or more atrophied, congenitally, from disuse, or both. He whose unclouded vision sees things just as they are, including the right and wrong of almost any and every question may, allowing himself to be dominated by love, ambition, avarice or some other passion, with open eyes choose a low course. Per contra, he whose intellect, which may be acute though narrow, fails to grasp the true relation of things, may, subduing all passion and apparent self-interest, act nobly, even if, with a mind more logical than clear, false premises lead to false conclusions. History affords examples of either extreme, as well as a few of that harmonious balance of intellect and character, which, in General Washington, has so impressed the world, and as long as man works upward must remain a living force.

Standards of ethical conduct—that is, conduct which not only extends to the development of individual character but also to that of the well-being of the race—have undergone considerable evolution, the most potent single influence which has been brought to bear upon them being Christianity. "An eye for an eye and a tooth for a tooth" of the Judaic, is supplanted by the offering of the other cheek to the smiter, of the Christian dispensation. Taking the world as a whole, even to-day, external standards vary enormously with the degree and kind of civilization—and its lack—with the religion and organization of society, the physical peculiarities of a country, the density of population, means of communication and a thousand other things.

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We are all agreed that as men we should so live as to cultivate our intellects, to enlighten our consciences, to strengthen and elevate our characters, and, in as far as in us lies, to promote the well-being of mankind. This is practical ethics. What, then, is medical ethics? Has an adjective any place in ethics? If so, why? Cannot all practical ethics be summed up in the Golden Rule? Yes and no. It can be so summed up, but rules based on analysis are useful as short-cuts, promoting the rapid-

*An address to the students of Western Reserve University Medical College.

ity of decision as to right conduct in concrete cases which may seem, or really be, complex. Every calling involves some peculiarities of relation to other persons, which add to or modify the restrictions imposed by general ethics. I have heard a stock-broker say that brokers, as a class, are the most honest men in the world, a simple word or nod being absolutely binding. But is not this due to the necessities of the business rather than to a sudden accession of spiritual grace which resides in and emanates from the seat in the brokers' board to each successive owner thereof? Were contracts thus apparently loosely made not inviolable, the business as at present conducted could not be transacted. The peculiarly intimate relations, especially with female patients, involved in the practice of medicine necessitate a very strict standard, lapses from which are less pardonable to the doctor than to men of any other calling save the priesthood. This has been recognized from very early times as we shall see later.

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Charaka, dating probably, as I am informed by Professor Lanman, from about 100 A. D., deals at some length with medical ethics and the mutual relations of pupil and teacher. It is too long to give in full, but I permit myself to make some extracts, calling your attention to the fact that this ancient Indian oath was administered to the pupil about to enter on the study of medicine, not at the end of his pupilage. We note the stress which is laid on the physical perfection of the candidate, and remember that such, in a limited way, is a pre-requisite to admission to the Romish priesthood. After setting forth what constitutes a good treatise to select for minute study, a list of the qualifications desirable in the preceptor are enumerated. "Approaching such a preceptor, the pupil desirous of courting him should attend on him with heedfulness like one revering one's sacrificial fire, or one's deity, or one's king, or one's father, or one's patron." A very proper attitude of pupil to teacher, not always observed at the present day.

Next come the qualities of the pupil:

"He should be of a mild disposition. He should be noble by nature. He should not be mean in acts. His eyes, mouth and nasal line should be straight. His tongue should be thin, red and unslimy. His teeth and lips should have

no deformity. He should not have a nasal voice. He should be possessed of intelligence. He should be free from pride. He should be endued with a large understanding. He should have power of judgment and memory. He should have a liberal mind. He should belong to a family the members of which have studied the medical scriptures or followed medicine as a profession. He should have a devotion for truth. He should not be defective in respect of any limb. He should have all his senses perfect. He should be disposed for solitude. He should be free from haughtiness. He should be of a thoughtful disposition. He should be free from those faults which go by the name of Vyasana." These are hunting, gambling with dice, sleep during the day time, speaking ill of others, infatuation for women, excessive addiction to singing, dancing and instrumental music, purposeless sauntering, and others of a similar nature.

Then follow elaborate ceremonies which are gone through with, so interesting and curious that I wish we had time for them in full. And finally, the preceptor formulates, as it were, a code, the acceptance of which is a pre-requisite to pupilage.

"If thou desirest to achieve success of treatment, earn wealth, acquire celebrity, and win Heaven hereafter, thou shouldst, reverencing kine and Brahmanas above all, always seek, whether standing or sitting, the good of all living creatures. Thou shouldst with thy whole heart, strive to bring about a cure of those that are ill. Even for the sake of thy life thou shouldst not drain those that are ill. Thou shouldst not, even in imagination, know another man's wife. Thou shouldst not, similarly, appropriate other people's possessions. . . . Thou shouldst not keep any connection with publicans, or sinful men, or with those that are abettors of sinful behaviour. Thou shouldst speak words that are soft, unstained by impurity (obscenity) fraught with righteousness, incapable of giving pain to others, worthy of praise, truthful, beneficial and properly weighed or measured. Thou shouldst always conduct thyself taking note of place and time. . . . While entering the family dwelling house of the patient, thou shouldst do it with notice to the inmates and with their permission. Thou shouldst (at such times) be accompanied by some male member of the family. Thou shouldst cover thy person properly. Thou shouldst (while entering) keep thy face downwards. With thy wits about thee, thou shouldst, with understanding and mind properly fixed, observe all things. Duly conducting thyself in this way thou shouldst enter (the dwelling house of the patient). Having entered, thou shouldst not devote thy words, mind, understanding, and the senses to anything else than what is calculated to do good to the patient, or to any other subject connected with the patient (than his recovery). Thou shouldst never give out (to others) the practices of the patient's house." . . .

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At the expense of chronology I will here give the oath which to-day must be taken

in Egypt before entering into practice:

"I swear in the name of God, the Most High, and of his sublime prophet, Mohammed, whose glory may God increase, to be faithful to the laws of honor, honesty and benevolence in the practice of medicine. I will attend to the poor gratuitously and never exact too high a fee for my work. Admitted into the privacy of a house my eyes will not perceive what takes place. My tongue will guard the secrets confided to me. Ever respectful and grateful to my masters, I will hand on to their children the instructions which I have received from their fathers. May I be respected by men if I remain faithful to my vow. If not, may I be covered with shame and despised. God is witness to what I have said. The oath is finished."

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The morality inculcated in the ancient codes and oaths is very high. Good character, good morals and professional secrecy are requisites common to all. The low state into which medicine had fallen during the Middle Ages is reflected in the codes and regulations of the times. Doctors too often had neither attainment nor character and it was deemed necessary to protect the community against them.

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But we must hurry on, great as is the temptation to linger. The history of medical ethics is inseparable from the history of medicine, and broadly speaking, no real progress in ethics can take place without antecedent progress in medicine.

During the seventeenth and eighteenth centuries the system makers, from Van Helmont to Hahnemann, were dominant, the resurrection of ancient literature leading at first to a blind reverence for authority, especially that of Galen, and the expenditure of brains often worthy of better things on hypothesis rather than on observation and experiment. Finally, the foundations of real progress were laid by Harvey, Sydenham and John Hunter, to select the great names of England alone. During the reign of the system-makers the lack of respect in which physicians were held, and part of the reason therefor, are reflected in the literature of the times and in the unseemly—to use a mild word—professional wrangles of the day. Contrast the attitude of Moliere toward doctors of physic with

that of writers for the modern stage. A class, as well as an individual, must respect itself to win the respect of others. Too many of the leaders of the profession, garbed in a long, velvet-lined doctor's robe, later with peruke, cane and sword, were mere pedants at the best, though they assumed the air of savants, and deemed it beneath their dignity to render other services to the sick than give dogmatic advice and write elaborate prescriptions. They took themselves very seriously. Perchance, had medicine stood higher in popular estimation, Rabelais, Smollett and Goldsmith might have been lost to literature. Rabelais was for fifteen years a monk, the last five years a Benedictine. The relation of the Order to medicine has already been spoken of. Had Rabelais not left the Franciscan for the Benedictine Order, would he have turned to medicine? Richard Mead, Doctor of Philosophy and Physic of Padua, later M. D. of Oxford, author among other works of "The Dominion of the Sun and Moon over the Human Body, and of the Diseases Thence Arising," the successor of Radcliffe in fashionable London practice, was bitterly attacked by Woodward, Professor of Physic in Gresham College, in print, and so rudely treated by him in public that Mead drew his sword and a duel was fought then and there. Mead disarmed Woodward and bade him beg for his life. "Never till I am your patient," was Woodward's witty reply. Later, Mead was literally chased down the grand staircase by Sarah, Duchess of Marlborough, who, offended by some remark of his at her bedside, jumped out of bed and pursued him with the purpose of pulling off his wig and throwing it in his face. Try to imagine such a thing in London today!

The duel between Doctors Bennett and Williams in the eighteenth century was a forerunner of similar events at a much later period, of events not quite unknown to-day south of Mason and Dixon's line. A pamphlet quarrel led to blows, and then to a challenge from Bennett, declined by Williams. Bennett then called on his confrere and called him a coward. Williams opened his door himself and shot Bennett with a pistol and swan shot in the breast. Bennett retreated across the street to a friend's house, followed by Williams who shot again and then ran him through with his sword.

Bennett managed to draw his sword and ran Williams through the chest and scapula, the sword breaking off short. Williams died before he could reach his house, Bennett in four hours.

In 1830 took place near Philadelphia a duel between Dr. Smith and Dr. Jeffries with pistols. Shot one at eight paces a miss; shot two breaks Smith's right arm; shot three wounds Jeffries in the thigh, causing him to bleed profusely. Bandages and brandy put him in condition for shot four, which, the men being only six feet apart, was fatal to both.

One more, and less tragic, illustration of the ethics of the time.

Wynter, English and fond of wine, and Cheyne, Scotch and an advocate of milk, rivals at Bath, exchange compliments as follows:

Dr. Wynter to Dr. Cheyne.

Tell me from whom, fat-headed Scot,
Thou didst thy system learn?
From Hippocrate thou hadst it not,
Nor Celsus, nor Pitcairn.

Suppose we own that milk is good,
And say the same of grass;
The one for babes is only food,
The other for an ass.

Doctor, one new prescription try
(A friend's advice forgive),
Eat grass, reduce thyself, and die,
Thy patients then may live.

Dr. Cheyne to Dr. Wynter.

My system, doctor, is my own,
No tutor I pretend;
My blunders hurt myself alone,
But yours your dearest friend.

Were you to milk and straw confined,
Thrice happy might you be;
Perhaps you might regain your mind,
And from your wit be free.

I can't your kind prescription try,
But heartily forgive;
'Tis natural you should wish me die,
That you yourself may live

If there are pessimists among us, let them read of past times. The fundamentals of human nature do not change. Fashion is still potent and always will be. But self-restraint has increased and the fire of passion is less easily lighted in those who are humbly trying to observe the facts and learn the laws of nature than in those whose pride

and feelings become enlisted in the advocacy of a hypothesis or a theory.

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The relation of doctor and patient is such, such the interaction of mind and body, so largely does mere perversion of function represent, modify, or complicate definite disease, that the confidence of the patient in the knowledge, skill and character of his physician is always a very important element in the care—not infrequently an indispensable element in the cure—of the sick. It is harmful to the character of one physician to directly or indirectly sap the confidence reposed in a professional brother. It is harmful to the usefulness of the profession at large so to do. It is harmful to the sick man. A dignified silence or reserve as regards quacks, even notorious quacks, is, as a rule, wise. We should certainly not go out of our way to break such silence. A certain proportion of the community is always ready to worship false gods, a larger proportion to be temporarily led astray. But as Mr. Lincoln is reported to have said "you can't fool all the people all the time," and in the long run truth prevails. The length of this run is shortened by absolute honesty in thought and deed on our part, by freedom from affectation of power and knowledge which we do not possess, by an attitude of mind which welcomes and recognizes progress, even though it may seem to clash with our personal interests at the time. Most of the ridicule which was unsparingly dealt to our profession in past times was richly earned by the assumption of so many of its members. The gold-headed cane, a portentous gravity of manner, a peculiarity of dress, other than that of scrupulous neatness, are trivialities which have had their day, like the proverbial dog. These particular trivialities are not likely to be reincarnated, but let us heed that other more subtle, and perhaps less venial, trivialities do not take their place.

The philosophy of life has been well, even if profanely, summed up in the advice of the Missouri father to his son: "So live every day that you can look any damned man in the eye and tell him to go to hell." Note that the latter part of the injunction is permissive, not mandatory. The important thing is the mode of life. The exercise of the privilege is secondary, subject to the inhibition of modesty and common sense.

Duty is ever paramount. The right which is attached thereto it may be better for us not to insist upon, and then only with careful regard for time and season.

Every rose has its thorn, and one of the thorns of the lovely rose of the practice of medicine is that the daily work of the physician brings him so much in contact with his inferiors, that is, with those who defer to his judgment. He thus comes in danger of being opinionated, intolerant of difference of opinion. Efficient antidotes to this toxin are an active share in medical meetings and the careful reading of at least one first-class medical journal of general scope. I have in mind more than one physician practising in small communities who make time to do these things, and I don't find these men the least ethical of the profession in their localities. We physicians must not only hold our tongues, but, more than men of some other profession, must shut our ears to tales, whether idle or malicious, either of the shortcomings and mistakes of fellow practitioners, or of remarks attributed to doctors or patients and derogatory to us. Such things should, in the vast majority of cases, pass us as the wind which we regard not. There are diseases which are communicated only through insects, which, meantime, do not seem to suffer themselves. A perfectly innocent remark, certainly in intention, may acquire virulence either in passing through one or more human infected insects, or only when planted on the culture medium of the jealous and suspicious mind of the person to whom it is said to have been applied. Is it not a safe rule, to credit others with the same good will and intentions which we of course possess ourselves? To assume as a general rule that evidence to the contrary is worthless? It seems to me that most people mean to do right. That most offences are not intentional, but are, at the worst, due to thoughtlessness. Is it not, therefore, well, if we believe we have good reason to think ourselves aggrieved, to have a frank talk with the aggriever unless we know his character to be bad? In that case his opinion of our utterances or deeds is of no account. It is not a good plan to write. The written word offers many chances for misconception. The result of a temperate personal interview will generally show that there is no real ground

for offense, that the alleged statement was either never made, or if made, was quite misunderstood, and the result of the interview may well be to make the interested parties better friends than they were before. A grievance is even more dangerous to harbor in the bosom than a serpent. The latter cannot do anything worse than kill the body, and that quickly; but the grievance is like a vigorous parasite, which fastens on and perverts or stunts the soul.

There is one conspicuous feature in which the ethics of medicine differ from that of nearly every other calling. The inventor of a machine, or of a process of manufacture, or a device, can patent it and receive legal protection, and receive all the emoluments directly flowing from the invention. It is considered good public policy thus to stimulate human progress by what is virtually a tax or bounty paid by the community. So also human thought embodied in the printed book may be copyrighted. The chemist who discovers a new compound may patent it and protect it further by a trade-mark. There is nothing in either the common or statute law to prevent a physician from patenting an instrument, or from, in some other way, acquiring proprietary rights. Here, however, medical ethics steps in and commands that the physician extend freely to all any invention or discovery he may make in the domain of medicine. Illness is part of the order of nature, incident to all, liable, like the rain from Heaven, to fall upon the just and unjust, the innocent and guilty much alike. No one is compelled to buy a patented article, for which some kind of substitute is practically always ready—perhaps not as good—but still serviceable. Health and its preservation are matters of such universal and vital import that the profession of medicine itself has decided that its members must forego anything like proprietorship in progress. The Bowles stethoscope is patented and is therefore expensive. Conduct and a profit allowable to Mr. Bowles would not be allowable were he Dr. Bowles.

To the doctor in love with his profession Heaven may sometimes appear as a place where he can exercise his calling without the necessity of taking fees—a fully endowed, organized and equipped hospital, if you will. Fees are the plague of a physician's life, although in the present organiza-

tion of society, a necessary plague. The price of medical attendance cannot be fixed and uniform to anything like the degree that obtains with other human necessities. He who cannot afford the first cut of beef suffers no real loss or hardship from the second or third. A skilful manager can feed himself or a household sufficiently and wholesomely at small expense. There are those among us who would be the better for taking the advice of Abernethy to the nobieman: "earn a sixpence a day and live on it." So also large expense is not needed to cover our nakedness and protect us from the weather. It is only the rich man, however, who can afford to indulge in second or third rate doctoring. Health is everything to the wage-earner and small salaried man, whose family depends on his daily returns. The poorer a man, the more does he need a good doctor. And it may safely be said that the poor in hospitals are often better attended than the rich in their "palatial residence" as the newspaper says. The poor man is often more thoroughly studied, and therefore probably more intelligently treated. In my own state I know one town, where, there being no poor, the poorhouse is rented and thus brings revenue to the town. In such a community fees can be tolerably uniform. Fee tables have their use as representing the minimum which should be charged to those able to pay for attendance. It is neither for the interest of the laity nor of the profession that fees should be cut for any reason other than the inability of the patient to pay. I have heard a medical friend state with pride that he had never taken a dollar fee. This seems to me a mistake. If a patient can afford a dollar and cannot afford more, is it not wise to accept it? The self-respect of the patient is preserved and the advice is likely to be of more service.

The maximum fee seems to me unlimited, provided that it be agreed upon beforehand. Unless it be so agreed upon, a rich man should not be charged an unusual fee for a usual service. Lawyers are apt to gauge their fees by the amount of money involved, especially to corporations. Some of them thus receive compensation which makes our hair stand on end. They deal with definite sums of money, we with the inestimable values of life and health. They render services which, as a whole, can be measured in

money, we services which very often cannot be measured by that standard. I have heard a very eminent lawyer claim great credit for the legal profession, in that no lawyer takes from any man any more than he has. Remember the injunction of Charaka not to drain the patient.

I repeat that fees are a plague. We are so often at a loss how much to charge and cannot avoid some mistakes. There is greater danger of underrating the ability of the patient to pay than there is of overvaluing our services. Then again, there is the plague of collection. It is not every bill which is settled by a check in the return mail. There are those who try to cheat—and who succeed. But it seems to me that, on the whole, people pay their just debts fairly well, and we must offset those who do so with grateful recognition with those who do so grudgingly, tardily or not at all.

Cannot we abridge the Golden Rule simply into "Let us be gentlemen?"

Let us possess our souls in peace when we find that there are those who are not gentle folk, pursuing the even tenor of our way and cultivating that precious quality of equanimity, the merits of which have been so well set forth by William Osler.

Robert Louis Stevenson, who surely had the opportunity to suffer many things from many physicians, and therefore should know whereof he speaks, says: "the physician is the flower (such as it is) of our civilization; and when that stage of man is done with, and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited, the virtues of the race"—*Cleveland Medical Journal*.

Correspondence

LETTER FROM THE SANDWICH ISLANDS.

Honolulu.

AT SEA, NEARING SAN FRANCISCO,

January 30th, 1910.

Dear Dr. Jepson:

We are nearing the end of our long sail. In sixteen hours more we shall reach San Francisco, and there bid adieu to the

staunch vessel that has been our home for the past three and a half months. The relatively short remaining distance of some 3,000 miles between there and home will all be land travel. The change will be a most welcome one. Our long and monotonous sail across the Pacific has fully satisfied the most extravagant desire for sea travel that, up to this time, has possessed us, and most willingly will we once more press our feet upon "God's footstool."

We left Japan on the evening of the 13th, and for the next five days the weather was rough and raw. On the sixth day, the 19th of the month, we reached the 180th meridian, the "international date line." As we were sailing eastward, we here gained one day on the calendar, so the next day, the seventh day out, was also the 19th. It was aggravating, when we were scheduled to arrive at Honolulu on the 23rd, to have this extra 19th thrown in and make us one day longer in reaching our destination. But even with this drawback our goal was at last attained, and the morning of the 23rd dawned with the green hillsides and silvery surf of Oahu, radiant in the sunlight, spread out to our longing vision. At last we were at Hawaii, "The Paradise of the Pacific," and our last stop before reaching our native soil. The preliminary inspection of the health officer over, we slowly steamed up to the dock and ran out the gang-plank. Then we were introduced to a custom at once unique and pleasing. As we went forward to the gang-way to go ashore, we were met by a company of native young women, with baskets filled with garlands of flowers and greenery, and, as we would come up, they would tie about the neck of each person, men and women alike, one of those garlands. The garlands were made of flowers of all kinds and colors, and their abundance furnished convincing testimony to the resources of their lovely gardens. Others of the group saw to it that each tourist had a button affixed, with the word "Aloha"—welcome—enamelled on it. This pretty custom, I understand, is unvaryingly followed whenever a vessel lands there, and is a token of their hospitality and good wishes. Of the entire party, more than six hundred and fifty, not one was missed. The preparation for this ceremony must have involved considerable work, for the flowers were all

fresh and the garlands or chains into which they were worked were substantial and durable. Each garland is called a lei. Out of deference to the custom, we all wore our decorations until the end of the day, and when they were laid aside they were still quite fresh and fragrant. The effect of this in the case of the ladies was quite pretty and becoming. The same could hardly be said of the men. To see a big two-fisted, awkward man going about with a rope of carnations around his neck, made one think of the garlanded ox of the ancients on his way to the sacrificial altar, and he would look, too, altogether as innocent and unsuspecting. Once ashore, the whole party was taken on waiting trolley cars for a ride through the city and suburbs. Almost at once we came to realize that we were in a veritable fairyland. Street after street we passed through, bordered with noble royal palms, lawns resplendent with brilliant flowers, houses and cottages embowered in vines and shubbery, some of them fairly buried in an enormous growth of the glorious bougainvillea, almost a solid mass of purple bloom, while around about were masses of the flaming hibiscus and poinciana, and all bathed in the soft, balmy atmosphere of our early June.

These islands—there are eight, inhabited—lie in about the latitude of Cuba, and are about 2,100 miles west of our coast. Hawaii, the largest and most southerly of the group, contains about 4,000 square miles. On it are the great mountains Mauna Kea, 13,900 feet high, and Mauna Loa, 13,600 feet, and the active volcano, Kilauea. Honolulu is the largest city of the group, and is the seat of government. It is on the island of Oahu, the third in size, containing about 600 square miles, and is something more than 200 miles northwest of Hawaii. This city is quite thriving; has a population in excess of 40,000; has schools, three daily papers in English, one in Chinese, four in Japanese, with semi-weekly Portuguese, and other periodicals. Of the total population of the islands, about 60% are Japanese. There are 6,000 or 8,000 Americans. The remainder is made up of natives, Portuguese, Chinese and in fact about every nationality on earth. The native race is slowly dying out. The principal products of the islands are sugar, rice, tobacco, rubber, bananas, and pine-apples, but

almost every known variety of fruit and vegetable can be cultivated. A short distance from the city is the famous Waikiki beach, where bathing and surf-riding are the vogue. A beautiful hotel accommodates the visitors. Here, too, is the Aquarium, which contains a most wonderful collection of fishes, that for brilliancy and gorgeousness of coloring and variety of form is unequalled anywhere in the world. Along the coast a few miles further is Pearl harbor, where the U. S. Government is constructing and fortifying a great naval station. On one day of our visit we drove up to the Pali, which is a notch in the ridge of mountains that rises just back of the city. The ascent from the city side is by a fine road of easy grade. At the summit the mountain terminates in an abrupt and almost perpendicular cliff, from which one looks directly down upon the plain, a thousand feet below. A splendid view is here afforded of the city, the surrounding country and far out to sea.

But that which appeals to the visitor most is not the scenery, or the products, or the tropical growth of vegetation. Other lands and other climes can equal these, although I doubt if any can surpass them. But it is the incomparable, the alluring, the enchanting climate that makes of these islands an earthly paradise. While the latitude is tropical, the climate is one perpetual May or June. The temperature never falls below 60°, and very seldom rises more than a degree or two above 80°. It was about 68° during our visit. It is this "all the year round" evenness of temperature that gives them their delightful charm. Other lands have as fine winter climate, but are intolerable in summer. Many have as fine summers but are impossible in winter. Others still have the equable temperature but have seasons when rain is almost continuous, followed by dry seasons when everything is parched and withered. Here showers fall every day and sometimes every hour, so that luxuriant growth and perpetual verdure characterize everything that grows, while the alternating sunshine decorates land and sea with a constant succession of brilliant rain-bows. The islands lie directly in the track of the north-east trade winds, and these sweep perpetually over them, tempering the sun's tropical rays, dissipating

the humidity and sultriness that would otherwise prevail. And besides, these airs have the health-giving quality of being clean and dust-free, by reason of their long sweep over the thousands of leagues of sea that they have traversed since leaving other shores. But why go on? No words can truly describe the delights of this wonderfully favored clime. But one thought jars in our contemplation of its charms. It is six days from San Francisco.

I cannot close this without quoting Mark Twain's glowing rhapsody, that strikes a note so true and so appreciative, that so vividly mirrors to the imagination the subtle charm that seizes and binds us in its bewitching thrall, to be freed again never more:

"The loveliest fleet of islands that lie anchored in any ocean. No alien land in all the world has any deep, strong charm for me but that one; no other land could so longingly and beseechingly haunt me sleeping and waking through more than half a lifetime, as that one has done. Other things leave me, but it abides; other things change but it remains the same. For me its balmy airs are always blowing, its summer seas flashing in the sun; the pulsing of its surf-beat is in my ear; I can see its garlanded craigs, its leaping cascades, its plummy palms drowsing by the shore; its remote summits floating like islands above the cloud-rack; I can feel the spirit of its woodland solitudes; I can hear the plash of its brooks; in my nostrils still lives the breath of flowers that perished twenty years ago."

With this tribute to this island paradise, we bring our series of travel-letters to a close.

L. D. WILSON.

Don't waste sympathy on yourself. If you are a gem, some one will find you. Don't whine. Tell people you are a failure and they will believe you. Talk and act like a winner, and in time you will become one.—*Stephen Harte.*

The men whom I have seen succeed best in life have always been cheerful and hopeful men, who went about their business with a smile on their faces, and took the changes and chances of this mortal life, facing smooth and rough alike as it came.—*Charles Kingsley.*

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

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Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

If the JOURNAL does not reach you by the 10th, drop us a card.

The next annual meeting of our State Medical Association will be held in Parkersburg on October 5th, 6th and 7th.

REPORT OF THE CARNEGIE FOUNDATION.

The Carnegie Foundation for the Advancement of Teaching is the title given to an organization growing out of the princely gift of Andrew Carnegie, which is administered by a Board of Trustees chosen with great care from the leading educators of the country, and of which Henry S. Pritchett is the President. This board has recently issued its *Bulletin No. 4*, which is the first of a series of reports on professional schools to be issued, and deals solely with medical education in the United States and Canada. It is by Mr. Abraham Flexner, and is a large volume of 325 pages. That the work of investigation necessary to the

preparation of this report has been most thoroughly done, and by one competent for such work, is apparent on every page. That the author is not a physician does not lessen the value of the report or impair the wisdom of its conclusions, since, as has been said, it represents a study, not of "medicine in relation to teaching, but of teaching in relation to medicine." Is medicine properly and efficiently taught, and if not, what changes in methods of teaching and in equipment are needed to bring us up to the level of the leading European nations? These are the problems for the solution of the Foundation, and as Mr. Flexner is an educator, and familiar with the many problems set before the schools and colleges, he is well qualified to undertake the work whose completion we have in this thorough and clear presentation of conditions as they exist in the medical schools of this country and Canada. It is worthy of note that the findings are very similar to those presented in the several reports of the Council on Medical Education of the American Medical Association, whose efforts have resulted in great improvement in our medical schools in the past few years, thirty of the poorer schools having gone out of existence in the past five years.

President Pritchett, in an introductory, holds that "all colleges and universities . . . are public service corporations, and that the public is entitled to know the facts concerning their administration and development" and that "only by such publicity can the true interests of education and the universities themselves be subserved. In such a reasonable publicity lies the hope for progress in education."

That there has been an immense overproduction of physicians in the past; that very many of these were poorly equipped by lack of preliminary education and by indifferent medical teaching; that the public fails to discriminate between the well and the poorly equipped physician, and that as a result the sick are not served as well as they should be, are facts well known to physicians. That many medical schools have existed, and still do exist, solely for the profit, directly and indirectly, of the teacher, is a fact also well known, and this report points out very plainly a number of such schools and shows wherein they are

defective. It is not surprising that the instructors in such schools do not like this report, and that one school has even entered a suit against the Foundation. If pushed in the courts the suit will serve the excellent purpose of having the defects of at least one indifferent medical school plainly shown to the public, whose interests must ever be the first consideration.

President Pritchett well says that "the day has gone by when any university can retain the respect of educated men, or when it can fulfil its duty to education by retaining a low grade professional school for the sake of its own institutional completeness." Nor should any independent medical school of low grade be longer tolerated, since the need for such has long since passed. Since our patrons can not judge of these matters, they should receive protection by the improvement or death of all such poor institutions as are kept alive by motives of personal gain and commercial expediency, and yet fail to render efficient service in teaching. In many of these, reforms in teaching can not be hoped for, since they must come, if at all, from and at the expense of the teachers themselves, whose personal interests are apt to blind them to the true situation and the necessity for improvement. The report before us "turns on the light upon conditions which, instead of being fruitful and inspiring, are in many instances commonplace; in other places, bad, and in still others, scandalous." Such conditions should no longer be permitted to continue in this enlightened land, where a liberal education may be had so freely, and in which we lead the world.

Prof. Vaughan points out that the medical profession "is ridding itself of commercialism. It is demanding of those who desire to enter its ranks a higher degree of culture and intelligence than is demanded of any other profession in this country. . . . This restriction is for the benefit of the people and not in the interest of the profession." It is an established fact that the improvements in medical education in this country in the past few years have been greater than in that of any other profession. The laboratory methods of investigation have resulted in a rapid increase in our knowledge of infectious diseases, and as a

result a very great improvement in our control of the conditions threatening public and private health. We believe that this Carnegie Foundation Report, together with the annual reports of our own Council on Medical Education, will result in the inauguration of improved methods of teaching in many of our medical institutions, in the merging of some and in the disappearance of others. The ultimate result of these changes will inevitably be that the public will be better served.

May the day be hastened when no one will think of entering upon the difficult study of medicine with an education below that of a four years' high school course. If our medical colleges take to heart the lessons of the report before us, and if our State Boards of Health rigidly enforce the laws with reference to the licensing of medical graduates, the advent of this day will be greatly hastened.

This Carnegie Foundation Report is a most notable and valuable publication.

S. L. J.

THE WHEELING MEDICAL LIBRARY.

The New York Academy of Medicine, The College of Physicians of Philadelphia, Boston, Brooklyn, Baltimore and Chicago have magnificent collections of medical literature in well-appointed homes, but the establishing of a medical library in a community the size of Wheeling is not an easy task. However, we are glad to announce here that the Wheeling Medical Library Association, after being three years moribund, has been resuscitated and from all appearances will be open to the physicians and their friends in September.

A well organized committee is at work soliciting subscriptions for stock, and already sufficient money has been pledged to insure the rental of the well-appointed rooms in the Board of Trade Building. A Librarian has been engaged, and the room will be furnished, and the books, some two thousand in number, with monthly and weekly magazines reaching about fifty in number, representing the different specialties, and including the leading Journals of our craft, will be on file.

On the library table will be placed the Index Medicus and the Index Catalogue of

the Library of the Surgeon General's Office. We shall be able through our affiliation with the Association of Medical Libraries to receive gratuitously a number of valuable journals, and through the Editor of this Journal, the exchange list received by our State Journal.

Things look auspicious for this institution and we hope the medical men and their friends in the upper Ohio Valley will rally to the support of this much-needed project. Contributions of medical books, old or new, and financial aid in large or small amounts, will be most welcome. The editor will see that all such reach their proper destination.

A NEW JOURNAL.

We welcome the appearance of *The Physicians' Business Journal*, a monthly of 24 pages, "exclusively devoted to the business side of the profession." It is published in Philadelphia, the editor being Dr. P. B. Thatcher, 310 *Bulletin* building. We are glad to see the name of Dr. J. E. Cannaday, of Charleston, in the list of associate editors. We believe there is room for a journal of this kind and hope to see this one prosper. One dollar per year.

We regret to announce the death of Dr. M. K. Kassabian of Philadelphia, who died as a result of X-ray burns. Dr. K. has been an earnest student in this field and has written a work on the subject. An Armenian by birth, he received his medical education in this country and devoted his life to the study of electricity, and became a recognized authority on the X-ray. His injuries from the ray date back to 1902, since which several operations on his hands have been done.

CHANGES IN THE UNIVERSITY OF PENNSYLVANIA.

Dr. David L. Edsall is to fill the chair of Theory and Practice vacated by Dr. Tyson's resignation; Dr. A. N. Richards, of the Northwestern University, is to fill the chair of Pharmacology and Therapeutics; Dr. Alonzo E. Taylor, of Baltimore, has been chosen professor of Physiological Chemistry, a chair for the endowment of which \$100,000 has been received; Dr. R. M. Pearce, of New York, is to be professor of Pathology, and Dr. Allen J. Smith is to occupy the new chair of Comparative Pathology.

HEAR THE STATE ASSOCIATION SECRETARY.

DAVIS, W. VA., July 16th.

To the Editor:

So many of our members can not understand why they do not receive their certificates as soon as they pay their dues, and why their names are spelled wrongly, that I thought it worth while to give the reasons.

I send out the certificates just as soon as I receive the \$2.00—not before. Many of the secretaries, in fact, nearly all, fail to send in names of paid-up members until they have nearly all of the dues. It is too much trouble to send in each name just as they get it. I know of one secretary who has had almost all of his members paid up for some weeks past and has not sent in any dues yet.

The names are spelled and addresses put down just as I receive them, unless I have strong evidence that they are wrong.

Our program is now nearly full, and to secure a place those intending to prepare papers should send the titles very soon.

A word to those who have not paid up. Please do not put it off longer. Send in your dues to your secretary at once. Delay causes great inconvenience to the editor of THE JOURNAL, and not a little expense to the Association, for all the old members get THE JOURNAL regularly, and as members drop out late in the year, the cost of THE JOURNAL for the year is lost. The only proper time to pay dues is in January, but since many have let the proper time pass by, the only time remaining is *now*. If you want to do the 'square thing' pay *now* for THE JOURNAL which you have been receiving all the year. Thus also you will show your continued interest in the State Association and in organized, progressive medicine. Fraternaly yours,

A. P. BUTT, Secretary.

THE EDUCATION DEVIL.

MUNICH, BAVARIA, June 2, 1910.

Where does all the world's misfortune come from? What causes all the earthquakes, sea storms, volcanic eruptions, mine disasters, and train collisions? They are caused by the mischievous education. Yes, there was a beautiful time, when the common people couldn't read and write; they could then be gratefully led by the nose; the despised worldly goods taken out of their pockets and the working power out of their bodies. But now time has changed! The mob claims its descent from the monkeys, and there are even some that no longer believe in comets as a warning of heavenly punishment, and consider a glass of good brandy a better remedy against some diseases than "the holy water of Lourdes." The insubordination grows larger and larger, and the fig leaves become smaller and smaller; and this is solely the fault of the damnable education.

Among the few enlightened institutions which comprehend this truth the Bavarian Parliament takes the first rank. Should it get a hold of the fellow who discovered the education—the good Lord have mercy on him! What does the peasant

need a hat for, and the people an education? Work and vote for "Centruca" (the Bavarian clerical party), so it is written in the Bible. What! It is not written in your Bible? Now we have it; it is because you can read, Oh, the terrible education!

After the Bavarian Parliament recognized its foe it decided to go after him with energy. In the last few weeks it gave the people's education two appreciable kicks, and once more pinched off a piece of the educated devil's tail. The Minister of Education, the holy Antonius of Unterhasching, did it with the help of his "black" (clerical) body and soul guards. There was a bill introduced in the Parliament that the Government should erect free schools and people's libraries, in order to fight against trash literature. This bill surely smelt of sulphur. Of course, the Bavarian Parliament would not be disinclined to fight trash literature, but the term trash needs a correct definition. Trash literature are the works of Darwin, Haeckel, Schopenhauer, Nietzsche, Heine and all non-clerical newspapers. These ought to be prohibited. But to fight this trash literature with public libraries, this would be to drive out the devil with Beelzebub! And the weed of education would grow the faster. With the votes of the "Centrum" against all the other parties, the dangerous bill to the commonwealth was killed. The education devil pocketed the kick and howlingly complained to his grandmother, the Science. But she consoled him: "There could nothing be done. Life is composed, as the great Berlin philosopher said, of dependencies, and against the decisions of the Bavarian Parliament the very gods would fight to no avail"! Scarcely had the education devil time to put a scanty bandage on his bleeding tail, soon again he felt the enemy's pinchers. On the Barerstreet there is a museum called the "Old Pinakothek." It was erected by King Ludwig I. Ludwig I. was a very good King, and even Centrum would have pardoned his poems, had he not been possessed by the education devil. Why on earth did he erect this "Old Pinakothek," with the outspoken aim to give the people, by free entrance, a chance to see fine art pictures? This decidedly obscures the King's character. The crime of Ludwig I. must be made good, because, does it not elevate the people's education level when they are allowed to study some good art pictures free of charge? And lo! the spirit came upon the holy Antonius of Unterhasching and the Bavarian Parliament again with the votes of the Centrum against all the other parties decided to collect for the Pinakothek an entrance fee of one mark (25 cents). It is considered that the receipt would amount to something like 20,000 marks (\$5,000) annually, a paltry sum, indeed, which could never justify the decision, had it not been for the kick which the education devil got from it. With chattering teeth, the education devil put his tail between his legs and howled bitterly.

Bavaria's "Blacks," however, are everjoyed with this victory and are gathering courage to new deeds. The education devil must be done up yet. There must be night where Antonius stars

shine, and joyfully should his war cry sound: "We don't want no education"!

DR. M. LEON.
(Formerly of Mannington, W. Va.)
* * *

CAPTAIN JOHN CLARK.

AN APPEAL TO HIS FRIENDS OF WEST VIRGINIA.
GEORGETOWN, GRAND CAYMAN,
June 5th, 1910.

My Dear Friends:

I am a long distance from you now. I found a brother in Philadelphia last year, and came here with him to see two sisters who are living here. I am very anxious to get back home again, but I have not the means to pay my passage, nor are any of my relatives in position to aid me financially, so there is nothing left for me but to apply to my friends in West Virginia, feeling sure that those who read the JOURNAL will respond to my call, as you all know me. I am very sorry to do this; both the book houses are keeping my situation open for me until I return. Whatever each one can do for me, please do it promptly, and be assured that whatever amount it may be, it will be gratefully appreciated. It takes a five-cent stamp to bring a letter to me here, or it will be laid over, causing much loss of time. It is very hot here and I am more than anxious to get home again, among my friends and patrons in West Virginia. Hoping to hear from you all soon, I am,

Sincerely and respectfully yours,

CAPTAIN JOHN CLARK.
*Grand Cayman, B. W. I., George Town.
(Via Kingston, Jamaica.)*

Society Proceedings

AMERICAN MEDICAL ASSOCIATION.

Abstract of Proceedings.

The sixty-first annual session of the American Medical Association was held at St. Louis, Mo., June 6-10, 1910. The registration was 4,070, this being the third meeting of the Association in point of size.

The House of Delegates met on Monday morning. The President, Dr. W. C. Gorgas, U. S. A., read his address, in which the work of the Association was commended and a number of suggestions made. The report of the General Secretary showed that during the past year 289 members had died, 1,937 had resigned, 1,031 had been dropped and 95 had been removed from the rolls on account of being reported as "not found," making a total loss of 3,352. During the year 3,593 new members were added, making a membership on May 1, 1910, of 34,176. The application of the Medical Association of the Isthmian Canal Zone for recognition as a constituent association was presented. The death of ex-President Herbert L. Burrell was commented on. The

Secretary presented a tabulation showing the membership in the constituent State Associations amounting to 70,146. The history of the Secretaryship and its connection with the editorship of the JOURNAL was reviewed. Dr. Simmons presented his resignation as General Secretary and asked that it be accepted. The report was referred to the Reference Committee on Reports of Officers.

The report of the Board of Trustees showed an encouraging progress in all lines of Association work, the work of the Council on Pharmacy and Chemistry, Council on Medical Education, Committee on Medical Legislation, Committee on Nomenclature and Classification of Diseases, and the Committee on Ophthalmia Neonatorum, being especially commended. The Trustees recommended that the report of the Committee on Organization of a Council on Health and Public Instruction be carefully considered. The addenda to the Trustees' report included a report from the Subscription Department, showing the average weekly circulation of the JOURNAL for 1909 as 55,361. The Treasurer's report showed a surplus in the Treasurer's hands on January 1, 1910, of \$163,340.72. The Auditor's report showed property to the amount of \$172,081.86, and total assets of \$399,462.16. The report of the Committee on Medical Legislation was presented by Dr. C. A. L. Reed, of Cincinnati, chairman. The year's work on National and State legislation was reviewed. Dr. Reed presented his resignation as chairman of the committee. Dr. A. D. Bevan, Illinois, presented the report of the Council on Medical Education, stating that during the past year the second tour of inspection of medical schools of the country had been made, and submitting as a part of the report a classification of medical schools into three classes: (a) acceptable, (b) needing certain improvements to make them acceptable, and (c) those which would require complete reorganization.

At the afternoon session the Board of Public Instruction and the director of the post-graduate work submitted their reports. Dr. F. Park Lewis submitted the report of the Committee on Ophthalmia Neonatorum, reviewing the work of the past year and recommending that its work be enlarged so as to include all preventable causes of blindness; also that renewed efforts be made to have all births reported promptly so as to make possible more thorough work in the prevention of blindness. The report was adopted and the committee continued.

Dr. H. O. Marey, Massachusetts, submitted the report on Davis Memorial Fund, showing total contributions of \$2,771.34. Dr. Marey presented his resignation as chairman, and Dr. Billings presented his resignation as secretary of the Davis Memorial Fund. The report was referred to the Board of Trustees. The Committee on Nomenclature and Classification of Diseases reported progress. The Council on Defense of Medical Research reported the publication during the past year of thirteen pamphlets, written by experts in the various fields, and prepared for general distribution. The Council has also given much material to the daily press. The formation of a society of laymen for the promotion of medical research is being considered.

Dr. Edward Jackson, Colorado, presented a report from the Committee on the Establishment of a Physicians' Sanitarium, recommending the appointment of a committee to draw up a plan for a corporate body to receive and administer funds for the relief of disabled physicians, and to establish a sanitarium for physicians suffering from tuberculosis. The report was referred to the Board of Trustees. President Gorgas submitted a report from the Committee on Memorial to Medical Officers of the Civil War, showing that three members had been appointed and that the two remaining positions would be filled by the appointment of one volunteer surgeon from the Union army and one from the Confederate army. After the presentation of a number of resolutions, which were referred to appropriate committees, the House of Delegates adjourned until Tuesday.

The House met on Tuesday afternoon, with the newly installed President, Dr. William H. Welch, in the chair. Dr. Frank B. Wynn, Indiana, presented the report of the Committee on Scientific Exhibit, recommending the preparation of cheap, compact and complete exhibits for the education of the public on all the problems of public health and comfort. Dr. Alfred Stengel, Pennsylvania, presented the report of the Committee on Scientific Research, showing that three grants of \$200 each had been made for the current year, as follows: Dr. R. M. Pearee, New York; Dr. Gerald B. Webb, Colorado, and Dr. E. C. Rose-nau, Chicago. The Committee on Organization of a Council on Health and Public Instruction recommended that the Committees on Organization, Medical Legislation, Public Instruction and Defense of Medical Research be abolished, and that a Council of five, to be known as the Council on Health and Public Instruction, be created. The Reference Committee on Sections and Section Work reported, recommending the organization of a Section on Genito-Urinary Diseases, with the following officers, to serve for the coming year: Chairman, W. T. Belfield, Chicago; Vice-Chairman, James Pederson, New York; Secretary, Hugh Young, Baltimore. The committee recommended that Sections on Physical Forces in Medicine and on Hospitals be not established at present. The report was adopted. The Reference Committee on Medical Education endorsed the work of the Council on Medical Education, and recommended that the rating and classification of Medical Schools, as determined by the Council, should be made public, and that the Council be instructed to continue its investigations. The classified list of colleges was presented as part of the committee's report.

The Reference Committee on Reports of Officers recommended that the request of Dr. Simmons regarding his resignation as General Secretary be respected, and that his resignation be accepted in order that he might devote himself exclusively to the duties of editor of the JOURNAL of the American Medical Association. This report was adopted. Dr. I. N. McCormack presented the report of the Committee on Organization, reviewing the work done for a Department of Public Health, and presenting the following resolutions:

Resolved, That the President be and is hereby authorized to appoint a committee of seven members, which shall be charged with the duty of framing a bill for a National Department of Health, to be presented to the next session of Congress, in December, and that this committee shall consider and determine all matters and policies relating to national health legislation, and may invite the co-operation and co-operate with other organizations having the same purpose in view.

Resolved, That the principles of the Owen bill, having for its object the creation of a National Department of Health, now pending in the Senate, and similar bills introduced in the House by Representatives Simmons, Creger and Hanna, be, and are hereby heartily approved by this Association, and the cordial thanks of the medical profession of the United States, officially represented by it, are hereby tendered to Senator Robert L. Owen, Irving Fisher and their co-workers for their able and unselfish efforts to conserve and promote the most important asset of the nation, the health and lives of its women, its children and its men, properly understood the greatest economic question now confronting our people.

The members of this Association stand for pure food, pure drugs, better doctors, the promotion of cleaner and healthier homes, and cleaner living for individuals, for the State and for the Nation. We believe this to be held as equally true by the reputable and informed physicians of all schools or systems of practice.

We welcome the opposition of the venal classes long and profitably engaged in the manufacture of adulterated foods, habit-producing nostrums and other impositions on the people—to the extent of hundreds of millions of dollars annually—and express our sympathy for the well-meaning men and women who have been misled and worked into hysterics by the monstrously wicked misrepresentations of a corrupt and noisy band of conspirators, and who are being used as blind instruments to enable them to continue to defraud and debauch the American people.

Medical science is advancing, especially on its life-saving side, with a rapidity unknown to any other branch of human knowledge. It is known of all men that our members in every community in the United States are unselfishly working day and night, instructing the people how to prevent tuberculosis, typhoid fever and the other diseases from which physicians earn their livelihood. Therefore, we welcome and will wear as a badge of honor the slanders of these unholy interests and their hirelings.

These resolutions were later on unanimously adopted by rising vote.

At the Wednesday session, Dr. Rosalie S. Morton, New York, was granted the privilege of the floor to present the report of the Public Health Education Committee. The Reference Committee on Legislation and Political Action commended the work of the Committee and Bureau of Medical Legislation and recommended that Dr. Reed's resignation be accepted with an expression of appreciation of his untiring, loyal and faithful services. The Reference Committee on Hygiene and Public Health commended the work of the JOURNAL in the direction of a sane Fourth of

July. The Reference Committee on Reports of Officers submitted a supplementary report on Dr. McCormack's work, endorsing his recommendation of the appointment of a special committee of seven, charged with the framing of a bill for a National Department of Health to be presented at the next session of Congress. Following the adoption of this report, Dr. Guthrie, Pennsylvania, moved the adoption of the resolutions presented by Dr. McCormack. This motion was unanimously carried. The Committee on Awards recommended that a gold medal be given Dr. Claude A. Smith, Atlanta, Georgia, for an exhibit of experimental researches on hookworm disease, and that certificates of honor be awarded to the following exhibitors: University of Minnesota, St. Louis University, St. Mary's Hospital, Rochester, Minn.; St. Louis City Hospital, Indianapolis Department of Public Health, University of Michigan, Dr. Honwink, St. Louis; Special Committee on Prevention of Blindness, New York; Northwestern University, Chicago; St. Louis Medical History Club. The following resolutions were then presented and adopted regarding the death of Dr. H. T. Ricketts:

WHEREAS, Howard Taylor Ricketts, a member of the American Medical Association, lost his life on May 3, 1910, from typhus fever, contracted while engaged in an investigation of that disease in the City of Mexico; and,

WHEREAS, He sacrificed himself in the study of a preventable disease and in the interest of the health and lives of the human race; and,

WHEREAS, His masterly attainments as a scientific worker in this and other fields rendered his life of inestimable worth to the medical profession and the world at large; therefore, be it

Resolved, That the American Medical Association, in convention assembled, herewith express its high appreciation of the ideals, the efforts and the achievements of this brilliant investigator, and its deep sorrow at the loss of a most brilliant investigator, and its deep sorrow at the loss of a most valued and cherished member; and,

Resolved, That we herewith express our sorrow in the death of Dr. Conneffe, of Ohio, who lost his life as the result of infection with typhus fever while working with Dr. Ricketts in Mexico City; and,

Resolved, That these resolutions be spread on the minutes of this Association and published in THE JOURNAL.

After the election of a number of associate members and the presentation of miscellaneous resolutions, which were referred to appropriate committees, the House adjourned until Thursday morning.

A special meeting of the House was held on Thursday morning to consider the report of the Reference Committee on Amendments to the Constitution and By-laws. A large number of amendments, consisting mainly of verbal modifications, were adopted. The last meeting of the House of Delegates was held on Thursday afternoon, the election of officers being the first order of business. The following officers were elected: President, Dr. John B. Murphy, Chicago; First Vice-President, Dr. E. E. Montgomery, Philadelphia; Second Vice President, Dr. R. C. Coffey,

Portland, Ore.; Third Vice-President, Dr. W. G. Moore, St. Louis; Fourth Vice-President, Dr. H. L. E. Johnson, Washington, D. C.

When nominations for General Secretary were called for, Dr. I. C. Chase, Texas, nominated Dr. Simmons for re-election in a speech which invoked repeated rounds of applause. In spite of the fact that his resignation had been presented and accepted, it was evident that the House of Delegates was determined to re-elect him. After a large number of delegates from different States had expressed their views, Dr. Simmons was unanimously re-elected. Dr. Frank Billings was nominated for re-election as treasurer by the Board of Trustees, and was elected. The following trustees were then elected to serve until 1913: Dr. W. W. Grant, Denver, Col. (re-elected); Dr. C. E. Cantrell, Greenville, Texas (re-elected); Dr. Frank J. Lutz, St. Louis. The President appointed the following as members of standing committees, the appointments being confirmed by the House of Delegates:

The Council on Medical Education—Dr. George Dock, St. Louis, to succeed Dr. E. E. Southard, to serve until 1915.

Council on Health and Public Instruction—Dr. H. M. Bracken, Minneapolis, to represent public health; Dr. W. B. Cannon, Boston, to represent defense of medical research; Dr. Henry B. Favill, Chicago, to represent public instruction; Dr. J. N. McCormack, Bowling Green, Ky., to represent organization, and Dr. W. C. Woodward, Washington, D. C., to represent legislation.

The Reference Committee on Sections and Section Work recommended the election to honorary membership of Dr. Alfred Stenger, Hamburg, Germany; Mr. J. Herbert Parsons, F. R. C. S., London, England, and Dr. James H. Honan, Berlin. The Board of Trustees reported regarding the publication of special journals on surgery and pediatrics, and, after extended discussion, the matter was referred back to the Board, with full power to act.

Invitations for 1911 were presented from Los Angeles, Cal., and Buffalo, N. Y., and, on ballot, Los Angeles was chosen, 61 to 58.

The Reference Committee on Hygiene and Public Health presented a report condemning the multiplication of optometry boards and the appointment of non-medical and unqualified persons thereon, recommending the formation of a committee on the prevention of blindness and authorizing the appointment of a committee to cooperate with the Department of Commerce and Labor, with a view to establishing proper visual standards and tests for pilots.

Following the adoption of resolutions of thanks to the Missouri State Medical Association, the St. Louis Medical Society, Governor Hadley, Dr. Dorsett and his local committee of arrangements, the House of Delegates adjourned sine die.

The attendance of the House of Delegates was large, 133 delegates being registered. An enormous amount of legislative work was done, the bulk of which was transacted in committees. The revision of the Constitution and By-laws and the reorganization of the standing committees will greatly strengthen the work of the Association and increase the possibilities for improved work. Taken as a whole, it was one of the most im-

portant sessions which the Association has held, and the prospects for the coming year are better than ever.

AMERICAN PROCTOLOGIC SOCIETY.

TWELFTH ANNUAL MEETING

Held at St. Louis, Mo., June 6 and 7, 1910.
The President, DR. DWIGHT H. MURRAY, of Syracuse, N. Y., in the chair.

Officers elected for the ensuing year:

President, GEORGE J. COOK, M. D.,
Indianapolis, Indiana.
Vice-President, JEROME M. LYNCH, M. D.,
New York City, N. Y.
Secretary-Treasurer, LEWIS H. ADLER, JR., M. D.,
Philadelphia, Pa.

EXECUTIVE COUNCIL.

DWIGHT H. MURRAY, M. D., of Syracuse, N. Y.,
Chairman.

GEORGE J. COOK, M. D., Indianapolis, Indiana
LOUIS J. HIRSCHMAN, M. D., Detroit, Michigan.
LEWIS H. ADLER, JR., M. D., Philadelphia, Pa.

The place of meeting for 1911 will be at Los Angeles, California. Exact date and headquarters to be announced later.

The following were elected Honorary Fellows: Mr. F. SWINFORD EDWARDS, Mr. W. W. WALLIS, Mr. P. LOCKHART MUMMERY, and Mr. W. ERNEST MILES, all of London, England.

The following were elected Active Fellows of the Society: Dr. HORACE SAMUEL HEATH, 320 Temple Court Building, Denver, Colorado; Dr. STANLEY G. ZINKS, 222 Fifth Avenue, Leavenworth Kansas; Dr. GRANVILLE S. HANES, Masonic Temple, Louisville, Kentucky.

The following is an abstract of the principal papers read:

Presidents Address,

"UNDERGRADUATE PROCTOLOGY."

By DWIGHT H. MURRAY, M.D., of Syracuse, N. Y.

After thanking the Society for the honor conferred upon him in making him President, he made some recommendations as to its future before taking up the formal subject of his address.

He considered that the American Proctologic Society stood for a high class of scientific work and the best that there is in Proctology. He believed that it would be for the best interests of the Society that the programs of future meetings should be made up of a symposium, or possibly two, with essays that shall treat thoroughly some selected subject or subjects, and that these papers should be written by men whose part in the symposium should be assigned to them by the Executive Committee. He suggested that the program should not be too crowded and that sufficient time should be given for a full discussion of every paper and subject presented.

He believed that a volume or year-book of the American Proctologic Society, containing a symposium, with additional papers of merit, such as would be presented by experts in proctology,

could be made of great value to the profession and would be sought after by general practitioners. He believed that it was of the utmost importance to the Society that the transaction be published yearly, as it would be a decided step backward to omit the publication, no matter what its cost might be.

A recommendation was also made regarding the limitations of the field of the proctologist. He believed it to be true that *ethical* practice of proctology was too narrow a field in which the specialist could gain a competence. He therefore recommended that this Society take up the question of the limit of proctology as a specialty, and that it be changed to include diseases of the small intestines; in other words, that proctologists become procto-enterologists, in this way every member of the specialty would be doing uniform work.

He then proceeded to take up the main subject of his address, "Undergraduate Proctology." He believed that the specialty was rapidly assuming the importance which is its due, in spite of the opposition it has experienced from the general surgeons, who have seemed to look upon it as an unwelcome invasion of their field.

He considered that one of the most important duties of the Proctologic Society was an educational one. He hoped that with the increasing appreciation and demand for this kind of special work, that the colleges would take up the subject in a manner which its importance demands, and that if the medical colleges did not educate the profession in this branch of medicine, the members of the Proctologic Society must do it. He put forth the claim that the field of medicine and surgery is too large to admit of any man becoming an expert in all branches. This is an age of specialties and the very limitations of a specialist make an expert of him.

He believed that proctologic teaching in colleges should be done by men learned in the specialty and not by general surgeons, who only teach in a desultory manner, so that when the students are graduated they go forth to the practice of their profession, in fully 75 per cent. of the cases, with little or no knowledge of this line of work.

He then proceeded to prove this point by a statistical report showing the answers to questions which he propounded in a communication to fifty of the most prominent colleges in the United States and Canada. The answers to those questions show conclusively that a very large percentage of the college faculties believe that proctology is of minor importance and that it is not necessary to give the student any special training in the subject.

In order to prove his point he found it necessary to communicate with a large number of physicians, including specialists in various branches and men who had graduated during the years from 1873 to 1905. He sent communications to these men, asking them to answer certain questions, which would show whether they believed they would have been better prepared for their practice and have been better able to treat their patients if they had been given instructions in this line of work. Ninety per cent. of the physicians answered the question in the affirma-

tive, which he believed told the story from the standpoint of the physician. This gave him good comparison from the standpoint of the college faculty on one hand, who feel that they know the subjects in which the student should be trained at the beginning of his life's work, and from the standpoint of the physician on the other hand, who is in the midst of his life work. These answers show that physicians believe that colleges should devote less time to major things in specialties and surgery, and instead give their students more definite and practical instruction in proctology.

Dr. Murray then presented the questions and answers from the college faculties and physicians in tabulated form. He did not claim that the work of the eye, ear, nose and throat, or of any of the specialties, was unimportant, but he did maintain that the time given to these specialties should be shared in a proper way with proctology, which would not detract from the importance of the older specialty, but would recognize the importance of proctology. At the same time this would put the young graduate in possession of knowledge that would not only be of great value to him, but of far greater value to his patients. There are certain common and important diseases in every specialty that the young physician is sure to meet and ought to be able to recognize.

He believed it to be the duty of the American Proctologic Society to foster a sentiment in the profession and among college authorities favorable to the special teaching of proctology either separately or as a branch of general surgery. He did not deem it necessary that a special chair of proctology should be created, but that a course should be provided for under the chair of general surgery.

Dr. Murray believed that it would be wise for the American Proctologic Society to offer a prize of a substantial sum of money for the best original graduating thesis on a proctologic subject. The competition to be open to graduating classes of any college in the United States and Canada.

In conclusion, the doctor believed that the profession should offer more encouragement to specialties in all branches, especially to those who are willing to devote their time to a branch which has for some reason been neglected, as proctology has been. Then it would be practically impossible for quacks and healers of various sects and isms to take advantage of our professional neglect, and use it as their opportunity to play upon the credulity and gullibility of human nature.

"REVIEW OF PROCTOLOGIC LITERATURE FROM MARCH, 1909, TO MARCH, 1910."

By SAMUEL T. EARLE, M. D., of Baltimore, Md.

The Committee on Proctologic Literature reviewed the following papers as worthy of the attention of the members of the Proctologic Society:

"The Treatment of Hemorrhoids by Zinc-Mercury Ionization," by Dr. T. J. Bokehham, which appeared in the Proceedings of the Royal

Society of Medicine, May, 1909, p. 135.

A paper by Dr. Herman A. Brav in the *Monthly Cyclopedic and Bulletin*, May, 1909, p. 268. "The Importance of Careful Post-Operative Treatment in Rectal Operations."

A paper from the *Albany Medical Annals*, May, 1909, Vol. XXX, by Dr. George Blumer, New Haven, Conn. "A Neglected Rectal Sign of Value in the Diagnosis and Prognosis of Obscure Malignant and Inflammatory Diseases Within the Abdomen." The sign is spoken of as the rectal shelf, which is observed on making a digital examination of the rectum on the anterior rectal wall, from two to four centimeters above the prostate gland in males. This shelf is of almost cartilaginous feel, which projects into the rectal cavity. In some cases the circumference of the rectum is involved in an annular zone of infiltration, more marked anteriorly and tapering off toward the posterior wall, a signet ring stricture, as Schnitzler calls it. The summary of his paper is contained in the following:

1. In certain forms of carcinoma of the abdominal organs, notably gastric carcinoma, and in some cases of tubercular peritonitis, implantation metastases in Douglas' pouch are common.

2. These metastases impinge upon the rectum and may infiltrate its submucosa, causing a peculiar shelf-like tumor on the anterior rectal wall, readily felt by the examining finger.

3. In cases of gastric carcinoma this may be an early metastasis, and occurs especially in males.

4. In such cases the primary tumor may be latent and the metastasis may be large enough to cause symptoms of obstruction. It has been mistaken at times for rectal carcinoma and has been removed as such.

5. The not infrequent occurrence of this rectal shelf makes it a diagnostic and prognostic sign of a good deal of importance, and warrants the statement that in no case of obscure abdominal disease should a rectal examination be omitted.

Dr. W. I. DeC. Wheeler, in the *London Lancet*, March 6, 1909, gives excellent reasons for always using the abdominal route, or a combined method of excision of carcinoma of the rectum, whenever the malignant growth is three inches or more above the sphincter.

The technic for Excision of the Rectum in Procidentia, as given by Dr. John H. Cunningham, Jr., Boston, Mass., *Annals of Surgery*, May, 1909, is referred to and favorably commented upon.

Dr. A. L. Wolbarst's improved rectal irrigating tube is referred to. A description of the instrument may be found in the *Journal of the American Medical Association*, July 31, 1909.

"MALFORMATIONS OF THE ANUS AND RECTUM; REPORT OF FOUR CASES."

By ALOIS B. GRAHAM, A. M., M. D., of
Indianapolis, Ind.

Congenital malformations demand prompt surgical treatment. Many cases are never reported and the percentage is evidently much larger than statistics indicate. These malformations are

sufficiently uncommon and interesting to warrant placing every case on record. Report of four cases:

Case 1.—White male child, born with no trace of an anus, and in whom careful dissection and exploration failed to find any trace of a rectum. Colostomy was suggested, but the parents refused their consent. Child died four days later. Autopsy refused.

Case 2.—Colored male child, age five years, born with a complete obstruction of the anus by a membranous diaphragm, which was perforated by the attending physician. Examination revealed a dense stricture, almost impermeable, involving the entire anal canal. The interesting point was the presence of a hypospadias through which feces had escaped for two years. The communication between the rectum and urethra was the result of ulcerations above the stricture rather than defective embryological development. Surgical treatment was refused.

Case 3.—Colored female child, age fifty-six days, in whom examination revealed a well-formed anus and a protruding or bulging imperforate rectum. A photograph shows a pronounced distention of the abdomen, the result of a fifty-six days' intestinal obstruction. Posteriorly, the rectum had no attachments, and the finger could be introduced easily behind the bulging imperforate gut, through the anal canal, into a blind pouch. A fistulous opening was found in the vagina just behind the hymen. The meconium and a small quantity of feces had escaped through this opening. The protruding rectal mucosa was dissected from its attachments and excised. The rectal mucosa was then sutured to the free skin at the anal margin, except for one-eighth of an inch posteriorly. This was used for drainage in case the blind pouch became infected. This patient made a good recovery. At the last examination, which was three months following operation, the finger could be introduced easily into the rectum, the stools were normal, and sphincteric control was good. The fistulous opening into the vagina was closed, and the posterior rectal mucosa was then sutured to the free skin at the anal margin. With the exception of an abdomen which seemed to be a trifle prominent for one of its age, the child appeared normal.

Case 4.—White child, one of twins, age forty-two hours, in whom examination revealed an imperforate urethra and no trace of an anus. Penis and scrotum were well developed, but neither testicle could be palpated. Careful dissection and exploration failed to find any trace of a rectum. A two-inch incision was made in the median line just above the pubis, but no bladder could be found. Decided to perform a colostomy or sigmoidostomy. A portion of what was supposed to be the sigmoid was opened and a large quantity of meconium escaped. Exploration revealed a pouch which appeared of much larger dimensions than a normal colon or sigmoid should be. Operation was completed, and yet our inability to find the bladder made the case a hopeless one. Child died twenty-four hours later. At autopsy no bladder was found. The entire large intestine was removed. This case is of interest from the point of view of defective

development. The pouch-like termination of the intestine might well be termed a monstrosity. The writer is inclined to believe that it is one of those rare cases in which the colon or sigmoid opens into the uterus. While the local examination revealed a male child, with the exception of being unable to palpate the testicles, the examination of the specimen removed at autopsy reveals marked evidence of the female generative organs. This child was a transverse hermaphrodite—namely, one in whom the external genitals seem to be of one sex and the internal of the other. Report of examination of specimen states that the pouch-like termination of the intestine is formed of three organs, namely, the bladder, uterus and rectum. (Specimen shown.)

Reviews

DISEASES OF THE EYE.—New edition just issued, G. E. DeSCHWEINITZ, M.D., *Professor of Ophthalmology in the University of Pennsylvania.* Cloth, \$5.00 net. W. B. Saunders Co., Philadelphia and London.

It is with much pleasure that we have reviewed this, the sixth edition of Prof. DeSchweinitz's widely-known work on the eye. While this book is primarily intended for students and general practitioners, it deserves a prominent place in the library of every ophthalmologist. There are quite a number of new features in this edition, especially in those parts having reference to obstetric injuries to the cornea; atoxyl amblyopia; ocular complications of diseases of the nasal accessory sinuses; Smith's operation for the removal of cataract in the capsule, and many others, that space does not permit us to mention.

Dr. DeSchweinitz is a most interesting writer and many of the chapters in his book have been almost entirely rewritten, notably the subjects of cataract, iritis, sympathetic ophthalmia, pulsating exophthalmos, and the surgical operations.

V. T. CHURCHMAN.

PULMONARY TUBERCULOSIS AND ITS COMPLICATIONS.—By SHERMAN G. BONNEY, M.D., *Professor of Medicine, Denver and Gross College of Medicine, Denver.* Octavo of 955 pages, with 243 original illustrations, including 31 in colors and 73 x-ray photographs. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$7.00 net; Half Morocco, \$8.50 net.

Two years ago we had the pleasure of giving a full review of this excellent work in its first edition. We then said: "It is the most practical exposition of the general subject that has been given to American physicians." In the time that has elapsed since its first appearance the author has made many changes and improvements in the work. The whole work has been revised and much new material added. Advantage has been taken of the publication of the Proceedings of the last International Congress on Tuberculosis to secure the very latest views on all disputed problems in tuberculosis, and five new chapters

have been added, thus presenting the reader the very newest information on the various phases of the subject. The general practitioner can certainly in no other single volume find so great amount of information on a topic that is so near to all of us in our daily professional life. We take pleasure in commending the work as worthy a place in the library of every practitioner.

INTERNATIONAL CLINICS.—A quarterly of clinical lectures and specially prepared articles. Edited by DR. H. W. CATTELL, Phila., aided by MUSSER, OSLER, MAYO, and others. Vol. II. 20th Series, 1910. J. B. Lippincott Co. \$2.00.

We have had frequent occasion to heartily commend this series of volumes which have been appearing quarterly for a number of years. All the papers are by men of the first rank in the profession, and they together cover a wide field. In this volume we have Cardiovascular Disease by Tyson, Gall-bladder Infections by Billings, Lumber Puncture by S. R. Klein, Eclampsia by Ballentyne and also by Jardine, these as samples. Progress in Therapeutics during twenty years is treated by A. L. Benedict and Progress in Medicine by J. J. Walsh. These articles make this volume a notable one.

PRESCRIPTION WRITING AND FORMULARY.—By JOHN M. SWAN, M.D., *Associate Professor of Clinical Medicine, Medico-Chirurgical College of Philadelphia.* 32 mo. of 185 pages. Philadelphia and London: W. B. Saunders Company, 1910. Flexible leather, \$1.25 net.

This little book is quite useful both for the student of medicine and the general practitioner. The paragraph in the preface in which reference is made to therapeutic measures other than the employment of drugs ought particularly to be emphasized.

The part of the book devoted to prescription writing is all that could be desired. Especially good are the chapters on "Latin For Prescription Writing, Official Preparations of U. S. P., Dosage, and Incompatibility."

In the Formulary are to be found a great many very useful prescriptions. The number given for each disease, and the tendency to polypharmacy might offer ground for criticism in these days when so few drugs are used. J. E. B.

SURGICAL AFTER-TREATMENT.—By L. R. G. CRANDON, A.M., M.D., *Assistant in Surgery at Harvard Medical School.* Octavo of 803 pages, with 265 original illustrations. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

Without anything definite as regards the after-treatment of surgical operations, the reviewer in his earlier career had to mostly blaze his own way in his post-operative treatment, and after twenty years of extensive surgical work has naturally arrived at methods and conclusions of his own; therefore, it was with special interest that he has read almost every page of Dr. Cran-

don's Surgical After-Treatment, to see how nearly his experience coincided with that of the author of this book who has gathered together all of his experience and bound it into one volume under the above title. The methods of after-treatment of surgical operations as suggested in this book can only be acquired by the surgeon after years of extensive work; and at this time when so many surgical operations are performed at the home of the patient, and perhaps miles from the operator, it is of the highest importance that the physician who has the after care of the case should be thoroughly posted in the after-treatment, which often carries with it more responsibility than operation itself. Therefore, a book of this nature is almost an absolute requisite to every physician, and especially the beginner, that in cases of emergency he may have a reliable guide. For this purpose this book can be recommended. There is scarcely any surgical operation whose care and after-treatment is not fully explained in this book. It is fascinating in style, and fills a needed gap in surgery. It can not be recommended too highly to doctors who have the after care of surgical patients.

C. S. H.

Medical Outlook

VALUABLE DIAGNOSTIC SIGN.—Dr. ABRAHAM, in *New York Med. Jour.*, has never failed to find in the many instances of gall-stones disease which he has noticed, a painful point midway between the umbilicus and the costal cartilage of ninth rib in the right hypochondriac region. If patient lies on back with arms and legs extended a sudden thrust with two fingers into that point will act like an electric shock on the patient as shown by either facial contortion or an involuntary jump of the abdomen. This place is also the point of maximum pain in an acute attack. This is always a painful point in chronic cases.

G. D. L.

CANCER OPERATIONS.—In the *Kentucky Medical Journal* is an article by A. J. Oschner, who gives these conclusions:

At the present time the following conclusions seem to be indicated:

1. The earliest possible diagnosis must be made.
2. In case it is not possible to exclude cancer in our diagnosis more competent counsel must be called.
3. The growth must be removed most extensively even in the earliest cases.
4. In case a physician is not competent to make an extensive removal, he must refer the case to one who can and will do this at once.
5. The search for new tests which will determine the presence of cancer early should be continued by competent scientific observers and supported by clinicians.
6. The search for the cause of cancer should be vigorously pushed.
7. At the present time negative results in diagnosis by laboratory tests must not be con-

sidered of sufficient importance to prevent operative treatment when physical examination indicates the presence of cancer.

PRIMARY CARCINOMA OF THE APPENDIX.—This is the subject of a paper read before the New Hampshire Med. Soc. by Geo. S. Graham, M.D., and published in *Medical Progress*, March, 1910. The author reports one case, a female, aged 12. After five successive acute attacks of abdominal pain, each attack lasting from two to five days, a diagnosis of chronic appendicitis was made and the appendix removed and recovery was uneventful. The author, after consulting the literature, makes the following conclusions:

1. Of relatively frequent occurrence, usually of small size, strictly localized, occurring most often in the distal third, discovery usually accidental.
2. Eighty per cent occur during the first four decades of life, females slightly greater liability than males.
3. Etiology obscure. Usually a history of recent inflammatory conditions of the appendix preceding the discovery of the lesion.
4. The diagnosis previous to operation has never been made.
5. The association with the neoplasm of acute or chronic inflammation leading to appendectomy acts as a check on its development and prognosis is in most cases favorable.
6. It is possible that their careful study may throw light upon questions of the etiology, and development of carcinoma not only of the appendix, but also of those found in other portions of the intestinal tract.

G. D. L.

THE TREATMENT OF FACIAL NEURALGIA BY LOCAL INJECTIONS.—As opposed to radical operations, A. Sicard of Paris (*Proc. Internat. Med. Cong.*, Budapest, 1909) strongly advocates the treatment of facial neuralgia by means of local injections (alcohol, etc.). He describes the technic of injection in the various forms of facial neuralgia, gives his results in 168 cases so treated and a short historical sketch of the development of the treatment of facial neuralgia by local injection. Two distinct types of facial neuralgia are described: a neuralgia facialis essentialis and a secondary facial neuralgia. The neuralgia facialis essentialis may be attributed (in agreement with Bisaud) to a narrowness of the foramina at the base of the skull through which the sensory nerve branches pass, and is more often found on the right side; the secondary neuralgia may be due to either peripheral or general causes. The neuralgia essentialis seldom affects all three branches of the nerve. The paroxysms are, however, very severe; local myoclonia, a strong hyperemia of the skin, an overflow of tears, and a hypersecretion of the esophageal glands often result. It is easy to distinguish this paralysis from unilateral frontal migraine. In the treatment by the injection method the chances of serious complications are small. Large temporary hematomas may arise around the point of injection. To be certain that the treatment is

successful it becomes necessary only to establish a persistent anesthesia in the skin or mucous membrane of the area supplied by the affected and injected nerve branch. In cases of myoclonia Sicard likewise found it sufficient to inject with alcohol the peripheral branches of the motor facial nerve. In all the 168 cases of facial neuralgia so treated beneficial results are reported! Relief was also afforded in one case in which the Gasserian ganglion was injected directly with alcohol through the foramen ovale. For injection Sicard used a very fine platinum needle 4 to 6 cm. in length. The skin was anesthetized with a 1 per cent. solution of stovain. For injection fluid 80 per cent. alcohol with or without the addition of stovain, but never mixed with chloroform, was most generally employed. Good results were also obtained by using the following solution for injection: 50 c.c. of 80 per cent. alcohol, 1gm. menthol and 50 gm. novocain. [NOTE: Those who wish to lock this subject up further will be interested in the articles by Patrick in *The Journal*, Nov. 9, 1907, xlix, 1567, and Dec. 11, 1909, liii, 1987, and by Hecht in *The Journal*, Nov. 9, 1907, xlix, 1574.]—J. A. M. A.

EXCERPT—THE THERAPY OF WORK.—

ROBERT S. CARROLL, M.D., of Asheville, N. C., in an excellent paper read before the Tri-State Med. Soc. at Richmond, Va., Feb., 1910, and published in *J. A. M. A.*, makes the following happy remarks: "In prescribing work as a therapeutic measure, a proper form should be specified. Physical employment well within the strength of the patient, productive in nature, so that its effects may be permanent, and employing sufficient mental activity to distract attention from purely physical, is the ideal. But even drudgery has its place. A large part of the world's work is drudgery, and to the pampered neuropath there is a wholesome discipline in working for work's sake. There comes a development of will hitherto unknown in the accomplishment of common foot tons of labor.

It is unnecessary to state the physical benefits of manual labor. No man is living his best who does not daily put into activity that large bulk of his physical body, his muscular system, and into such activity as will call forth a virile expenditure of energy. A large majority of neuropathic patients have worked for years along mental lines, and even though there may have been some physical expenditure it usually has been associated with emotional wear and tear. The mental relaxation and rejuvenation which follows substitution of reasonable physical employment for high-pressure mental strain, can not be gained. While there is no question that energy may be trained to flow into either physical or intellectual channels with equal efficiency, wholesome benefits to the mind come from the physical exaltation following the normal use of our muscles. But the greatest influence, the true and lasting benefit in work as a therapeutic agent, rests in the moral uplift, the great mastering of self which comes when one is taught to work right, when one knows the joy and forgets the burden of doing, when self-mastery displaces in-

dulgence, when doubt of one's strength and ability is replaced by faith—faith which grows out of visible evidences of one's accomplishment—when morbid self-centredness, that miserable dwarf of the soul, gives way to an externalizing self, the forgetting of self in its relations with people and things; then the passion for material comfort will lose its devalizing power in the face of that independence which comes with the toughening and the strengthening of will, the offspring of productive accomplishment. Theory, sermonizing, the stimulation of music and art, the inspiration of poetry and song, have their places in the needs of many-sided man, but for developing power and character and for making man's spirit master of his body, mortal man has to work since the days of fair Eden. In fulfilling the law of work, man's spirit may not only master itself and cure itself of its quirks and quibbles, but to surprising degree may obtain and retain a mastery over body, which it should normally rule, a mastery superior to petty discomforts of temperature and weather and the habits of our neighbor's children and the din of traffic, a mastery superior to the miserable hyperesthesias and dysesthesias so incident to nervousness.

G. D. L.

Miscellany

AN EDITORIAL ON TOTAL ABSTINENCE.

BY WAY OF VARIETY.

A clear brain is capital. Do you ever hear of John D. Rockefeller, J. Pierpont Morgan, James R. Keene, James I. Hill, or Andrew Carnegie, doing anything to befuddle the brain? The most popular brain-befuddler is strong drink. The clearest-headed men, plus education and experience, are not more than sufficient to wrestle with the financial problems of these strenuous times, and when a man who desires to earn and save money permits liquor to get a hold on his appetite, the doom of Belshazzar is his—he is weighed in the balances and found wanting. The moral side of this matter is common knowledge. These words are for men who are ambitious to accumulate something.

Shakespeare knew and appreciated the value of money, of good name, of creditable apparel, or the esteem of men, and of the power of place; but he knew, too, that liquor was a deadly foe to all of these, and meditating upon what a wreck its use had made of them, he said, "O thou invisible spirit of wine, if thou hast no name to be known by, let us call thee devil!"

Livingstone penetrated the jungles of Africa, and spent years upon years studying conditions of life among the benighted people. As at home in England, so there in darkest Africa, his life business was to search out the causes of human depravity—to diagnose conditions that he might wisely apply the remedy; and his ultimate conviction, endorsed by Sir Henry M. Stanley, who sought him in the midst of his labors, was that the liquor traffic was the open sore of the world.

Gladstone studied the problems of life from every point of view. His career brought him into

touch with every stratum of society, and his political duties gave him access to all sorts of information. He was competent to speak and his testimony is that strong drink has wrought more desolation in the world than war, pestilence, and famine combined.

Here, then, is the expert evidence of three competent witnesses. It is difficult enough at the best to know just how to invest time, talents, and the fruit of them, to the greatest advantage. What hope of winning does a man have who handicaps himself with so great a curse as strong drink, and thinks single-handed to outwit the devil at his own game besides, when nations have failed.

A man must at least be sober if he hopes to win at anything that demands a clear brain.—Exchange.

PREGNANCY IN A WOMAN OF 56.

Jacobs (*Progres Medical Belge*, October 15, 1909) relates a case of pregnancy in a woman aged 56. She had had nine children and two miscarriages. Her last child was born when she was 49 years old. The menopause came on at 51 and was complete at 52. The change of life was not accompanied by any special phenomena; there were no "flushings," nor sweating, nor digestive troubles. For four years menstruation had ceased completely. Becoming aware of some uncomfortable sensations in the abdomen, accompanied or followed by somewhat abundant leucorrhœa, and noting that the abdomen was increasing in size, she consulted a doctor, who thought she had an ovarian cyst, and sent her to the author. Fear prevented her following this advice until a few days before the report, when the size of the abdomen became so great as to cause her alarm; at the same time she felt vague irregular pains resembling those she had experienced in all her pregnancies. On examination the abdomen was found regularly developed below the umbilicus. It was easy to feel the uterus, globular in shape, extending to within two or three fingerbreadths of the umbilicus, and mobile. The vulva and the orifice of the vagina were cyanotic. The cervix, which was very large and deeply torn, was soft. Ballottement could easily be felt. The breasts were enlarged, and milk could be squeezed out of them. On auscultation, a faint fetal bruit could be heard. Jacobs diagnosed a normal pregnancy of five months. He says that he has several times found pregnancy in women over 50, but this is the first time that he has had the opportunity of examining a case of pregnancy occurring after the menopause had been definitely established for four years.—*Med. R. of R.*

PREGNANCY IN A GIRL OF TWELVE.

V. Geets (*Progres Medical Belge*, October 15, 1909) relates a case of pregnancy in a very young girl observed by P. Lamborelle, of Malines. The case was that of a girl who was delivered of a splendid baby at the age of thirteen years and three months. She was small, wearing short petticoats, and slightly developed for her age, which at the time she came under observation was

twelve and one-half years. She was believed to be wholly given up to the ordinary pleasures of her age. In her family history, however, there were proofs of special tendency to precocious procreation. Her mother had had a child at the age of fifteen; one of her sisters conceived at sixteen. The girl herself began to menstruate at the age of eleven years and four months, and the periods were regular every twenty-eight or twenty-nine days during one year and eight months. It was at this time that she conceived by her cousin who was aged twenty-three. Gestation proceeded normally, the child not seeming to be depressed or in any way morally affected by the event. There were no nervous disturbances; the enlargement of the womb went on in the natural way up to term. When labor began the obliteration of the os took place very slowly, but dilatation was regular and normal, the pains not being excessive. It was a case of seat presentation; delivery was quite normal except as regards the head and the right arm, which was bent behind the occiput. The disengagement of the arm and the extraction of the head were effected by manipulation with some difficulty, but in less than four minutes. The cord was of normal size; the placenta seemed enormous. There was no laceration of the perineum. At no time during the labor, which lasted about twenty hours, did the patient cry out or show signs of impatience, except during the manipulation of the extraction of the head. The child breathed regularly for twenty minutes and then died, notwithstanding all attempts at resuscitation. After delivery everything went on normally. There was an abundant flow of milk. The author calls attention to the following as being the salient features of the case: Gestation without morbid phenomena; labor without great pain; the facility with which delivery was accomplished, taking into account that it was a primipara and a seat presentation; the great elasticity of the perineal tissues and the absence of laceration.—*British Med. Journal*, Dec. 11, 1909.

To the young men in the profession, those who are at the beginning of life's journey, while I am now near its close, I would say:

"Be not like dumb driven cattle."

Be men, think, judge, act for yourself, cultivate a habit of independent thought and investigation, guided but not controlled by the study and investigation of the learned men of the profession, jealously preserve and protect your independence, be ever open and ready to receive knowledge regardless as to the source of such knowledge; many valuable truths have come from very humble sources. Take for your motto the words of Thomas a Kempis, who said, "mark not who said this or that, but mark the words spoken."—*Dr. H. C. Buck, in Charlotte Med. Jour.*

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Original Articles

HUMAN SUGGESTIBILITY.

Mental Influence Over the Bodily Functions.

S. L. Jepson, A.M., M.D., Sc.D.,
Wheeling, W. Va.

(*Oration in Medicine before the West Virginia State Medical Association, 1909.*)

"This is an age of fads, an age when the unessential, the intangible, the weird and mystic are pursued, when high-sounding words and phrases take the place of ideas, when metaphysical vaporings replace scientific observation, and trivial nothings the solid truth; when wretched commonplaces inspire admiration, when worn-out platitudes become strokes of genius, and when the imbecilities of hysteria become the final word of wisdom."—*Dercum*.

My mind has been carried back to the earlier ages of the world, and has recalled the fact that man has always been a very suggestible being. In the Middle Ages especially periodical manias or crazes seized the minds of men, holding them for longer or shorter periods and in greater or lesser numbers, the ordinary reasoning powers being for the time apparently in abeyance. These crazes might be divided into the religious, the medical and the financial; and not unreasonably so, since the soul, the body, and the bank account embrace about everything worth considering in this life.

That wild human folly, the Crusades, disturbed Europe at intervals for two centuries, and vast armies, not only of men, but of boys and girls with leaders

of ten and twelve years old, marched back and forth until millions of people were destroyed. The fanaticism of Flagellantism seized the people at various times, when vast numbers, stricken with remorse for their sins, marched through the streets in almost entire nakedness, scourging themselves with knotted thongs until the blood flowed, this, as they thought, having a share with the blood of the Savior in atoning for sin. The Dancing Mania, with St. Vitus as the patron saint, was another craze that caused many men and women to appear on the streets and engage in wild and delirious dancing, at times for 24 to 36 hours, until they dropped from sheer exhaustion, and all because of the dominant idea that they *must dance*. All sense of pain was lost during this performance. This was no doubt closely allied to hysteria, a disease that is now recognized as almost wholly due to suggestion in persons whose will power, when applied to their own complaints, is very defective, but who are very willful and exacting with their friends. You will all recognize the fact that hysteria, as well as chorea, frequently occurs in epidemics in schools and wherever many young women are associated together.

The early and wide-spread belief in witchcraft was another result of man's suggestibility. The most learned men were active in the persecution of witches. King James I and John Wesley were among the believers; and even the great Dr. Johnson said that, although the existence of witches was not proved, he was not satisfied that they did not exist. Parliament in 1563

passed an act decreeing the punishment of witchcraft by death, and in the thirty-nine years following there was an annual average of 200 executions in Scotland alone. At least twenty of such murders are charged up to our own country. I only need to refer to the old Camp Meeting days, when many in the congregations became hysterical, and wriggled and squirmed about the ground from the power of the strenuous appeals of the preacher, to illustrate the influence of religious suggestion. The staid and sober people of Holland lost their heads in the 16th century over the cultivation of the tulip, and became so insane that \$5,200 was paid for a single bulb; and sometimes one bulb was divided into shares and sold as other stocks. The people vied with each other in making collections of this flower, the poor aping the rich as in our day; and other business was sacrificed for this fad until the land was on the brink of ruin. So in London the South Sea Bubble brought thousands of cool-headed men to ruin. A company was formed which assumed the debt of England when granted the exclusive right of trade with the south seas. Extravagant promises made by the promoters put the stock up to 330, 550, 890, and finally to 1000, although a single voyage of one ship was the total evidence of the execution of the proposed plans. When the stock was at the highest the President and some of the directors sold out. How modern that sounds! The French are said to be the best financiers in the world, and yet they were carried away by the Mississippi Bubble, a scheme organized for the purpose of developing the Province of Louisiana, supposed to be rich in precious metals. A company promised share-holders 120% profit. Public interest rose to a frenzy. When the stock was at its highest, the wise exchanged it for gold which they hid away. Banks ceased payment. Money became scarce. The bubble burst. John Law, the promoter, fled. And how often since have silly schemes, worked on the suggestibility of man, led to his ruin! Have you doctors heard the answer given by J. Pierpont Morgan, when asked why he had never invested in gold mines? "I have often wanted to," he said, "but the entire stock was always taken by the doc-

tors before the promoters reached New York."

Permit me to refer to one or two false prophets who have had their day, drawn thousands of followers after them, and dropped out of sight. Of these Joanna Southcott has secured a place in history. Born in 1750, reared in ignorance, while a house servant she declared herself a prophetess, and when a maid of sixty years declared that on October 9th following she would become the mother of a second Shiloh, Prince of Peace, miraculously conceived. Her thousands of deluded followers made great preparation for the proper reception of the distinguished infant; but instead of the baby came death from dropsy; only this and nothing more. In reference to this woman Macauley says: "We have seen an old woman with no talents beyond the cunning of a fortune-teller, and with the education of a scullion, exalted into a prophetess and surrounded by tens of thousands of devoted followers, many of whom were, in station and knowledge, immeasurably her superiors, and all this in the 19th century, and all this in London!" And in America we had her counterpart in the great Dowie, who organized a church, founded a publishing house, a bank, a land association, erected a tabernacle, founded a city, and in that city started an establishment for the manufacture of lace, goods typical of Dowie's flimsy pretensions. In 1901 he proclaimed himself "Elijah the Restorer", and hating the medical profession with a venomous hatred, he set up in opposition to heal the sick; and of course he had thousands of followers. But his influence waned, and falling sick, and his divine power failing to bring relief, he died in the good old way, in the care of a regular physician, thus giving the lie to all his pretensions.

We hear much these days of psychotherapy. The cure of disease by strong mental impression, as you all know, is very ancient, being mentioned in the Ebers papyrus, dating 1552 B.C. At different periods men have risen to notoriety if not distinction by the exercise of some seemingly mysterious power to heal the sick. Mesmer was one of these. An educated physician, he at first thought that the magnet possessed this power; then that animal mag-

netism was his peculiar possession. Unpopular in Vienna, he in Paris raised a furor of enthusiasm, and thousands rushed after him, until a national commission, after investigation, announced his method as "a great proof of the power of the imagination", or, as modern psychologists put it, of the power of suggestion. Mesmer was a born quack, and accompanied his practice by methods which were designed to be startling and dramatic rather than scientific, and to cloud with an appearance of mystery and even supernaturalism the simplest processes. His house was charmingly furnished. Mirrors lined his reception rooms into which but a dim light came through stained glass windows. The halls were scented with orange blossoms, incense burned in antique vessels, and music, vocal and instrumental, from distant chambers stole upon the mysterious silence which was constantly maintained. How very suggestible all these surroundings! Is it any wonder that success came to such a man! A later fakir was Dr. Perkins of tractor fame. With two rods, one of brass and one of steel, he set thousands agog in two continents, misled President Washington in Philadelphia, received from the United States Chief Justice a letter of commendation to John Marshall, later stirred London to its depths, confidence in him leading to the erection of a hospital for the cure of disease by the tractors, the first report from which expressed the "hope that Parliament would honor Perkins as a great discoverer". The doctor made \$50,000, sickened and, like Dowie, died under the care of a regular physician, his invention failing to work in his case, for, according to the theory of the day, "the tractors produced no effect in any disease except those in which there is present an extra degree of that *principle* which is the cause of the disease, and they perform the cure by taking off this excess and restoring the equilibrium". Not every one could make the tractors work, and the secret of Perkins's success was, that he was a "very handsome man, six feet tall, of commanding personality, full of that intangible something that women call charm and men call magnetism". What a misfortune that all of us do not possess these qualities! Be it noted here that Mesmer and Perkins did heal the sick. And the

sick are healed at Lourdes in France and at St. Ann's in Canada. And they are healed by the various forms of mental influence exercised by traveling mountebanks, and by systems of belief of which the most noted of today is Christian Science.

What shall be said of this popular craze? That it is one of the most stupendous frauds of this or any age will be generally admitted; and yet it is too big a thing to be thus summarily dismissed. Mark Twain doubts whether its founder "is in full and functional possession of her intellectual plant"; and we have seen that it is not necessary that one should be to secure a host of followers. That she is an uneducated woman, incapable of writing even respectable English, is well known. Of her book a writer says: "Of all the strange and frantic and uninterpretable books which the imagination of man has created, this one is surely the prize sample." And yet this woman with this book has started a belief which she calls science, and an organization which she calls a church, which have been accepted by thousands of more or less intelligent people in several continents. This need not surprise us after the facts have been considered which we have already presented. To again quote Mark Twain: "That a commonplace person should go on climbing and become a god, or a half god, or a quarter god, and be worshiped is nothing. It has happened a million times, and it will happen a hundred million times more. It has been millions of years since the first of these supernaturals appeared, and by the time the last one shall have performed his solemn little high jinks on the stage and closed the business, there will be enough of them accumulated on the other side to start a heaven of their own, and jam it."

We can readily agree with a recent writer who says: "Generally speaking, the class of recruits within the folds of the Christian Science church are the spiritually restless who have lost their one-time faith in old-fashioned religion as a vital force in daily life—those whose faith in the religious traditions of the Fathers has faltered and is out of touch with the life and interests of community in general, leaving only a dwarfed and self-centered spiritual existence."

Mrs. Eddy's system of cure, whose essentials are as old as the ages, were stolen from Quimby who had healed her of a chronic disorder, no doubt hysterical, and whom she once joyfully accepted as the prophet of a new dispensation, and later repudiated. The organization which she formed and controls with a grip of steel, has added mightily to her hold, and but for this the craze would long ago have run its course and been buried. C. S. differs from all other faith cures in that it does not heal disease,* but seeks to convince people that disease is non-existent. Hear a few quotations from Mrs. Eddy and her healers. Mrs. E.: "Matter and mortal body are the illusions of human belief". "This human error about physical wounds and colic is a part and parcel of the delusion that matter can see and feel". "Evil has no reality. It is * * simply a belief, an illusion of material sense". (Science and Health P. 93.) "Sin, sickness and death * * are without a real origin or existence". (S. & H., P. 286.) A healer to a patient: "You have no disease. What you call disease is a fixed mode of thought". From the prayer of the President of the N. Y. School of C.S.: "Holy Reality, Thou art everything; thou art not sick, and therefore nothing in this universe was ever sick, is now sick, or can be sick". From all of which stuff it appears that the C.S. "cure" is the discovery by the patient that there is no such thing as disease in the world, a most comforting reflection to one suffering with the pangs of cancer or trigeminal neuralgia, or gall-stone or nephritic colic! It requires considerable patience to treat seriously such arrant nonsense as this; but the evil results of this craze are such that it demands some attention. Christian Science is an organized system of deceit, and it is leading many into a form of lunacy and more to death. It should therefore be denounced by all good people on all occasions. Says Dr. Warbasse: "I charge this unnatural system with cruelty. I have seen the sufferings of the unfortunate dupes of this delusion. I have seen the hand withheld that should have plucked the burning iron from the breast. I have seen them racked with pain till their faces were dis-

torted, while through their tears they feebly murmured: 'There is no pain'. I have seen them sink into unconsciousness and die, and heard the weeping orphans told, 'he is not dead'". And Rev. Bishop Fallows says: "Christian Science would deny all aid to the piteous cries for remedial help in burning fever and corroding cancer. It would refuse all antitoxin in diphtheria. It would prohibit all efforts against infection when some terrible disease is rampant, did not the law with its strong arm interfere". Rev. Myers, pastor of Immanuel Church, Chicago, says he has personally buried scores of Scientists where the deaths were due to neglect of proper medical treatment. Hundreds, he says, "are dying in Chicago because C.S. has led them by its falsehoods to abandon the proper treatment for their diseases". And yet, to show their own hypocrisy, there is not a hospital in Chicago that is not caring for some of these fadists, some of whom, after being rationally cured, adhere to their insane delusion. John Armstrong, manager of the C.S. Herald, when wanted as a witness in the recent Eddy law case, was found sick with pleurisy and under the care of a physician. So, while these queer people teach and preach lies and nonsense, the more sane of them are compelled to resort to rational treatment when seriously ill; but the infants, having no will of their own, are sacrificed on the altar of Eddyism. "Persons whose minds are susceptible to the C.S. vagaries are still in the childhood stage of mental development. They love to talk of the great when they have not yet learned of the small. They discuss God and the infinite when they do not know nature and the finite" (Warbasse). Had they lived in the earlier days they would have been in the tulip craze, or wasting their money in pursuing the South Sea or Mississippi Bubble, or waiting for the advent of the Southcott baby, or burning witches, or patronizing Mesmer or Perkins and his tractors. They must have a fad of some kind, and the pity of it is that this latest fad kills so many people.

Permit a brief allusion to the Emmanuel movement, perhaps the sanest and certainly the most honest effort ever made to cure disease by mental influence. The aim of this movement is "to cure the patient by reinforcing in him through religious per-

*We know they claim cures of even malignant disease, but this is inconsistent with their own teaching, as appears from quotations given.

suasion, through contact with the symbols of the church and with godly men, and through religious suggestion, a confident belief which gives new unity and through it new strength to the mind of the sufferer until it overcomes the functional disease of the body" (Munsterberg). Organized by a distinguished clergyman well trained in psychology, recognizing that only functional diseases are amenable to mind cure alone, and having the aid of physicians to determine the cases that are deemed suitable for such treatment, we are not surprised that many cures have been reported. An explanation of these cures will be attempted later. There are several dangers connected with this movement that may be here noted. It will probably fall into the hands of men less honest and with little training in psychology, and whose efforts will often fail. Nervous people rushing to a church for healing, if disappointed will lose faith in the church itself, and in the great Head of the church. The sick should be under the care of a trained physician capable of observing alterations in disease, and of modifying his opinions and treatment accordingly. It often happens, and especially is this true of nervous diseases, that close and repeated examinations are required to properly diagnose a case. If an error is made in turning over a case to the clergyman, no further opportunity for investigation remains. Most of these patients need physical and medical as well as mental treatment. This they cannot get at the church, hence there is a probability of half cures only. The circumstances surrounding the church treatment are such as to endanger an epidemic of nervous disease. The whole purpose of the treatment demands that the highest possible degree of suggestibility be brought about by the minister. But it is evident that this means at the same time the most fertile soil for every chance suggestion, and for influences which are perhaps entirely unintended. Finally, on this point, the church in imitating that which others can do just as well or better, loses the power to do that which the church alone can do. (Munsterberg).

Two questions presented themselves to the writer when this paper was conceived. The first was, what is it in men, educated, intelligent, reasoning men, that leads them

at times to forsake their reason, to forget the deductions of their own and the world's experience, and rush madly, like herds of stampeded cattle, after a belief, a theory, an enterprise that could never commend itself to the calm judgment of any thoughtful man? It does not explain much to say that man is a very suggestible animal, and yet it is man's suggestibility that so often leads him to take up with the various crazes that all are familiar with. Suggestibility, as defined by Bernheim, is the aptitude of the mind to receive an idea, and the tendency to transform it into action; and Dr. Sidis says the idea, after a little opposition, is accepted uncritically at last, almost automatically. Man has been called a herd animal, and in the crowd and as an individual he is not the same person. As an individual he is a perceiving, reflecting, reasoning being. He is subject to certain feelings, emotions, desires and impulses prompting him to action more or less deliberate. He has been educated away from imitative, impulsive action toward thought, reflection, deliberation, by the development of the higher brain centers. If these be put to sleep as in hypnosis, the man at once becomes an ideo-motor machine, acting on every suggestion made to him. In the crowd, in crazes such as we have considered, a man's conduct approaches that of the hypnotic subject or the uneducated child. Men become creatures of imitation, and suggestions from the conduct of others easily influence them. Their usual reasoning powers are inhibited and deliberation becomes impossible. They then cease to draw conclusions from experience, and are controlled by impulses as are those around them. In faith-cure movements the desire for health is the first impulse, and this affects the mentally weaker first. The number seeking the same end increases and mental excitement results. If the healer have prestige from reported successes, his power is considerable. The excitement grows as more fall into line, and men soon cease to consult their judgment. Ere long a rush sets in and finally all reason seems lost. Wonder at results, real or imaginary, paralyzes the critical faculties and puts doubt to sleep. Such excitement in the lower brain centers as accompanies excessive emotion exercises an inhibitory or paralyzing effect upon the higher, reasoning

centers, rendering calm thought, memory, association and correct reasoning well-nigh impossible.

There are people in every community who possess what might be called the mob mind. They live on excitement, and although they possess no great qualities, their restless, energetic spirit may constitute them leaders in crazy movements of whatever sort. They will always start with some foolish followers, and the power of suggestion increasing with the increase of numbers and close association, we soon find the craze in full swing. This is too much a day of crowds and associations. Says Stanley Lee: "Every-idea we have is run into a constitution. * * Our fads have by-laws. Our reforms are mass meetings. * * We awe the impenitent with crowds, convert the world with Boards, and save the lost with delegates; and how Jesus of Nazareth could have done so great a work without being on a committee is beyond my ken". Is it not time that intelligent people should begin to consult their own sober reason and experience, and place a curb bit on their suggestibility, that it may cease to carry them off the path of common sense after every fad that light-minded people so love to cultivate!

The second question to be considered is, how are we to account for the many cures of disease by the various methods that may be classed under the head of mind cure? We may premise the remark that the fake healers cannot raise the dead, restore a lost eye or limb, give sight or hearing to one born blind or deaf, or mental power to the imbecile. Therefore they possess no superhuman power. Hence the cures we hear of, when genuine, must be attributed to an influence on the mind of the sick, a powerful impression of some sort that should be capable of explanation.

There are several classes of nervous disorder that are especially amenable to psychotherapy. The first we shall name is hysteria, a disease characterized by loss of will power as applied to the disorder of the patient, generally a female. To quote Paget's very apt saying: "The hysterical daughter says 'she *can* not'; the mother says 'she *will* not'; the doctor says 'she can not *will*' ". The minds of such people have acquired habits of thought or feeling which are independent of the will, and these

habits have got the better of them, so that it is difficult to exert that power of self-direction which the well trained mind will make its highest object. Hence we see hysterical convulsions, coma or syncope, analgesia, loss of sight, hearing or speech, various forms of muscular contractures or paralysis,—all these without other than a psychic foundation. They may be due to mental representations, to fixed ideas, or to functional trouble out of the whole cloth (Dubois). And all the symptoms will be greatly exaggerated by constant brooding over them. Many a slight injury has been nursed by constant thought and worry until paralysis, contracture or joint debility of years standing has resulted. Such cases sometimes get into the courts in the form of damage suits, and not always with intentional fraud on the part of the patient, who may honestly believe himself to be damaged in health for life. The mental stimulus of a good round sum in compensation for damages is the best form of mind cure. It is very well known that whatever tones up and strengthens the will power of such patients will cure them. Sir James Paget long ago recognized that these patients may be jolted, as it were, out of their disease, when he wrote to a colleague: "What unsatisfactory cases these are! This clever, charming lady will some day disgrace us all by being juggled out of her malady by some bold quack, who by mere force of assertion will give her the will to bear, or forget, or suppress all the turbulences of her nervous system".

Then we have the neurasthenics, patients who are depressed in mind and body from various causes. Recently the term psychasthenia has been introduced as applying to those cases of nervous prostration in which the mental symptoms are very prominent. Imperative ideas and fixed emotions, obsessions, phobias, mental depression and enfeebled will power, mark these cases. These symptoms may continue for a long time, no ordinary means being sufficient to lift the patient from his depression, even though he realize that his ideas have no sound basis. We have our hypochondriacs also, who imagine every disease in turn and have none of them long. Then we have in every community a set of people who are simply depressed from disappointments of various kinds. So great is the

tension of modern life that those especially of defective nervous force are apt to let down under the strain. All the optimism in one's nature is needed to keep the system from dropping below the level of health, and both body and mind may become disordered, trifling causes producing undue influence. Out of these classes come the faith cures. We well know that such cases as these are very numerous, especially in the cities, and they are always abnormally susceptible to the influence of suggestion. A Russian writer has aptly said that "suggestion enters the understanding by the back stairs, while logical persuasion knocks at the front door"; and often the patient can be more easily influenced for his own good by the back-stair way than by sober reason.

It should be noted as a truth that the great majority of the magically cured patients were never very sick, never organically, never physically sick. They were neurotic, distressingly ill no doubt, as really ill as many with organic diseases, and with disorders more difficult of cure by ordinary methods than are many organic diseases. It is the mental treatment that they especially need, for the disorder is largely mental. Mental stimulation, faith, hope, everything that can lift from doubt and despair, are needed to cause a brighter outlook. The disposition of the human mind is such as to place confidence in the operation of mysterious agencies. As we have seen, Mesmer well understood the value of subdued light, elegant furniture, and the sound of distant music. As to cures wrought at shrines and in churches, it may be remarked that the surroundings are such as to impress the nervously sick. The vaulted ceilings, the swinging censer, the dim religious light, the robed priest or minister, serve as powerful suggestions. Says the psychologist, Prof. James: "We are all to some extent susceptible to outside suggestions and prone to act in accordance with what we are made to expect. Perhaps on no other topic is suggestion so readily accepted by people as in matters pertaining to their health". Patients go to the places and to the people having the reputation for special power to heal. They have faith to start with. They expect results. They are at once impressed by the positive manner of the

healer, and if any crutches and canes are on exhibition, these have a tremendous influence. The sick at once have more confidence in themselves and try to do things, and finding themselves succeeding, their confidence increases and their spirits revive. Hope of improvement sets the patient to looking for signs of progress, and as these appear the old idea of disease becomes inhibited; and with increased cheer there is bound to come increase of appetite and strength, which will continue until the old depressing thoughts are forgotten. Constructive nervous and vascular impulses are carried to the cells and organs of the body by cheerful emotions and a hopeful view of life, and the bodily functions are soon more perfectly performed. Even in acute affections faith and hope are valuable adjuncts to the physician's efforts to cure. How much more so to the nervous and discouraged. This is recognized by the proprietors of a sanitarium who display the following stanza:

"Talk health; the dreary, never-ending tale
Of mortal maladies is worn and stale.
You cannot charm, or interest, or please
By harping on the minor chord, disease.
Say you are well, or, all is well with you,
And God shall hear and make it true to you."

Celsus, writing in the first century, recognized the benefit of cheer when he said: "It is the mark of a skillful practitioner to sit awhile by the bedside with a blithe countenance"; and Cassiodorus, in the fifth century, wrote: "To give joy to the sick is natural healing; for once make your patient cheerful, and his cure is accomplished". And Burton, in the 17th century, in the *Anatomy of Melancholy* wrote: "All the world knows that there is no virtue in charms but a strong conceit and opinion alone, which force the humors, spirits and blood, which takes away the cause of the malady from the parts affected. The like we may say of the magical effects, superstition and cures, etc., such as are done by mountebanks and wizards". The eminent Professor James endorses this view in these words: "As soon as new faith in life is given * * a great and unexpected improvement sets in."

The so-called "cures" of Christian Science are explained on the same principle. Many of these victims of a mental malady only are religious enthusiasts, and

they are made to feel, by shutting their eyes to the stern facts of every-day life, that all things are working together for good. With the average people fear runs like a thread through the whole of life. Surrounded by a cloud of fear and apprehension in childhood, we later become anxious as to the future of our lives. What shall be our vocation? Shall we be successful? Shall we meet with disappointments, financial, social, political? Shall we approach old age in comfort or poverty? What as to the future life? Hence we fret and worry until the nervous system is racked. But the Christian Scientist is taught to shut his eyes to the evils of the world; rather he is gulled into the belief that life has no evils. Theirs is a religion "which has no hell; a religion whose heaven is not put off to another time with a break and a gulf between, but begins here and now, and melts into eternity as fancies melt into the dreams of sleep" (Twain). If one wishes to be filled with joy, and peace, and happiness, and health at the expense of the loss of his reason and common sense, we commend him to Eddyism. But such teaching does heal, but in no new way. It is the same old joy-and-hope cure, the benefits of which have been recognized and preached for ages. An advantage that Eddyism possesses is, that its followers are banded together in a compact organization, and thus have the benefits that spring from contagion; and also, like the alcoholics in a Keeley Cure establishment, the immense benefit that comes from sympathy and united effort in the promotion of a common cause.

Again, as physicians we must recognize that mental states affect physiological function; and psychology teaches that every mental process has a corresponding brain process. Clouston, the distinguished English alienist, says: "The evidence that the brain cortex regulates absorption, secretion, vascular tone, and all the constructive and retrograde processes in the cells of the tissues, may now be regarded as complete". We advise the mother to refrain from nursing her infant when angry or otherwise mentally excited, lest the quality of the milk be altered. A hysterical woman's kidneys secrete more copiously after a hysterical outbreak. A mental shock is sometimes followed by

diabetes or pernicious anemia. The expectation of a certain effect from a drug is apt to be followed by that effect. Colored water administered to a hundred patients in a hospital produced nausea in three fourths of them when the doctor, in assumed alarm, announced that he had given an emetic by mistake. Morton Prince's patient who suffered from rose cold when exposed to roses, experienced the same unpleasant symptoms when paper roses were suddenly presented to her; and it is said that she never had rose cold afterward. We must therefore never lose sight of these physical results of mental influence, and strive so to shape the thoughts of our patients as to secure the desired results.

A new and pleasant sensation, a dominant idea, has often effected cures. The case of Elizabeth Barrett is in point. An invalid for years and on her bed, she received a call from Robert Browning. Other calls followed. The poets were soon "two souls with but a single thought"; and one day in the absence of her family she arose and walked off and "they two became one flesh". Many cures of paralysis were reported to have occurred as a result of the San Francisco earthquake. These were of course functional.

In this connection we may refer to the vaso-motor nervous system, whose general center is located in the medulla, with ganglia and nerves distributed to the minutest blood vessels throughout the system. These vessels are easily made to dilate or contract by mental states. One emotion, as anger, flushes the face, another, as fright, blanches it. Mental shock may contract the vessels of the surface and bathe it in cool perspiration. The sight or odor of a luscious peach causes the salivary glands to pour out an increased secretion; and the throat becomes dry from sudden terror. Pavlov, by making fistulae in a dog's oesophagus and stomach, found that meat swallowed caused gastric juice to flow although the meat never reached the stomach; while pebbles passed to the gullet fistula excited no gastric secretion, showing that a mental and not a physical stimulus was the exciting cause. A table has been invented balanced in the center on a narrow support. If a man lie on it in a horizontal position, and a mental problem be given him to solve, the head will sink from an

increased flow of blood to the brain. If the man be directed to go through some leg exercise mentally, though there be no muscular movement, the feet sink. Whatever favorably influences the mind may be expected to improve the condition of the sick by improving nutrition through the operation of the vaso-motor system. The concentration of the mind on a diseased organ, or one supposed to be diseased, with the expectation that it is to be improved and invigorated, is apt to be followed by such result. Fixed attention on any part of the body will often cause a sensation in the part, as shown in a circle of persons with hands united and connected with the poles of a battery, even though there be no current. The increase of blood to a part through mental influence alone favorably modifies nutrition, and later a change in structure may reasonably be expected. The skillful suggester well knows how to work this principle to the benefit of the patient, and the influence is all the more powerful when applied in the crowd with the usual exciting accompaniments, and the sight of those recovering who were never sick except in the mind. It may be well in this connection to emphasize Dr. Schofield's remark, that "those with too little emotion or too much intellect are not easily healed by the faith-cure movements".

Let it not be forgotten that of the faith cures reported many are but temporary, relapse occurring as soon as the excitement has passed. Others are of cases where no disease has existed, others of purely hysterical patients, and these of the milder variety, leaving a small remnant in which positive good has been done. This good we have attempted to explain on rational physiological and psychological principles. Is there an aid to cure through what has been called the subconscious? Schofield, a prominent English writer, says yes, and that the cause of the sudden cures is "mainly and primarily the power of the unconscious mind over the body". Hudson says: "It is the subconscious mind that is the source of the mental power that heals". And Boris Sidis: "Behind the primary self a secondary consciousness lies hidden"; and again: "It is the subwaking, the reflex, not the waking and controlling consciousness that is suggestible. Suggestibility is the attribute, the very essence of

the subwaking, reflex consciousness". These authors essentially agree. Now comes Prof. Munsterberg, one of the world's most eminent psychologists, who in his recent work on *Psychotherapy* asserts that there is no subconsciousness; and that "consciousness has nothing to perform, that is, consciousness is in no way active". The writer is no student of psychology, but ventures to suggest that these apparent differences of the authorities may be thus reconciled. The consciousness is not active and performs no cures, but it is the medium through which cures are effected by reason of impressions it receives and transmits to the centers of nervous action in the lower brain, and which are thence reflected to different parts of the body, often producing beneficent results. The subconsciousness, neither a physiological nor psychological entity, has yet an existence in the sense that impressions are received and registered without our having a conscious knowledge of them, and thus also reach the centers of nervous action. The distinguished English physiologist, Carpenter, long ago taught that "a very large part of our mental life goes on not only automatically but below the sphere of consciousness". Now it is well recognized that we are most suggestible when consciousness is in abeyance, as in hypnosis; and only less so when it is in partial abeyance, as in states of abstraction, in crowds, and in times of excitement. It therefore seems quite reasonable to suppose that the subconscious state, by this more ready reception of suggestions, while it performs no act and effects no cures, yet becomes the medium through which cures may be effected by the action of the reflex cerebral centers, which action is the result of impressions reaching these centers subconsciously. The extent of physiological and possibly pathological changes thus effected we can never know; but the theory that great good may thus be brought about seems entirely reasonable, and it may offer an explanation of some of the cures that have not otherwise been made clear.

In concluding I am forced to make the confession that our profession, in the treatment of human ills, has been slow to claim as its own the right to apply the various methods of psychotherapy. Nearly 2500 years ago Plato wrote: "The bother with

the physicians in our day is, that they pay too much attention to men's bodies and too little to their souls (minds)." And yet here we are, in the 20th century, making the same mistake and allowing a large part of our legitimate work to be done by the ignorant but bold pretender. This is doubtless due to the natural conservatism of physicians, and particularly because mind cures have been so closely associated with imposture and quackery, and honest, educated men hesitate to pursue any course that presents the appearance of emulating the practices and methods of the mountebank and faith healer. But physicians to a greater degree than any other class of men have the happiness of man at their disposal. They are dispensers of hope and despair. They may brighten the eyes of their fellow beings with gladness or dim them with tears. The world needs to be less fearful and more confident, less gloomy and more hopeful, less sad and more joyous. And what class of men can do so much as physicians toward bringing about these better conditions? Let the advanced practitioner, then, take note of what is valuable in the modern methods of psychotherapy, by whomever practiced, and fit himself for their application as occasion may arise; for these methods scientifically applied may, as can no other, cheer the heart, lift from depression, and add new zest to the life of the nervous and despondent. But at the same time let us treasure the wise words of Weir Mitchell, and "keep our heads cool amid the wild efforts of the ignorant, the mystic, the miracle-monger, to intrude where the archangels of science tread warily, conscious of such limitations as have always kept our greatest humble-minded".

My brother, lay down that professional handspike and get the mote out of your own eye before you pry the beam out of your brother's eye. Get right with God and yourself, then you will get right and keep right with your brother physician.

We must treat each man on his worth and merits as a man. We must see that each is given a square deal, because he is entitled to no more and should receive no less.—*Roosevelt*.

POLIOMYELITIS: APROPOS OF THE SPREAD SOUTHWARD OF THIS DISEASE.

RECENT RESEARCHES: FALLACIES IN DIAGNOSIS: MISCONCEPTIONS ABOUT TREATMENT.

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This disease, the unusual prevalence of which caused so much alarm in New York and New England since 1907, and even before, has this year become epidemic as far south as Washington and its neighborhood, and seems likely to extend still further.

As investigations more extensive than any of those in the past have recently been conducted not only in this country but abroad, and as the writer finds much uncertainty as to the results of these among medical men by whom he has been consulted, it seems wise to present now a short statement of some important facts about the disease; for, in order to prevent its spread, the co-operation of the general practitioner is imperative, as the Scandinavian government research bureaus long ago found. In those countries, upon application a diagnostician or a pathologist is sent to any reported case, and a concerted effort is being made by these traveling specialists to instruct practitioners in the special technique which has been adopted for the research of data, ante- and post-mortem.

ÆTIOLOGY.—In New York, a joint committee of the Neurological and Pædiatrical Societies attempted a statistical investigation of 2,000 (estimated) cases of which 750 were analyzed. They concluded that the disease was infectious but not contagious; that it was more fatal to life than commonly supposed; and that complete recoveries without paralysis were not so unusual as had been believed. In many cases the disease behaved like other infections, and the general symptoms were often as promi-

ment as paralysis. The brain stem* might be involved; but there were very few cases of encephalitis. Early meningitis was very frequent, however.

Only two cases occurred in negroes. The epidemic began in June, and it was at its height in September, the country cases beginning later.

One epidemic spread along a trolley line; poor and rich were alike affected, and the incidence seemed proportional to population. The communicability equaled that of cerebro-spinal meningitis. Relative immunity seemed to follow an epidemic.

The diarrhoea which many authors believed important was not prevalent (14%), constipation being as frequent.

There was respiratory catarrh in 84 cases, of which 45 showed sore throat. Only 21 cases showed gastro-enteritis within two weeks before onset. Forty-two per cent of the 283 cases under two years were at the breast; this seems to eliminate food infection.

Many cases showed no prodromata.

SYMPTOMS.—The more frequently mentioned symptoms were restlessness, irritability, apathy, pain in back and limbs: pyrexia was absent in only 61 cases. In 111 cases the fever lasted over a week; its usual duration is two or three days. Vomiting occurred in nearly 25%. Rigor occurred in 61.

Of the *nervous symptoms*, restlessness was the most frequent. It occurred in 369 cases. Headache in 162 cases. Delirium, 62 cases. Convulsions, 51 cases. Twitchings, 8 cases. Apathy occurred in 294 cases. Stupor in 71 cases.

Rigidity of the neck was reported in 121 cases. This of course indicates meningeal irritation, and is clinically very hard to differentiate from cerebro-spinal meningitis. Meningeal irritation is also indicated by the pain and tenderness. This occurred in nearly all the cases for a day or two, and in 50% was quite marked, and in some of the cases excruciating. It was most frequent in the lower limbs and next in the trunk. There was skin eruption in 61 cases. Papules were the commonest, and they very often covered the whole body; the significance of this

has yet to be explained, as in Norway only one case occurred.

The invasion of the nerve centers is usually simultaneous; and in more than a quarter of the cases was complete the first day, in 90% before the third day. Although the paralysis is well known to be a flaccid one, rigidity preceded the relaxation in 38 cases of the New York epidemic. This again is indicative of meningeal irritation. Not only could the muscles of the limbs be affected, but those also of respiration, deglutition, speech, ocular movements and of the bladder and rectum.

The *pathological conclusions of the New York Committee* were as follows:

1. That in poliomyelitis acuta there were both interstitial and parenchymatous lesions, but that the interstitial were of fundamental importance and the latter secondary.

2. That the ganglion cells were affected only when in contact with the interstitial process.

3. That the interstitial process was dependent upon the vessels for its character and localization.

4. That the lesion, while generally most marked in the anterior horns, was not confined to that portion of the grey matter, and hence the word "anterior" should not be used to designate the condition.

5. That the white matter of the cord was the seat of inflammatory changes of minor importance.

6. That the pial infiltration was the essential element in the disease, and might be the origin of the infective agent.

7. That the involvement of the medulla, pons and basal ganglia always occurred in the fatal cases, though clinical experience in the last epidemic had shown that such involvement did not mean a fatal issue necessarily.

8. That in striking contrast to the cord, the ganglion cells in the medulla, pons and basal ganglia, even when near infiltrated zones, escaped serious alteration.

9. That the brain cortex may show evidences of vascular irritation and sometimes infiltration.

10. That the edema which is present plays an important role in explaining the transitory nature of the symptoms in the non-fatal cases.

*The portion of central nervous system between crura cerebri and foramen magnum.

11. That the predominating role ascribed to the central artery by previous observers was unjustifiable.

12. That there was no evidence of thrombosis.

13. That apparently the infective agent may affect any part of the brain stem in its initial lesion.

14. That it could not be determined from a study of the pathological histology whether the infection had a hematogenous or lymphogenous origin.

15. That while the central nervous system was the seat of the principle lesion in polyomyelitis acuta, changes in the internal organs of the body pointed to a general infection.

16. That the acute inflammation of the lymph apparatus connected with the intestinal tract might indicate the path of entrance of the infective agent.

An epidemic at Mason City, Iowa, is now under investigation, and Dr. John Anderson, Director of the Hygienic Laboratory of U. S. Public Health and M. H. Service, informs me that Dr. Frost, the officer there now, has found among the 65 cases in a population of 5,000, many abortive cases which would have escaped diagnosis under ordinary circumstances. He also reports a fulminant case which ended fatally in five minutes when the patient had been apparently well, and was only diagnosed *post-mortem*.

Much fear has been created by the newspaper accounts of this disease. In consequence of the alarmist attitude adopted in these, many people have taken their children away from what they believe to be infected areas. Now this attitude is quite unjustifiable; for reports of cases in the country districts are reaching me in considerable numbers. So that a child is perhaps as likely to contract the disease at country or sea-side as in town, the number of cases being generally proportional to population. Until the method of contagion is discovered, we do not know what precautions to adopt; but it might be prudent to restrict contact with other children, more especially in such frequented places as moving picture shows, nickel and dime theaters, churches, camp meetings, crowded sea-side boarding-houses, and perhaps public play grounds; for general principles tell us that crowding favors contagion.

But these are counsels of perfection; and I do not advocate their adoption or the closing of the schools on account of the disease, the incidence of which is comparatively small and the mortality minimal.

Shaffer has recently suggested that the avenue of infection is by abrasion in the skin. In Minnesota dust is believed to play a part in the spread of the disease, and sprinkling of the streets is now being urged as a preventive.

DIAGNOSIS.—The prominent features at the commencement of simple cases are the flaccidity of the affected limb, and loss of the reflexes in which the affected muscles are concerned. But there are pitfalls for the general practitioner in the exploration of these latter. I find it not unusual, especially in children, that the *reflexes* are reported to be absent when in reality the patient has suppressed the reaction by a rigid contraction of all the muscles of the limb being explored. No observation is of value unless the limb is placed in the correct position and all the muscles are relaxed. A case of meningitis may in this way be mistaken for one of infantile paralysis, an error of diagnosis which might cost the patient's life.

Again, the transcendently important *plantar response* is often misinterpreted. When the sole of the foot is tickled or scratched, the normal response often includes a rapid drawing up of the leg by flexion at hip, knee and ankle (dorsiflexion) and sometimes at toe (dorsally) as well (although the latter is usually flexion), the extension which sometimes occurs being in part volitional. Now this is not Babinski's sign, although it is often so called. To elicit this, a careful technique must be followed; all the muscles must be relaxed; the knee, hip and ankle passively semiflexed; and it is best to gently hold the waist of the foot. With a brass pin in the other hand, the sole of the foot should be firmly and slowly stroked from the heel towards the toe, first on the fibular side, and if no response occurs, then on the tibial side. If the toes do not yet move, the first stroke must be repeated and continued into a broad and sweeping mesialward movement across the pad at the base of the toes.

Babinski's sign consists of a slow extension of the great toe, after one of these stimuli *under these conditions*.

Accessory and important signs described by the same observer are the spreading of the four outer toes (the fan sign), and the sharp contraction of the the tensor fasciae femoris muscle.

Extension of the toe sometimes occurs in meningitis; and hence its erroneous declaration may cause a serious error of diagnosis.

Difficulties of diagnosis are presented also by Kernig's sign, unusual distribution of paralysis, marked mental symptoms without paralysis, bulbar paralysis, gradual ascending or descending paralysis resembling that described by Landry, cases with encephalitis. Examination by a skilled neurologist should be sought in such difficult cases.

A condition which might be mistaken for poliomyelitis is the rare one of syphilitic pseudo paralysis.

The investigation of these epidemics shows that we must discard many old views about the early symptoms. The unsatisfactory histories and sometimes examination of dispensary cases Dr. Emmet Holt believes should prevent us from concluding that abortive cases are rare, and he believes that many of them are overlooked or miscalled. He believes, too, that a number of deaths from acute poliomyelitis are attributed to such causes as pneumonia, cerebro-spinal meningitis, encephalitis and Landry's paralysis. Gowers, too, has insisted upon the frequency of errors of diagnosis.

On the other hand, Dr. Lovett believes that during epidemics many other diseases are called poliomyelitis.

THE COURSE AND TREATMENT.—Wickman reports 10% mortality in the Scandinavian epidemic. In the New York epidemic about 6% recovered completely, while in 86% some paralysis remained. The deaths of reported cases were infrequent; but it is likely that many cases died without diagnosis. During the active stage, rest and light diet are the most important needs. Drugs are not indicated; and the general treatment of fever should be followed.

The indications for treatment of the paralyzed muscles are:

(1) To aid the rapid absorption of the inflammatory exudate in and around the central nervous system. Potassium iodide

is generally recommended for its deobstruent effect. It is possible that some more active fibrolytic might here find a use; but I am not aware of its trial.

(2) To favor regeneration of the nerve elements by good nutrition.

(3) Most important is it to maintain the life of the muscles of which the function and nutrition are interfered with by destruction of their neurons in the anterior horn of the spinal cord, including their axonal prolongation into peripheral motor nerve. There is much misapprehension concerning the means of doing this. Vibration, massage, passive movements and hydrotherapy are quite secondary in importance to direct stimulation of muscle contractility by *galvanic electricity*. This is the only means which will keep alive the myotomes during the course of regeneration of their nerves. As those of which the cells are entirely destroyed will never regenerate, it is impossible at first to predict the amount of voluntary muscle which will remain to the patient; but it is our duty to keep alive the whole muscle in the hope that when exudate and oedema subside, there will remain sufficient innervation to give useful movements.

Degeneration of nerve is well begun within three days, and at the end of ten days is decided. Regeneration is a matter of months. Hence, electrical stimulation should be begun early, contrary to a very general notion, which has confused the contra-indications of irritative conditions of the nerves with the indications just outlined. Galvanism to the muscles can have no possible irritating effect upon the inflammatory area in the spinal cord, and it should be begun immediately after the fever subsides and the patient's general state is such as to permit of its employment without causing perturbation of the mind.

(4) *Prevention and Correction of Deformation.* It is most important from the very beginning to prevent contracture and malposition. Were this done much orthopedic surgery could be dispensed with.

(5) *Preventive Inoculation.* Efforts at preventive and curative inoculation are being made in the laboratories of the Pasteur Institute, of the Rockefeller Institute, and in the laboratory of Weichselbaum. The results of Leviditi are so far the most

promising. He, too, has discovered what resembles an organism by centrifugalizing and diluting the precipitate, which is then stained by Loeffler's method. It occurs in large numbers as an extremely small, round or slightly oval diplo- or staphylococcus. With the Giemsa method, what appeared to be nuclei are shown in blue. These bodies differ from those found in control cultures.

The preventive inoculation used by Leviditi is performed with the dried spinal cord of infected animals. This substance is virulent when intracerebrally injected. Heating to 56° destroys the vaccine. Flexner now reports partial success in producing active immunity by a vaccine (in monkeys).

Hexamethylenamine by the mouth is now given by Dr. Starr as a routine on account of the fact that it is excreted into the cerebro-spinal sack.

The New York Committee lay great stress upon the prolonged and frequent *hot bath* in the treatment not only of the acute and painful stage, but during the time when feeble attempts are being made by the little patient to move his paralyzed muscles. The bath should be at least 12 inches deep, the temperature 100° F., gradually increased not above 104° F. At least 15 minutes should be spent in it three or four times a day; and the bath should not be permitted to cool. After the bath, the child should be dried in bed while wrapped in a blanket. The committee has no doubt that the baths both promote sleep and relieve pain by preventing tension upon the muscles and joints. Not only so, but it is much less painful to straighten flexed limbs while they are warm and suspended in the bath. Again, the perfectly equal support of the limbs while floating in water makes possible voluntary movements which cannot be performed while the weight of the limb has to be overcome. In a child, it is particularly difficult to excite voluntary effort against drag or discomfort.* A systematic method of

exercises while in the bath must be devised; and these must be made into a game, so that the child's interest may be enlisted. Each case will require different exercises in accordance with the incidence of the paralysis.

The psychic factor is of the greatest importance in this part of the management of the case. Later on, too, one must not neglect the reticence and tendency to diffidence which the disability may foster in the child. On the other hand, exaction and selfishness must be guarded against. Stories of great men who have overcome physical infirmities are of much help. A small country town is perhaps the best environment for such people, whose range of occupation is not so limited as one at first supposes. If it is necessary to turn to a purely intellectual pursuit, tuberculosis must be obviated by specially devised exercises and as much open air as possible; cramped positions must be avoided.

Locomotion is often possible by means of a rolling platform, modified roller skates or something of the kind; for every encouragement must be given to the use of each shred of muscle tissue spared.

Besides the psychic factor a great obstacle to muscle contraction is stretching of the muscle fibres by contracture of the antagonists from the permitting of incorrect postures. These can be overcome in the first stages in the bath and later on by gentle massage, bandaging, and apparatus.

My experience shows, contrary to the belief of this committee, that *galvanic electricity*, so far from irritating and increasing pain, actually *soothes and relieves pain* so that after its application an extended position, which before was intolerable, is for a while comparatively easy of achievement. This apparent discrepancy of experience is perhaps due to the great imprecision with which have been reported to the New York Committee the manner of application of electrical treatment and the period of the disease at which it has been applied. *For the detailed account of some exercises which they have employed and

*Not only for treatment but for scientific statistics it is essential to distinguish between the pain of the early period, due to meningitis, and that after the first fortnight and often earlier. The latter is due to drag upon and malposition of muscles and joints, and is best relieved by the hot bath, galvanism to the muscles, and padding of the bed to prevent stretching.

*I need not go into detail to refute the exaggerated claims made by the newspapers concerning a special form of massage employed in New Jersey; for it has no special validity beyond the glorification of those concerned, in the eyes of the ill-informed.

for the further details as to pathology, epidemiology, of poliomyelitis as revealed by recent researches, I must refer the reader to the report of the New York Committee, published as No. 6 of the Nervous and Mental Monograph Series, the monograph of Wickman (Berlin, 1907), the recent publications of the Rockefeller Institute for Preventive Medicine, and those of Leviditi in the transactions of the Biological Society of Paris.

1758 K Street.

For further discussion see Society Transactions.

DIPHTHERIA WITH SPECIAL REFERENCE TO TREATMENT

W. J. Judy, M.D., Kerens, W. Va.

(Read at April meeting of Barbour-Randolph-Tucker Society.)

In offering this paper to this society I have nothing new or original to offer, but hope that you may have your memory refreshed on this, to my mind, the most dreaded disease we have to deal with, and that I may learn something from you.

As I said in the beginning of this address I have nothing new to offer, but we can say the same about the ministers of the Gospel in their meetings; they have one point in view and that is, to save souls. Our one ultimate aim as physicians is to cure diseases and save life. We might be ever so eminent as diagnosticians, it would do the patient no good if we were not therapeutists. I shall sketch briefly this disease until I come to treatment.

Definition: Diphtheria is an acute, infectious disease, usually of the throat and air passages, characterized by the presence of a grayish-white or dirty-white membrane, which is due to the Klebs-Loeffler bacillus, the toxins of which are absorbed into the system, giving rise to grave constitutional symptoms.

Etiology: Due to the entrance of the Klebs-Loeffler bacillus through an abrasion in the mucous membrane or skin.

Pathology: May be divided into local and constitutional lesions. The local lesions are due to the Klebs-Loeffler bacillus and characterized by the formation of a membrane. The constitutional lesions are due to the action of the toxins which are absorbed into the system from the local lesion, and are manifested chiefly in the heart,

kidneys and nerves. The process is usually fatty degeneration.

Symptoms: The period of incubation is from 24 hours to five days. Holt says, in most cases that have been observed, he found it to be from two to five days. The symptoms vary, depending upon the virulence of the infection, the resisting power of the patient, and the location and extent of the membrane; as when it is located in the larynx, we not only have the mechanical obstruction of respiration but the danger incident to a delayed diagnosis and the complication of broncho-pneumonia; when in the posterior nares the toxin is more readily absorbed, and the membrane obscured from view until the disease is well advanced. But the usual course of the disease is as follows: At the onset lassitude, headache, chilliness and wandering pains in different parts of the body, gradual rise in temperature to 101 or 102, or in some cases and later in the disease to 104 or higher, with sore throat and dysphagia. At the end of about 24 hours from the initial symptoms, a grayish membrane appears, usually on the tonsil. The surrounding mucous membrane is very much congested and of a purplish color. The set of the membrane presents a punched out appearance. A strong septic odor is imparted to the breath. It has been described as similar to that of a mouse nest. This odor is peculiar, and when once understood and recognized is of great value in diagnosis.

The Facies of diphtheria is marked and is recognized by the experienced clinician. In two or three days the depression is very marked. The pulse is soft and compressible, there may be active delirium or the patient may be apathetic. Albumen is present in the great majority of cases. In laryngeal diphtheria there is a hoarse, croupy cough, and the attendant symptoms of obstructive respiration, making a grave and serious picture.

Complications and Sequelae: The chief are affections of the heart due either to fatty degeneration of a heart muscle or the nerves of the heart, giving rise to sudden death. Paralysis may be local or wide spread, usually of the palate or extremities. Nephritis is a constant symptom in serious cases and is usually found in milder ones. Cervical adenitis, broncho-pneumonia, otitis media, thrombosis and embolism with their resulting evils may be present. Sometimes a

persistent anemia follows the disease. Vomiting, epigastric pain, together with slow pulse are dangerous symptoms, indicating degeneration of the pneumogastric nerve.

Diagnosis: This may be divided into clinical and bacteriological. The former is to my mind of much more importance than the latter, as it obviates the necessity of waiting and thereby losing valuable time, and as antitoxin is comparatively harmless in nearly all subjects its use should not be delayed, especially as not more than one physician in ten in active practice is prepared to make a culture. Do not understand me to say I condemn the bacteriologist, for he has rendered valuable aid in this dread disease, but he has his limitations of usefulness in diagnosis. Holt says four-fifths of all cases can be diagnosed by the clinician.

Prognosis: This should be guarded. It depends on the location and extent of membrane, the time when medical aid is given, and the sequelae and complications.

Prophylaxis: Isolation, all hangings and unnecessary furniture should be removed from the room, physician and nurses should use an antiseptic spray and be given an immunizing dose of antitoxin of at least 1000 units. As a precaution I always use a pane of glass in examining the throat, to keep the patient from expelling poisonous material in my face when coughing. The room should be thoroughly disinfected with sulphur and formaldehyde. All cloths used to expectorate on should be burned. Abrasions on the hands should be protected.

Treatment: This is to my mind the most important part of my paper because our present method of treating this disease gives results which the physician of two decades ago never hoped to realize. I make this statement without fear of successful contradiction, that we have physicians here in our society that were as good diagnosticians twenty years ago as they are today, while their knowledge at that time compared favorably with that of the present, but they could not cure diphtheria, and many a poor mortal has crossed the river who would be with us today if the physician had remained at home with his nitrate of silver swab, for he only opened up a new field for the bacillus diphtheriae to grow, by lacerating the mucous membrane. I for one am very thankful that I escaped this dreadful disease until modern times

and the age of serum therapy, having had two attacks of the disease and taking 10,000 units of antitoxin at each time, thus proving my faith in antidiphtheritic serum to cure this disease.

The treatment of this disease may be divided into *general* and *local*. The former includes diet, hygiene and medicine. The diet in all cases should be liquid, milk being the most important, and it should be given at regular intervals in sufficient quantity every two or three hours. Broths may be allowed. Ice cream is beneficial and nourishing; in some cases gavage must be resorted to. This is more successful in children under three years old than rectal feeding. The sick room should be large and well ventilated. All dejecta from patient and cloths used about him should be put in 1:1000 bichloride solution or handkerchiefs and soiled cloths burned. The patient should have a change of linen daily if not too seriously ill; all dishes and spoons should be sterilized by boiling. It is useless to hang sheets moistened in antiseptic solutions, as it has been proven by McCullom, by making cultures from the dust from the windows and ventilators of the sick room, that in no instance was the Klebs-Loeffler bacillus found. To demonstrate that it is not an air-borne disease, he pumped the air of the room through flasks of bouillon and at the end of 24 hours no diphtheria bacillus was found, but various others were.

Stimulants: Alcohol in the form of brandy or whiskey is of much benefit and should be given in sufficient doses as soon as the depressing effects of the disease are manifested. Other heart stimulants may be used, such as strychnine and digitalis; they are of questionable value, however, and digitalis should be avoided in the late stage of the disease.

Other Drugs: Keep the bowels open with calomel $\frac{1}{4}$ grain every 10 minutes until four grains are taken.

Hypodermoclysis of normal saline solution is said to be beneficial by some writers, but I have never used it.

Locally, use an antiseptic irrigation in children. This can be used better than a gargle and it removes the toxins.

Treatment of special symptoms: Cervical adenitis; local application of ice; incise if the glands suppurate.

Paralysis This treatment must be expectant. Electricity, massage, rest, nourishing diet and tonics, such as elixir ferri. quiniæ et strychn. in palatal paralysis. If the patient cannot swallow resort must be had to esophageal feeding.

Serum Therapy: The treatment of diphtheria at the present time is almost scientifically accurate, the remedy par-excellence is a bold and liberal use of antidiphtheritic serum derived from the horse, and the physician who fails to use it is very careless of his patient's welfare, and I believe should not be countenanced by an ethical profession. It should be given early in the disease to get the best results, and in large doses, 5,000 to 10,000 units of the standard serum. It has reduced the death rate from 50% to 10 or 12%. After the administration of 3,000 to 5,000 units on the first or second day of the disease, in about 24 hours the membrane has usually wholly, or almost so, disappeared. The temperature and pulse are normal, the patient having had a good refreshing sleep, and tells you he is feeling well. Repeat the dose in 12 hours if the symptoms have not abated. Give it in the subcutaneous cellular tissue surrounding the scapula under strict antiseptic precautions. Inject slowly after expelling all air from the tube. Do not rub the resulting swelling. Give enough serum to neutralize the toxins if it takes 100,000 units. Laryngeal diphtheria may require intubation or tracheotomy.

Injurious Effects of Antitoxin: A great deal has been said about the injurious effects of antitoxin, especially among the laity, but I am reluctant to say it has been condemned by some members of the profession. I for one do not think that it is absolutely harmless, but on the other hand I have seen at least two instances where it did do harm, which I will speak of hereafter; but admitting this to be a fact, the evil effects in those two cases could not be compared to the good it does in curing the many cases which I have treated, and could not be relied upon as a statistical basis. Antitoxin may have a depressing effect on the heart. It unquestionably to my mind has an injurious effect on the white fibrous cartilage, as I have seen two cases, as spoken of above, when a typical arthritis of the various joints of the body resulted,

with heart complications about three weeks after administration. Cooper, of Hinton, reports similar results. I believe this is more apt to occur in persons of a rheumatic and gouty tendency. In both cases the condition responded favorably to aspirin and sodium salicylate. I have also observed urticaria in about three fourths of my cases. As my paper is already growing long I will conclude with a report of my only fatal case in which antitoxin was given. I was called to see Miss M., age 16, who was a robust, healthy person previous to present illness. Throat became sore on Monday, I saw her on Friday the fifth day of the disease. She was apathetic, breathing very labored, pulse soft, weak and rapid, great pallor, feeble second heart sound, very weak and unable to swallow, and had slept none for four nights. Cervical adenitis with cellulitis present. On inspecting the throat I found the pharynx, tonsils, soft and about one half the hard palate, covered with membrane. I told the father that she was sure to die if I did not give her antitoxin, and offered him only the shadow of a hope if it was given. He consented to my wishes, but had been informed, as have most of the laity, in my community, that it was a remedy of last resort and that it would "kill or cure." I accordingly gave her 10,000 units. She promptly died in one hour after I had administered it. The father refused to have it given to his other children in immunizing doses. I heard a few days later that several of his children had the disease, and of course I was not called as I had already killed one. My professional neighbor, or the old mamma, nursed all the others back to health.

SPINA BIFIDA—REPORT OF A CASE.

J. E. Cannaday, M.D., Charleston, W. Va.
Surgeon to Charleston General and
McMillan Hospitals.

Infant Child of Mr. A. C. Stillwell.—Referred to me by Dr. T. H. Elliott, of Glen Ferris, West Va. Four months old. Operation performed June 4, 1910. Had a large flat tumor over upper portion of sacrum. This was partially covered by skin but for the most part by a reddish integument which suggested mucous mem-

brane without the secreting surface. This was rather distended with fluid and had a broad base. Light pressure over it made the child become very uneasy and cry. There were a few scabs and eroded patches at various points on the surface of the growth.

The history given by the doctor was that at birth of this child, apparently normal and healthy in all other respects, there was noticed a soft flat tumor over lower portion of spine that leaked a clear serum through a small opening evidently ruptured by birth pressure. There was leakage from this opening for several days and then closure for a few days with renewal of leakage. In a short time there was complete cessation from further leakage. From time to time small ulcerative patches appeared and were healed slowly and with difficulty. It was found that the best means of protecting this mass from ulceration was to save it from pressure by keeping the child lying either on the side or abdomen much of the time, and to keep the tumor as clean and dry as possible. This patient was fortunate in having a most excellent nurse to whose untiring care it probably owes its life.

This child when first brought to me was in apparently excellent condition with the possible exception of being a little nervous, but later alarming difficulties of respiration developed, and when the child was brought to me for operation the breathing was most stridulous and labored. There was a peculiar cry and at each inspiration there was a very marked retraction of the skin in the supra-sternal notch. This condition was much worse when the baby was excited or cried. It suggested a chronic obstruction from an enlarged thymus or other swelling behind the sternum.

The breathing was so persistently bad that we gave a very gloomy prognosis and decided in favor of local anesthesia. The skull was normal in size and shape and there was nothing unusual about the size and tension of the fontanelles.

Operation.—The skin at the line of incision was infiltrated with sterile 1% Novocaine solution and the tumor dissected free down to the opening in the spine which admitted the ends of the middle two fingers quite readily. A few nerve fibers were seen lying across the inner surface of the sac.

These were dissected free with a scalpel and returned to the bony canal.

The sac was amputated, sufficient being left to form flaps to close in the spinal canal. These flaps formed from the lining of the sac were closely approximated with 00 cat-gut, and over these flaps of muscle and fascia were approximated in a similar manner. The skin flaps were purposely left rather large and loose, and were brought together with interrupted sutures of silk-worm gut. The wound was dressed in the usual manner with sterile gauze. The patient suffered no pain during the operation and was shocked but little. Normal salt solution was given by rectum, three ounces every two hours. Before operation baby had had an occasional light rise of temperature. Three hours after operation the temperature jumped to 104° F. While this was the maximum rise, the temperature continued to fluctuate above normal for five or six days, after which there was an occasional slight evening rise. After the dressings were removed after the fourteenth, whenever the dressings were soiled they were changed immediately and the skin sponged with alcohol.

Beginning a few days after operation, the child's breathing began to improve and by the tenth day was nearly normal most of the time.

Coyle and Richardson Building.

NUTMEG POISONING.

G. D. Lind, M.D., Johnstown, W. Va.

I was called to see a five-year-old son of a druggist. The father stated that the boy seemed to be suffering from the effects of some narcotic, but could discover nothing except that the boy said that some neighbor boys had given him candy. The boy's pupils were dilated, he staggered in attempting to walk, and on being awakened from sleep would immediately go to sleep again. He complained of a fullness in his stomach, and said he was drunk. Pulse and respirations slow, no nausea, nor pain. He ate the so-called candy about 4 o'clock p.m., did not recover from the effects until the next morning. Then it was discovered that he had eaten five or six nutmegs.

There being no dilation of the pupils, I prescribed paregoric in a little whiskey and water.

I can find no instance of fatal poisoning from eating nutmegs, but some works on *Materia Medica* say that the oil of nutmeg will produce narcotic effects that may prove fatal. Stevens (*Materia Medica*) says that "in large doses nutmeg acts as a narcotic poison, producing headache, vertigo, delirium, stupor, coma, and finally death from respiratory paralysis."

Selections

APPENDICITIS IN CHILDREN.

In *Pediatrics* for July is a very interesting paper on this subject by Dr. Isaac Wood, Kingston, Ontario. He gives interesting historical data. In 1812 Parkinson, of London, reported the first death from perforation of the appendix, the patient a boy of 5 years. About 1840, Melier, a Frenchman, collected five cases, and in his report suggested:

First.—These conditions may not be so rare as they are supposed to be.

Second.—The appendix-caeci may be the primary seat of the disease.

Third.—Chronic suppurative tumors in the right ilial fossa may result from a primary lesion and perforation of the appendix.

Fourth.—The possibility of surgical interference for these conditions may some day be conceived.

Melier's conclusions deserved greater recognition than was accorded them. He was evidently living in advance of his generation.

In 1848 Hancock, an English surgeon, diagnosed inflammation of the appendix and incised the mass without waiting for fluctuation, and to him must be accorded the honor of introducing the modern method of treating a diseased appendix. Willard Parker, of New York, next reported four cases treated by incision and drainage. He concluded—first, that nature endeavors to throw a protective wall around the abscess; second, that there is danger of this wall being ruptured by ulceration or distension; third, that "a timely incision should be made, neither too early nor too late, not before adhesion had fully formed, nor after a short period before the maximum formation of pus had been reached; that is, from the 5th to the 12th day." He added that "gangrene and perforation are more fre-

quent in children than in adults, and the cases generally progress more rapidly."

It was left to Pro. Fitz, of Harvard, to dispel the mists, clear away the misconceptions and bring order out of confusion. In his paper (1886) in *American Journal of Medical Science*, the essential features brought out were:

First.—That all these obscure conditions, known as typhitis, peri-typhitis, caecitis, etc., were only different stages of a morbid process beginning in the vermiform appendix, and that the word "appendicitis," used for the first time in this paper, was "coined" by him to call attention to inflammation of the appendix, as the primary lesion.

Second.—That an early diagnosis was imperative.

Third.—That operation should immediately follow diagnosis.

Fourth.—That the diseased appendix should be excised. This paper, published twenty years later than Parker's, introduced a new and progressive era in the history of our subject. The literature of appendicitis has increased rapidly and our knowledge has been wonderfully enriched. More than 3,000 journal articles, besides books and monographs, have been indexed in the Surgeon's General Library at Washington since 1896.

In the study of this literature one can not but note the almost complete absence of any special reference to appendicitis in children. With a few exceptions, recent writers have treated "appendicitis" as a disease common to all ages. Books written by Morris, Fowler, Deaver, Ochsner and others are replete with information on other aspects of the disease, but not a page or possibly even a paragraph is found to differentiate appendicitis, as it occurs in children and in adults. Among the exceptions I may mention that Howard A. Kelley has given in his 1909 edition of "Appendicitis and Diseases of the Vermiform Appendix," an excellent chapter on appendicitis in children, and for many of the facts in this paper I am indebted to this valuable work.

If we turn our attention to those special features which differentiate appendicitis in children and in adults:

Anatomically, we find, first, that the appendix in the child is relatively larger and longer; second, the walls are thinner, the

meso-appendix is shorter, often less than half the length of the tube (this tends to kink or bend the appendix and to limit the blood supply, especially to the distal half); third, the entrance from the caecum is funnel shaped, the lumen is larger, the mucous membrane smoother and the valve of Gerlach often absent or ineffective, hence foreign bodies or morbid materials more readily find their way into the tube; fourth, the lymphoid tissue in the appendix of the child is more abundant and the blood supply is poor, hence destructive processes go on more rapidly and the liability to gangrene and perforation is greater; fifth, the omentum is relatively smaller and less effective in walling off a gangrenous or perforated appendix.

Pathologically, we note, first, these inflammations of the appendix induce a greater effusion of serum in children than in adults; second, that this effusion quickly becomes purulent; third, the occurrence of gangrene and early perforation is more frequent in the child; fourth, that abscesses are more likely to form and to rupture in children than in adults; fifth, that there is greater tendency to spreading peritonitis (Sprengel found 46.8 per cent. among his cases); sixth, that intoxication of the system is more rapid and intense in children.

Clinically, these differential features assume more than ordinary interest and importance. We have not time to discuss them in detail. We simply mention some of the general principles. First, that appendicitis in the child is more sudden in its onset, rapid in its progress and intense in its symptoms than in the adult; second, that the unstable condition of the nervous system (peculiar to children) may lead to confusion or error and may delay or prevent a positive diagnosis; third, that abnormal conditions are frequently met with in children which render the clinical phenomena vague and misleading, for example, right-sided pleurisy or pneumonia may simulate appendicitis—the pain, tenderness and rigidity being located in the right iliac fossa, or in abnormal positions of the appendix (common in children) the pain and other symptoms may be found on the left side of the abdomen—in the epigastric region or under the costal arch.

We feel that a due appreciation of the anatomical, pathological and clinical fea-

tures already noted should enable us not only to differentiate appendicitis in children from the same disease in adults, but to set it apart as a subject for special and separate consideration in its diagnosis, its prognosis and treatment.

We are told by eminent authorities that "the diagnosis of appendicitis is generally easy." This may be true in adults—it is not true in children. The recognition of appendicitis in the early stages—when operation would be successful—is extremely difficult. The cardinal symptoms of appendicitis—sudden acute pain in the right iliac fossa, tenderness over McBurney's point, rigidity of the right rectus muscle, vomiting, elevation of temperature, acceleration of pulse, etc., which are quite constant in the adult, are irregular, uncertain and have little diagnostic value in the child.

The prognosis of appendicitis in the child ought to be good. Compared with the prognosis in the adult it is bad, very bad. In 1907 the average mortality for children in six large clinics was 19.23 per cent., for adults it was 2.9 per cent.

Dr. J. B. Murphy says: "We should have no deaths from appendicitis," but we have them. What are we going to do about it? Where does the responsibility rest for this terrible mortality, this veritable "slaughter of the innocents"?

From a careful review of the literature of appendicitis and from observation we have come to the following conclusions:

First, that the occurrence of appendicitis in children is much more frequent than it is generally supposed to be. Selter found that appendicitis was seven times more frequent before the age of 15 than it was from 15 to 30; second, a large percentage of cases that occur are not diagnosed; third, a large percentage of cases are diagnosed too late for successful treatment; fourth, that the current literature of appendicitis should be revised, and those features of the disease peculiar to children should be clearly set forth and strongly emphasized; fifth, our "diagnostic senses" should be awakened and trained to recognize the earliest, the initial, symptoms of the disease; sixth, physicians and surgeons should be made to realize that an early diagnosis is imperative in the case of children; seventh, that diagnosis should be followed immediately by operation.

INTESTINAL OBSTRUCTION FROM ASCARIDES LUMBRICOIDES.

Report of a Case.

Richard E. Venning, M.D.,
Charles Town, W. Va.

The older authors denied the possibility of obstruction from this cause. Treves, in his work on obstruction of the intestines, expresses the opinion that "there is no trustworthy illustration of this somewhat rare form of intestinal obstruction."

Peyrot¹ does not mention a single case in his exhaustive observations on intestinal obstructions.

Rilliet and Barthez² think it possible, but state that strangulation caused by worms must be exceedingly rare.

D'Espine and Picot³ contend that not a single example of intestinal strangulation exists, at least in the case of a child.

Galvagno Bordoroni in 1887 was the first to report a case of obstruction from lumbricoides, which he confirmed by the post-mortem examination. In the same year Stepp⁴ speaks of a case of a 4-year-old child in which the post-mortem showed fifty ascarides, hermetically sealing the lumen of the bowel.

Taylor⁵ in 1899 reported a case in which he operated and found two feet of the ileum inflamed and edematous. He opened the intestines and delivered sixty-six worms in a mass producing the obstruction. The intestine was damaged beyond repair and the child died on the third day after the operation.

Botoff⁶ describes a case of obstruction of the bowels with perforation and subsequent peritonitis, in which the post-mortem disclosed 500 ascarides in the bowels.

Simon⁷ in an autopsy on a child dead from obstruction of the bowels, found a mass of worms interlaced and strangling the intestines.

In a number of cases reported, the diagnosis of obstruction from worms was made and after the administration of anthelmintics and purgatives a large number of worms passed and the obstruction disappeared.

In other cases, at operation or autopsy, a few worms have been found producing an obstruction. This was due rather to

the position of the worms than to the large number mechanically blocking the intestines.

A large lumbricoid has been found in the appendix vermiformis coiled within the appendix and wrapped around the bowel, producing the constriction.

I find on record very few cases in which the obstruction has been convincingly shown to be due to the mass of lumbricoides.

That a collection of great numbers may be present without producing symptoms of obstruction is mentioned by Winceoucoff⁸. In one case 2,500 were expelled in five months from a child and in another child 12 years old 5,000 were expelled within three years.

Patient.—I saw the child, a boy aged 2½, for the first time at 10 p. m., February 28. The parents stated that he had not been well for some time and that he had worms, having passed eighty in a few days. Careful inquiry convinced me that these worms had merely worked their way out of the child's mouth and anus.

Examination.—In appearance the child was small for his age and very much emaciated. He complained of pain in the abdomen and was restless. The skin was dry and harsh. There was no nausea or vomiting. The child refused nourishment but took water freely. There was no distention of stomach or abdomen. Palpation of abdomen did not show much tenderness. The bowels seemed to be filled with masses, palpable through the thin abdominal wall, which both Dr. F. M. Phillips, who saw the case with me, and myself, thought were worms. The worms forming these masses could be so distinctly felt as to leave no doubt in our minds that they were causing the obstruction.

During the night ten worms came from the patient. We advised operation and the next day the child was brought to the hospital. By this time the stomach and abdomen were distended and on palpation painful.

Operation.—The abdomen was opened in the midline, incision three inches. The abdominal cavity contained a small amount of free bloody serum. The small intestines seemed everywhere filled with worms. Twenty-four inches of the jejunum was distended, almost to the point of

1. Peyrot: Obstructions de l'intestin, These d'agregation, Section de chirurgie et accouchement, Paris, 1880.

2. Barthez and Rilliet: Traite des maladies des enfants, Ed. 3.

3. D'Espine and Picot: Manuel des maladies de l'enfant, Edition 4, 1885.

4. Stepp: Munchen, med. Wehnschr., 1887, No. 51.

5. Taylor: Am. Jour. Obst., 1889, p. 800.

6. Botoff: Jour. de clin. et ther., 1897, No. 10.

7. Simon: Rev. medical de l'est, 1892, p. 228.

8. Winceoucoff: Centralbl. f. Kinderh., May 1, 1907.

rupturing. I opened the bowel and extracted the worms as rapidly as possible. So tightly were they impacted that it was necessary to remove them one at a time until the mass was somewhat untangled. After clearing this portion of the bowels the incision of the bowel was closed. About the middle of the ileum another impaction was found about 10 inches in extent; this was similarly treated. The last point of impaction was found at the cecum. Here the worms were massed in the ileum as well as the cecum and the appendix was so packed that it stood up like one's thumb. It was evident at that time that the bowel had been too largely distended to regain its tone and a resection was considered, but the child's condition did not justify this. No fecal matter was found in any part of the intestines.

Postoperative History.—The abdominal wound was rapidly closed and salt solution given subcutaneously and by rectum. The child was almost pulseless when put on the operating table and died six hours after. In this case the obstruction was clearly due to the large number of worms mechanically blocking and overdistinging the bowels. There was no fecal matter anywhere in the bowels, no volvulus, constriction or anything producing the obstruction other than the large masses of worms. The average size of the worms was 9 inches, the smallest 7 inches. Two hundred and seventy-three worms were removed at the time of the operation. Ninety were passed by anus before operating and, as only the masses sufficiently large to produce obstruction were removed, I should think one hundred or more were left in the bowels.—*Jour. A. M. A.*

DIRECTIONS TO A YOUNG PHYSICIAN.

By Dean Swift, Rediviv.

Should you be called to see an important man in your town, when you go, impress him with the idea that you have laid aside all other cases to see him. Tell him that he is seriously sick or *threatened* with pneumonia. If he does grow very ill you will be credited with great sagacity, whereas if he gets well rapidly you will receive praise for great skill. That word "threaten" will be a very valuable one in your vocabulary. Use it often, for much reputation may be gained from its apt use.

When your patient is suffering from an incurable disease, if he has money, tell him you can cure him. He will die in the end, but dead ones are soon forgotten and you have done him good by inspiring him with hope. Do not send in a bill during his life. Wait until you know the amount of his estate and act accordingly. You worked for the money and need it as much as the helpless widow who probably would

not have courage enough to fight a suit.

When a child is sick it does not talk and so you can make a mountain out of a mole-hill. Now is the time to say "You have just called me in time." Above everything else have your reputation in mind and the more closely you sail your case between the Scylla of diphtheria and the Charybdis of meningitis the more glorious will be your safe homecoming. In these cases send your bill while the parents are in the throcs of gratitude.

When you are told by a layman that Dr. Rival has been telling queer stories about you and criticising your management of a certain case, believe him, for what reason would he lie, and Dr. R. does not treat you well anyhow. If a layman tells you that Mrs. Jones says Dr. R. killed her child, it is not necessary to truthfully defend him. Just say, "Oh, that cannot be," and otherwise "damn him with faint praise." Remark that you heard he had been drinking lately and it's too bad.

You may be called to see a case of pneumonia which Dr. R. has been working hard with for a week, and who is getting sicker and sicker. By this time he is on the verge of crisis. Stride into the room, give a casual glance at the patient, pick up the medicine bottle, smell it and look horrified; go to the open window and fling the drug as far as your indignant arm will permit. Then turn, and in awful, solemn voice, say: "What a blessing I was called. I may be able to save him, but he was slowly poisoning." Then what acclamations you receive when next morning the grateful wife meets you at the door with the news plainly showing in her face that "John is better." You get all the credit and be sure you take it, and hold your hand out for more and—and—remember to charge for that credit. You might as well have it. By right it belongs to God and Dr. R., but they will never miss it.

When you are asked to witness an operation, be sure on the first occasion in the drug store or barber shop to tell of it and hint that maybe it was a good thing for the patient that Dr. R. had asked you to assist him, and how much she had been neglected by her former attendants. Of course you mention no names; you never do; it is not ethical; but it is none of your business if your description is interpreted correctly.

It will save you time and trouble if you train your clientele to believe that a single glance of the eye is enough for you to reach a correct diagnosis. There is no use of all this thumping of the chest or this kneading of the belly when we have such terms as "sluggish liver," "neurasthenia," "grip," "malaria," to cover a multitude of conditions. It makes no difference about a name, for the medicine will be the same, and likely the result, for God is good to the sloppy doctor.

When you are called in consultation, try to remain after the regular physician is gone. Gossip about everything, including the patient. Let the family know that Dr. R. was doing all right, but—ah, that "but"—"two heads are better than one. Ha! ha! Good day." They will all think that you are a genial, whole-souled fellow, ever ready to give them some time. Always be strictly ethical, but a man of any standing must sail his barque close to the shoals of dishonesty to anchor it in the deep water of financial success.

Should a consultation be asked for in one of your own cases, never leave the side of the consultant and always give the result of your meeting to the family yourself. Do not give him a chance to express his opinion openly. Ask for his fee in the presence of the consultant. He will know that you always look after his interests, besides the family will remember how mercenary he is, thinking of money in the face of death.

Never ask for a consultation yourself, for that calls the attention of the patient to your ignorance, and it is better never to know what ails a man than to let him think you do not know.

There are three kinds of people you ought never to offend—a newspaper man, a policeman or a religious gentleman. The first has your reputation in his hand. Everyone but you advertises and pays for it. You avoid publicity. It is a good thing to have a friend on a newspaper. Tell him all about the peculiar ingrown toenail you operated on. That is the public's business, they ought to know, but warn him not to mention names, for that offends ethics. Say this in a way that he forgets it, and the article in the paper will graphically describe the wonderful success of Dr. Get-thair.

Medical ethics is an occult subject, the

knowledge of which must be acquired by study. It is above common sense and courtesy; we are governed by set laws which must be learned so that when you offend it is not because you are not a gentleman; it is because you never attended a course of lectures.—*Jour. N. J. Med. Ass'n.*

(Doubtless all of us have seen the kind of physician that following the above ironical advice will produce. He may win a practice and for a time seem to prosper, but is sure to land in the grave "unwept, unhonored and unsung," and his memory will be malodorous as long as it lasts.—Editor.)

THE FINANCIAL REWARDS OF A PHYSICIAN.

That the doctor is not a good business man has passed into a proverb. The explanation that "no man with business instincts and the desire to make money would dream of entering the medical profession," is both unusual and suggestive. This statement appears in the December number of the *New York State Journal of Medicine* in an editorial entitled "The Economics of Medicine." The conclusion that there is "no money in medicine and that no great fortunes can be won in a medical career," while not new, is important.

After discussing the average income of members of the profession and the fact that the cost of living has increased at least 50 per cent in the last twenty-five years, while the fees for medical service have remained the same, so that the "purchasing value of a dollar which the doctor now gets for a visit is just half what it was twenty-five years ago," the editor calls attention to the additional fact that preventive medicine has in late years greatly decreased the amount of remunerative work for a physician. Pasteurized milk and hygienically prepared foods have greatly decreased the summer diseases of children. Antitoxin and quarantine have greatly reduced diphtheria. Typhoid fever epidemics are prevented or are short-lived. Medical inspection of school children has reduced zymotic diseases. Much of the work being done by physicians in the prevention and extermination of diseases is done without hope or expectation of reward. Since this work is for the benefit of society, the *New York* editor is perfectly reasonable in saying: "We have a right to ask the public whether it has not also some obligation to the medi-

cal profession. Can society expect men to spend ten years in preparation for the most difficult and exacting of professions at a cost of at least \$7,500.00 and then reap a reward which is but little more than the cost of the education would earn if put out at legal interest? Medical men have families to support, children to educate. They must pay for their homes and at least strive to provide for their old age. How is it to be done in present circumstances? . . . How can men live decently and honestly whose incomes are decreasing and whose expenscs are increasing? . . . Stern necessity in our large cities is driving our men to illegal and dishonorable means of raising money, dishonorable because secret and clandestine. . . . The entire economics of medicine must be placed on a different basis if we are to make any real progress in combating the evils of commercialism."

After discussing the proposition to raise the fees of the general practitioner as a remedy, which proposition he fears would not be successful, "as physicians would not be loyal to each other," and deciding that the end can only be obtained through organization, the *New York Journal* concludes: "We cannot protect ourselves as individuals. We cannot as individuals ameliorate our present condition. Why should we hesitate to make use of the only agency which is a power in the world today if we use it justly and with righteousness? In the words of a great statesman, we are confronted with a condition and not a theory. We need a remedy lest worse things happen to us. Is there a remedy? Is it capable of application? Who will suggest a better remedy? How can any remedy be applied without organization? These are serious questions and require reflection. The opinion of the profession is desired."

These *are* serious questions. The views of the profession, not only in New York, but throughout the country, will be of great value. Carefully, fairly and dispassionately these questions must be discussed and settled by the medical profession of the present generation or the profession and the people of future generations will suffer. The physicians of the United States must unite to enlighten the public on the danger of ignorant, ill-trained and poverty-stricken physicians and on the duty of the public to

support and encourage, both legally and economically, a medical profession which can afford to be disinterested, unselfish and philanthropic. If this is not done, the next decade will see the standard of the medical profession lowered simply through force of economic pressure. The danger and the loss from such a change will fall far more heavily on the public than on the profession. It is the duty of far-sighted physicians, however, to sound a warning and to lead the way in enlightening the public.—*Jour. Am. Med. Asso.*

In the past, physicians have been against each other and the people against the profession, the doctor having two foes to fight: the one within, the other on the outside of the profession. The time has come for the physicians to be as one man, "united we stand, divided we fall." We should and can be a Gibraltar of strength, power, influence, unity and brotherly love and protection.

The disagreeable dissensions among the members of our profession, more particularly to be observed in the smaller towns and villages, spring from base impulses as a rule: they are fostered and kindled by covetousness and petty jealousies which should find no place in the make-up of a noble, generous ambition. It is the duty of every physician to bring the local profession, wherever he may settle, into good repute, by attempting to overlook the imperfections so patent in others, and by reposing with confidence in the fair-mindedness and liberality of his competitors. If he should have a real grievance, the laity should not learn of it, for the public is never interested or concerned about the injured individual. The errors of a brother practitioner can often be corrected by a private interview, and whilst no man is above censure, an open reproval is always inexcusable. It has been well said that the greater the regard that physicians have for one another in a given community, the greater will be the public regard and esteem for our profession.—*Jos. M. Andes in Physicians' Business Journal.*

"Move to the fore.

God himself waits, must wait, till thou come.

Men are God's prophets, though ages lie dumb.

Halts the Christ Kingdom with conquest so near.

Thou art the cause then, thou man at the rear.

Move to the fore."

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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Editorial

TO COUNTY SECRETARIES.

What are you doing to make the next meeting of the secretaries interesting? Your chairman, Dr. Benton, as you know, has been trying to stir up interest in the meeting, and he expects every secretary to be in a position to give a good account of the work of the past year. Have you collected the dues for 1910 from every member? If not, you have not done your whole duty. Finish it *now!* For every member whom you allow to escape the Association loses about one dollar, as all have had the JOURNAL regularly, and it cost almost a dollar for each one. You should long ago have ascertained how many were intending to drop their membership and sent the names to the editor, so that the JOURNAL could be discontinued. Since you failed to do this, you should see that every copy of the JOURNAL is paid for. Then hustle for new members. Many good new men are locating in the State. These should join the progressive ones, and march in the ranks of the State Medical Association.

Get busy and aid Chairman Benton in having a good meeting of secretaries at the Parkersburg meeting of the Association.

PHTHISIOPHOBIA.

In the efforts of the profession to deal with the various aspects of the tuberculosis problem, it is to be regretted that our zeal and devotion have at times led us into exaggeration and overstatement. This is especially the case when the subjects of the contagiousness and curability of the disease are under discussion. Public interest of the helpful kind has been hard to arouse, and in the effort to do this it is feared that exaggerated and misleading statements on both of these phases of the subject have been rather recklessly disseminated. The effect of this has not been entirely good. It has been successful in focussing public attention in a moderate, and in a few instances, in an extreme degree upon the problem, but not always with commendable results. The more effectively to stimulate the exercise of proper precautions to guard against the dangers of the contagion, the measure of its communicability and the risks to those who have the care of, or who may be associated with, those suffering from the disease have been unduly magnified. This is apparent in the increasing difficulty of obtaining caretakers for advanced tuberculosis cases. We have in mind such a case in which, only a few days ago, an attendant who had been secured declined to continue the service on account of the fear of contracting the malady. It is equally reprehensible to give currency to the idea that the disease is easily curable and could be quickly eradicated. We have seen it seriously stated, that for a certain sum of money—not a small one to be sure—the city of New York could be freed from the disease in a few years—three to five. Such sweeping assertions as these cannot be sustained by any knowledge we possess that is applicable to either the cure or control of tuberculosis. It is true we are learning more and more how to utilize certain means of cure that have always been available to us, and have devised others that, temporarily at least, have held some promise of benefit, but the fact remains that we must

still suffer the humiliation of seeing the great majority of such cases decline and die in spite of our optimism. In the matter of controlling the spread of the disease, we, of course, stand on firmer ground, yet the factors that enter into it are so numerous and various, and many of them so little understood, that it almost seems vain to expect anything like an early accomplishment of our task.

We were moved to a consideration of these matters by two pieces of legislation of recent enactment, one by Nebraska, the other by Oklahoma, which are luminously discussed by Dr. S. A. Knopf in the *New York Medical Journal* of July 9th, 1910. The Nebraska one refers to the treatment of tuberculous patients who may be admitted to any hospital at the charges of the State. One section is as follows:

4707. Sec. 5. (Board of Health—Duty). It shall be the duty of the Nebraska State Board of Health to institute inquiry for and receive applications from hospitals in this State for the care and treatment of the persons described in Section One of this Act. It shall pass upon and make a list of the hospitals suitably equipped and managed and willing to receive patients under this act, and send a list thereof to each county clerk in the State. It shall prescribe regulations for the care, housing, and nursing of such patients and see that the same are complied with. Provided that the charge at any such hospital for any patient under this act shall not exceed seven dollars per week and shall include board, lodging, care, and medical services. *Provided, further, that it is made obligatory for any such hospital or sanatorium to use the modern treatment by immunization (vaccine therapy) in addition to open air and other sanitary methods.*

A certain Nebraska physician, according to Dr. Knopf's paper, claims the credit (?) of this preposterous piece of legislation. In our wildest dreams it never occurred to us as a possibility that the time would ever come when diseases would be treated by statute. Of all the baneful happenings that could afflict the practice of medicine this would be the most paralyzing. Is this only the first step? Are we next to expect enactments prescribing what the treatment of typhoid fever is to be, and when we shall resort to foreeps? Are we at last to have a definite settlement of the vexed question, when to operate for appendicitis? Is the code to usurp the place on our bookshelves of our works on medical practice? How long will it be before the rich and powerful proprietary and patent medicine

interests see in this form of legislation the chance to secure recognition of their products? We know how all-persuasive are the influences they can command. Shall we soon have statutes requiring, say, that no case of pneumonia shall be treated without using so many pounds of "thermophlogistine", or that all cases of Bright's disease shall have somebody's "kidneyvine"? This seems very absurd and ridiculous, but it is just next door to the provisions of the Nebraska statute.

The Oklahoma law is the outgrowth of pure and simple phthisiophobia gone mad, and is a part of the act which regulates the licensing of physicians to practice in that State. This letter, from the Secretary of the Board of Medical Examiners of that State, to a physician of another State who desired to obtain a license to practice in Oklahoma, is quoted by Dr. Knopf in the journal above referred to:

December 7, 1909.

Dear Doctor: Replying to your favor of the 2nd. This Board does not grant license to physicians who are afflicted with tuberculosis.

Enclosed you will find a copy of the affidavit attached to all our application blanks, also copy of instructions which will give you the desired information.

Any further information will be gladly furnished.

Very truly yours,

(Signed) FRANK P. DAVIS,
Sec'y State Board of Med. Examiners.
A. E. S.

TUBERCULOSIS AFFIDAVIT.

I further state that I am not now suffering with tuberculosis in any form; that I have not in the last three years lived in the house with, or nursed any one suffering from said disease. That I have not opened an office or begun practice in the State of Oklahoma, and will not do so until I will have received the proper authority from the State Board of Medical Examiners.

Subscribed and sworn to before me this..... day of, 1909.

I, _____, a legally qualified physician in the State of _____, have been acquainted with _____, whom I know to be the same person making an application to which this is attached; that I have known _____ for three years, and have made a thorough examination and find _____ to be free from tuberculosis.

My State license is No.

Subscribed and sworn to before me this day of, 1909.

Now this absurd and utterly unwarranted legislation is the direct result of our

own foolishly exaggerated statements concerning the communicability of the disease. The public has taken these at their full face value, and has sought to protect itself by legislation even more foolish, which, pushed to its logical conclusion, would end in compelling isolation of the tuberculous as we do of the leprous. What we should do is tone down our excited apprehensions and deal with the simple facts of the case. We all know that a tuberculous person can live in his home, associate with his family and friends, and yet by the exercise of certain simple and easily observed regulations, be almost negligible as a source of danger either to them or to the community. A number of years ago, as we remember, in an investigation of this phase of the subject, it was found that in the Brompton Hospital for Consumptives, in London, where hundreds of advanced cases were cared for all the time, and only the ordinary precautions of cleanliness and good ventilation were observed, the circumstance of a nurse contracting the disease was rarely known. The same is true to-day.

We should aim to allay in the public mind this unreasoning apprehension, to instruct it in the plain and simple methods by which practical immunity may be secured, and to point out how it can best exercise its kindly offices toward the amelioration of the lot of the afflicted ones, if we are to prove a blessing and not a curse to those unfortunates who are the objects of our solicitude. The simple truth is a sufficient weapon with which to wage our battle.

L. D. W.

NEW REMEDIES FOR SYPHILIS.

Syphilis is a much dreaded disease, and very properly so. No intelligent, honorable physician cares to insure a cure unless the patient will consent to careful observation and management, with medication when deemed necessary, during a period of three years. With present remedies, even with this protracted treatment we can not guarantee the patient immunity against the later manifestations, as paresis, locomotor ataxia and gummata. Any new remedy that is proposed, therefore, very naturally excites marked attention. Just now a number of German Journals are reporting miraculous results from a

new remedy evolved by the laboratory investigations of Ehrlich, himself not a practitioner but who is known to us all as a man of high scientific attainments; and his honesty of purpose is shown by the fact that his remedy, which is now known only as "606," has been placed in the hands of distinguished clinicians for experiment on syphilitic patients. The results thus far reported are so brilliant that the whole continent of Europe has become excited over the matter, the newspapers are filled with exploitations of the wonderful results, and physicians are rushing to Berlin and other points where the remedy is being tried, all of which shows deep interest in a subject that is full of import to the individual, the family and the state on account of the far-reaching results of syphilis; but that the newspapers have any knowledge of the remedy until it has been placed in the hands of the whole medical profession for general use is greatly to be deprecated. We present the matter here that our readers may be prepared for future developments. The facts are chiefly from the *Jour. Am. Med. Ass'n*, Aug. 13.

Ehrlich calls his remedy "sterilisatio magna," because it possesses the power of "killing all parasites at once." It is the result of years of experiment, and in November last, in company with Dr. Hata, the new combination was hit upon. It is an arsenical preparation whose chemical name has 38 letters and is therefore omitted here. After satisfactory trials on animals, the remedy was applied to human beings, Prof. Wechselmann, of Virchow Hospital, Berlin, being charged with the first experiments. The remedy is administered hypodermically, and Wechselmann claims that "one injection arrests the disease to as great an extent as more than a year's treatment by any other method." He believes that "the remedy acts on the symptoms of syphilis in all their infectious forms with a rapidity and thoroughness which cannot be approached by any other remedy." After an experience with eighty cases, all, we believe, in the acute stages of the disease, he reports the results as satisfactory in all. Eruptions and ulcerations heal quickly, in some cases in which mercury had failed. The general condition of the patients also quickly improves, fat being taken on. Reports to the Berlin

Medical Society by L. Michaelis, Alt and others were confirmatory of Wechselsmann's observations. Neisser writes to a Journal that it is positive that the new remedy "exerts a remarkable, even surprising action on the spirochete, and also on the syphilitic products themselves. Spirochetes disappear in very many cases in from twenty-four to forty-eight hours from primary lesions and condylomata in which they were abundantly present before administration." In one case of brain syphilis he reports the symptoms promptly relieved. Schreiber and Hoppe also give favorable reports from the intravenous injection of the remedy, and in fifty-two cases they found the Wassermann reaction—now regarded as a positive evidence of syphilis—to be negative in over 92 per cent., in most of them within fourteen days after the remedy was used. They regard the remedy as possessing an absolutely specific action, and that this is manifest after a single injection. A number of other physicians have made exceedingly favorable reports to the German Medical Journals, so that we may reasonably hope that a remedy of unusual value has been discovered. But first reports are apt to be too enthusiastic, and we can well afford to wait for the calm judgment that will come from a more extensive experience with the remedy in the hands of a greater number of skilled observers.

In this connection we present the following excerpt from a late issue of the *Am. Jour. of Urology*, for which we are indebted to Dr. F. L. Hupp:

"Hollopeau and Brodier (*Gazette des Hopitaux*, Dec. 16, 1909) in a communication before the Therapeutic Society, reported that in the treatment of syphilis they had used the following five remedies in intrapreputial injections: Atoxyl, arsacetin, hectin, mercury bibromide, and an amalgam known under the name of arqueritol. The first two were active and well borne in daily doses of from ten to twenty centigrams, yet severe disturbances of vision were provoked in some cases by very small doses; therefore, these remedies are used only occasionally by the authors. The best results were obtained by daily doses of from ten to twenty centigrams of hectin. It was with this remedy that the authors

syphilis which came under their observation. Injections of mercury bibromide, which are so well tolerated in the buttocks, are not well borne in the prepuce, for they give rise to an extensive induration, which is exceedingly painful and persistent. The same was true of arqueritol even when given in doses of two centigrams. Mercurial preparations are not adapted for use in this method of local abortive treatment of syphilis. Of the other preparations, hectin seemed to merit preference."

S. L. J.

FLORENCE NIGHTINGALE

Died on August 13th. She reached her 90th birthday on May 12th, and received from the new King of England a message of congratulation. Born in a wealthy and highly respectable family, she early manifested unusual interest in the relief of human suffering. After studying nursing with the Sisters in Paris, she spent six months at Kaiserwerth on the Rhine in further training in an institution under Pastor Fleidner. Returning to England, she organized hospitals in several cities, and founded a sanitarium for the care of invalid governesses. In 1854, during the Crimean war, she was at her own request sent to Constantinople with forty women nurses, and in the hospital at Scutari, where conditions were especially bad, her superior executive ability soon manifested itself by the wonderfully improved sanitary condition and the reduced mortality. Her work in Turkey gave to her the title, "The Angel of the Crimea". After nearly two years abroad, she returned to England and was summoned to Balmoral Castle to receive the personal thanks of Queen Victoria. Fifty thousand pounds was raised for her, with which she established training schools for nurses in several of the London hospitals. King Edward conferred upon her the "Order of Merit," limited in membership to twenty-four persons, and she is the only woman who has ever received this distinction. Duty willingly and well done brought to Florence Nightingale all her honors and an undying fame, and but for her own request for a modest funeral, her remains would now be reposing in Westminster Abbey among the many great ones who have preceded her to the tomb. But this could not have added to her fame

which a life of unselfish service for humanity has made secure.

S. L. J.

EDITORIAL NOTES.

We are glad to note the consolidation of the Medical Departments of the Ohio Wesleyan and the Western Reserve Universities. This leaves but one regular medical school in Cleveland. The Western Reserve has for many years taken a high position among medical colleges, and this union, with the recent gift of \$250,000 by Mr. H. M. Hanna, insures still greater efficiency. The cause of higher medical education is marching on, and nothing will hasten its progress more than the consolidation of the several schools of each city into one strong institution.

As required by the constitution of the State Association, we give below an important amendment to the constitution proposed at the last meeting. This was referred to the general session, and will be voted on at the next meeting in general session. The following was proposed as a substitute for Sec. 3 of Article IX: "The President and Secretary shall be elected by ballot in the general session, and all other officers named in Sec. 1 by the House of Delegates, on the morning of the last day of the annual session and no person shall be elected to any such office who is not in attendance at that session, and who has not been a member of the Association for the past two years; nor shall any member resident in the county in which the annual session is held be eligible to election as President or Secretary, unless in the case of Secretary it be a re-election."

We last month printed a letter from a subscriber now in Germany, sarcastically reflecting on the German Parliament. All we saw in the letter was simply that an educated German writing from Germany, generally considered as foremost in matters of education, criticised his native land for limiting education among the common people. It has been suggested that the writer had another object, and intended to reflect on the clergy in Parliament rather than on the nation. Had we perceived any such purpose the letter would not have been printed. Neither politics nor religion shall

ever find a place in the JOURNAL's discussions with our knowledge or consent.

Dr. Holman Taylor of Marshall has been chosen editor of the *Texas Medical Association Journal*. If he proves as good as his predecessor, Dr. I. C. Chase, who resigned, he will do. We have reason to kindly remember Dr. Chase for his counsel to us when we were in our infancy, editorially speaking.

The second annual meeting of the American Association of Clinical Research will be held in Boston on September 28 and 29, 1910.

Some very valuable contributions on Researches in Medicine and Surgery, in Prophylactic and Anaphylactic Medicine, in Mental Medicine, in Radiotherapeutics, in Metabolism, etc., are promised. There will also be a public meeting.

PUBLIC LECTURES BY PHYSICIANS.

As reported to the last meeting of the Am. Med. Ass'n, in July, 1909, physicians from different parts of the country met in New York city, when the Public Health Education Committee of the American Medical Association was formed and officers were elected. Many physicians, both men and women, who have already done a great deal of work individually along these lines have now promised, through this committee, to give gratuitously, from time to time, during the ensuing year, as they may be requested to do so by women's clubs, mothers' and teachers' organizations, young women's Christian associations, church and social settlement clubs, etc., addresses on the following subjects:

1. The cause and prevention of ordinary colds.
2. The value of pure food and the physiology of digestion.
3. The chemistry and economic value of food.
4. The care of the food at home.
5. The relation of pure water to the public health.
6. Water-borne diseases.
7. The value of exercise and rest to the public health.
8. The causes and prevention of nervous exhaustion and prostration.
9. The use and abuse of stimulants and narcotics.
10. The prevention and cure of tuberculosis.
11. The air we breathe and the value of ventilation.
12. The relation of flies, mosquitoes, water bugs and other insects to public health.
13. Pure milk and infant hygiene.
14. The hygienic management of nervous children.
15. The relation of teeth to good health.
16. Prevention of some of the commoner skin diseases.
17. The importance of early diagnosis and treatment of adenoids.

18. The causes and prevention of deafness.
19. The prevention of Fourth of July injuries and tetanus.
20. The prevention of acquired deformities.
21. The causes and prevention of blindness.
22. The causes and results of eyestrain.
23. How to instruct children regarding the origin of life.
24. The responsibility of girlhood to motherhood in the care of the health during the menstrual period.
25. Pregnancy and the menopause.
26. The value of early diagnosis of cancer in women.
27. The responsibility of boyhood to fatherhood.
28. Social hygiene — how parents may protect their sons and daughters from immorality.

The results have been that the laity in many places have come to a more thorough understanding of the regular physician's position, as unselfish advisor and trained scientist, and therefore the prejudice and spirit of opposition which have been aroused by antivivisectionists and others have been lessened.

We give the above list of subjects as a guide to any local medical societies that may desire to institute a course of lectures during the coming winter. The public need information on medical and sanitary subjects, and we are confident that good will come to the profession indirectly by thus enlightening the people.

MAYOR GAYNOR'S WOUND.

The following interesting account of wounds like that sustained by Mayor Gaynor, optimistic in its nature, appeared in a recent metropolitan daily, from the pen of a hospital surgeon. It should be of general interest:

The surgeon calculating upon the theories of gunshot wounds is frequently agreeably or disagreeably surprised by practical experience as obtained in extensive service, such as war or riot. Such experience demonstrates that theories must be based upon true physiological and pathological facts, and not upon supposition.

Blood from the mouth as a result of a bullet wound indicates that the bullet has traversed a part which communicates with the mouth. If the blood is coughed up the bullet has passed through or is located in the respiratory tract, and if expectorated or flowing from the mouth the injury is in the parts above the lower constrictor of the pharynx (the swallowing muscles). In injuries below that point blood can only enter the mouth if the constrictors are in extreme relaxation, as may be in severe cases of shock or unconsciousness.

A clean bullet passing through these organs, as often demonstrated in the history of the Spanish-American, as also the Japanese War, is harmless in most instances, if the person is otherwise healthy, unless a large blood vessel or an important nerve is pierced in its course. A wound in the pharynx or in any part leading into but higher than the mouth never proves dangerous except in diabetic patients or patients suffering from other diseases of metabolism,

in which condition the wound anywhere would be just as serious.

Only if a large wound exists below the level of the mouth one may theoretically fear the possibility of infection. Saliva, however, is to some degree a disinfectant. The animal makes use of it for all its wounds, and if in a healthy state it protects the masticator from infectious invasions.

A clean bullet may be located in any part of the body without doing the least injury if it has not pierced the vital organs; it becomes encysted and absolutely benign to the system. There are quite a few people, particularly war veterans, who carry bullets in their bodies and are in perfect health.

Among the astonishing facts exhibited in war service were a number of instances in which bullets had traversed the abdominal cavity. In some of them the internal injury was indicated by traces of blood found in the excretion, and frequently the patient recovered without the least interference. It was, indeed, occasionally demonstrated that the cases of this character gave better results without than with surgical interference.

F. L. H.

State News

STATE BOARD OF HEALTH OF WEST VIRGINIA.

Report of examination held at Charleston, July 11, 12, 13, 1910. Number of subjects examined in 9; total number of questions, 120; percentage required to pass, 80; oral and written examination; partly oral and partly written. Total number examined, 67. Number passed, 48. Number failed, 19. The following applicants passed:

Name, Dean Miltimore; school of graduation, Cornell Univ. Med.; year of graduation, 1910; school of practice, Reg.; home address or previous location, Coalwood, W. Va.

M. H. Tabor, Univ. of Col.; 1910; Reg.; Man-ning, W. Va.

J. C. Bowman, N. C. Med. Col.; 1910; Reg.; Beckley, W. Va.

C. S. Lawson, Med. Col. of Va.; 1910; Reg.; Flemington, W. Va.

R. J. Nutter, Med. Col. of Va.; 1910; Reg.; Flemington, W. Va.

R. D. Stout, Med. Col. of Va.; 1910; Fleming-ton, W. Va.

J. H. Bell, Med. Col. of Va.; 1910; Jared, W. Va.

I. W. Taylor, Med. Col. of Va.; 1910; Matoaka, W. Va.

John Bennett, Univ. of Louisville; 1910; Middlebourne, W. Va.

J. W. Duff, Univ. of Louisville; 1910; Mt. Tell, W. Va.

S. P. Carter, Univ. of Louisville; 1910; Boomer, W. Va.

O. W. Shreve, Univ. of Louisville; 1910; Ham-lin, W. Va.

L. H. Hayhurst, Univ. of Louisville; 1910; Pullman, W. Va.

H. Winter, Univ. of Louisville; 1910; Staats Mills, W. Va.

P. C. Starkey, Univ. of Louisville; 1910; Ravenswood, W. Va.

A. W. Jones, Univ. of Virginia; 1910; Montgomery, W. Va.

D. J. Cronin, Col. P. & S. (Balt.); 1910; Huntington, W. Va.

C. F. Sayre, Col. P. & S. (Balt.); 1910; New Haven, W. Va.

W. B. Hunter, Col. P. & S. (Balt.); 1910; Citie, W. Va.

W. G. Harper, Col. P. & S. (Balt.); 1910; Elkins, W. Va.

C. W. Maxson, Col. P. & S. (Balt.); 1910; Pt. Pleasant, W. Va.

J. R. Tutwiller, Col. P. & S. (Balt.); Lewisburg, W. Va.

T. F. Keating, Col. P. & S. (Balt.); 1910; Baltimore, Md.

F. F. Holroyd, Col. P. & S. (Balt.); 1910; Athens, W. Va.

A. M. Reid, Col. P. & S. (Balt.); 1910; Beckley, W. Va.

G. W. Kahle, Col. P. & S. (Balt.); 1910; Knox, Pa.

G. F. Gressinger, Col. P. & S. (Balt.); 1910; Gauley Bridge, W. Va.

W. L. Grounds, Col. P. & S. (Balt.); 1910; Houston, Pa.

L. H. Moore, Col. P. & S. (Balt.); 1910; Houston, Pa.

G. C. Blake, Col. P. & S. (Balt.); 1910; Scarbro, W. Va.

M. G. Hoffman, Col. P. & S. (Balt.); 1910; Bunker Hill, W. Va.

L. O. Fox, Col. P. & S. (Balt.); 1910; Ansted, W. Va.

G. W. Schafer, Col. P. & S. (Balt.); 1910; Wheeling, W. Va.

J. K. Fisher, Col. P. & S. (Balt.); 1910; Akron, Ohio.

H. C. Kincaid, Balt. Med. College; 1910; Summersville.

J. W. Nelson, Balt. Med. College; 1908; Parkersburg.

J. E. Clagett, Md. Med. Col.; 1910; Fawcett Gap, Va.

O. V. Brooks, Md. Med. College; 1910; Mill Run, Pa.

A. J. Pickering, Md. Med. College; 1910; Grantsville, W. Va.

C. E. Grimm, Jefferson Med. Col.; 1910; St. Marys, W. Va.

J. S. C. Fielden, Jefferson Med. Col.; 1910; Fall River, Mass.

A. Mairs, Jefferson Med. Col.; 1910; Charleston, W. Va.

H. E. Orndoff, Jefferson Med. Col.; 1910; Waynesburg, Pa.

C. W. McConihay, Jefferson Med. Col.; 1910; Lewiston, W. Va.

C. M. Ramage, Johns Hopkins Med. Col.; 1910; Fairmont, W. Va.

G. S. Condit, Univ. of Maryland; 1910; Mannington, W. Va.

W. C. Ellis, Barnes Med. Col.; 1910; Newton, W. Va.

R. V. Lynch, Eclectic Med. Col.; 1910; Elec.; Williford, W. Va.

Of those who failed, eight were graduated from the University of Louisville, three from the

College of P. & S., Baltimore, three from the Eclectic Medical Institute, Cincinnati, two from Mehary Medical College, one from the College of P. & S. of Chicago, and two from the Chattanooga Medical College. The questions are given below.

OBSTETRICS AND GYNECOLOGY.

1. What forms of hemorrhage are met with before, during or after labor; treatment of each?
2. Define puerperal eclampsia and give its treatment.
3. Name the source, character, relative quantity, and functions of the liquor amnii.
4. What are the most serious complications met with in breech presentation?
5. How would you treat a case of hour-glass contraction?
6. How would you treat a case of face presentation?
7. How would you treat a case of gonorrheal conjunctivitis in an infant?
8. Give five causes of metrorrhagia.
9. Give in full your treatment of gonorrheal endometritis.
10. Give symptoms and treatment of cystitis. Dr. Rymer (Examiner).

PRACTICE OF MEDICINE AND PEDIATRICS.

1. Give the diagnosis and treatment of acute follicular tonsillitis.
2. What is the practical import of hematuria, and how can its source be diagnosed?
3. Give the etiology and treatment of St. Vitus' dance.
4. Give the symptoms indicative of impacted gallstone.
5. Give some suggestions for diet after weaning and the feeding of children between the ages of one and two years.
6. State some rules regarding bathing, exercising and clothing infants.
7. Describe and treat infantile syphilis.
8. Differentiate pneumonia from capillary bronchitis, give treatment of each.
9. Thrush: State conditions that favor its development. Give treatment.
10. What diseases in infancy usually precede congestion of the brain. Give necessary precautions to prevent. Dr. Frame (Examiner).

CHEMISTRY AND MEDICAL JURISPRUDENCE.

1. Explain the following terms: Atom, molecule, oxidation, reduction, analysis, synthesis.
2. Write the formulas for calomel, bichloride of mercury, nitrate of silver, copperas, saltpetre.
3. What are the source, properties and uses of quinine, strychnine and cocaine.
4. Name any five organic acids and give their source and uses.
5. Distinguish between wood alcohol and grain alcohol as to their properties and uses.
5. Explain the chemistry of respiration.
7. What are the sources and properties of carbonic acid. How would you treat a case of carbonic acid poisoning?
8. Define insanity and give some of its various forms.
9. What is senile dementia?
10. What is the hydrostatic test and what is its value in a case of suspected infanticide? Dr. Brock (Examiner).

ANATOMY AND EMBRYOLOGY.

1. Into what class are the bones divided, and give a few instances of each.
2. Describe the antrum of Highmore.
3. Trace a drop of blood from the tip of the tongue to the index finger.
4. Name the lobes and fissures of the brain.
5. Describe the solar plexus.
6. Describe the stomach.
7. Name the abdominal viscera.
8. Describe the aorta and name its branches.
9. What changes take place in the

vascular system at birth? 10. Describe the embryo at end of six weeks of gestation. Dr. Godbey (Examiner).

SURGERY.

1. Describe the treatments of a bullet wound of the leg. 2. Define thrombosis; embolism. Describe the symptoms of venous thrombosis of the leg. 3. Treat a compound comminuted fracture of the middle third of femur. 4. How would you distinguish between a fracture at the neck of the femur without impaction and a dislocation? 5. Burns: Define, classify; give prognosis and treatment. 6. Give the nature and treatment of Pott's fracture. 7. Name the dangers and give the treatment of carbuncle. 8. What is hemorrhage? Divide anatomically and clinically, treat mechanically and therapeutically. 9. How would you determine that a limb was injured beyond hope in a crushing accident? 10. Give the cause and treatment of varicose ulcers. Dr. Vickers (Examiner).

BACTERIOLOGY AND HYGIENE.

1. What are pyogenic bacteria? 2. Define germicide, antiseptic, asepsis, sterile, disinfectant. 3. Define immunity. What is natural immunity, acquired immunity, inherited immunity? 4. How is diphtheria antitoxin obtained? What is the usual dose? 5. What disease is transmitted by a bite of the infected stegomyia fasciata? 6. How do forests benefit public health? 7. Give six desirable factors in the location of a tuberculosis sanitarium. 8. What four diseases may be acquired from drinking cow's milk? 9. What objections are advanced against vaccination? 10. Name five good disinfectants and give indications for their use. Dr. Dickey (Examiner).

MATERIA MEDICA AND THERAPEUTICS.

1. What are antiseptic remedies? Name three and give indications for their use. 2. What are excitomotors? Name three and explain therapeutic action of each. 3. Give two cerebral sedatives and give therapeutic action. 4. Aconite: Physiological action. Therapy and dose of tincture. 5. Apomorphine: From what derived, physiological action, therapy and dose. 6. Nitroglycerine: Give properties, physiological action, therapy and dose. 7. Digitalis: Dose and indications for use. 8. Name three emetics with dose of each. 9. Ferrum: Name four preparations and dose of each. 10. Atropine: Source, physiological action and dose. Dr. Warden (Examiner).

PHYSIOLOGY AND HISTOLOGY.

1. Food: Divided into how many classes, give example and chemical composition of each. 2. Respiration: Describe it, give number in adult and child one year old. 3. Animal heat: Describe it, give temperature in mouth, axilla and rectum and daily variation. 4. Describe the course and changes nitrogenous foods undergo in the body. 5. What is the effect of alcohol long continued on the human body? 6. Red corpuscles: Describe them, where formed and destroyed and give function. 7. Describe the general, pulmonic and portal circulation. 8. How is the heart nourished and how is arterial tension maintained? 9. Give histology of skin. 10. Give histology of lobule of human lung. Dr. Robins (Examiner).

SPECIAL MEDICINE.

1. Define Pott's disease. Make early diagnosis. 2. Define blood pressure. How determined? Give diagnostic value. 3. Give pathology, diagnosis and treatment of progressive muscular atrophy. 4. Name the cardinal symptoms of tumor of the brain. 5. Give etiology, diagnosis and treatment of optic neuritis and optic atrophy. 6. For what conditions and in what strength would you use the following in the eye: Boric acid, sulphate zinc, nitrate silver, atropine sulphate, cocaine, bichloride of mercury and yellow oxide of mercury. 7. Describe, diagnose and treat nasal polypi. 8. Give the etiology, pathology and treatment of the symptom ozaena. 9. Diagnose and treat hysterical aphonia. 10. Give etiology, symptoms, diagnosis and treatment of spasm of the larynx in children. Dr. Halterman (Examiner).

At a mass meeting of all the physicians of Martinsburg, August 18th, the question of Lodge practice was discussed and it was the unanimous opinion of all present that it was harmful and injurious both to the medical profession and the public.

Every physician in the city signed an agreement not to do contract practice, for any lodge, and to discourage such practice as far as possible.

It was further agreed that no physician will consult or affiliate with any one doing lodge practice.

There are now about 2,800 people in Martinsburg, practically, getting free treatment, and on account of the evil growing out of it the physicians who have been doing the practice, have been the first to express the desire to quit it, and have signed an agreement to stop it at the expiration of their contract and not to renew the same.

Dr. Chas. M. Frissell, of Wheeling, is traveling in Europ, as is also Dr. Harriet B. Jones.

Dr. Frank L. Hupp, of Wheeling, is spending his vacation on Lake George, N. Y.

Dr. J. G. Walden has removed his residence to Warwood, four miles north of Wheeling. He retains an office in the city.

Dr. J. H. Steenberger, of Huntington, is removing to Ashville, N. C., and will there pursue the specialty of obstetrics and diseases of women and children.

Dr. Harry Werner's baby died of cholera infantum.

Dr. Butt's son, aged four, broke his humerus at the surgical neck.

Dr. Bender, assistant to Drs. Hardy and Butt, spent his vacation in Hagerstown.

Dr. I. B. Johnson, of Lanesville, will go to Hampshire county to settle up his father's estate first August.

Dr. O. H. Hoffman, of Thomas, spent a few days recently on his fine farm near Havre de Grace, Md.

Dr. M. Maxwell, of Coketon, has just returned from his vacation.

Dr. Michaels has relocated in Hendrix.

Dr. Thompson, of Albert, has returned from Hampshire county, where he went to attend

wedding and inspect some orchards.

Dr. Raymond Kirk, of Paw Paw, W. Va., was recently married to Miss Mary Arnold, of South Branch.

Dr. George Thomas, of Romney, was one of the incorporators of the new National Bank in Romney.

Dr. W. Byrd Hunter, a recent graduate of the College of Physicians and Surgeons in Baltimore, has recently taken the State Board Examination of West Virginia, and has located at Oceana.

Dr. B. L. Pettry, of Dorothy, Clear Fork District of Raleigh, has been elected chairman of the Republican County Executive Committee.

J. E. C.

Dr. H. J. Cherry has located at Harding, W. Va.

Dr. Glenn Harper, graduate of P. & S., Baltimore, 1910, has located at Wildell, Pocahontas county.

Dr. C. H. Hall, of Elkins, has returned from his vacation in Harrison and Marion counties.

Dr. H. K. Owens, of Elkins, was in Cumberland, Md., recently visiting his relatives.

Dr. A. M. Fredlock, of Elkins, is receiving congratulations on the arrival of A. M. Fredlock, Jr.

Dr. Ravenscroft, of Hambleton, has located at Montrose.

Dr. T. Jud McBee, of Elkins, was at Charleston and Huntington recently.

Dr. W. D. Miller, of Weaver, was married August 6 to Miss Louise Lawrence, of Baltimore. They will make their home at Weaver.

Dr. J. C. Irons, Councilor of Second District, was in Monongalia and Preston counties in July in the interest of medical organization.

Dr. I. B. Johnson, of Lanesville, is taking a month's vacation in the east.

Dr. H. W. Neal, of Glady, is in Virginia on a vacation and is being relieved by Dr. C. A. Clemmer.

Dr. H. W. Daniel attended the races at Morgantown.

Dr. A. S. Bosworth, the "Orator of Randolph," is a candidate for the House of Delegates on the Socialist ticket.

Dr. J. F. Thompson has located at Albert, Tucker county.

The physicians of Elkins crossed bats with the legal and ministerial professions in two games of base ball, the physicians winning over the lawyers by a score of 21 to 20 and over the ministers 22 to 17.

T. G. M.

Since the lamented death of Dr. T. L. Barber, of Charleston, Dr. Hugh C. Nicholson has assumed complete charge of the Barber Sanatorium and Hospital. The operating room has been enlarged and extra equipment added. In the department of treatment, a complete Bier hyperemia outfit has been installed; and in order to meet the growing demand on the institution, fifteen beds for patients have been put in, and a training school for nurses started under the efficient management of Miss Anne Bessler. Realizing the need of a Pasteur institute for this State, such a department has been added.

Dr. Mary Virginia McCune, of Martinsburg,

has been made chairman of the public health committee of the Berkeley Civic League, recently organized. She has also been appointed superintendent of the department of anti-narcotics and scientific temperance of the W. C. T. U.

The death of Dr. M. L. Fittro, long a practitioner of New Martinsville, has recently been announced.

Married.—Dr. George C. Rhoades, late of Wheeling, and now a surgeon in the U. S. navy, and Miss Elsie Selden Baxter, of Elizabeth, N. C. Miss Baxter is a daughter of Mr. W. M. Baxter and niece of Rear Admiral Cone, of the U. S. navy, and resident of Washington City.

Married.—Dr. C. A. Barlow—sometimes called Brigadier General Barlow—and Miss Anette Whiteside, both of Benwood.

The automobile has broken out in epidemic form in Wheeling. The following physicians in the city have contracted the disease: Linsz, Reed, Hupp, McColl, Hildreth II, McLain, Caldwell, Mcgrail, Schwinn, Truschel, A. Wilson, Best, Vieweg, Fulton, Etzler, Haning, Myers, Oesterling. These are our *fast* physicians.

Died.—In Clarksburg, on August 18th, of typhoid fever, Dr. J. M. McLaughlin, of Webster Springs. Dr. M. was long a member of the State Medical Ass'n. He was 50 years old and was married a few months ago to Miss Shock, of Webster Springs.

Society Proceedings

MEDICAL ASSOCIATION OF DISTRICT OF COLUMBIA.

The Southward Spread of Epidemic Poliomyelitis in the United States.

(For this report we are indebted to Dr. Tom A. Williams, Washington, D. C.)

This disease, which has prevailed since 1904 in New England and since 1907 in New York State, has now reached the Capital, and there are estimated to be already nearly two hundred cases in the city and surrounding country. So much alarm has been created by the sensationalism of the newspapers that the Medical Association of the District of Columbia met in special session on August 23rd in order to consider the situation and attempt to reach a common understanding from which they might formulate a statement to render uniform the advices which are reaching the public from irresponsible sources.

The matter was taken up as follows: Epidemiology, Dr. L. T. Royster of Norfolk, Va., the secretary of the pediatric section of the American Medical Associa-

tion: Bacteriology and Pathology, Dr. John F. Anderson, director of the hygienic laboratory of the United States Public Health and Marine Hospital Service: Symptomatology, Dr. G. N. Acker, visiting physician of the Washington Children's Hospital: Differential Diagnosis and Treatment, Dr. Tom A. Williams, neurologist to the Epiphany Dispensary, Washington: Preventive Measures, Dr. W. C. Woodward, Health Officer of the District of Columbia.

Dr. Royster inclined to believe that the present outbreak was an epidemic analogue of a sporadic disease rather than a new malady. He emphasized the comparative frequency of meningeal and encephalitic incidence of recent epidemics. He believed that until we have clearer knowledge of the manner of contagion, it is better to err on the safe side with regard to precautions against infection. No promise is yet afforded by attempts at attenuation of the virus with which to furnish a useful preventive inoculation; but the labors of the Rockefeller Institute have added a very great deal to our knowledge of the transmissibility of this disease, and such work is a striking illustration of the value of such laboratories.

Dr. Anderson emphasized the European experiments by which infection had been conveyed by spraying the suspended virus into the nares and by rubbing it on the bruised nasal mucous membrane. Introduction of the virus into the stomach through an oesophageal tube has also infected animals. It is very important to keep in mind the demonstrated fact that the virus, like that of epidemic cerebrospinal meningitis, is excreted by the nose. It is also excreted by the saliva. From these experimental facts it should follow that the disease might be conveyed clinically in this way, and that precautions against this possibility should be taken, even although the reported facts do not favor this view at present. But as the virus remains active for a long period and is very resistant to most inimical agents except heat and as in the laboratory of Levaditi the virus has been obtained from the olfactory bulb as the direct result of infection through the nose, too many precautions cannot be taken against the nasal avenue and the conveyance of the disease

by the inspiration of infected dust. Hence, the disease should be notifiable in order that minute inquiry may be instituted as to the manner of propagation. The fact that normal sheep serum appears to have a weak neutralizing effect upon the virus and that this can be augmented by inoculation, may have a bearing upon seropathological researches in the future.

Dr. Acker alluded to an epidemic which had occurred in 1889 during which he saw about twenty cases in the District. Only sporadic cases then occurred until 1904, when there were twenty-five. He has been much struck by the absence of family infection, never having seen two cases at once in a household. The contagion must therefore be very feeble. He has noticed the frequency of spinal irritation in this epidemic, and he has seen several cases which were mistaken for rheumatism and neuritis, and some for typhoid fever. In some cases, the paralysis has occurred only after the subsidence of the fever or after a recurrence. He thinks that if all cases were reported the mortality would not exceed 5%.

Dr. Williams alluded to the need of an accurate neurological technique in diagnosing the more difficult cases, which were not numerous. Some resembled Landry's paralysis, in some meningeal symptoms predominate, in some it was chiefly the brain stem which was attacked, giving rise to a dysergic syndrome, sometimes unilateral, as in a case he briefly reported. In such cases, examination of the reflexes is particularly important; but it is sometimes very difficult in children to obtain the muscular relaxation needed to examine these, especially when the meninges are irritated. The failure to respond under these conditions does not indicate absence of the reflexes, a remark which should be unnecessary; but which is required on account of the frequency of the error by the general practitioner. Again, the Babinski sign is often erroneously declared to be present when in reality there has only occurred the normal defense reaction of the limb. The correct method of eliciting the plantar reflex connotes the complete relaxation of the limb in a self-flexed position while the foot is held by the instep.

There are two sources of pain from the

poliomyelitis; (1) meningeal, (2) that due to stretching, dragging and torsion of muscles, fasciæ and ligaments. The latter permitted by the atonia which results from the neuronal degenerations of the disease. The best remedy for it is early galvanism, to exercise muscle contractivity and preserve tonus. But prolonged suspension in water as recommended by the New York Committee which reported upon the 1907 epidemic is also of great value, and something can be done by well applied slings and pads for the patient in bed. To encourage the voluntary movement which is so important a factor in recovery, the child must be induced to play the kind of games which make a demand upon those muscles which are weakened; and when no visible movement is otherwise attainable, suspension in a bath will often enable the little patient to command some otherwise inert muscle bundle. In conducting these exercises, which must be persevered with for months, the psychic factor is of the greatest importance, so that the child can participate with enjoyment and thus make greater and more prolonged efforts.

Dr. Woodward believed that could we answer the question of why these outbreaks were occurring throughout the civilized world at this particular time, we might go far towards finding a means for arresting the spread of poliomyelitis. Does it prevail now because the growth of the organism is favored, or is it because our mode of life renders us more susceptible? At present we must work empirically, although we can be largely guided by laboratory experiments, which have shown the danger of nasal and salivary secretions. Disinfection of these and the use of different utensils by the patients should be minimal recommendations. But there is always the danger of infection by droplets. We must have more light; and therefore a collective investigation is called for to supplement that being conducted in experimental laboratories. In this way the present epidemic may afford a means for the elucidation of another problem of medical science.

In the discussion, *Dr. John A. Foote* alluded to cases which had been diagnosed as chorea, and thought many cases, through this diagnosis, escaped detection. After the discussion, on the proposal of

Dr. Philip S. Roy, the following resolution was submitted to the newspapers by the unanimous vote of the meeting:

The Medical Association of the District of Columbia convened in special session, by order of the President, Dr. N. P. Barnes, on August 23rd to consider the prevalence of acute anterior poliomyelitis which is reported to be rife in the District of Columbia and its neighborhood.

I. They unanimously desire to deprecate the undue alarm which has been excited about this disease. Even in severe epidemics, only about one person per thousand is attacked, and one death per ten thousand of population is an unusually high mortality.

II. Remembering that infantile diarrhoea claims one out of every twenty-five children who die, and that bronchitis and other respiratory diseases cause the death of one in every forty children who die, making a total in the District of Columbia of more than 400 per annum, it should be obvious how disproportionate is the alarm which is now excited about infantile paralysis.

We do know how to prevent both diarrhoea and bronchitis. Precautions against these decimating affections are much more urgent than is a vague terror of poliomyelitis, because

III. We do not know how to prevent this infection either in town or country; for we do not know in what manner it is conveyed from case to case. But we do know that it is very rarely ever transmitted by direct contact in the same house. We do know that it is just as apt to occur in the country as in the town. We do know that it can only be by direct inoculation transmitted to monkeys, and that the virus of the human disease is not acquired by domestic animals.

Some believe that it is carried by dust, others by cracks in the skin, others that it occurs only in low-lying land. We know none of these yet; but we are making a sincere effort to solve this difficult question with our colleagues in New York, New England, the Marine Hospital Service and in Europe.

IV. As to treatment we do not feel called upon to issue a statement. Each case may present difficulties, but these can only be met by the physician as they occur.

This marks a step in the public function of the medical profession in the District of Columbia, as it has not hitherto been regarded expedient to issue official proclamations from the medical profession for the enlightenment of the people in matters of hygiene or the prevention of disease; although this has been systematically done in the States of California, Illinois and Massachusetts and conspicuously in Maryland.

BARBOUR-RANDOLPH-TUCKER MEDICAL ASSOCIATION.

The July meeting was held at Randolph Conny Court House, Elkins, W. Va., July 8, 1910, afternoon and evening. Twenty-three physicians were present.

Dr. Arbuclle presented a patient on whom he had recently performed the mastoid operation. Several other operative mastoid cases were reported.

Dr. Harris reported, for diagnosis, two cases of epigastric tumors in girls 17 years old.

Dr. E. R. McIntosh read a well prepared paper on Hay Fever.

Dr. H. W. Daniels read a paper on Anaesthesia. The various methods of anaesthesia were discussed by almost all present, and the consensus of opinion of the society was that ether was the favorite with chloroform as second.

At the night session Judge A. G. Dayton, of the U. S. Court, addressed the society and a large number of the laity. The judge very pleasantly discussed the good and bad sides of the law and medical professions. The society felt highly honored to have one of her distinguished sons to address it.

J. JUD McBEE, Secretary.

BRAXTON COUNTY SOCIETY.

The last meeting of this society was held July 12th, in Burnsville, the following program being followed:

"The Old Order and the New," Dr. B. H. Adkison, Corley.

"The Benefits of Organization," Dr. C. C. Ruesmiscell, Gassaway.

"Obstetrical Work in a Country Practice," Dr. M. T. Hoover, Palmer.

"The Hospital as a Factor in the Profession," Dr. A. S. Boggs, Gassaway.

Clinical Cases.

Dr. M. T. Morrison is president and Dr. J. W. Kidd secretary.

"The young man knows the rules, but the old man knows the exceptions.

"The young man knows his patient, but the old man knows also his patient's family, dead and alive, up and down for generations."—Dr. Holmes.

Reviews

PRACTICAL SUGGESTIONS IN "BORDERLAND SURGERY."—For the use of students and practitioners. By GUSTAVUS M. BLECH, M.D., Professor of Clinical Surgery, Medical Department Loyola University, Chicago; Director-in-Chief Illinois Legion American Red Cross; Surgeon-in-Chief Abraham Lincoln Hospital, Chicago, etc., etc. Handsomely bound in rich maroon cloth, gold side and back stamps, 220 pages, by mail, \$1.50. Professional Publishing Company, Philadelphia, 1910.

It is difficult to give a satisfactory estimate of the qualities of this little book. The title at once attracts attention. Borderland Surgery has to do with conditions in which there is more or less question whether the aid of surgery should be called in at all. As a rule the author advises a conservative course, but it is doubtful if he has added anything to the already available and accepted knowledge in support of it. Probably the best chapters in the book are those "On the dangers incident to operations in general;" "Contraindications to operations in general;" and "The surgeon as a factor in successful surgery." The remaining eight chapters discuss "Diseases and Operations of the Abdomen, Chest, Ductless Glands, Genito-urinary Organs, Joints, Nervous System, Diseases of Women," and a concluding chapter by Dr. Micheal Goldenburg, of Chicago, on "Conservative Surgery of the Eye, Ear, Throat and Nose." The reasons for and against surgical intervention are generally fairly set forth, with, as before said, a general leaning toward conservatism. And where his own experience has been too limited to justify a positive opinion the author does not hesitate to say so. Many statements are open to serious question, as, for instance, that "incision and drainage of the gall-bladder is much simpler than an appendicectomy;" that "if an umbilical hernia in infants does not disappear after a year, in spite of careful strapping, I would suggest subcutaneous prothesis by means of paraffin;" and that "acute retention of urine, no matter to what cause due, does not always call for catheterization;" that "a hot sitz-bath, and the administration of a *diurtic* (italics ours) will often relieve, etc." Several operations the very opposite of conservative are detailed at length, as Freund's operation for emphysemia, Routet's anastomosis between the large saphenous vein and the peritoneal cavity for ascites, and Bier's injections of alien blood into the prostate in hypertrophic enlargement. It should be added, however, that the author is skeptical as to their value. He finds much to commend in Bier's hyperemia in diseases of the joints, and in discases of women he strongly condemns the prevalent craze for curettement and removal of cystic ovaries. We miss any reference to the operation for removal of enlarged lymphatics, a subject on which there is much difference of opinion.

The book as a whole is an example of hasty and careless work. Crude errors in grammar and construction are numerous. Such words, if they

be words, as "specialistically," "asepticable," and the sentence, "Colic palpation over the gall-bladder, etc.," could only get into the text through gross carelessness. The proof-reading is a reproach to the publishers and an irritation to the reader, and altogether inexcusable. Yet, notwithstanding these glaring defects, the book contains a good deal of what we call "common sense," and its suggestions very often would help the doubting practitioner to a decision as to whether or not, in a given case, surgical procedure would be advisable. We took up the book with a marked prepossession in its favor, we fear that this has not been well maintained by its perusal.

L. D. W.

GYNECOLOGICAL DIAGNOSIS.—By WALTER L. BURRAGE, A.M., M.D., (Harv.). Consulting Gynecologist to St. Elizabeth Hospital, Electro-therapist and Surgeon to Out Patients, Free Hospital for Women, Clinical Instructor in Gynecology, Howard University and Instructor in Operative Gynecology in the Boston Polyclinic. D. Appleton & Co., New York and London. Cloth, \$6.00.

This is the only book of which we know, devoted entirely to gynecological diagnosis. It goes without saying that all points touching the question of diagnosis are much more fully elaborated than is possible in any general work on Gynecology.

The work is written along practical lines and primarily for the general practitioner. He it is who first sees the class of cases discussed, and hence the necessity of his being fully informed, that his diagnosis may not be at fault and the patient suffer in consequence.

The author goes into detail in procuring the history of each patient's case, pursuing a system in so doing. Many useful hints are given touching the significance of single symptoms. For example, uterine hemorrhage under 20 means endometritis or a polypus; from 20 to 30, a polypus or the results of gestation; from 30 to 40, fungous endometritis, polypus or fibroid; from 40 to 50, fibroids or cancer; after 50, probably cancer.

Every possible position and instrument for examination is described and when necessary illustrated, and all methods of examination minutely given, including the modern investigation of urethra, bladder and ureters, and also the rectum.

A chapter is given to the significance of the chief symptoms of pelvic disease and these are exhaustively studied. Enough of anatomy is given to clarify the topics discussed and the newest pathology is briefly set forth. Where necessary tables are given clearly exhibiting the differential diagnosis of diseases.

The diseases of pregnancy are not omitted. An entire chapter is given to ectopic gestation; and hydatiform mole, abortion, and other conditions met with in the pregnant woman are fully entered into. An unusual and very valuable feature of the book is a full discussion of the gynecological diseases of infancy and childhood, as anomalies of formation, labial hernia, imperforate hymen and rectum, genital hemorrhages, diseases of vulva and vagina, malignant disease of the

uterus, of which 23 cases have been reported "between 9 months and 15 years."

The last forty pages are devoted to the menopause and old age. The book contains over 200 illustrations and a copious index. It also has an alphabetical list of illustrations, with pages where they are to be found. The paper, printing and binding are in Appleton's customary excellent style.

We most heartily commend the book, and think all general practitioners who desire to do good work should possess a copy. Of course all specialists will do so.

S. L. J.

EDUCATION IN SEXUAL PHYSIOLOGY AND HYGIENE.—By PHILIP ZENNER, M.D., Professor of Neurology in the Medical Dept. of the University of Cincinnati. The Robert Clark Company, \$1.00.

The purpose of this little book is the prevention of sexual diseases by the education of young people in sexual hygiene. The author believes that this instruction should be systematically given in the schools in connection with a course in biology. We have read the book with interest and commend it to parents and teachers. If a future edition is called for, we hope the author may develop the subject more fully.

MEDICAL ELECTRICITY AND ROENTGEN RAYS.—By SINCLAIR TOUSEY, A.M., M.D., Consulting Surgeon to St. Bartholomew's Clinic, New York City. Octavo of 1116 pages, with 750 illustrations, 16 in colors. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, 7.00 net; Half Morocco, \$8.50 net.

Tousey's new book on medical electricity and Roentgen's Rays with chapters on photo-therapy and radium gives to the profession a treatise in one volume that is at once practical to those operating electrical currents and to beginners in the use of Electricity and X-rays, giving him the personal experience of a pioneer in this work, and the benefit of his mistakes and the best ways to get results with proper protection to operator and patient, and without needless destruction of coils and tubes.

The chapters on High Frequency and X-rays are invaluable to those new in this work, explaining away many difficulties that necessarily arise to beginners that have not had special training.

The index is so arranged that one has no difficulty in finding out the subject he wishes to review, and there it is explained in a language understood by all, which is the best tribute a treatise on Electricity and X-rays could be paid. I believe that this is a book that will be in constant use when in any physician's library where the owner uses electricity in any of its various forms.

H. H. YOUNG.

The best means of securing a painless end-limb amputation stump consists in covering the raw surface of the bone, whenever there is no contraindication, with an osteo-periosteal flap, after the manner of Bier.—*American Journal of Surgery*.

Medical Outlook

IODINE STERILIZATION OF THE SKIN.

—Waterhouse and Fenwick in *London Lancet* of April 16th, give their experience with this form of skin sterilization. They have found that catgut, as it comes from the manufacturer, is sterilized by soaking for one week in a solution of iodine 1 part in 500 of rectified spirits and water in equal parts. Iodine to the skin after scrubbing with soap and water was a disappointment, for the reason that the water caused the epithelial cells to swell, and thus the iodine was prevented from penetrating between them and into the ducts and sebaceous and sweat glands. Hence the preliminary washing was not only unnecessary but harmful. Much better results were secured by simply painting the surface with an alcoholic solution of iodine. In 150 cases all but one case healed by first intention; and in the other case (hernia) after 8 days the wound was all healed but three-fourths inch, where the wound gaped slightly. One patient died suddenly with pulmonary embolism when almost well. After trying 8 and then 6% solution of iodine in rectified spirit, the authors settled down to the use of a 2% solution, which they have found just as reliable as the stronger solution. The staining caused by the iodine is removed by soaking the towels in a 2½% solution of carbolic acid. In future the authors assert they will always employ a 2 per cent solution of iodine in rectified spirit, and paint this solution on the skin two hours prior to the operation, the preliminary shaving and any necessary washing of the skin being performed some time earlier in order to allow the skin to dry. They will then for greater security in important cases repeat the painting one hour later, though they hardly deem this intermediate application necessary. The last painting will be done on the operating table. A small flat painter's brush answers admirably. It need only be sterilized if the surgeon is to handle it on the operating table. In general, a dresser or a nurse will do the painting while the surgeon is washing his hands. A notable advantage of the iodine method is the fact that the whole preparation is carried out only two hours prior to the operation. One of their private nurses informs them that in her experience a patient prepared for an amputation of the breast the evening prior to operation hardly obtains any sleep. The scrubbing of the skin, the employment of the necessarily irritating antiseptic, and the bandaging are jointly responsible for this, and the dressing is a constant reminder of what is to come in the morning. With the iodine method the patient's preparation only begins in the morning, and she therefore has nothing but the dread of the operation to interfere with sleep. In conclusion, the authors add that they are so satisfied with the iodine method that they intend to use it in future as a routine measure, and will continue to do so until a better is discovered.—*Therapeutic Gazette*.

ORIGIN OF CANCER.—Crile, of Cleveland, in his Oration in Surgery before the Illinois Medical Society, (*Ill. Med. Jour.*, July) emphasizes the influence of local irritation as an etiological

factor in cancer. On the face cancer is preceded by a mole, a keratosis, a wart, tumor, or ulcer. We never see cancer in a healthy mouth with sound teeth, in the absence of syphilis, leucoplakia, warts or fissures. The precancer stage is in most cases a remediable condition. Yet how often has the physician, as well as the patient, waited to see whether the firebrand upon the roof will burn itself out or burn down the house. There is an unexplainable inertia with respect to the protection from cancer.

If, in the cancer period of life, every unhealthy scar were excised and the surface covered by skin grafting, every chronic irritation were removed, every ulcer healed soundly or excised and the surface covered by skin grafting, every wart and mole excised, every keratosis relieved and the mouth kept wholesome, the teeth smooth and even, it would be found that, without surgical mutilation and without the specter of fear, the cancer problem of this portion of the body would be measurably solved. Now, just as certain as every apple that ever fell obeyed the same law of gravity as the particular apple that gave to Newton the suggestion of the great law, so certain may we be that cancers of the invisible, inner regions of the body obey the same law as do the cancers of the skin. We may not assume, but conclude that internal cancers have their precancer stages, their chronic irritation, ulceration, benign growth stages. Of the larynx, the ulcer of syphilis and the papilloma; of the stomach, the chronic ulcer; of the gall bladder, the irritating gall stones and chronic inflammation; of the large intestines and rectum, the many ulcers and irritations; of the pelvis of the kidney, the irritating stones, and so on through the long list of precancer states.

The pre-cancer stage in the stomach, gall bladder, intestines and uterus is, to a certain extent (though not in all as in the external parts of the body), amenable to treatment. The frequent incidence of cancer of the stomach is certainly another reason for disposing of the ulcer or the scar of the stomach. So, too, in diseases of the rectum, ulcers should be relieved, not alone on account of the discomfort they produce, but also because of their being a possible source of cancerous growth. Likewise, the presence of irritating calculi in various parts should always be regarded as at least a potential cancer. In benign tumors of the uterus, cancer appears in a higher percentage than in the normal uterus. This constitutes an added indication for the removal of tumors of the uterus. * * * * *

Growing tumors, persistent ulcers, chronic indigestion and disturbances of internal organs in the cancer period of life should always be minutely investigated. No tumor should be watched to see whether it will take on the characteristics of cancer. It should be dealt with as a suspected or convicted cancer.

"The life of a physician becomes ignoble when he suffers himself to feed on petty jealousies and sours his temper in perpetual quarrels."—Dr. Holmes.

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Original Articles

A FEDERAL DEPARTMENT OF HEALTH—THE OWEN BILL, AND ITS OPPONENTS.

By S. Adolphus Knopf, M.D.,

Professor of Phthisio-Therapy at the
Post-Graduate Medical School and
Hospital, New York.

(This paper was sent to us, and to several other journals also. Owing to its importance at this time, we are glad to give it a prominent place.—Editor.)

Anyone who is familiar with the workings of governmental departments of health such as exist abroad, who has seen or experienced the sanitary benefits bestowed upon the people by the Reichs-Gesundheitsamt of Germany (Imperial Department of Health), the Conseil Supérieur de Santé Publique de France, and the similar institutions of most European governments, cannot help feeling amazed that any opposition should exist to the establishment of a federal department of health in this country. This amazement becomes all the greater when one considers some of the elements of which the opposition to that measure is composed. There is, for example, the New York Herald, a large and influential newspaper with an honorable career and a brilliant record for advocating everything that is conducive to the public welfare. Only in this particular instance has it allowed itself to become the mouth-piece of principles to which it is in general opposed, that is to say, principles and meas-

ures whereby the good of the people at large and the progress and welfare of mankind are hindered, and the lives of individual American citizens endangered. This particular newspaper is independent of any political party, or professional or religious association which might prejudice its point of view, and still it opposes a measure whereby all citizens of the country would benefit. The writer cannot help thinking that this powerful news organ has not informed itself thoroughly of the real purpose and function of a federal department of health, and in its attack upon a large body of men such as compose the American Medical Association, the American Public Health Association, the National Association for the Study and Prevention of Tuberculosis, the American Association for the Advancement of Science and the various medical academies of the country, it is certainly misguided. It is to be hoped that the distinguished editors of the New York Herald will soon see that in their attitude toward the Owen bill they are not on the side of the people, but are working against the welfare and interests of the masses.

The principle of the Owen bill, establishing a Department of Health, has been endorsed by the President of the United States, by General George M. Sternberg, surgeon general of the army (retired), and Rear Admiral Charles F. Stokes, surgeon general of the navy, by General Walter Wyman, of the Public Health and Marine Hospital Service, by Dr. Harvey W. Wiley, of the Bureau of Chemistry, by governors of States, by the Conference of State and Territorial Boards of Health, by the United

Mine Workers of America, by the National Grange, by the Republican and Democratic platforms, and by numerous other organizations.

What is the principle of this bill which is advocated by thousands of men trained in medicine or sanitary science and interested in the public welfare?

Section 7, which embodies the main purpose of the Owen bill, reads as follows: "That it shall be the duty and province of such a Department of Public Health to supervise all matters within the control of the federal government relating to public health and to diseases of animal life."

Section 2 of this bill deals with the unification under a secretary of public health of the various agencies now existing which affect the medical, surgical, biological, or sanitary service.

There has recently been formed an organization which calls itself "The National League for Medical Freedom." It has for its purpose to combat the Owen bill; it is opposed to the establishment of a federal Department or Bureau of Health. The name of this organization is certainly, if not intentionally, misleading. It cannot claim to battle for medical freedom, for there is not a word in the entire bill which could be interpreted as limiting the practice of medicine to any particular school. Their claim that the establishment of such a bureau of health would have any resemblance to a medical trust is entirely unfounded.

The life insurance and industrial insurance companies which advocate this bill certainly have no desire to limit medical freedom or to repress any system which offers the chance of lengthening human life. These companies do not favor medical partisanship, and their sole interest is to prolong the lives of their policy-holders by whatever means possible. Their actuaries state specifically that they believe human life could and would be lengthened by the establishment of a Federal Department of Health.

Lee K. Frankel, Ph.D., representing the Metropolitan Life Insurance Co., is a member of the Committee of One Hundred, appointed by the American Association for the Advancement of Science to further the propaganda for the establishment of such a department. Neither the above mention-

ed great newspaper nor any of the leading spirits of the "National League for Medical Freedom," all of whom, I regret to say, have allowed themselves to ascribe the worst motives to the members of the committee, will deny that the names of the officers of this committee show that it is thoroughly representative of the highest type of American citizenship. The officers of the Committee of One Hundred are:

President, Irving Fisher, Ph.D., Professor of Political Economy at Yale University.

Secretary, Edward T. Devine, Ph.D., LL.D., Professor of Social Economy, Columbia University, and Secretary of the New York Charity Organization Society.

Vice presidents are:

Rev. Lyman Abbott, D.D., LL.D., Emeritus Pastor of Plymouth Church, Editor of The Outlook.

Jane Addams, A.M., LL.D., Founder and Headworker of the Hull House Settlement; ex-President of the National Conference of Charities and Correction.

Felix Adler, Ph.D., Professor of Political and Social Ethics, Columbia University; Leader of the N. Y. Society for Ethical Culture.

James B. Angell, A.M., LL.D., Professor of Modern Languages and Literature and President Emeritus of the University of Michigan.

Joseph H. Choate, LL.D., D.C.L., (Oxford), Diplomat and distinguished lawyer.

Charles W. Eliot, A.M., LL.D., President Emeritus of the University of Harvard.

Rt. Rev. John Ireland, LL.D., Archbishop of St. Paul.

Ben B. Lindsay, Judge, Reformer and Author, Denver, Colo.

John Mitchell, President of the Labor Union of America.

Wm. H. Welch, M.D., LL.D., Professor of Pathological Anatomy, Johns Hopkins University.

Need I say anything in defense of the Committee of One Hundred after having given the names of its officers?

Direct and most unkind comments, not to use a stronger term, have been directed especially against one vice-president of the committee representing the medical profession. I refer to Dr. Wm. H. Welch, M.D., LL.D., President of the American Medical Association. Those who know Dr. Welch

and even those who only know of him, would justly think it absurd if I should see the need to say even a word, in defense of this master of medical science. To us it is indeed difficult to understand that there could be any man or woman in this land capable of speaking ill of Dr. Welch. There is no name in the medical world which is more honored in this country and abroad, no medical teacher more admired, no one who has a larger following than this Johns Hopkins professor of pathology, and no physician more beloved and looked up to as representing all that is best and noblest in the profession than Dr. Welch. If there is any man in the American medical profession who is unselfishly devoting his high intelligence, his time, and his means to the public welfare, it is Dr. Welch. Gladly do we acknowledge him as our leader.

To accuse the president and members of the American Medical Association of selfish motives in advocating the establishment of a Federal Department of Health is absurd. If there ever was an unselfish movement inaugurated, it is this one. It is a movement by physicians for that reduction of disease which *ipso facto* means a movement against their financial interests.

The writer is a member of the regular profession; he nevertheless would not wish for a moment to limit the freedom of any citizen to choose his physician from some other school or cult, providing the individual assuming the function and responsibilities of a physician had the training necessary to prevent him from endangering the life of his patient by lack of medical knowledge or skill.

The official mouthpiece of this "National League for Medical Freedom" is Mr. B. O. Flower, who had heretofore the reputation of a fighter for everything involving the spiritual, social, and physical progress of humanity, and it is inexplicable to many of his admirers how he can lead a movement opposed to the improvement of the health of the nation. The vast majority in the ranks of this so-called "League," though they may be well meaning, noble, and earnest, are not men and women who have toiled patiently for years in order to acquire the thorough scientific medical training which enables one to assume that great re-

sponsibility of the care and treatment of the sick. They are unable to appreciate the inestimable value of federal help in preventing disease. These people are blindly following certain individuals who designate the regular profession as a medical trust, and accuse the thousands of noble men and women who are devoting their lives to the alleviation of human ills of a desire to monopolize medical practice. The establishment of a federal department of health would mean pure food, pure medicine, control of plagues and epidemics, the advancement of medical science and through it the improvement of the health and increase of material wealth of the nation. It is said that many of the individuals opposing the Owen bill are commercially interested in the manufacture of drugs or patent medicines, of which latter the American people swallow about \$200,000,000 worth annually. Whether it is true or not that the National League for Medical Freedom is backed financially by drug manufacturers and patent medicine concerns, I am not prepared to say; yet even these men have nothing to fear from a Federal Department of Health if the drugs they put on the market are pure and the claims made for patent medicines do not delude the public or endanger its health. The element which clamors most loudly for medical freedom is composed in many instances of men and women who have attended one or two courses of lectures or get their "degrees" without any training at all, and have developed into "doctors" and "healers" in a most remarkably short space of time.

Because the American Medical Association has always advocated a thorough medical education, is pleading constantly for pure drugs, is opposed to quackery, patent medicines and nostrums, its 40,000 members are considered a medical trust. Yet it is in the ranks of this very American Medical Association that are found the greatest number of unselfish devotees to preventive and curative medicine. It is among this association that are found the men who have added the greatest glory to the medical and scientific reputation of this country. America's greatest surgeons—Marion Sims, Gross, Sayre, O'Dwyer, Bull—were members of this association. McBurney, Jacobi, Stephen Smith, Welch, Osler, and Trudeau have graced this association by their mem-

bership for nearly half a century. The heroes in the combat against yellow fever—Reed, Lazear, and the hundreds of others who have devoted their best energies and knowledge and often sacrificed their lives for the sake of medical science, were members of the American Medical Association.

One of the most illustrious members of the American Medical Association is its former president, Col. William C. Gorgas, of the U. S. army, chief sanitary officer at Panama, an adherent to the regular school. It is due to the genius, the scientific and thorough medical training of Dr. Gorgas that the formerly deadly Isthmus of Panama has now become as sanitary a region as any. A great patriotic enterprise, important to commerce and the welfare of nations, was made possible by this man. He has labored and is constantly laboring for the establishment of a federal department of health because he knows the inestimable benefit which such a department would bestow upon the nation.

Whatever advance has been made in medical science in America or in Europe, has been made by scientifically trained men or by physicians not without but within the ranks of the regular profession. The greatest benefactors of mankind are those who diminish disease by prevention and cure. As another illustrious example of medical benefactors, may I be permitted to cite that great trinity of scientific giants who through their labors have accomplished so much in reducing disease and lessening human misery in all parts of the globe? They are Pasteur of France, Lister of England, and Koch of Germany; all of them aided their governments by direct participation in the governmental health departments. We are still mourning the death of perhaps the greatest of the three—Robert Koch. I do not believe that there is, even in the camp of our opponents in this so wrongly called "League for Medical Freedom," a single intelligent individual who will deny the inestimable benefits which Koch has bestowed upon mankind through his discovery of the germs of tuberculosis, of cholera, of the spores of anthrax, of tuberculin, and through his many other equally important scientific labors. Yet, had it not been for the Imperial German Reichs-Gesundheitsamt, which is the equivalent of the institution we are striving for—a Federal De-

partment of Health—Koch never would have been able to devote his life, energy, and great genius to those important discoveries through which thousands of lives have been saved in all civilized countries during the past few decades. It was while working in this governmental institution, which is doing exactly the work the Owen bill asks the federal department to do, that Koch discovered the tubercle bacillus and the bacillus of cholera. Because of the discovery of the comma bacillus, we no longer have those fearful cholera epidemics which formerly decimated our own and other countries. This disease can now be easily diagnosed and by proper quarantine its mortality can be reduced to a minimum. And what shall we say of the progress that has been made in the fight against tuberculosis because the Federal Department of Health of Germany enabled Koch to do research work and thus discover the bacillus of tuberculosis to be the primary and only direct cause of the disease? As director of the Hygienic Institute and member of the Reichs-Gesundheitsamt he inaugurated that wonderfully effective campaign against tuberculosis whereby the mortality from this disease in Germany has been reduced to nearly one-half of what it was prior to the discovery of the tubercle bacillus..

Under Koch's inspiration and guidance and in the same institute, many great scientific discoveries of incalculable value to humanity were made. Foremost among them are the works of Ehrlich, one of Koch's most celebrated pupils, who recently gave to the world a new remedy which promises to prove a specific in an affliction from which mankind has suffered for centuries.

As co-worker in the Kaiserliche Gesundheitsamt and the Institute for Infectious Diseases, affiliated therewith, we must also mention Behring, the discoverer of the anti-diphtheritic serum. Thanks to the discovery of this serum thousands of young lives are now saved which would formerly have fallen victims to the terrible disease known as malignant diphtheria. This was made possible by the opportunity given to the workers in the Reichs-Gesundheitsamt and Imperial Institute for Infectious Diseases.

Can there be any better argument in favor of the establishment of a Federal Department of Health?

HOOK WORM DISEASE.

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This subject, although recently brought into much prominence and seemingly new, is of quite ancient origin. As Egypt is the birthplace of the science of medicine, so it is supposedly the birthplace of the hook worm. Possibly the seven plagues at the time of Moses may account for its origin, although there is no record of worms having been visited upon the Egyptians at this time. At any rate, writers have demonstrated the analogy between this disease and the Egyptian chlorosis described three or four thousand years ago.

The first hook worms were described by Goeze, a German clergyman, in 1782, and were called by him "Haaken wurm." Later a scientist of the same nationality called them "uncinariae." The first hook worms found in man were discovered by Dubini in 1837 while performing an autopsy at Milan, and he gave them the name of "Ankylostoma Duodenale," which today is known as the old world hook worm.

The Brazilian physicians gave us our first clinical knowledge of the disease. During the building of the St. Gothard tunnel in 1879, there was an epidemic among the miners, called "St. Gothard's tunnel anemia," which was shown by certain Italian zoologists to be due to this parasite.

The infection in this country is undoubtedly of African origin, and although the negro has received from the white man an infection, to which he is particularly susceptible, in the form of the white plague, so in turn has the white man received from him an infection which is sapping the very life blood from thousands of the bone and sinew of our southland, rendering them not only inefficient industrially, but leading to mental and physical degeneracy in the wake of which follow grief, sorrow, and poverty.

The negro by infection through several generations has developed an immunity to the action of this parasite, and while not feeling the effects of the disease himself, is a constant menace to the community through soil pollution, as is the typhoid bacillus carrier.

Dr. H. F. Harris, secretary of the Georgia State Board of Health, was the first

man to discover the eggs of the parasite in this country, and to recognize the widespread prevalence of this infection throughout our southern states.

Dr. C. W. Stiles, of the United States Public Health and Marine Hospital Service, soon classified this new found parasite, and called it "Necator Americanus"—American Murderer.

Incidence.—This disease, the most fatal of all parasitic infections, has its widest geographical distribution in tropical and sub-tropical countries. In Porto Rico in 1903, statistics showed that one quarter of the deaths on the island were due to this parasite. The Philippines also show a large proportion of infected inhabitants. In this country the disease is almost entirely found in the southern States, with the Potomac and Ohio rivers as the northern natural boundaries; but sporadic cases occur elsewhere, which can usually be traced to southern origin.

Chamberlain, in a very excellent article on "Uncinariasis Among Southern Recruits," in the *Archives of Internal Medicine*, gives the following summary: "Infection with uncinaria is very common among southern-bred soldiers during the first three years of service. In 100 men examined, 60 per cent showed uncinariasis. Among new recruits the infection is as high as 85 per cent. Southern-bred soldiers of more than three years service, show a much lower percentage of infection—only 11 per cent in 33 cases. Hook worms gradually die out, most of them during the first three years, and under favorable sanitary conditions obtaining in the army or at home, reinfection occurs rarely, if at all.

The symptoms produced by a slight hook worm infection are so mild that they cannot be detected by the ordinary methods employed by the examining surgeon, and diagnosis must be made with the microscope. An eosinophile count of over 5 per cent is a very strong evidence of infection by an intestinal parasite, but one below this is no evidence against uncinariasis. The parasite in probably all cases is *Necator Americanus*. In some cases the worm probably lives several years in the intestine. In many light infections the ova are difficult to find, requiring the complete examination of five or six cover glass preparations.

Farm life is very important as a predisposing cause. Among 74 men who had farmed at one time, 81 per cent were infected. Most of the men had gone barefooted in childhood and over one-half reported having had "ground itch," though usually not since childhood. Southern soldiers are less well developed physically than northern soldiers. Uncinariasis in childhood is a very probable cause of this under development. Light infection does not materially affect the efficiency of the soldier, although the majority report that they feel more vigorous after treatment. Treatment of the light infections is of great importance in any attempt to stamp out the disease."

A loose sandy soil, a warm climate, and plenty of shade are the most favorable conditions for the life and development of the hook worm, hence the infection is heaviest along the sand area, next heaviest in the Appalachian region, and least in the clay land region.

Dr. Stiles says that "one out of every eight southern cotton mill employees is infected, and the industrial efficiency is markedly greater outside the mountains and sand land area." "In the most of these cases," he says, "a diagnosis can be made without the aid of a microscope." 38 per cent of 56 Tulane Medical College students examined showed the infection. The people most commonly infected are those from the rural districts, variously known as "poor whites," "sand lickers," "crackers" and "dirt eaters." As many as 81 per cent of the population of the farm lands in some parts of the south are infected.

The question now naturally arises as to why the population of the rural districts should be chiefly affected. This may be answered in two words, "soil pollution." This means contamination of the ground by careless disposal of body waste, and as the only way by which hook worm eggs escape from the body is by the stools, this is the only way by which the disease can be transmitted. Stiles says that "79 per cent of negro farm houses in N. C., S. C., Ga., Ala., and Miss., have no privies connected with them." The same is true of 46 per cent of the white farm houses. Most of those having privies have the surface variety, open at the back, giving perfectly free access to hogs, dogs, chickens, and flies, by which the eggs can be spread over the whole place." Improvement in sanitary conditions,

particularly in disposal of the sewage of the farm houses and cotton mills, is the first measure to be undertaken in the prophylaxis of, and the stamping out of the infection.

At the recent hook worm conference held in Atlanta, one of the men in the discussion said he "considered the greatest wonder of the ancient world—not the pyramids of Egypt, the Colossus of Rhodes, nor the hanging gardens of Babylon, but the Cloaca Maxima, which carried off the sewage of the City of the Imperial Caesars."

Parasites.—Both uncinaria duodenalis and Americana belong to the nematode family, strongyloidea. The duodenalis worms, both male and female, are larger than the Americana, but the eggs of the latter are larger. Two pairs of ventral teeth, which are hook like, and one pair of dorsal teeth directed forward, are characteristic of the head of the duodenalis, whilst the Americana has no hook like teeth, but simply a dorsal and ventral pair of semilunar lips or suckers. The caudal bursa of the male duodenalis has a tridigitate dorsal ray, and the dorsal ray of the Americana is bipartite. Eggs of the Americana often contain fully developed embryos when laid, while those of the duodenalis are laid in segmentation. The eggs have a thin clear shell, are ellipsoid in shape and the yolk, which is brownish and granular, may show from four to sixteen or more segments. Every hook worm found in the intestine represents an embryo taken into the body, as these parasites do not multiply in the intestinal tract, for oxygen is necessary for the development of the eggs. An infected person may pass thousands upon thousands of these eggs in a single stool, so that by the careful disposition of fecal matter, infection may be stamped out of existence. After the eggs are passed, segmentation of the yolk has already begun or soon begins. The embryo escapes from the shell, sheds its skin twice, feeds for a few days, then lives in its cast off skin without food until it is taken into the human host. This happens in one of two ways. Either the larvae are taken directly into the alimentary tract in contaminated food or water, or they enter the body through the skin, which process is considered more common. In this latter way they produce "ground itch," also known as "foot itch," "foot sore," "dew

itch," "dew poison," etc. This is usually the first symptom of hook worm disease.

Loos showed that the larvae entered the skin through the hair follicles and penetrated the deeper tissues. Ashford and King say that exposure of the skin to the action of the larvae causes in a short time itching followed by redness and swelling. In two days papules develop followed by vesicles discrete or confluent, which usually rupture. Sometimes pustules follow. The lesion usually subsides in a week or two.

Smith and Harris of Atlanta have also demonstrated that this ground itch in a mild form may be produced by the application of the alcoholic extract of the larvae to the wrist of a person for one hour. They also showed that larvae of flies assisted greatly in the development of the larvae of the hook worm by burrowing around through masses of feces and soil, thus giving the eggs of the hook worm greater access to oxygen which is necessary for the development of larvae.

The wearing of shoes, by preventing ground itch, may reduce but not eradicate hook worm disease. After entering the skin these larvae get into the circulation, pass through the heart to the lungs, thence up the trachea to the pharynx and down the oesophagus to the small intestine where they become mature, attach themselves to the intestinal wall and begin their work of sucking blood and poisoning their victims.

Pathology.—Pathological findings vary, of course, according to the severity of the infection. Hemoglobin varies from 10 to 91.5 per cent. In mild cases this decreases very slightly, if at all. The red cells are decidedly reduced in very severe infections, and poikilocytosis and polychromatophilia are present. The average leucocyte count in mild and severe cases is from 7,000 to 9,000. Eosinophilia is an almost constant finding, though it may be absent in very severe cases. Its absence is always taken to be a grave prognostic omen, for it is believed that eosinophilia expresses the index of bodily resistance to an hypothetical toxin of uncinaria. The blood picture is much like that of pernicious anemia except for the scanty number of erythroblasts and megaloblasts present. There seems to be little relation between the number of worms present and the severity of

infection, as shown in the findings of only a few worms in fatal cases, at autopsy; but the severity of infection seems to depend upon the absorption of the unknown toxin secreted by the worm.

Whipple finds that the hook worm contains a weak hemolytic agent soluble in salt solution, and present in all parts of the worm. This hemolysis is not specific and he regards it as unlikely that it has any relation to the anemia of uncinariasis.

The habitat of the worm is the upper part of the jejunum and duodenum. A few also have been reported as found in the stomach. There is a large amount of mucus present in the intestinal canal and a severe catarrhal process is present in the jejunum and duodenum, but other parts of the canal are similarly affected. The lesions produced directly by the worms are minute superficial erosion of the mucosa, and when found attached their bodies are usually surrounded by bloody mucus. Blood as such or occult is usually found in the stools. There is intense pallor of skin and other tissues. Edema of extremities, ascites, effusion into other serous cavities and considerable general anasarca are present. Fat is well preserved and of a light yellow color, muscular tissue shows brownish gray atrophy. Liver shows fatty degeneration, spleen is decreased in size and shows decrease of lymphoid tissue and in size of malpighian corpuscles. Kidneys show chronic parenchymatous nephritis, lungs are pale and edematous, heart is hypertrophied, its musculature flabby, and valves functionally incompetent. Brain shows intense anemia and effusion into the ventricles. Bone marrow shows changes similar to those in pernicious anemia.

Symptoms.—These vary from being few or none at all to being most pronounced in very severe cases. The disease is most destructive from the ages of 10 to 30 years. Lack of bodily development is a most important feature when the infection occurs in childhood. A patient of 20 to 25 years may resemble a child of 12 to 14 years, in height, lack of body hair, and of genital and bony development. The face has an old look, the expression being anxious and tired. The skin may be muddy, sallow or lemon yellow (called in the south "Florida complexion"), or it may be waxy white in

color. The varying shades of yellow are due to an hematogenous icterus. Eyes are lustreless and the sclerae are white and show an absence of subconjunctival fat. Appetite may be lost or be voracious with pica leading to eating earth, dirt of all kinds, rags, hair, etc. Digestion is impaired. Nausea and vomiting are often present, accompanied by epigastric pain and tenderness. Muscles are soft and flabby, and fatigue is easily brought on so that laziness is often present. Dyspnoea and palpitation are frequently present, and accentuated murmurs are often heard over the base of the heart. Dizziness, tinnitus, headache and mental torpor are frequently marked. Impotence in men and amenorrhoea in women are generally present, although the women may bear children who are either rachitic or show well marked cachexia, and who soon become victims of uncinariasis. Edema may be limited to the lower extremities or there may be general anasarca. Children show a pot-bellied condition, due both to ascites and flatulency.

Treatment.—The Brazilian physicians were the first to treat hook worm disease, but unfortunately their treatment was unknown in other parts of the world. The Italians began the treatment with male fern, but Bozzolo was the first to use thymol. Fortunately in this we have a drug acting specifically on the parasite without having any injurious effect on the human organism.

The treatment is very simple and the prognosis most hopeful in all but extremely severe cases.

The following is the treatment given by Doctor Harris: Late in the afternoon of the day before the treatment is to be given, the patient is given from 2 to 10 grs. of calomel, according to his age and strength. On this day he is allowed very little dinner and no supper. The administration of castor oil or any other oily substance is absolutely contraindicated, for some of it might remain in the intestinal tract, dissolving the thymol that is to be given the next day and making it more readily absorbable, thus producing poisonous effects on the patient. Next morning a full dose of epsom salts and hot water should be given as soon as the patient awakens. After the bowels have been thoroughly evacuated, one-half dose of the thymol to be given is administered,

finely powdered, in a capsule and is followed in one hour by the other half, the dose being gauged by the age and strength of the patient. It is best to be guided in the dose of thymol by the apparent rather than the stated age of the patient. The patient should stay in bed and lie on his right side, thus permitting the drug to pass more rapidly from the stomach. The amount given should be as follows:

Up to five years-- 7 to 10 grs.

5 to 10 years---10 to 20 grs.

10 to 15 years---20 to 40 grs.

15 yrs. and over--40 to 60 grs.

In advanced age the quantity should be less than in middle age, the age and strength of the patient being always taken into consideration. The patient should be allowed no food on the day of treatment; possibly one or more cups of coffee may be given during the day. If the patient experiences no ill effects from the thymol, a saline need not be given until 4 or 5 o'clock in the afternoon, and then in hot water. Again, no castor oil should be used. Patient may have food after the bowels have acted well. When this treatment is carried out faithfully, it is rarely necessary to repeat it, but after a couple of weeks another examination of the feces should be made, and if eggs are present treatment should be repeated. This should be done over and over again until exhaustive examinations of the feces show by absence of eggs of the parasite, that all the worms have been expelled.

Beta naphthol is used by some in the treatment of this disease.

Thus we see we have in this malady, not only one which yields readily to treatment, but one which can and will in time be entirely stamped out. Then will the cotton mill laborer and the farmer be not only more efficient in their work, but being freed from the disease that has oppressed both them and their forefathers, they will step from their accustomed gloom and depression to the threshold of a new, a brighter, and far more wholesome existence.

Here is a good motto for consultants, who are so often late:

"I owe all my success in life to having been always a quarter of an hour beforehand."—*Lord Nelson.*

ALCOHOL ONLY A NARCOTIC POISON.

Its Extensive Adoption and Promiscuous Use Due Exclusively to Its Narcotic Effect.

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for Nervous and Mental
Diseases

Actual experimentation, scientifically conducted by experienced workers with proficient technical training and the assistance of definite instruments of most delicate precision, have demonstrated the following facts:

First:—That thirty grams (one ounce) of alcohol introduced into the normal human body, either in concentration as pure alcohol or in the common commercial dilutions as beer, wine or spirits, reduce the acuteness of all the special senses, sight, hearing, taste, smell and feeling.

Second:—That the effect of 80 grams (about two and two-thirds ounces) of alcohol, either clear or diluted as above, administered in a single or in divided doses within a period of a few hours, does not pass off within twenty-four hours.

Third:—That alcohol is a protoplasmic poison, capable of degenerating or destroying the cellular elements which form the basis of our existence, that it is capable of producing both functional and organic changes are expressed by the term alcoholism.

Fourth:—By far the larger amount of alcohol introduced into the human body undergoes no digestive or other chemical change. It is taken in and eliminated as alcohol unchanged, it circulates in the blood stream, coming in contact with all the tissues of the body through which the life-giving blood flows; whether nerve or brain or muscular tissue, all are equally exposed to the corroding action of the alcohol when taken internally.

Fifth:—That fifteen grams of alcohol will coagulate eight grams of egg albumen as quickly and completely as twice that amount of boiling water will cook the same amount of egg albumen. The protoplasm of which our bodies are constructed is com-

posed of carbon, oxygen, hydrogen and nitrogen, nearly identical with the albumen of the white of an egg, and constitutes the basis of all living matter in animals and plants.

The proportions of this albuminous substance which enter into the structure of the principle constituents of the human body in one thousand parts are as follows: The spinal cord contains 74.9, the brain 86.3, liver 117.4, muscle 161.8, blood 195.6, the middle coat of the arteries 273.3, the crystalline lenses of the eye 383.5, besides smaller amounts in the different fluids and in the membranes of the body.

Sixth:—That alcohol is a narcotic drug; and narcotic drugs have the property of mildly or profoundly stupefying the individual; and it belongs to the same class of drugs as opium, cocaine, morphine, stramonium, hyoscyamus, cannabis indica, conium, (poison hemlock), etc. All narcotics are also capable of producing conditions of true poisoning characterized by vertigo, nausea, delirium, convulsive motions, agitation and finally stupor.

We can readily see, therefore, that the so-called small doses of 30 grams of alcohol which produce at least the demonstrable functional effects expressed in the reduction of the acuteness of the special senses through its general distribution through the system, may in all reasonable probability have some organic effect, though slight; in a single dose and not frequently repeated, with nature's reconstructive ability which continually antagonizes the invasion of poisonous substances and seeks to repair the damage done by them, many slight organic changes may not be clearly shown; nevertheless, single intoxications, although indulged in at infrequent intervals, are not harmless, because two things occur, viz: functional disturbances which are demonstrable, and the probable degeneration of the cellular elements through the effect of the alcohol on their albuminous constituents. Primarily and secondarily through nature's effort to repair the damage done, alterations in the tissues must occur which may interfere with the integrity of function of those tissues. In comparison, a patch on the knee of a pair of dress-suit trousers, no matter how perfectly executed by the most proficient tailor, or how nearly invisible to com-

mon notice was the patch, or how gracious and courteous and acceptable the owner, the fact of the patch alone would preclude their introduction into polite society, hence their function would be entirely destroyed.

Now from the fact that the functional effects of eighty grams of alcohol do not pass off within twenty-four hours, it is readily demonstrated that any individual consuming this amount of alcohol (which is equal to about three drinks of whisky, two of brandy, twelve ounces of wine or two pints of beer), within a day or a day and a night and repeated daily, is in a state of continual intoxication, although perhaps not noticeable by the individual himself or by his associates. Nevertheless, such is the fact which can be demonstrated by the use of instruments of precision, which measure accurately these functional disturbances. The individual who begins by taking one glass of beer occasionally, or wine at his meals, or a cocktail with a friend, is not only exposing himself to the deleterious effects of the immediate dose, but the narcosis which it produces is often so pleasant that it invites occasional or frequent repetition; and just at this point occurs the determining factor of much of the acute and chronic alcoholism leading to inebriety; the majority of all the alcohol which is consumed, either habitually or occasionally, as a beverage or as a medicine, is consumed directly because of its narcotic effect, which produces a feeling of comfortableness, a dulling of the special senses, and if taken in large enough quantities, dulling or obliterating the general sensation also, to the extent that the individual does not accurately perceive the annoying sensations of physical discomfort and mental irritation.

This narcosis of alcohol is the basis of its general deception; it lures the individual into an impression of well-being, while it destroys the integrity of his physical structures, and at first this feeling of mild or profound narcosis is so satisfactory in comparison to the discomforts of physical or mental irritations, that the individual loses clear conception of judgment in measuring the possibilities of physical deteriorations which must necessarily accrue from the use of this narcotic poison.

Thus is induced frequent repetition,

which means eventually chronic alcoholism, either in mild or more profound degrees, but usually of comparatively slow progress which is entirely unrecognized by the individual or his associates until the physical damage done is beyond repair, and the individual finds himself in a precarious moral and social condition, and all to his wonderment he becomes the butt of his associates, jokes in reference to himself or the objects of his friends' insults in accusing him of facts and conditions which he is assured do not obtain. He has been narcotised, poisoned, and is diseased, and he can not understand the changes which have been progressively taking place in his physical condition, frequently altering his personality, filling him with delusions, rendering him entirely incapable of self-discipline or self-management, always under the delusion that he is in no way incapacitated.

This is the picture of subacute and chronic alcoholism acquired by a normal individual, and is much the same only slower in progress and mild in comparison to the picture produced by the same means in the defective individual, the person with hereditary taint, or the individual who through acquired physical defects from disease and other causes, has less resisting power and is more susceptible to the allurements of narcosis, in whom the conflagration only burns more fiercely and thus precipitates a more speedy calamity.

No subject has been so extensively discussed, argued and outraged as the subject tending to show the beneficial effects of alcohol, and the conclusions reached in its favor are all based solely upon the knowledge of the narcotic effect induced by its use.

The feeling of comfortableness induced by the narcotic effect of alcohol is proof against any argument embodying the facts as to the dangers invited by its use, even with the living evidence of hundreds and thousands of acute and chronic alcoholics and confirmed inebriates in our midst continually.

When the acute and chronic stage of alcoholism has been reached, and the friends and family of the victim begin to realize something of his condition and its possibilities, and seek to abate the nuisance by per-

suasion or argument, and are confronted with statements from the victim assuring them that he has absolutely no need of reformation, that his habits and customs are those of a gentleman, then they are accustomed to regard these persons as individuals with more or less vicious tendencies and moral depravity, but fail to recognize that these changes are the symptoms of the disease and are only the natural outcome. The fact is, these people are simply following the natural course, they feel bad, have pain, are irritated, or are depressed or worried and aggravated, a drink of whisky or other alcoholic solution, or two or three of them, benumbs their acuteness of perception and renders them less conscious of the multiple irritations connected with daily life, unconscious of the physical degenerations taking place within their bodies from the toxic effects of the alcohol through its dehydration, suboxidation and coagulation of the albuminous constituents of the protoplasm of which the body is constructed, and often superimposed upon hereditary or acquired defective conditions, they yield to a natural impulse, viz: the desire for a feeling of comfortableness. Alcohol produces this, and through its poisonous processes soon establishes perverted physical conditions which demand increased doses and increased frequency of repetition demonstrated in chronic alcoholism and inebriety, and which the diseased individual is no longer able to withstand: *Not the desire to take a drink*, but the desire for a feeling of comfortableness which experience has taught him comes through the internal administration of alcohol.

Thus we readily see that acute, subacute or chronic alcoholism and finally inebriety are the natural and unavoidable outcome of yielding to a perfectly natural impulse or inclination, and frequent repetition has established a habit, while habits, whether commendatory or vicious, are much more frequently the outcome of thoughtlessness or carelessness than of design. The confirmed inebriate had no desire or intention of being an inebriate or a common drunkard, or occasionally drunken, and so on back to the beginning, but the fact is that he is an inebriate because he KNEW he would never be what he is, just as the paranoiac knows he is not insane; everybody is in-

sane but him, and his friends have outraged him by placing him under restrictions; delusions form a principle symptom of both diseases and are an expression of the disordered physical condition from which they arise.

Why, then, should we hold drinking men or women responsible for their perverted acts or expressions or conditions any more than we would hold accountable the typhoid fever patient who is delirious from a similar intoxication of a specific origin? In the typhoid case physical changes have taken place and from the poison thus generated which circulates in the system functional changes have taken place in the brain and nervous system which is expressed in the delirium. The same thing occurs in the alcoholic. Alcoholic poisoning arises, making functional and organic changes in the cellular constituents of the body, and thereby arise the most varied and probably the most extensive expressions of physical alterations of any other poison known whose use would not result in a more speedy death.

Alcohol is comparatively a slow, progressive poison; sufficiently slow in its action and sufficiently active in nature in its attempt to repair damage done to the body by the introduction of this and similar other poisons, that many alcoholics are able to live on for years in a state of apparently comparative health, though the cellular constituents of their bodies would show only a mass of pathological degenerations.

It is a fact well known to the medical profession that subacute and chronic alcoholic intoxications may simulate every known form of insanity, and in many instances it requires considerable diagnostic skill to determine whether a given case under observation is one of organic insanity or one of the alcoholic psychoses; and it is also generally known that alcohol in combination with other poisons and in the presence of degenerative processes which are more or less common in daily life, and which nature's reparative ability is unable to entirely compensate for becomes a most active cause of organic insanity.

And still another fact more terrible in consequences than all the ones mentioned above, a fact which has long been known to medical and kindred sciences and which is

being demonstrated almost daily in biological research, is that the ravages accruing from alcoholic poisoning, whether acute, subacute, or chronic, do not subside necessarily with the individual who imbibes the alcohol, but as a result of its use, whether so-called moderately or immoderately, degenerations may be transmitted to the offspring. Thus we have neurotics, epileptics, imbeciles, and a whole range of other defective conditions from birth, with no other cause than that they are the products of alcoholized parents or grandparents. We have daughters and grand-daughters who are sterile and who are unable to nurse their offspring, indisputably from degenerations from alcoholic heritage. We have epileptic children the product of conception following a single alcoholic intoxication of the father, the only intoxication of his life; with healthy children born previously and following the birth of the epileptic child from the same parents.

These are hard and fast facts which the progress of medical science is daily recording; not sparsely but voluminously all over the civilized world, and these degenerations which I have mentioned, with thousands of others unmentioned in this article, go to make up the volume of argument against the use of alcohol internally under any pretext whatever, for it is a poison which we find has so extensive, almost unlimited possibilities of harm; a narcotic poison with only one factor in its favor, and that in itself a deception; *its narcotic effect lures one into a sense of well-being while its toxic properties corrode the cellular elements of the body, involving the integrity of the protoplasm which forms the very basis of our physical existence.*

These facts alone, to any thinking individual of normal capacity, should be conclusive evidence against the internal use of alcohol while there is absolutely no argument based on science or reason which can obtain against total abstinence.

Meltzer's sign—pain on active flexion of the hip, with the knee extended, while the examiner presses firmly down over McBurney's point—is a most valuable corroborative evidence of appendicitis. It is not intended for cases in which abscess is palpably present.—*American Journal of Surgery.*

SPINA BIFIDA AND CONGENITAL TUMOR OF SACROLUMBAR REGION.

Dr. J. Schwinn, Wheeling, W. Va.,
Surgeon City Hospital.

SPINA BIFIDA.

Up to the time of aseptic surgery, spina bifida has been a surgical *noli-me-tangere*, and while attempts were made to reduce the tumor by pressure or to destroy the sac by injections of different fluids, producing adhesive inflammation, these attempts were, to say the least, crude, risky and attended with poor results. With the advance of aseptic surgery, and a better understanding of the pathology of the different forms of spina bifida, the results of the modern operation have become decidedly better; and at the present time we have quite a goodly number of cases operated successfully.

Broadly speaking, there are only two forms of spina bifida, which at the present stage of our knowledge should be the object of surgical interference; namely, the pure meningoceles, (simple protrusion of the meningeal sac through the cleft in the vertebra), and certain forms of meningo-myelocele, (the spinal cord or parts of it adherent to meningeal sac); while those cases where the spinal cord or parts of it lie free and uncovered in the cleft, or where parts of the cord are missing, are inoperable because of other grave congenital defects present, or on account of such symptoms as are not likely to improve after an operation, such as grave paralysis of the limbs or of the sphincter muscles.

The dangers of an operation are:

First—Sudden loss of spinal fluid in large quantities.

Second—Infection.

Third—Relapse.

With a rigid aseptic technique, with the precaution of tying the sac in the manner it was done in my second case, and with the use of the fasciæ and muscles of the sacral region to cover the cleft, we are in a position to avoid these dangers in the greater number of cases.

Case I.—F. M. Boy nine months old. No deformities either in father's or mother's family. The boy is well developed with no other defects. Over the lower lumbar

region, in the middle line is a soft, smooth, round swelling, the size of a small orange, with a broad base, immovable, incompressible, covered with normal skin, except at the very top, which is represented by the thin shining meningeal membrane. Temperature and pulse normal, there are no paralyses, and urination and defecation seem to be normal.

Operation Jan. 2, 1903.—Elliptical incision around middle of tumor down to the meningeal sac. This was dissected free from the skin down to the cleft in the vertebrae, and opened. Nothing was found of nervous structure in the sac, and it was sutured over by Lambert sutures with chromic gut. The neighboring muscles and fasciae were then immobilized, and drawn over the gap and sutured with chromicized catgut, while the skin was sutured with silk-worm gut, and a very small gauze wick was left under the skin for drainage. The operation was done under chloroform anesthesia and with the baby on a steep incline, head downwards. The temperature the evening of the operation was $102 \frac{2}{3}$, pulse 143. On Jan. 3rd the dressing was quite moist, and it was found, on changing the same, that there was a constant oozing of cerebro-spinal fluid. For the next eight days, up to January 11th, the temperature ranged from 99 to $100 \frac{3}{5}$, with a perfectly normal condition of the child, except that the urine had to be drawn by catheter, and that the bowels became very sluggish; so much so, that they would not move any more either after enema or purgatives. On the eighth day after the operation, the middle silk-worm sutures had cut through, and left a gap in the skin about one inch long. The edges of this were then freshened and two silver wire sutures were introduced through all the tissues down to the canal and about $1 \frac{1}{2}$ inch from the edge of the gap, where they were fastened by buttons. Immediately after drawing these sutures tight, there was a discharge of gas by the rectum under considerable force, something that had not been observed from the time of the operation.

Fifteen hours after the second operation, a large free movement of the bowels followed, and from that time on the bowels moved normally. It seemed as if the stop-

ping of the flow of cerebro-spinal fluid and the restoration of normal pressure conditions in the cerebro-spinal space, had a great deal to do with the return of these functions to their normal state. I did not hear from this case any further until a year ago, when the boy was brought to my office again with the following history:

The functions of bladder and rectum had been normal for quite a while, (how long the writer could not tell), when gradually both sphincters lost their tone, and when I examined the boy there was incontinence of urine and feces, except when the stool was very constipated. I proposed to construct a rectal sphincter by splitting off a ring from the gluteal muscle, and also to provide the boy with a urinal, but so far the patient has not returned. In this case there was evidently a pathological condition in the lumbar cord, whether it was the result of the congenital defect or the operation, or whether it was an altogether new development, I am unable to say.

Case II.—C. T. Boy three months old. The parents and two other children are



SPINA BIFIDA—CASE 2.

perfectly normal. At birth there was a small, flat swelling over the lower part of sacrum, which had grown considerably, especially during the past six months, when the baby cried a great deal.

Status: Well developed child. Over the lower part of sacrum, in the middle line is a roundish swelling, flattened on top, slightly compressible and becoming very tense

during crying. The swelling measures two inches in its horizontal diameter, and is $1\frac{1}{4}$ inch deep; it is not movable and shows fluctuation. The anterior fontanelle is $2\frac{1}{2}$ inches long, two inches wide. The skin over the tumor is dry, leathery, whitish in several places, scarlike and covered on top of tumor with numerous fine, long hairs.

Operation July 6, 1910. Elliptical incision made through skin down to the sac, which was with difficulty dissected from the skin, but freed *in toto*. A ligature of chromic No. II was then provisionally thrown around the neck and drawn tight enough to prevent the escape of the cerebro-spinal fluid from the canal, and yet not so tight as to injure any nervous structures that might happen to be in the sac. The sac was then opened and carefully examined, and as there was nothing found of nervous nature, the above ligature was drawn tight, and the sac cut off flush with the vertebrae. The wound was then closed as in case I. I consider the manner of handling the sac as above described of the utmost importance, as it permits of a thorough examination of the contents of the sac, without the escape of cerebro-spinal fluid, insuring greater safety also as to infection.

The baby was restless for the first few days, but there was never any loss of fluid, and on July 18th, when the stitches were removed, the healing was perfect. I have had a recent letter from the father stating that the baby is doing well.

SACRO-COCYGEAL TUMOR.

Besides the swellings caused by spina bifida, the sacrum is not infrequently the seat of tumors of all descriptions, fibroma, lipoma, angioma, and sarcoma; but the most interesting forms of tumor in this region are those congenital tumors which show more or less of the tissue of a fetus; that is, tissue derived from all the three primitive germ layers, all the way down from the formation of a more or less perfect second fetus (Dipygus) to those tumors containing parts of the skeleton and viscera, and finally, tumors made up of a mixture of simple and complex tissue derived from the three germ layers. An example of this latter sort of tumor is the following:

T. H. A girl baby of six weeks, referred by Drs. McMillan and Spragg. The confinement was normal, and when the baby was delivered, there appeared over the coccygeal region a round, soft, smooth, boggy tumor the size of a new-born child's head. After a few days this tumor gradually took on the oblong shape and became



SACRO-ILIAC TUMOR, ANTERIOR ASPECT.

nodular on the surface, so that when I first saw it on Aug. 12th, 1906. I found the following status: Baby fairly well nourished, breast-fed, bowels and urination apparently normal. Over the sacro-coccygeal region there is a tumor of the form of a large



SACRO-ILIAC TUMOR, POSTERIOR ASPECT.

oblong potato, protruding downward and backward. The length of the tumor is ten inches, and its diameter near its base four inches, near the top three inches. It is covered with normal skin, and in places with long lanugo hairs. Its surface is un-

even, presenting nodules in several places, from the size of a hickory nut to that of a hen's egg; some of these nodules are fluctuating, others elastic. The tumor is immovable, incompressible, apparently not painful nor tender. The anal opening is in front of it, the coccyx and lower sacrum covered by it. By rectum one feels the same nodular surface, and the rectal mucosa is freely movable over the tumor; there is no communication of the rectal lumen with any part of the tumor.

Operation on Aug. 18th, 1906. Chloroform anesthesia. Elliptical incision around the tumor near its base. Tumor freed from the skin down to its attachment between the rectum and coccyx, where it was shelled out without difficulty and removed. It evidently took its origin in the tissues between the lower rectum and coccyx. The skin flaps were then attached to the part of the rectum that was bared by the operation, and the wound closed. For several weeks the sphincteric action was disturbed, but finally became normal. The wound healed by first intention, and so far as I could learn the child has had no further trouble.

The tumor proved to be a conglomeration of a number of derivations of the three original germinal layers, the microscope showing indications of the presence of skin tissue, bone tissue, epithelial areas resembling the arrangement of liver cells, etc., so that it must be classified with those congenital tumors that Wilms has called "embryoid tumors." These tumors are never malignant, they never cause metastases, but some of them grow rapidly to considerable size, and their removal is imperative on account of their unsightliness and the inconvenience they cause.

THE EARLY DIAGNOSIS OF INCIP- IENT TUBERCULOSIS.

J. L. Pyle, M.D., Chester, W. Va.

(Read before the Hancock Co. Medical Society.)

The early symptoms of tuberculosis are not so easily detected as are the symptoms of some other diseases, yet as a rule they are sufficiently plain to him who is familiar with them. The symptoms produced by a small tuberculous focus are as a rule very slight, and are either unheeded by the patient or overlooked by the physician. Too

often the local signs are well marked and the constitutional symptoms unmistakable before a diagnosis is made. This nearly always means an advanced lesion, one which is most difficult to cure. It is the duty of the profession, the urgent duty, it may be added, to make diagnosis of tuberculosis early, for early diagnosis gives promise of prompt arrest of the process.

At times we are amazed at the manner in which the disease is overlooked in its early stages. Neither physician nor patient seems to recognize the early signs. Both seem to confuse these with other conditions. Many of these mistakes on the part of the physician come from the routine practice of treating symptoms and failing to make a diagnosis.

The tuberculous patient suffers from malaise; he is given a tonic with the purpose of building him up. His tuberculosis is unsuspected and left untreated. He may suffer from frequent and prolonged colds. He is given a spray or some favorite hobby, a cold cure; his tuberculosis is not recognized. He shows a variable appetite and loses weight; he is given a bitter tonic with some favorite digestant and no diagnosis made. Even yet the lungs have not been suspected, thus showing that our profession is not giving the best service it can to those suffering from tuberculosis. The physician must assume the responsibility in making a correct and early diagnosis by thorough examination of his patient, and thus prevent the spread of the disease. The physician must appreciate his opportunity and assume the responsibility of making an early and correct diagnosis if tuberculous patients are to recover.

The case known as "galloping consumption" is one which has probably been giving symptoms of incipient tuberculosis for months, perhaps years, but on account of a failure on the part of the doctor to make a proper examination, and taking subjective symptoms in place of getting busy and familiarizing himself with objective symptoms he has failed to grasp its true nature. When he awakes to the fact that his patient has tuberculosis, it is then too late for successful treatment. The lung tissue has already broken down, so he then terms it "galloping consumption."

While we desire to learn a more perfect

method of treating tuberculosis, we must not lose sight of the fact that present methods will, if applied early, offer health to a large majority of cases. If the medical men in general would expend but a fraction of the time in learning to diagnose, which a few scientists are expending in endeavoring to discover a cure, we would say that the cure for tuberculosis is already at hand, and mankind would be freed from the great white plague.

Tuberculosis can and should be diagnosed before bacilli are found in the sputum. It is not an acute but rather a chronic disease, alternating between periods of quiet and activity, sometimes months or years in duration. At times the patient suffers no inconvenience, and were it not for an occasional "attack of cold," as the patient terms it, he would not know that he was ailing in any way.

I have no new symptoms to offer and no new methods of examination which will shorten the road to diagnosis of early tuberculosis, but will discuss briefly what I believe to be some of the most important points in making early diagnosis of tuberculosis. In the first place, take time to examine the patient and don't treat symptoms alone. Don't try to examine a patient in a few moments. Don't trust to the stethoscope and what the patient tells you. It is well to suspect tuberculosis even though the tubercular bacilli can not always be found. Where the disease is expected, it is of the greatest importance to get the family history. Find out if any of the relatives had tuberculosis, or if patient has been closely associated with anyone who has the disease. Some occupations may lead to tuberculosis, such as stone and marble cutters, coal miners, etc. Take a careful clinical history, which will render the presence or absence of tuberculosis probable. Upon this history depends the physician's further action.

The patient may give a history of slight intercostal neuralgia, some hoarseness at times without cause, continuous malaise with loss of strength, some nervous symptoms, trouble with indigestion, frequent colds, slight rise of temperature, especially in the evenings, loss of weight, a tendency to pleurisy and spitting of blood. All of these symptoms are suggestive of tuberculosis. If one or several of these symptoms

are present, other methods should be used to complete the diagnosis.

The patient should be stripped to the waist and a thorough inspection made of the chest. Notice if there is a difference in the movement of scapula in deep breathing, which may be of value in the detection of an infected lung. Examine the chest. Place hands on chest, palms down and extending over the clavicles and upper ribs. As the patient breathes look for difference in expansion; the affected side expands more slowly and not so fully. This slowness does not of necessity mean the presence of tuberculosis, but is only one of many points that go to make up a diagnosis. Make, if necessary, repeated microscopical examinations. Administer the tuberculin tests, which are numerous.

Tuberculosis must always be considered a serious disease. It is never too early to begin the treatment. The disease has nearly always gained considerable headway before the physician is consulted. Many patients do not quite understand the gravity of the situation, and the physician must be firm and positive if anything in the way of treatment is to be accomplished. There is a marked disposition in human kind to regard as of little importance mandates or decrees, unless there is distinct evidence of their reasonableness. There is no one who does not earnestly hope to escape contagion, and if he is made to understand how, he is almost sure to lend his aid.

We need a better appreciation of the symptoms of tuberculosis, a better understanding of the art of cure, and the co-operation of both physician and patient in applying the remedies as soon as the disease is discovered. "Early recognition with immediate intelligent treatment are the essentials to success."

THE USES OF GLYCERIN IN MEDICINE.

G. D. Lind, M.D., Greenwood, W. Va.

Glycerin is a tri-atomic alcohol, but unlike the greater number of the alcoholic series of carbon compounds, it is perfectly harmless unless used in enormous quantities. Wood says: "So far as we know, the largest amounts of glycerin taken by the

stomach in man have produced no other symptoms than those of mild gastro-intestinal irritation; but Schellenberg has reported a long series of cases in which serious and in one instance fatal poisoning followed the injection of glycerin containing iodoform for coxitis and other diseases. The conclusion of Schellenberg that the manifestations were due to glycerin, is confirmed by the fact that they were those seen in the lower animals poisoned by the injections of glycerin, namely, elevation of temperature, rapid pulse, albuminous urine with tube casts, and in the fatal case the lesion of acute parenchymatous nephritis."

In doses of from one to two ounces it acts as a gentle laxative, but is uncertain in its action, and as there are many substitutes it is not best to use it for this purpose.

Glycerin is very hygroscopic. This property must be taken into consideration in using it for skin affections. If a softening action is desired, as in certain skin diseases characterized by hard, scaly crusts, it is the proper vehicle for antiseptic remedies. It is a common remedy for chapped hands and lips, and for excoriations of the skin generally, but here it is wrongly used, for its hygroscopic property makes the skin very tender and hypersensitive. Linseed oil, which oxidizes on drying and leaves a thin, flexible protective coat, is much better in such cases.

Most proprietary pastes, creams, ointments, etc., contain glycerin. When we prescribe such we are striking a blow in the dark, for we do not know whether we are going to help or hinder the cure of the skin disease. Eczema in its protean forms is one of the most difficult skin diseases to cure. The reason probably lies in the fact that water is deleterious in this skin affection, and most of our remedies are either in the form of lotions containing water or ointments containing glycerin which attracts moisture from the air. It has been my experience that an oxide of zinc paste made with lard, vaselin or lanolin will cure most cases if water and glycerin be kept away from the affected parts. The old application and the natural exudation of the skin can be washed away with warm vaselin and a soft cloth or bunch of cotton, and water be entirely dispensed with in the treatment.

There are certain persons who can not tolerate glycerin on the skin or mucous membrane. This idiosyncrasy can only be determined by trial.

Glycerin has a decidedly stimulating action on mucous membranes, and should be used in all cases where secretion is deficient. The dry tongue and mouth of typhoid fever patients are benefitted by frequent bathing with glycerin and water. As an expectorant or addition to expectorant preparations it should take the place of sugar. The latter readily ferments in the bottle if the syrup be not strong, and the tendency to ferment in the stomach before absorption should be considered. As a vehicle along with a proper quantity of water it should be used in all washes for mucous membranes, whether of mouth, nasal cavities, vagina, urethra or rectum. Even in eye lotions a minute quantity is of advantage.

I wish to emphasize the importance of glycerin as a vehicle for internal remedies; not so much for the reason that it is desirable in itself, but because it can take the place of alcohol and sugar as a diluent and preservative. There is evidently a growing dislike to alcohol as a medicine *per se*, in the medical profession. But there seems to be no great amount of opposition to alcohol as a vehicle. Tinctures and fluid extracts are still prescribed, some of them containing as much as 40% alcohol. The principal reason for this is the desire for a palatable and elegant-appearing preparation. It is not generally known that glycerin will make a finer preparation than alcohol or sugar. Tinctures which can not be reduced with water without making a disgusting mixture can be diluted with glycerin and water until the dose can be given by drams rather than by drops. Certain patent medicine firms are now using glycerin in the preparation of their nostrums. While their motives are not the best, being only to avoid the necessity of stating the percentage of alcohol to comply with the Pure Food and Drug Law, the effect will on the whole be better for the people who will persist in buying nostrums, whether for the purpose of getting the alcohol or in the hope of a cure of some affection.

Physicians are no doubt in many cases responsible for the great number of drug

habitués, including the alcohol fiends. If we can do away with alcohol as a medicine, and almost entirely as a solvent and preservative, we have made one great step in temperance reform. In glycerin we find a substitute, for it is soluble in both alcohol and water, and can be mixed with nearly all drugs in almost any proportion, without causing precipitation. It is true that many alkaloidal salts are thrown out of solution by glycerin, but in such cases nearly pure glycerin may be used, for it is a solvent for all alkaloids.

In regard to its so-called poisonous properties, it seems that it is only when used hypodermically or in sinuses that it is dangerous. The latest experiments prove that glycerin is to some extent a food, and may take the place of fats and oils. Where medicine is required in tuberculosis, why not use glycerin and get the benefits of its nutritive properties, instead of resorting to nauseous cod-liver oil which is of no value except as a food?

There is no substance which has equal power with glycerin in disguising nauseous medicines. Castor oil, turpentine, solutions of iron and various other medicines can be diluted and at the same time almost completely disguised by glycerin. As Wood says: "It seems to envelope the medicinal substance and prevent its action on the palate."

APPENDICITIS AS A COMPLICATION OF PREGNANCY

S. D. Hatfield, M.D., Iaeger, W. Va.

Appendicitis probably occurs as frequently during pregnancy as at other times; but until recently it has been frequently overlooked, in great part, no doubt, because of the difficulty of diagnosis. It should be regarded as a very serious complication, as many women die if not operated upon, while the surgical procedures undertaken for its relief are frequently followed by premature labor.

Pregnancy does not predispose to the occurrence of appendicitis, but in case of chronic disease in which the appendix has become adherent to the uterus or its appendages, exacerbations may result from the traction exerted by the enlarged uterus

and the physiological congestion of the pelvic viscera. Moreover, when the process has gone to abscess formation, the rapid increase in the size of the uterus may bring about rupture of the abscess walls.

The symptoms should not differ from those observed in non-pregnant women, but the condition is frequently overlooked, as the pains are often considered to be due to the pregnancy itself, while the distension of the abdominal walls by the enlarging uterus makes difficult the appreciation of the rigidity and muscle spasm, which to me are very valuable diagnostic aids.

The physician should always consider the possibility of appendicitis when a pregnant woman complains of pain in the right side of the abdomen, especially if this be associated with an elevation of temperature and pulse, provided some more satisfactory explanation for the condition cannot be found. It is well to remember that pyelitis and inflammatory conditions of the appendages may give rise to identical symptoms. At the time of labor and during the puerperium the recognition of appendicitis would be more difficult. No doubt many women have died of perforative peritonitis, the condition having been diagnosed as puerperal septicemia.

I here report the following case:

F. R., mulatto, aged 19 yrs., was first seen by me on May 6th, 1910.

Previous History.—Gives the history of having had almost all the diseases common to infancy and childhood, with complete recovery. Began to menstruate at the age of 14 years. Has been regular until January, 1910, since which she has missed three menstrual periods. Has been married two years. No history of appendicitis prior to the present time. Family history negative. Denies all history of gonorrhoea or specific disease.

Present Illness.—Eighteen hours previous to my first visit patient was seized with a very severe pain in the right iliac region which continued unabated up to that time. Bowels moved two or three times during the acute attack. Patient also vomited all food, fluid and medicine taken by the stomach. Temperature 102.4°, respirations 28, pulse 120.

Physical Examination.—General appearance: very thin and not well developed. Pupils contracted but react naturally; mucous membrane red and dry; lips pale; pinched expression; pulse normal in force and volume but very rapid; respirations shallow and jerky; abdomen rigid and tense, with general tenderness and considerable tympanites; pain and tenderness more marked in the right iliac region; urine highly colored and shows a strong reaction to indican test. An in-

distinct mass was made out on the right side of the umbilicus reaching down into the iliae fossa. The uterus was found on a level with the symphysis pubis, globular shaped and freely movable.

A diagnosis of appendicitis was made. No blood count was made, but the presence of pus was suspected from the physical signs.

Operation.—A long incision was made through the dense fibers of the external and internal oblique muscles and fascia somewhat nearer to the anterior superior spine of the ilium than the umbilicus, over the tumor, to facilitate drainage. A small quantity of a free milky, purulent fluid escaped, and a distended and congested loop of the small intestine immediately presented itself in the wound, but was not adherent. The appendix was found adhered to the lateral wall of the head of the cecum, and also by its mesenteric attachment to the parietal peritoneum. It was quite gangrenous and had a perforation at its distal end.

The appendix and meso-appendix were ligated *en masse* and removed, the stump carbolized and dropped back into the peritoneal cavity. The abdomen was closed with drainage, and the patient left the operating table in good condition. She was put into the Fowler position, and Murphy's proctolysis started, and kept up for twenty-four hours. On the second day after the operation the wound was dressed, and considerable pus was escaping. The wound was redressed daily for ten days, at the end of which time the drains were removed. The patient was able to walk out of the hospital on May 28th, the seventeenth day. June 4th patient is up and doing well.

Selections

WHAT I WANT TO EXPECT OF MY COUNTY SOCIETY.

J. Clark Cooper, M.D., Villisca, Iowa.
President Montgomery County Medical Society.

To answer this question, but few words are required but to answer the one that immediately follows, requires more.

It should read like this, "What I expect from my county society and how I am going to get it."

To answer the first clause I will say, professional improvement and social enjoyment. Though I speak only from a theoretical standpoint, it seems to me that we could develop the social side with great pleasure to ourselves and much benefit to the organization. With the assistance of the gentler sex we should be able to infuse enough life into the organization to make it worth while to attend.

However, by far the most important phase of this question is the professional improvement we expect to get from our society work.

It was to better the profession that our predecessors formulated the present system of organization and it is for the present generation of medical men to make good along the lines they laid down, for now more than ever before in the history of the world does success depend on organized effort. It is an age of organization.

Such a thing as an independent worker is an impossibility. Each branch of medicine is dependent on the other and the working society is the best known remedy to stimulate progressiveness, and the best preventive for medical narrowness.

If we expect to be benefited by our county society, it must be more than an organization in name only, we must have meetings and do something in them, and the number of those meetings per year, and the percentage of members in attendance will give the index of progressiveness of that county society as a whole. We should have a minimum of four meetings a year, with the privilege of as many more as each local society desires.

There are no valid excuses for repeated absences. The busiest men not only attend county societies but district, state, national and special. The laity does not begrudge us the time, they rather expect it, and the man who attends and takes part in the work of his society is the one who deserves confidence and patronage, and he will get it.

Medical men are of two classes, one is advancing, the other on the retrograde; and if we expect to trot in the former class we must meet together, measure ourselves by the other fellow's standard, especially the ones better than ourselves, exchange ideas, find our weak spots and strengthen them. You know the old adage: "A chain is no stronger than its weakest link," and our weakest links are the cause of our failures and by them we must learn. Therefore it seems obvious that we can improve ourselves in no better way than by frequent meetings.

Having decided that we must meet, there comes a still more importance phase,—What am I to expect when I do attend? Will I have to listen to everything from Johnny's

swallowing the tin whistle to a discourse on somniform? I hope not.

Let the work of the society be systematic; if no regular course of study can be pursued with advantage, let each meeting have some certain line of work, equally distributed among all classes of members as to age, experience and so forth. Let the program committee select the line of work, the speakers, also the principals in the discussions. See to it that the man of thirty or thirty-five years practice is given opportunity and due credit for his wealth of experience, also that the recent graduate is made to feel at home by giving him the newer technical work with which he is familiar. In this way, by distributing the responsibility, the interest in the society should be easily maintained. A program so carried out will be more satisfactory than one of the hit and miss type where each participant selects his own subject and shows his skill as a hobby horseman.

After the reading and discussing of papers, I know of no department more interesting, nor more neglected than the presentation of cases, for illustration or diagnosis. Rare cases in this way could be utilized for the benefit of all. By canvassing the county, material sufficient can usually be obtained to enable the county society to present a good clinic in any of the branches of medicine or surgery, and there is no reason why we should not use this material for teaching purposes. We will go to Chicago or points farther away to attend clinics and profit by their teachings. We cannot equal them. No one pretends to do that, but we can offer no excuse for ignoring the possibilities we have at home except jealousies, laziness and disinterestedness.

Another branch of this department is the exhibit of specimens and photographs of cases that are rare and instructive.

Then there is another department, that of instruments and apparatus. Let us say we have a program on stomach diseases, why should not our instrument men who are such good friends of ours send us an assortment of the latest apparatus, instruments, etc., pertaining to the subject under discussion, so that we can keep in touch with the latest and best along mechanical lines of diagnosis and treatment.

If we will not become interested in our-

selves, do not expect anyone else to stir us out of our lethargy.

Another department that has been justly getting into the limelight the last few months is that of *Materia Medica* and Therapeutics. We are all therapeutists, no matter which branch of the profession furnishes us our work. We are all, with very few exceptions, doing general practice regardless of what our professional cards say. And the idea seems to have pervaded the medical profession that the degree of M. D. is big enough to cover that of Pharmacy as well, forgetting that it is now recognized as a distinct profession.

I think the investigations of the Council of Chemistry and Pharmacy have opened the eyes of many of the profession, and a retrospective view of their therapeutic activities of the years past is anything but pleasant.

Now, why should not the county societies follow the custom of the state and national societies, as well as local societies in many eastern cities, and open negotiations with their local pharmacist. He will be able to give you much valuable assistance in the preparation of your therapeutic agents.

The day of pharmaceuticals is on the wane, and it is to our druggists that we will be soon compelled to look, so let us ask them in and give and take. Let us practice medicine and get out of the drug business.

After my society has utilized all the material in my own county, I shall expect them to occasionally invite in men who reside in the neighboring counties, for two special reasons.

First, because it will develop mutual good fellowship.

Second, it will stimulate good work in both counties, for they will in turn invite their neighbors and your society benefits, and privileges will be correspondingly increased.

The others to be invited are those prominent in the profession in your section. See to it that the visitor comes as a teacher and also that he presents something of interest and something that will benefit you and help you to advance yourself—and pay him for it.

It is time wasted to listen to interesting discourses in which the author has but one thing in his mind, to make it so difficult.

complicated and discouraging to his listeners that they will believe themselves incapable of even aspiring to reach the pinnacle he has built for himself, and hereafter will refer all this work to him.

From a business standpoint there are a few things that I expect my society to do.

First, it is a mistake to retain men in good standing year after year who will neither appear on the program nor be present at its meetings. * * * *

Do not allow your society to be used as an advertising medium for one of your own members or by visitors from your neighboring cities. Counties located within a few hours ride of one of the larger places have been considered legitimate picking by the men in those places.

They want all your business they can get either by making you believe you are incompetent or by making your patients think so. * * * *

To Summarize.

1. Develop the social side with the assistance of the ladies.
2. Improve yourselves professionally by frequent meetings.
3. Let the work be systematic and be outlined by the program committee.
4. Occasional joint meetings with the pharmacists.
5. Selection of suitable men from outside the county to appear on your program.
6. Refuse legal protection to the drones of the society.
7. Develop a little enthusiasm of your own for yourself and your possibilities.

Now, gentlemen, if I can go home and do all these things as they should be done, you will hear a big noise down in my corner of the state.—*Iowa Medical Journal*.

THE ETHICS OF CONSULTATION.

James T. Fisher, M.D., Los Angeles, Cal.

The subject of this paper bristles with many delicate problems, and there are so many trying situations, which cannot be solved by any fixed Code of Ethics, that the writer feels himself in no way competent to present more than a cursory review of the subject together with a few thoughts relative to a better feeling which may be engendered between the practitioner and

the consultant. The method of consultation has changed during the past few years, owing to the fact that specialism has divided medicine into various branches.

When all men were general practitioners, and no one was supposed to know more about one subject than another, a consultation was somewhat after the manner of a committee meeting; the majority cast the vote, and the vote was reported to the patient.

In these days medicine has become a science rather than an art and a consultation is a very different matter. It seems to me that certain points are essential in an ideal consultation:

First, it must be early enough to do good. How often do we know of cases, where, when the patient is about to die, a consultant is called, only to say, "There is nothing to do." This may possibly serve as a protection to the reputation of the attending physician, but his conscience would have been better protected had he called the consultant while it was still possible that something could be done.

A consultation is indicated immediately when the patient is not improving to our satisfaction. We should remember that his betterment is the main object of the consultation and that it can be best served by early, rather than late, advice.

The second important step is the choice of the *proper consultant*. This is difficult for these are days of specialism in medicine, as in all else. We are nearing the stage of the German professor, who spent his entire life in the study of the Dative and Ablative cases in Latin, and whose only regret at his death was, that he had not confined himself to the Dative alone.

We should recognize that the man who has devoted his years of study and research, say to the eccentricities of that organ called the heart, would be in a position to give more intelligent advice concerning its management than one who had not given it special attention. Our time is limited, and one man *cannot* learn *all* about *everything*. Let us choose then, the man for consultation who is in a position to give us the most help.

Next, I should like to say a word about the demeanor of the consultant during the consultation. It is of the greatest importance, for upon it will perhaps depend the

existence or non-existence of future consultations.

He should be introduced by the attending physician to the patient and family. It is best that he be allowed to examine the patient alone, having previously gotten the history from the attending physician. He should be careful to make little or no comment to the patient, nor to the family thereafter. In conclusion, the physicians should, in private, review the case in detail, determine the diagnosis, and agree upon a definite line of treatment. The result of this consultation should be presented to the family or patient by the family doctor.

The last point is in regard to how much of the findings of the consultation shall be told the patient. Here again no Code of Ethics can solve the problem. Good judgment and moral uprightness alone are the guides. The patient is paying for the opinions of the expert, and he has a right to know them. If there be more than one consultant, there may be divergent opinions. There may be a choice between operation or medical treatment, between a risk-all for a definite cure, or a certainty of partial invalidism. The patient and the family have a right to know all opinions and to choose for themselves.

This, we say, is in a measure the ideal consultation, yet no unyielding laws of conduct can be laid down. Every case is a law unto itself, and all one can do is to be honest, thoughtful of our fellow doctor, and above all, use that God-given, alas, sometimes God-withheld quality—tact.

But the great fact remains that consultations are not indulged in to any great extent by the profession at large; they are delayed as long as possible, and frequently the patient or family are the first to ask for them.

There must be a reason for this, and we have not far to go to find it. It is not because we are lacking in honesty, nor in an earnest desire to do all possible for the benefit of the patient; nor is it to save the patient's purse (for almost all doctors lower their fees to the ability of the patient).

It is, I think, on account of the frequency of the loss of patients and families from the attending physician's visiting list, after the consultation. If the patient's improvement after the consultation is thought to be due to the wisdom of the consultant, he is likely,

in the next illness, to be called in place of the attending doctor.

The consultant himself is too frequently the sinner, in fact must bear his share of the responsibility for the infrequency of consultations. His unethical demeanor makes consultations feared rather than courted. He is too frequently inclined to ignore the physician in charge. He talks to the patient and family, and often leaves the impression that had he only been called earlier, the patient would now be well. Worse than that, he sometimes criticises the attending physician openly. At best, he leaves doubts in the family's minds and the future usefulness of the family doctor is impaired.

It is true that the consultant often does find some egregious error, either in diagnosis or treatment, but with tact in his mouth and kindness in his heart there are usually ways of remedying even this, without injury to the family doctor.

This lack of ethics, or of the thoughtful conduct in consultation, arises from actual thoughtlessness, usually coupled with ignorance of what is really expected. There is no better place to get this knowledge than in the medical school, and early in the course at that, so that one may grow, unconsciously, to have an ethical mind—an aseptic mind—just as, unconsciously, the trained surgeon has aseptic hands. There should, at least, be a series of lectures lasting throughout the course, to keep ethical principles, and kindness and thoughtfulness of one's fellow doctors ever before the mind of the student.

Then, too, the laity in a measure regards the request of a physician for a consultant as a declaration of weakness and inefficiency, rather than of strength and honesty.

This attitude of the public mind is due, it seems to me, to the very fact that consultations are rare, and a consultant is used only in dire extremity. So cause and effect go in a circle.

If the profession made use of them more frequently, whenever, in all honesty, they are indicated, the public would come to regard them in their true light, as simply one of the valuable aids in the best treatment of the case.

That a consultation is valuable, I think no one with any experience will deny. It is a

lamentable fact, but one we must face, that hundreds of people die every year whose lives might be saved, if we would ask for assistance from those in a position to know more of the subject than we, or even those, perhaps no wiser, who may see something that our eyes, accustomed to the symptoms, may have overlooked.

Especially is it desirable for the doctor newly graduated to indulge in consultations, for a diploma from a medical school is not, alas, a certificate of unlimited wisdom. Away down in our hearts even the best of us know that we are sometimes unfit to have the precious lives of loved ones entrusted to us, but because we know of no class more fit, we accept them, and do the best we can. But in all honesty, let us give them the benefit of all knowledge there may be in the profession, and not limit them to that in the narrow confines of one man's brain.—*Southern California Practitioner*.

TOLERANCE TOWARD CRAZES.

When a thorough study of the literature, addresses, actions, and doings of the Christian Scientists convinces us that their so-called system is a mixture of fraud, stupidity, and insane delusions; when the chief priestess of the cult—who, while preaching her doctrines, has not forgotten to become enormously rich—tells us, for instance, that she *instantly* cured a cancer which had eaten into the flesh to a degree that "the jugular vein stood out like a chord;" when the literature is found to consist of the most imbecile gibberish, absolutely unintelligible to a rational being; when the reports of their cures prove on examination to be either pure inventions or gross exaggerations (except in cases of functional neuroses); when in addition to all that, we see that all their healers, from the highest to the lowest, are furiously bent upon making money, and will not distribute any of their comfort or preach any of their truth without a consideration; when we learn that the chief absent-treatment-fakiness—down in Florida, against whom the postoffice officials had to issue a fraud order—obtained \$200 from a man in New York, under a promise to make his shortened leg two inches longer by *thinking* of it; when osteopathy, which is nothing but a perfected massage, impudently makes claims as a complete system of medicine, capable of curing the most diverse diseases by external manipulation; when an osteopath claims, for instance, that he can "reduce" typhoid fever (as if it were a dislocation), by pressing upon the seventh cervical vertebra; when we see these mostly illiterate bonesetters knocking at the doors of various legislatures to be admitted to the practice of medicine without proper educational requirements; when we see that the followers of these cults en-

danger not only their own lives but also the lives of the community by refusing to take any precautions in the infectious diseases; when, what is still worse, innocent little children are allowed to die in agony without any attempt at relief—a child that sustained an extensive burn, and another one that had diphtheria in a most virulent form, were cruelly prevented from getting medical aid by their Christian Scientist parents, until death freed them from their cruel sufferings—we say, when we see such facts of similar and worse character, then it becomes our duty to assume an unequivocal attitude. We must expose the humbugs and fight the knaves whenever and wherever we can. This must be the attitude of the medical press, of the medical societies as a whole, and of every right-minded physician, as an individual and as a citizen.—*Critic and Guide*.

"Medicine, sometimes impertinently, often ignorantly, often carelessly, called 'allopathy,' appropriates everything from every source that can be of the slightest use to anybody who is ailing in any way, or like to be ailing from any cause. It learned from a monk how to use antimony, from a Jesuit how to cure agues, from a friar how to cut for stone, from a soldier how to treat gout, from a sailor how to keep off scurvy, from a postmaster how to sound the Eustachian tube, from a dairy maid how to prevent smallpox, and from an old market-woman how to catch the itch insect. It borrowed acute puncture from the Japanese, and was taught the use of lobelia by the American savage. It stands ready today to accept anything from any theorist, from any empiric who can make out a good case for his discovery or his remedy."—Dr. Holmes.

"If you cannot acquire and keep the confidence of your patient, it is time for you to give place to some other practitioner who can."—Dr. Holmes.

THE CHOIR INVISIBLE.

Oh may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence; live
In pulses stirred to generosity;
In deeds of daring rectitude; in scorn
For miserable aims that end in self;
In thoughts sublime that pierce the night like
stars,
And with their mild persistence urge men's
search
To higher, vaster issues.

May I reach
That purest heaven—be to other souls
The cup of strength in some great agony;
Enkindle generous ardor; feed pure love;
Beget the smiles that have no cruelty;
Be the sweet presence of a good diffused,
And in diffusion ever more intense!
So shall I join the choir invisible,
Whose music is the gladness of the world.

—George Eliot.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor*.

ASSISTANT EDITORS

L. D. WILSON, A.M., M.D., G. E. LIND, M.D., Ph.D.,
C. A. WINGERTER, A.M., M.D., LL.D.

WHEELING, W. VA., OCTOBER, 1910.

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

OUR FORTY-THIRD ANNUAL MEETING.

The program of the 43rd annual meeting of the State Medical Association is in the hands of the members; and lest some may have failed to receive a copy, and for the information of our other readers, we have printed it on another page of this issue of the JOURNAL, which we are sending out in advance of its usual appearance, that it may reach all of our readers some days before the meeting.

The President and Secretary have worked hard to arrange a program that would be satisfactory to all, and surely they have been abundantly successful. A great variety of themes, medical and surgical, is presented for our delectation and instruction. Secretary Butt has worked as have few secretaries to promote the growth and prosperity of our state medical organization, and no one who has ever filled the position of secretary will ever be inclined to criticize for his strenuousness, since nothing short of this will bring the desired

results from a certain class of men. The secretary's predominant idea has been to develop discussion, and with this end in view he was inclined to limit the number of papers and shorten the time of reading them. We have discouraged the former idea, since our experience has taught that many who promise papers fail in the end to produce them. This was notably the case last year. As a result we have had considerable difficulty in procuring for the JOURNAL a sufficient number of papers to fill our columns, and have had to draw on outside friends to supply the deficiency.

If any essayist can express himself with sufficient clearness and force in a ten-minute abstract of his paper, we advise that he do so, allowing the full paper to go to the JOURNAL. In this way he will command more undivided attention, and more time will be reserved for discussion. But our laws permit an essayist to consume twenty minutes, beyond which the members will rarely listen attentively, and any reader can be called down at the expiration of this time. Discussion certainly adds very greatly to the interest of all medical meetings. There are always a limited number who are willing to engage in discussion, but the great majority are never heard from. This is to be deprecated. New men are always heard with interest, and we suggest that the native modesty be this year left at home, and that each member carefully study the program in the few remaining days before the meeting, select one or more topics that may be of special interest, prepare himself by reading and reflection to express himself concisely, and come to the meeting ready to take part in the discussion, and thus add his mite to the general good. Thus the interest of our meeting may be greatly increased, and thus each member taking part in it will be made to feel a greater interest than he may have heretofore felt.

Parkersburg is a beautiful city. It is in a part of the state that has been well organized for many years. The committees have been making fine preparation for our comfort and entertainment. Let us reciprocate by turning out *en masse*, and may we be able to exceed even the famous Clarksburg meeting in attendance. Casting dull care away, let us refresh and re-create our-

selves. October is a charming month, and one of our most healthful. Our patrons will appreciate our efforts to thus increase our knowledge of disease, for does it not inure to their welfare? That patron or patient is very short-sighted who throws anything in the way of his physician attending the meetings of his medical associations, be these yearly, monthly, or weekly. The most busy and intelligent physicians are those most frequently present at these meetings. So turn your professional business over for a brief period to one of the non-progressives, and the loss will not be yours. You will get a rest; you will learn something that your substitute does not know; you will mingle with the best set of men on earth, and take home with you most delightful impressions that will long linger with you in your work; and you will make new resolves for the future that will brighten your whole life. You will love mankind, and especially your professional brethren, better than ever before; and if you are half a man, you will try ever after so to shape your life and conduct as to draw men to you and not repel them.

"Look up, not down, out, not in, forward, not backward, and lend a hand."

ALL ABOARD FOR PARKERSBURG!

S. L. J.

SECRETARIES, ATTENTION!

Mr. Secretary:

MY DEAR SIR:—

You are a very important person, the most important in any medical association. Upon you largely depends the scientific interest of your organization, and almost altogether its financial success. We all recognize that yours is a hard place to fill. The members will not always do as you wish them to, and especially are they careless in money matters. Almost all of them are honest, paying their grocer, their dry-goods merchant, their cigar and tobacco bills, and some indulging even in unnecessary and expensive habits of an injurious nature. But to pay their financial obligations to the medical society promptly does not occur to many. And you, poor man, have to bear the burden of collection. We are sorry for you. How often you have to ask for those dues no one but you knows. Still it is your duty to persevere, and the society

owes you a debt of gratitude that is rarely paid. But for you the society would soon become bankrupt, and some of them have done so, simply because the secretary failed to persevere. We don't want to add to your misery by scolding, but really if you haven't collected the dues of all the members on the roll of your society, there has kept out of the JOURNAL'S treasury one dollar for each delinquent, for every one of them has received the JOURNAL every month of the year, and is still receiving it. There is still time to make a reputation for yourself before the annual meeting of the State Association, whose secretary tells us that we are behind last year's record of membership. Go for those delinquents once more, and if any positively decline to pay their just dues, kindly call their attention to the fact that the society has been taxed to send them the JOURNAL during the year, and since the editor has never been requested to discontinue it, these delinquents are in honor bound to send us a dollar each to liquidate our indebtedness to the printer. Collect the dollar and send to us, and we are forever your debtor. But we greatly prefer to have the whole dues paid, and every members' name retained on our roll of progressive physicians.—THE EDITOR.

Have your local paper boom the Parkersburg meeting!

SUICIDE RECORD FOR 1909.

The *New York Times* has this to say editorially regarding the analysis of the last year's suicide record which recently appeared in *The Spectator*:

One is almost tempted to take a gloomy view of our complex American civilization on looking over the suicide record for last year, published last week by *The Spectator*, a life insurance journal of this city, to find that 12,500 persons deliberately took their own lives. This feeling of discouragement is not lessened by a comparison of these figures with the records for previous years. It is true that the unofficial estimate for 1909 is not greater than the actual record for 1908. But the latter was the greatest suicide year in the history of the country, due in large measure, it was thought, to the after effects of the 1907 panic. Fair comparisons must embrace a considerable number of years, and then the almost unbroken increase becomes apparent; the excessive sacrifice of lives little short of appalling.

In 1890 sixty-five leading American cities showed a population of 10,903,441, 1,343 suicides, and a suicide rate of 12.33 per 100,000 population. Five years later these cities had increased in population to 12,623,983, with 1,909 suicides, or

15.8 suicides for every 100,000 persons. In 1900 the rate was 16.3, 19.3 in 1903, and 20.7 in 1904. There was a slight falling off in suicides for the next three years, a period of general prosperity, but the panic in the fall of 1907 sent the rate again above 20 per cent, and there it remains. The full force of the increase is at once seen by the close association of the rates, 12.3 and 20.6, at the two extremes of the twenty-year period.

Mr. Frederick L. Hoffman, who analyzed the figures for *The Spectator*, has been able to draw some interesting conclusions. Forty-two of the sixty-five cities for which the records are complete show an increase for last year over 1903, the slight decrease in each of the three remaining twenty-three cities alone bringing down the average a point below the high-record rate of the year before.

The increase was greatest in Denver, or 22.2 per cent, followed by Salt Lake City with 22.1 and Hoboken with 22 per cent. The highest actual rate in 1909 prevailed in San Francisco, with 59.9 suicides for every 100,000 population. Oakland, on the opposite side of San Francisco Bay, came next with a rate of 55.1, and Hoboken third, with a 52.6 rate. Interestingly, Mr. Hoffman finds the same cities maintaining their high suicide rates from year to year with almost unbroken regularity. It is actually significant, however, and not readily explained, that most of the cities returning highest suicide rates contain proportionately large Teutonic populations.

Perhaps the most striking conclusion is to be drawn from a study of the methods resorted to by those bent on "ending it all." It is that, after all, the suicide is at heart a coward. This has been asserted often, but here seems capable of mathematical demonstration. The larger number of suicides, or 4.8 per cent out of a total of 14 per cent for five years, 1900-1905, resorted to poison, always considered a coward's weapon, while 1.1 per cent employed asphyxiation closely related to drugs in the sense of ease and absence of blood. Such methods as hanging, cutting, jumping from high places, and crushing, all of which hurt, are occasionally heard, but the records show they are not popular. F. L. H.

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY.

A special report on birth registration is being prepared under the direction of Dr. Cressy L. Wilbur, Chief of the Division of Vital Statistics of the Bureau of the Census, for the first annual meeting of the American Association for Study and Prevention of Infant Mortality which will be held in Baltimore in November. The report of the committee on birth registration will be presented at the session on municipal, state and federal prevention, of which Dr. Wm. H. Welch is chairman. The members of the committee on birth registration include in addition to Dr. Wilbur:—

Dr. Wilmer R. Batt, Commissioner of Vital Statistics, Harrisburg, Pa.

Dr. Charles V. Chapin, Commissioner of Health, Providence, R. I.

Dr. John S. Fulton, Sec'y General Int. Cong. on Hygiene and Demography, Washington, D. C.

Dr. John N. Hurty, Sec'y State Board of Health, Indianapolis, Ind.

Dr. Wm. C. Woodward, Health Officer, Washington, D. C.

The meeting will open with a general session on November 9th. On the 10th and 11th there will be four special sessions, as follows:—

Municipal, State and Federal Prevention.—Chairman, Dr. Wm. H. Welch, Johns Hopkins Medical School, Baltimore; Secretary, Dr. John S. Fulton, Sec'y General Int. Cong. on Hygiene and Demography, Washington.

Medical Prevention.—Chairman, Dr. L. Emmett Holt, 14 W. 55th Street, New York City; Secretary, Dr. Philip Van Ingen, 125 East 71st Street, New York City.

Educational Prevention.—Chairman, Dr. Helen C. Putnam, chairman of the committee to investigate teaching of hygiene, appointed by the American Academy of Medicine, 1903, Providence, R. I.; Secretary, Prof. Abby L. Marlatt, Department of Home Economics, University of Wisconsin, Madison, Wisconsin.

Philanthropic Prevention.—Chairman, Dr. Hastings H. Hart, Director Department of Child-Helping, Russell Sage Foundation, 105 East 23rd Street, New York City; Secretary, Mr. Sherman C. Kingsley, Supt. United Charities, Chicago, Ill.

The officers of the association are:—President, Dr. J. H. Mason Knox, Jr., Baltimore; President-elect, Prof. Chas. Richmond Henderson, Chicago; Vice-President, Prof. C. E. A. Winslow, Boston; Vice-President, Mr. Homer Folks, New York City; Secretary, Dr. Linnaeus E. La Fetra, editor, *Archives of Pediatrics*, New York City; Treasurer, Mr. Austin McLanahan, care Alex. Brown & Sons, Baltimore.

The headquarters of the association are in the Medical and Chirurgical Faculty Building, 1211 Cathedral Street, Baltimore, Md.

For information or circulars write to the executive secretary, Gertrude B. Knipp at above address.

HOW TO SLEEP OUTDOORS.

"Direction for living and sleeping in the open air," is the title of a pamphlet being sent out today by the National Association for the Study and Prevention of Tuberculosis to its local representatives in all parts of the United States.

The pamphlet is meant to be a handbook of information for anybody who desires to sleep out of doors in his own home. It emphasizes the fact that outdoor sleeping is as desirable for the well as for sick. The booklet will be sent free of charge to anyone applying for it at the headquarters of the National Association for the Study and Prevention of Tuberculosis in New York, or to the secretary of any local or state anti-tuberculosis association.

Some of the subjects of which the pamphlet treats are, how to take the open-air treatment in a tenement house; how to build a small shack or

cabin on a flat roof in the city; how to make one comfortable while sleeping outdoors either in hot or cold weather; how to arrange a porch on a country house; and how to build a cheap porch; the construction of tents and tent houses; the kinds of beds and bedding to use in outdoor sleeping, and various other topics. The book is well illustrated and attractively prepared.

The object of the book is to suggest particularly to consumptives who cannot secure admission to a sanatorium how they can be treated at home under the direction of a physician. In view of the fact that there are less than 25,000 hospital beds in the United States for consumptives and fully 300,000 who should be in hospitals, the National Association urges that more attention be paid to sleeping in properly provided places at home, and that in every case the best be made of the patient's environment.

NOTE.—By applying to the secretary of your local Anti-Tuberculosis Association you may be able to get a local card to this story, with regard to the number of tuberculosis cases in your community and the provisions now made for their care.

State News

After Oct. 1st, Dr. Harris of Mill Creek will be in Europe for seven or eight months pursuing a course in General Surgery at the University of Vienna.

During this time and from September 15th, Dr. W. H. Daniels of Baltimore will be in charge of his practice.

Dr. D. is from the University Hospital of that city, where he served one year as interne and still another year as assistant resident physician.

We regret to announce the recent death in the Wheeling Hospital of Dr. G. L. McIntire, late of New Martinsville. The death followed an operation for appendicitis. The doctor was long a member of our State Association, and the only one in his town, although it contains seven or eight other physicians. That town certainly needs an awakening, or a new, progressive practitioner.

Our esteemed member, Dr. Sharp of Parkersburg, has recently been quite ill, and is still under medical care. But as one of the reliable "old guard," he has his "Oration on Medicine" prepared for our coming meeting.

Dr. Harriet B. Jones has arrived home after two months' pleasure trip in Europe, and Dr. Hupp from two months' recreation on the beautiful Lake George, N. Y.

At the recent meeting of the Mississippi Valley Medical Association, Dr. J. E. Cannaday of Charleston read a paper entitled "Some Remarks on the Subject of Prostatic Hypertrophy."

Dr. J. B. Doddrell, who has been in the employ of Dr. Jas. McClung at Camden-on-Gauley, leaves next week for Webster Springs, where he will

locate. We are sorry to lose him from among us. He will succeed in his new location.

Dr. H. S. Brown, North Bend, left for his old home in Clay county Tuesday on a two weeks' vacation. Dr. Veon will look after his practice.

Snowden Hunter, the 18-year-old son of Dr. J. W. Hunter of Cirtsville, fell from a moving train on the Virginian Railway at Eccles recently and received injuries which resulted in his death. Young Hunter attempted to climb on the caboose of the train while it was in motion, and his foot slipped throwing him under the wheels. One of his legs was badly mangled, and an operation in which it was removed was performed by Drs. Roller and Bruce at his home, where he was taken soon after the accident. He only survived a short time after the operation.

On the program for the annual meeting of the American Association of Obstetricians and Gynecologists, which met in Syracuse, N. Y., in September, was a paper by J. E. Canraday on "Advantages of Suprapubic Cystotomy in Certain Surgical Conditions of the Urinary Bladder."

PROPOSED AMENDMENT TO CONSTITUTION.

The following was proposed as a substitute for Sec. 3 of Article IX: "The President and Secretary shall be elected by ballot in the general session, and all other officers named in Sec. 1 by the House of Delegates, on the morning of the last day of the annual session, and no person shall be elected to any such office who is not in attendance at that session, and who has not been a member of the Association for the past two years; nor shall any member resident in the county in which the annual session is held be eligible to election as President or Secretary, unless in the case of Secretary it be a re-election."

PROGRAM OF THE FORTY-THIRD ANNUAL MEETING OF THE WEST VIRGINIA STATE MEDICAL ASSOCIATION

Parkersburg, W. Va., October 5, 6 and 7, 1910.

GENERAL MEETING

In Y. M. C. A. Building, 219 Eighth Street.

WEDNESDAY, OCTOBER 5, 9:30 A. M.

Call to Order by the President, Dr. T. W. Moore, Huntington.

Prayer by Rev. M. F. Compton.

Address of Welcome—Mayor W. B. Pedigo, ex-Governor A. B. White, Dr. H. M. Campbell.

Response by Dr. C. A. Wingerter, Wheeling.

President's Address—Dr. T. W. Moore, Huntington.

New Business to be referred to House of Delegates.

WEDNESDAY, 2:30 P. M.

The Oration in Medicine by Dr. W. H. Sharp, Parkersburg.

SOME OF THE PROBLEMS IN MEDICINE.

Arteriosclerosis—Robert Fisher, Morgantown.
 Feeding in Typhoid Fever: Report of One Hundred and Twenty Cases Fed on General Diet Without a Death—G. C. Rodgers, Elkins.

The West Virginia Physician and Tuberculosis—George A. MacQueen, Charleston.

Evolution in Medicine—A. S. Bosworth, Elkins.
 Internal Secretions—G. D. Lind, Johnstown.

The One at Home—C. H. Maxwell, Morgantown.

WEDNESDAY, 8 P. M.

Public Address, Y. M. C. A. Building.

The Improvement of the Human Race—G. A. Aschman, Wheeling.

THURSDAY, 9:30 A. M.

Management of Normal Labor—H. W. Daniels, Elkins.

Obstetrics in Coal Fields—J. H. Anderson, Marystown.

Methods of Prevention and Repair of the Perineum—W. A. McMillan, Charleston.

A New Sign of Tubal Pregnancy—W. W. Golden, Elkins.

Ectopic Gestation as It Concerns the General Practitioner—A. J. Kemper, West Milford.

Abdominal Tumors—M. Virginia McCune, Martinsburg.

Cystic Degeneration of the Ovaries as Related to Repeated Abortions—W. L. Wcaden, Mt. Carbon.

Facial Orthopedic Surgery—J. C. Archer, D.D.S., M.D., Wheeling.

THURSDAY, 2:00 P. M.

Oration in Surgery: Injuries to Cranium and Contents—C. R. Enslow, Huntington.

Hyperemia as a Curative Agent—H. G. Nicholson, Charleston.

Malignant Disease of Stomach from a Surgical Standpoint—R. E. Venning, Charleston.

Chronic Nephritis, Pathology, Course and Treatment—John M. Simpson, Morgantown.

Modern Treatment of Pneumonia—B. S. Preston, Charleston.

Social Hygiene and the Physician's Relation Thereto—J. C. Irons, Elkins.

Auto-intoxication—C. L. Holland, Fairmont.

Status Lymphaticus—I. B. Woodville, Fayette.

The Diagnosis and Treatment of Locomotor Ataxia and Other Late Manifestations of Syphilis of the Nervous System—Dr. Tom A. Williams of Washington, D. C.

FRIDAY, 9:30 A. M.

Adenoids—P. L. Gordon, Charleston.

Diseases of Accessory Sinuses with Reference to the Eye, Ear, Nose and Throat—J. McKee Sites, Martinsburg.

Glaucoma—E. A. Hildreth, 3rd, Wheeling.

The Physician's Responsibility in Relation to the Defective Classes—G. H. Benton, Chester.

Care of Insane—J. R. Bloss, Huntington.

Aspsis in Tonsorial Parlors—T. Jud McBee, Elkins.

Ethical Hints—W. E. Neal, Huntington.

Misplacements of Uterus—Harriet B. Jones, Wheeling.

Malpositions of Liver—Frank LeMoyné Hupp, Wheeling.

FRIDAY, 2 P. M.

The Pathology, Symptomatology and Diagnosis of Diseases of the Prostate—G. Timberlake, Baltimore, Md.

The Surgical Treatment of Hypertrophied Prostate with Some of the Advantages of a Two-Stage Operation—J. E. Cannaday, Charleston.

Essentials to Success in the Operative Treatment of Inguinal Hernia—Robert J. Reed, Wheeling.

Surgical Shock—J. E. Coleman, Fayetteville.

Some New Aspects of Modern Medicine and Surgery—J. W. Kidd, Burnsville.

The Invisible Link—H. H. Harrison, D.D.S., Wheeling.

The History and Technique of Skin Grafting—Latimer P. Jones, Pennsboro.

Sexual Perversion and Marriage—M. V. Godby, Charleston.

* * *

FAIRMONT, W. VA., September 6, 1910.

Editor West Virginia Medical Journal:

Having been reappointed a member of the National Legislative Council of the A. M. A., I enclose you revised list of the National Auxiliary Committee for this state.

Yours very truly,

J. W. McDONALD, M.D.

Name	County	Postoffice
C. B. Williams...	Barbour	Philippi
M. V. McCune...	Berkeley	Martinsburg
G. M. Sturgell...	Boone	Danville
C. C. Rusmiser...	Braxton	Gassaway
J. B. Walkinshaw...	Brooke	Wellsburg
T. W. Moore...	Cabell	Huntington
W. C. Abel...	Doddridge	West Union
B. B. Wheeler...	Fayette	McKendree
J. O. Lantz...	Grant	Hartmansville
T. C. McClung...	Greenbrier	Ronceverte
G. H. Thomas...	Hampshire	Romney
G. H. Benton...	Hancock	Chester
G. S. Gochenour...	Hardy	Moorefield
C. W. Halterman...	Harrison	Clarksburg
V. L. Casto...	Jackson	Ripley
B. B. Ransom...	Jefferson	Harper's Ferry
A. A. Shawkey...	Kanawha	Charleston
J. I. Warder...	Lewis	Weston
A. M. Parsons...	Lincoln	Branchland
S. A. Draper...	Logan	Logan
H. D. Hatfield...	McDowell	Welsh
C. W. Waddell...	Marion	Fairmont
O. F. Covert...	Marshall	Moundsville
J. S. Biddle...	Mason	New Haven
F. T. Ridley...	Mercer	Bluefield
Z. T. Kalbaugh...	Mineral	Piedmont
A. G. Rutheford...	Mingo	Thacker
L. W. Cobun...	Monongalia	Morgantown
H. M. Brown...	Monroe	Union
A. L. Grubb...	Morgan	Berkeley Springs
Jas. McClung...	Nicholas	Richwood
R. J. Reed...	Ohio	Wheeling
O. Dyer	Pendleton	Franklin
A. S. Grimm...	Pleasants	St. Marys
M. E. Gardiner...	Pocahontas	Dunlevie
M. H. Proudfoot...	Preston	Rowlesburg
A. Y. Martin...	Putnam	Winfield
Owen Davis	Raleigh	Beckley
J. E. Irons...	Randolph	Elkins

Name	County	Postoffice
C. W. Rexroad	Ritchie	Harrisville
C. D. Casto	Roane	Spencer
O. O. Cooper	Summers	Hinton
J. E. R. Ellis	Taylor	Grafton
A. P. Butt	Tucker	Davis
V. H. Dye	Tyler	Sistersville
L. H. Forman	Upshur	Buckhannon
J. F. York	Wayne	Kenova
S. P. Allen	Webster	Webster Springs
A. E. McCuskey	Wetzel	Pine Grove
P. W. McClung	Wirt	Elizabeth
H. B. Stout	Wood	Parkersburg

"ATONY OF THE RECTUM."

By WILLIAM M. BEACH, M.D., of Pittsburgh, Pa.

Dr. Beach stated that atony or sluggishness of the rectum signifies the inability to expel its contents by reason of impaired musculature, ligation or innervation, and further that the musculature in the rectum proper, or that portion above the plane of the levator ani is entirely involuntary whose inertia must therefore be due to some inherent factor.

On the contrary, the anal canal, which is made up for the most part of the voluntary fiber has most to do with the expulsive act, the normal function of which depends chiefly upon the muscular automaton that is intact, proper innervation and psychic influence.

The physiologic rectum depends upon (1) an unobstructed canal (2) firm ligaments, and (3) a well-developed rectal sense residing on the anal canal. Factors contributing to atony are (a) Traumatism to the perineal body, (b) disease in the anal canal, (c) Enteroptosis secondary to general systemic conditions or local anatomic anomalies, (d) the abuse of injections and drastic catharsis, (e) disease in adjacent organs, as prolapsed uterus, adhesions, neoplasms, appendicitis, prostatitis, circulatory disturbance as engorged portal vessels and primary gastric diseases, (f) atony may be the sequel to lues or senility. The treatment is that of constipation being guided by the cause. Alternative, dietetic and mechanical agencies are to be invoked.

Society Proceedings

AMERICAN PROCTOLOGIC SOCIETY.

(CONTINUED FROM AUGUST ISSUE.)

"THE USE OF QUININE AND UREA HYDROCHLORIDE AS A LOCAL ANESTHETIC IN ANO-RECTAL SURGERY."

By LOUIS J. HIRSCHMAN, M.D., of Detroit, Mich.

Dr. Hirschman presented to the Society a report of his work with quinine and urea hydrochloride as a local anesthetic in ano-rectal surgery. The cases operated upon were as follows:

Acute Thrombotic Hemorrhoids, 10; Internal Hemorrhoids, 22; Interno-External Hemorrhoids, 7; External Hemorrhoids, 10; Fistula-in-ano, 14; Abscess peri-anal, 7; Fissura-in-ano, 7; Excision of Scar Tissue, 3; Ball's Operation (Pruritus ani), 2; Hypertrophied Papillae, 16; Inflamed Morgagnian Crypts, 4. Total, 102.

He reported perfect results as far as operative anesthesia was concerned in every case, and in but seven cases was there any post-operative pain. He uses the one per cent. solution of quinine and urea hydrochloride in all of his cases of ano-rectal surgery, where suturing of the skin is not required.

The technic of administration as employed by Hirschman is the same as that used with weak solutions of cocain and eucain. He describes this technic in detail. He believes that the substitution of quinine and urea hydrochloride for any of the other anesthetic salts hitherto employed will be found eminently satisfactory in all cases of ano-rectal surgery, where suturing of the integument is not required. He sums up its advantages over the other anesthetic drugs as follows:--

- First: It is soluble in water.
- Second: It can be sterilized.
- Third: It is equal to cocain in anesthetic power.
- Fourth: It is absolutely non-toxic.
- Fifth: It has a pronounced hemostatic action.
- Sixth: Post-operative anesthesia lasts from four hours to several days.
- Seventh: It is inexpensive and most always available.

"VILLOUS TUMOR OF THE RECTUM."

By T. CHITTENDEN HILL, M.D., of Boston, Mass.

The author stated that a villous tumor of the rectum is very uncommon and but few cases have been recorded in current literature. B. Merrill Ricketts reported a case before this society in 1907 and states that but "sixty-two cases have been reported, nine of which have been by six American authors." Since then I have been able to find but one case reported by Vautrin (*L'Review de la Gynecologia*). His article is the most accurate and painstaking observation to be found on the subject.

It is rather difficult to arrive at any conclusion as to their relative frequency by studying the reported cases or by searching hospital reports, as these border-line tumors are generally very loosely classified. Probably the most accurate data at our disposal may be had from St. Mark's Rectal Hospital, London, in which twenty-five villous tumors are tabulated among 42343 patients with rectal ailments.

The chief point of interest about these tumors is that a certain percentage of them show a marked tendency to undergo malignant degeneration. From the histories of the 13 cases cited by Ricketts, including one of his own, we learn that three recurred and three did not. Those with a broad base, later became malignant, while those with a pedicle did not. Of the other seven cases no mention was made as to the final outcome.

Goodsall and Miles have had 12 cases—8 in men and 4 in women, of which number two ultimately became carcinomatous.

From careful study of these cases and several others the author believes that if there is a distinct pedicle without infiltration of the adjacent mucous membrane, tumors of this type are generally benign and if completely removed by ligation, or otherwise, there is but little likelihood of their recurring. On the other hand, if the base is broad, whether there be induration or not, a total extirpation of the rectum should be advised.

Another point of some interest borne out by a study of these cases is that the longer the condition has existed the less likely is it that the growth will prove malignant. The case now reported seems to bear out this statement.

Mrs. M., 40 years of age, was referred by Doctor J. H. Vaughn, of Everett, Mass., Jan. 5, 1907. She was well-nourished, weight about normal but anemic with sallow complexion. Had had indigestion for years but in other respects was in good health. For the past six years had noticed rectal hemorrhages. During the year previous the hemorrhages had become more profuse and the mass was always protruded at the anus during defecation and even after slight exertion when walking.

She had to go to the toilet several times during the day and to get up two or three times at night, when she would pass one-half cupful of blood-stained mucus; also considerable mucus would at times escape with flatus. For two months, tenesmus had been present nearly all the time. She did not complain of anal or sacral pain.

Rectal examination. Sphincters, peri-anal skin and anal canal were perfectly normal. In the rectum was felt a slippery growth with a band-like pedicle one inch wide by one-half inch thick, attached obliquely with the long axis of the rectum. By careful manipulation the writer was able to bring outside the anal orifice, a lobulated cauliflower like mass, the size and shape of a large English walnut, from which there was a gentle oozing of blood while it was held outside by the sphincters.

Operation January 8th, 1907. The sphincters were stretched after infiltration with one quarter of 1% cocaine solution and the mass drawn down with the finger and the pedicle infiltrated and clamped about half an inch from the margin of the tumor.

The pedicle was then transfixed on the proximal side of the clamp and ligated with Pagenstecher No. 5 in three sections and the pedicle cut away on the distal side. An ounce of bloody mucus escaped from the anus during the dilation.

The operation was easily performed and with but little discomfort to the patient under local anesthesia.

Over three years have now elapsed since the ease was operated upon and as yet there is no sign of recurrence.

The report of Dr. Louis Hoag upon specimen, Jan. 8, 1907, was as follows: "Pedunculated cauliflower tumor of flattened spheroidal form of pale brownish red color and 4x3½ cm. in size.

"Surface quite regularly broken by deep narrow pits and furrows between and among hundreds

of small hemispherical ovoid and spindle-shaped lobules ranging from 1 to 3 mm. in diameter. Such are soft, juicy but not necrotic and of uniform pale brownish red color. Surface always smooth and glistening. Irregularly distributed are deeper clefts outlining pyramidal divisions of the tumor, each bearing upon its base, which is directed outward, a number of the lobules just described.

"Toward the periphery of the cross section of the tumor the lobules are of uniform-soft consistency and of uniform pale-brown red color. Centrally the pale pedicles, which are about 4 mm. in diameter, enter the tumor at a sort of hilus and its white fibrous tissue bearing numerous small blood-vessels spreads out to be finally lost in the similar tissue of the apices of the various pyramidal divisions of the tumor."

"SIGNIFICANCE OF RECTAL HEMORRHAGE."

By LOUIS J. KROUSE, M.D., of Cincinnati, Ohio.

Who called the attention of the profession to the importance of making a more careful examination of every case where there is bleeding from the rectum. He stated that rectal hemorrhage must not be considered conclusive of the existence of piles. Many other diseases besides piles are accompanied with bleeding. He laid great stress on the importance of diagnosing malignancy in its early stage so as to give the patient a better chance of recovery. Many cases of malignant disease of the rectum, whose only symptom is hemorrhage have been overlooked and the patient sacrificed which would not have occurred had the family physician insisted upon a local examination thereby diagnosing the disease in its incipency before it had gone beyond the operable stage. He further stated that every patient is entitled to a thorough examination; and physicians are in duty bound to use all the means at their command to accomplish it. As Murray very aptly expressed himself, "Thus a case that today would be operable and a cure result, if diagnosed, would be inoperable in six months or a year and death result." The author reported numerous cases where a correct diagnosis had not been made on account of the negligence of the family physician. Some had been operated upon for bleeding piles which subsequently turned out to be cancer. He concluded his article with the statement "that earlier recognition of malignancy would add materially to the future welfare of the patient which can be obtained by surgical measures, and it therefore behooves the general practitioner to be on his guard and examine carefully every case of bleeding so as to detect malignancy in its incipient stage."

"ANO-RECTAL AFFECTIONS OF INFANCY AND CHILDHOOD."

By A. J. ZOBEL, M.D., San Francisco, Cal.

This paper briefly described those ano-rectal affections of infancy and childhood which may appear in one's daily work or in consultation practice.

From the first hour after birth the ano-rectal region is of vast importance. At that time malformations may be determined and proper relief promptly afforded.

The various malformations were enumerated and briefly described. Some of these abnormalities pass unnoticed throughout a long life, but others are the source of great discomfort and distress.

Mention was made that while hemorrhoids are common in adults the possibility of their presence in the young is rarely considered. Yet they may appear in children of tender years. The various causes for hemorrhoids in the young were reviewed in this paper.

Malignant growth of the rectum, while rare, are occasionally met with. Cases were quoted where the disease was found in children as young as five years of age.

Benign growths are more common. Adenoma is the most frequent of these. They are often diagnosed as internal hemorrhoids, and, like them, may become strangulated. They may exist for some time and attain quite a size without producing any symptoms until strangulation occurs.

Fissure of the anus is believed by the writer to be present more often than it is usually diagnosed. It may cause severe crying in nurslings. May cause reflex symptoms to appear which for a time may baffle the diagnostician. Some of these may resemble coxalgia. The incautious and improper introduction of syringe nozzles and thermometers into the anal canal frequently cause fissures. Other causes were also mentioned.

Especial stress was laid on the subject of Pruritus Ani in children. The writer believing it to be a very frequent source of great discomfort and torment to the little ones. It is very rarely suspected or diagnosed and he believes that it accounts for much of that peevishness in these little ones for which no cause can usually be assigned. The child is seen to rub his anal region saying, "It hurts." Does not complain of itching. Seems to misinterpret the sensation. He has found superficial lesions of the anal mucous membrane in these cases, and as the symptoms disappeared when local treatment was instituted he feels assured that these were the cause of the trouble.

Fistulo-in-ano is met with occasionally in children and even in nurslings. While it may be tubercular it may also be of a congenital nature.

Ischio-rectal abscesses are met with even in early infancy. When incised they rarely end in fistulae.

Prolapse of the mucous membrane of the anus and rectum is a common condition during the second and third years of life. Long continued tight binding in babyhood may be the starting point. Diarrhea is the most common antecedent. Anything that induces prolonged and severe straining at stool may be a cause. Some of these causes were mentioned.

The varieties and causes of proctitis were also dwelt upon. Proctitis is often taken for ordinary catarrhal diarrhea due to improper feeding. It

is advised that when a gonorrhoea of the genital tracts exists in children that a secondary infection of the ano-rectal region should always be considered.

It is hoped that this reminder that infants and children have ano-rectal troubles, as well as adults, will lead to more thought being given in this direction, and that it will bear fruit in bringing relief to some of these little sufferers.

"THE TREATMENT OF RECTAL FISTULA."

By J. RAWSON PENNINGTON, M.D., of Chicago, Ill.

Who referred to three methods, viz.: simple incision; the injection of bismuth paste; the incision or excision with immediate suture (Proctorrhaphy).

Of the *Simple Incision* he said: Those of us who are operating quite frequently for this malady know its disadvantage, drawbacks, and frequent failures to cure. That this operation has done more than any other, unless it be that of the ligature or clamp and cautery operation for hemorrhoids, to bring disrepute upon rectal surgery. That the laity dread a rectal operation more than any other surgical procedure because of the fear of pain, the fear of recovery and the fear of loss of control over the bowels. Yet, we know that each of the above operations in the hands of experts gives good results. Concerning the injection of bismuth paste, he said: To treat a rectal fistula, the paste is liquefied by heating in a water-bath and injected into one of the openings with a metal or glass syringe. The other opening or openings are kept closed by an assistant while the injection is being made. Enough force is used until one feels reasonably sure that all tracts and diverticuli have been filled. The paste may be forced into some line of cleavage if too much tension is used and carried along this line to some distant organ or healthy tissue and deposited there with deleterious results.

Of excision or incision with immediate suture (proctorrhaphy), he said: This method is the most rational of all surgical procedures, that he dissects and removes the entire tract when a probe or director can be passed through the fistulous channel and into the rectum. That he then searches out and removes any diverticuli or tracts connected with the main tract. If this can not be, or should not be done he then incises the fistula and dissects out all granulation tissues. If need be the wound is disinfected with carbolic acid and alcohol.

Suturing the wound may be done by lembertizing the line of incision from its termination in the rectum to the anus. The ends of the severed sphincters as well as the deeper portions of the incision are next brought together with the interrupted catgut sutures. The skin and fascia are sutured with interrupted silk worm-gut. He dresses the wound with iodoform or plain gauze and applies a T bandage. He maintains that proctorrhaphy, or the paste, or a combination of the two, offers the nearest approach we have to the ideal method of treating extensive rectal fistula.

OHIO COUNTY SOCIETY.

The first autumn meeting of the Ohio County Society was held at the usual place on Monday evening, September 12th. Twenty-six members were present. The secretary read his report as follows:

To the President and Members of Ohio County Medical Society:

Nearly twenty-five hundred years ago that wise Greek philosopher, Plato, said that "Education and health had the mightiest influences on the maintenance of laws"; but it is only within the past generation that the tremendous truth of this statement has been fully realized; and it is being better known to-day in this county, due largely to the work and influence of the Ohio County Medical Society.

During the past year we have held thirty-eight regular meetings, with an average attendance of twenty-eight, thirty-six of which were devoted to scientific work. During the early part of the season we took up a lecture course on Diseases of the Stomach, devoting five months to the work, on the completion of which your Scientific Committee thought that miscellaneous topics would break the monotony of a regular course, and this procedure was followed with gratifying results. To stir up the enthusiasm we deemed it advantageous to bring before you visiting lecturers, which proved to be a move in the right direction. Among the lecturers secured were Dr. Edward Reemlin, Cincinnati; Dr. Richard Behan, Pittsburgh; Dr. Edward M. Baehr, Cincinnati; Dr. William Glynn, Pittsburgh; Dr. O. E. Smith, Cincinnati, and Dr. William C. White, Pittsburgh. These lectures undoubtedly enlightened all of us; and better, the citizens of Wheeling appreciated our efforts.

December the 10th, 1909, the Board of Trade building was partially destroyed by fire, and brought destruction to our meeting place. Temporary quarters were secured in the county building, and our work progressed uninterruptedly.

During the year your Scientific Committee met five times and arranged details of program.

The membership has increased slightly during the past year, numbering to date 73. I regret to state, however, that a few of this number are delinquent.

During the year two of our members entered that inevitable goal—death, Doctors E. W. Alexander J. S. Smith. We have lost one member by removal from the city, Dr. A. J. Quimby, who now resides in New York City.

The Entertainment Committee, Dr. W. S. Fulton, chairman, handled the banquet on February 8th, 1910, which proved the most successful on record. This event is of real value in bringing our members together, and promoting harmony and good fellowship.

The Library Committee, Dr. Frank LeM. Hupp, chairman, held two meetings, and plans are on foot whereby we should soon be housed in our own permanent quarters.

For the confidence of this society I am deeply grateful, and am keenly sensible of the high honor conferred upon me. I am pleased to say

that officers, committees and members have always given me kindly sympathy and cordial support in my work, without which no secretary could well succeed; and I wish to express my hearty thanks to all

It is my sincere hope that this society may continue on its career of usefulness, and grow in power and influence.

RANDOLPH J. HERSEY, *Secretary.*

The election of officers was next in order and resulted as follows: President, W. S. Fulton; Vice-President, D. B. Best; Secretary, R. J. Hersey; Treasurer, R. M. Baird; Censors, J. G. Walden, A. B. Nichols, S. L. S. Spragg; Delegates to State Medical Society, C. A. Wingerter, E. L. Armbrrecht, D. H. Taylor.

The best feeling prevailed among the members, who seemed to enjoy the reunion after weeks of separation, and a winter of enjoyment and great profit is expected.

September 19, 1910.

The society met, 28 members present. After reading of minutes the treasurer's report was read, showing \$217.08 in the treasury. The president-elect, Dr. W. S. Fulton, delivered his inaugural address. He told of the good work the society had done during the past year. It had been largely instrumental in establishing the Associated Charities of the city, and under the able leadership of Dr. Harriet B. Jones, had done much to advance the cause of tuberculosis prevention. The excellent work done by our members, Health Officer McLain and City Bacteriologist A. Wilson in enforcing sanitary regulations and improving our milk supply were favorably alluded to, and the aid of the society in their further efforts was asked. Other suggestions were that we aim to secure medical inspection of school children, the elimination from the community of quack institutions, the more careful oral report of cases of interest, public lectures for the information of the public in matters of health. The speaker closed with a plea for harmony in the profession and a united effort for the upbuilding of the State Medical Association.

Dr. Jepson reported a case of gonorrhoeal ophthalmia. He had seen the mother two weeks before confinement, when she reported a profuse vaginal discharge which she suspected had come from her husband, who she thought was diseased. He was later examined and found to have gonorrhoea. Called in the night and having no silver solution, the doctor washed the vagina with a bichloride solution, and very quickly the child was born. The eyes were cleaned as carefully as possible with the means at hand. At a third visit, 36 hours after termination of labor, one eye of the infant was greatly swollen and an abundant purulent discharge present. The other eye was sealed, but it also later became infected. Treatment with a 10 gr. solution of silver nitrate, with frequent cleansing with a boric acid solution and the application of cold compresses brought speedy relief and a cure soon resulted. The case is reported to impress the necessity of prophylaxis. The speaker felt that he had erred in not using a silver nitrate solution at the time of the child's birth, which would almost certainly

have prevented the infection. Hereafter he will carry this solution (5 gr. solution is strong enough) in his obstetric bag, and thought all should do so.

Dr. Wingerter resigned as delegate to State Medical Association, Dr. Osburn being elected in his place, and Dr. Burns was chosen as alternate vice Dr. Osburn.

S. L. J.

Reviews

DISLOCATIONS AND JOINT-FRACTURES.

—By FREDERIC J. COTTON, A.M., M.D., *First Assistant Surgeon, Boston City Hospital*. Octavo of 654 pages, 1201 original illustrations. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$6.00; Half Morocco, \$7.50 net.

There is no physician in active practice to whom the title itself of this new work will not appeal. It is the fracture complicated by joint involvement that is the most difficult to diagnose, most troublesome in the labor of reduction and retention, most unsatisfactory in the end results, and most likely to cause the harassed doctor to renew his resolve to transfer his property to his wife.

The X-ray has served to soften somewhat the aspect of this *bete noir* of the profession, and the new book records the progress toward a more accurate and scientific management of complicated fractures, resulting from this accessory method of diagnosis. Obviously radiography inspired it. It is a veritable picture-book, twelve hundred of them, in its six hundred pages; an illustration for every point deserving emphasis, and all new and by the author's own hand, himself the artist.

The opening chapter on "Generalities" is rich in helpful suggestion and makes the first impression of the book a favorable one. A theme given much attention is "The X-ray and Fractures," and the author's treatment of it gives ample proof of his hard sense and of his conservatism. He criticizes the position taken by some writers that a skiagraph is a necessary preliminary to the treatment of every fracture, and calls it the "shecrest nonsense." He "maintains firmly that in the great majority of cases a properly trained surgeon can make his diagnosis, so far as practical details go, about as well without the X-ray." He favors this help, if convenient, but denies that it is a "necessary routine" or that it should take the place of an immediate searching examination by manipulation under anaesthesia and prompt reduction. He urges the skiagraph in obscure and atypical fractures about joints, also of other fractures if at any time within two weeks after reduction there is any doubt concerning the proper replacement of fragments.

The author's judgment and counsel in the great number of complicated fractures he describes are equally commendable, inviting the conclusion that his unusual opportunities in the Boston City Hospital with its wealth of clinical material, his experience as a teacher, his ability to write in a style clear, concise and logical, his successful effort to cover the whole subject from vertebrae

to phalanges, coupled with superior skill in draftsmanship and illustration, has enabled him to present to the profession a work of exceptional merit. It would seem to justify the prophecy that it will fill a place in its day as satisfactorily as did the classic work of Hamilton on a similar subject, meet the need of his time, and be accepted as the modern authority in this particular surgical field.

REED.

THERAPEUTIC ACTION OF LIGHT, Including the Rho Rays, Solar and Violet Rays, Electric Arc Light, and the Light Cabinet.—By EUGENE ROGERS, M.D., formerly *Demonstrator of Anatomy in the University of New York*. Publisher, The Author.

Here is a book dealing with one of nature's forces, the divinest of them all, the first of the Lord's creation; a book that asks us to discard all of our well-tried remedies, that, figuratively, laughs to scorn our surgery, serums and science. The preface informs us that we should call the new force the "Rho Rays," characterized by the Greek R, perhaps with the idea of eliminating the superfluous words of our prescriptions, the sign R being sufficient to designate the cure of all the patient's ills, thus saving both time and thought, to be sure.

The introduction starts off so much like one of Capt. King's stories for boys, or an ad. for one of the latest Hash Kosh Indian Remedies, that we really became interested at once, and settled ourselves for a bit of entertaining reading, when suddenly we are reminded that it is the healing art that is being discussed, told that this valuable remedy is used by the savage in obstetrical procedure, reminded that the medical profession accepts the germ theory of disease, but with mental reservation that places the doctors on a level with the above-referred to aborigines. "But what of law in the destruction of bacteria, (he bows to science) in curing disease? Practically little. * * * * Nevertheless, there is law throughout the universe." "If we project certain rays of light upon the lungs during the first stage of the disease (pneumonia) for 15 or 20 minutes, the bacteria will be destroyed and the disease aborted. The prognosis is made with as much certainty as the diagnosis. Both are determined by law." What shall become of our humble brother, the general practitioner, whose living depends on getting a goodly number of calls down in his book, against such a conqueror of so mighty a foe as pneumonia? Let him take down his sign or buy a high-power Rho Rays generator, as described in the text, at so many hundred "per," and cure his patients at one "per."

Nevertheless, there is valuable information in the book. The first two chapters are limited to a clear and simple description of the source of the light used, the object of the inventor in presenting the lamp for use, and photographic proof of the existence of these new rays, methods of use and results secured. The remainder of the book, over 300 pages, is devoted to the diseases treated, their etiology and pathology being the same as found in any text book. As each disease is described, the treatment is outlined, and although the writer

would have us believe that only such diseases as are amenable to the rays are discussed, he has evidently included so many, that we are left in doubt as to whether this agent is not the only one that should be directed in our therapy. The attempt here made to exploit this particular lamp should not be overlooked, although we may be ready to try any new method or instrument that promises good to our patients. My personal observation of cases has taught me that many cases may be benefited by the use of the light treatment, but it is scarcely just to the cause for which we strive to accept literally all the claims of the various promoters who would have us exhaust our time and resources on all the fads and fancies of their fertile brains.

HOOKWORM DISEASE—Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment.—By GEORGE DOCK, A.M., M.D., *Professor of the Theory and Practice of Medicine, Medical Department Tulane University of Louisiana, New Orleans*, and CHARLES C. BASS, M.D., *Instructor of Clinical Microscopy and Clinical Medicine, Medical Department Tulane University of Louisiana, New Orleans*. 250 pages, royal octavo. Fifty illustrations, including one colored plate. Price, \$2.50. C. V. Mosby Company, St. Louis, Publishers.

The disease of which this book is an exposition has occupied much space in recent Journal literature, and the profession is now fairly well informed on the subject. The authors have had unusual opportunities to study the disease, and their standing is such as to assure the reader that what is here presented is reliable. The book is beautifully printed and illustrated, and contains all that the practitioner needs to know as to the hook-worm disease.

In view of the wide prevalence of this disease in the South, the subject is one of very great importance, especially so since a correct diagnosis leads to an early and almost certain cure. The reader of this book will be richly rewarded, and any one practicing in an infected district should send for a copy. We can cordially recommend it to our readers.

A TEXT-BOOK OF PATHOLOGY.—By JOSEPH McFARLAND, M.D., *Professor of Pathology and Bacteriology in the Medico-Chirurgical College of Philadelphia*. Second Edition. Octavo of 856 pages, with 437 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

This valuable book was written more particularly for students of Medicine; however, we as practicing physicians know of no work which contains more valuable information on this all-important subject. Upon pathology rests the science of medicine. From researches in pathology alone, are we able to understand the symptoms of diseases and prescribe the proper remedy. A good pathologist is usually a good physician. The author's long experience as a teacher and writer on Bacteriology enables him to make this most difficult subject readily understood. The

chapters on Parasitism, Infection and Infectious Diseases are especially clear and well written. This text-book contains more than 400 illustrations pertaining to pathology and bacteriology. These illustrations are all of the most interesting subjects, which are especially helpful to the student of medicine in comprehending the text. The illustrations showing microscopic sections of tumors and other diseased tissues are exceptionally fine.

No medical library is complete without a good text-book on Pathology. We can heartily recommend Dr. McFarland's book to the medical profession. L. O. R.

Medical Outlook

ANTIGONOCOCCUS SERUM.—Dr. T. C. Stellwagon, after a study of 27 cases at the Jefferson Medical College clinic, draws the following conclusions as to the action of this serum:

1. Acute and chronic urethritis does not yield to serum treatment, but the use of serum renders the patient more readily amenable to local treatment.
2. Prostatitis is frequently benefited by the use of the serum.
3. Epididymitis has often been cured by its administration.
4. In gonorrheal arthritis the antigonococcic serum has proved to be practically a specific.
5. In all gonorrheal complications we believe serum treatment is indicated.
6. We have found the daily administration of two or four cubic centimeters of serum, depending on the severity of the case, gives the most satisfactory results.
7. No inconvenience was experienced by the patients other than a slight eruption, which soon disappeared.—*Therapeutic Gazette*.

THE TREATMENT OF CANCER WITH THE FLUID FROM A RECOVERED CASE.—Engene Hodenpyl, pathologist to Roosevelt Hospital, makes an announcement regarding cancer in the *Medical Record* of Feb. 26, 1910, which seems to us of most momentous import. He has used the ascitic fluid from a recovered case of internal cancer in the treatment of forty-seven carcinomatous patients with most striking results. Injected *anywhere*, a selective action upon the cancer cells becomes rapidly manifest, the tumors subsiding and emaciation decreasing. These phenomena are attended by temporary local redness, tenderness and swelling in the region immediately adjacent to the tumors. The normal tissues of the body show no reaction and there are no systemic effects, even after large venous infusions. The tumor tissue becomes softened and necrotic and is either absorbed or discharged externally. Subsequently more or less connective tissue is formed in its place.

Many of the forty-seven cases were hopeless and inoperable at the beginning of treatment.—*Therapeutic Medicine*.

CAUZE SPONGE IN ABDOMINAL CAVITY NINE MONTHS.—Dr. Hunter Robb, in *The Cleveland Medical Journal* for June, reports a case of this kind. A celiotomy was performed

in May, 1908, adherent ovaries and tubes containing pus were removed, and other adhesions separated.

The abdominal cavity was closed without drainage. There was a slight elevation of temperature for two days following the operation. Aside from this, however, the convalescence was uninterrupted. Twenty days after the section the cervix and perineum were repaired. Six weeks after the laparotomy the patient was discharged feeling well in every way. In February, 1909, a little more than nine months from the time of the operation, she was again admitted to the Lakeside Hospital complaining of some distress in the left lower quadrant of the abdomen. On binannual examination a fluctuant movable mass, about the size of the closed fist, could be made out. Three days later the abdominal cavity was reopened through the line of the previous operation. The mass was found beneath the brim of the pelvis lying to the left of the median line, enveloped in a connective-tissue-like sac, and surrounded by the sigmoid flexure, the omentum, and several coils of the small intestines. During an attempt to separate the intestines from the mass the sac ruptured and a small quantity of a purulent looking fluid escaped. At the mouth of the opening in the sac there appeared a whitish substance which proved to be a gauze sponge, in a perfect state of preservation. After separation of the intestines and the omentum, the sac was removed. The uterus was then separated from the adhesions which bound it down to the pelvic floor posteriorly. At the right cornu of the uterus there was a small cystic mass which was removed. The abdomen was closed in the usual manner and the patient made an uninterrupted convalescence. Aside from the facts that have been mentioned already, the points of special interest would seem to be: (1) the slight disturbance which followed the first operation as shown by the practically normal convalescence; (2) the tolerance of the peritoneum for such a large foreign body; (3) the fewness of the really important symptoms which made the operation necessary nine months after the original abdominal operation.

PREPARETIC STATES.—C. L. Dana, New York (*Journal A. M. A.*, May 14), after referring to a former paper in which he had expressed similar views, reiterates his belief that certain cases of paresis may yield to specific treatment if thoroughly used in the earliest stages. He is led to repeat his statements because they have been misunderstood, some having jumped to the conclusion that he had held that fully developed paresis could be cured, and also because his view as to the essential unity of nervous syphilis and parasyphilis had been confirmed by the discovery of the spirochete and the evidence of its activity by Wassermann and other tests. He points out the unreliability of the distinctions which have been attempted to be made between paresis and cerebral syphilis. It follows that if there is an essential underlying unity between true paresis and "leucetic neurasthenia," "pseudoparesis," "nervous syphilis," and what he calls the "preparetic state" there is no reason to suppose that if we can cure one we cannot also forestall or even cure the others. It has been his experience to

see a number of cases which confirm this view and he puts on record the final history of the 5 cases he reported, 5 years ago, and adds a number of others. These show that what he is apparently justified in calling ineipient paresis may be sometimes arrested or even cured. If the history, he says, of cases of paresis could be traced back in all instances to the first beginnings, he believes that in a good many instances proper medical treatment might have kept them in check. The onset of a parasyphilis, Dana says, occurring in persons who have had infection, takes place in the following different ways: "1. Acute symptoms of syphilitic exudates in the brain, ending promptly or later in paresis, or ending in cure, with or without mental symptoms, or ending in some deterioration with final serious cerebral vascular changes. 2. Acute mental symptoms, mania or melancholic, ending in cure or paresis. 3. Tabetie and parietic symptoms, ending in taboparesis or in tabes with arrest of paresis. 4. Insidious mental and physical deterioration ending in paresis." The above conditions may or may not end in paresis, depending on treatment, the constitution of the patient and the intensity of the infection. Often they go on till nearly every symptom of paresis appears and even then may be arrested. This is what he means by the cure of early paresis.

THE CURE OF WARTS BY SUGGESTION.—*Bonjour (Revue Med de la Suisse Romande)* at a recent meeting of the Western Switzerland Medical Society, presented a boy whose warts he had succeeded in removing exclusively by suggestion. The child had been treated previously, but in vain with all the recent caustic agents, in an attempt to free him from the disfiguring warts which were scattered in enormous numbers over his face and left hand. Eight days after a session in which suggestion-treatment was employed, the warts presented a shriveled appearance, and at the end of another week they had disappeared. He claims that the method of suggestion has never failed in his experience, in the case of warts. These skin-growths occupy a very peculiar position in the list of tumors, and are characterized by their abrupt, sometimes inexplicable, disappearance. The suggestion-method of removal requires but one session, as a rule, and it is rare for three or four treatments to be necessary.—*Charlotte Med. Journal.*

CROTALIN INJECTIONS THROUGH THORACIC WALLS AS A MEANS OF TREATING PULMONARY CAVITIES.—Dr. Thomas J. Mays has an article on this subject in the *Virginia Semimonthly* of July 22nd. He desires to express his gratification at the physiological toleration of crotalin when brought in direct contact with the highly sensitive lung texture, and at the hitherto unknown power through which it apparently antagonizes and checks the local consumptive process.

In addition it may be said that while no claim is made that crotalin, in this, its later phase of administration, is to be regarded as a panacea for all consumptive ills, although the effects are

clearly superior to the arm method, it is seriously maintained that when its therapeutic adaptability is fully and finally developed, it will bid fair to become a master weapon in the warfare against pulmonary consumption." G. D. L.

X-RAY TREATMENT FOR GRAVES'S DISEASE.—Schwarz, of Vienna (*Arch. d'elec. méd.*, April 10, 1910), claims that radiotherapeutic treatment of Graves's disease has as high a percentage of success as the surgical method, and has none of the danger and pain incident to the latter. He insists, moreover, that X-rays in exophthalmic goitre have a distinct etiological basis, one of their general properties being their power to diminish glandular secretions. Soon after the irradiation of the thyroid a modification of the nervous symptoms is generally observed, and this is frequently followed by a sudden change in the general nutrition. In some cases the patient puts on weight very rapidly; a gain of 6 or 8 kilograms (13 or 17 lb.) in a month is quite common. Within a short time there is often also a diminution of the exophthalmos, although this is a most persistent symptom, especially in cases of long standing. Out of 40 cases under the author's observation, after radiotherapeutic treatment had been applied for a mean period of three months, there was increase of weight in 26; diminution of the pulse-rate in 36; amelioration of the nervous symptoms in every case; of the exophthalmos in 15; of the goitre in 8. The improvement is constant for the nervous symptoms, and almost constant for the tachycardia, and on this latter point Kraus is quoted as saying that when the tachycardia has disappeared for a certain time, one may consider Graves's disease as cured, although other symptoms may continue. On these grounds the author claims 90 per cent of successes for radiotherapy, which is at least equal to the percentage of operative successes. As to technique, he points out that the skin of the cervical region is normally more sensitive than that of other regions of the body, and that this sensibility is further increased in sufferers from Graves's disease. Therefore too strong doses must not be given. He irradiates the neck, first in the anterior direction, then in the left and right lateral directions, with rays filtered through a piece of glass of 2 mm. thickness. The dose is $\frac{1}{2}$ Sabouraud, or 2 kaloms of the Schwarz Fallungs-radiometer, applied at intervals of three weeks: that is to say, first week, neck, anterior direction, $\frac{1}{2}$ Sabouraud; the following week, right lateral direction, $\frac{1}{2}$ Sabouraud; a week later, left lateral direction, $\frac{1}{2}$ Sabouraud; and recommencing eight days later with the same dose in the anterior direction. This cycle of irradiations must be followed uninterruptedly, frequently for six months.

NEW TREATMENT OF CHANCROIDS.—Pederson and Marsh of N. Y., in the *Am. Jour. of Surgery*, report excellent results from the following method of treatment:

The details of the procedure are these: The lesion is ordinarily cleansed with water and gauze; then cocaine or other local anesthetic is liberally applied for five or ten minutes; next any ordinary liquid caustic, preferably nitric acid,

is flooded upon the sore, care being taken to work it well beneath the overhanging edges and into any pockets, and on the other hand to prevent it from reaching the sound skin; after the acid has been given several minutes in which to act, the lesion is wiped dry with blotting paper; then with a sharp curette the slough is thoroughly and deeply removed until clean, smooth, healthy-looking tissue is reached; this surface is now carefully and systematically painted with 10% nitrate of silver solution, with special reference to the overhanging edges and pockets; when the nitrate of silver has produced a delicate white pellicle everywhere, an ordinary wet dressing is applied.

Usually, one such treatment will convert a large and vicious chancroid into a clean, healthy surface, which will heal in a very few days. Sores originally the size of a quarter-dollar piece, not infrequently will be entirely healed within two weeks. When this method fails, and a repetition is necessary, it is almost invariably because too little acid was used, or the acid treatment was too brief, and thereafter the curetting was not deep enough.

TREATMENT OF DIFFUSE PURULENT PERITONITIS WITH CAMPHORATED OIL.—Hirschel (*Munch. Med. Wochenschr.*) describes a method which he has employed in nine cases of peritonitis during the last three years. In view of the fact that he reserved it for cases in which the prognosis was well-nigh hopeless, the results obtained (five recoveries and four deaths) are most encouraging. The procedure is somewhat as follows: After opening up the abdomen with a median or longitudinal incision, the site of perforation is sought and sutured. The pus is then removed with dry or moistened gauze pledgets as rapidly as possible, Douglas's pouch being also carefully cleansed. After this comparatively superficial cleansing of the abdominal cavity a 1 per cent solution of camphor in oil is introduced in amounts of 100 to 300 gm. and spread over the entire cavity by means of a piece of gauze. Usually a counter incision is made either in the lumbar region or median line and drains inserted down to the site of disease, the openings being closed around the drains. The addition of the camphor to the oil was found to have a remarkably favorable prolonged effect; the pulse, which was scarcely to be felt before operation, becoming gradually stronger, while the tympanites and vomiting subsided. The presence of the oil, which could be observed as late as fifteen days after its introduction in cases coming to autopsy, seemed to prevent the formation of adhesions.

THE USE OF OIL IN THE ABDOMINAL CAVITY.—Mr. D. P. D. Wilkie (*Surg., Gyn. and Obst.*, Feb., 1910), feels justified from his experience in advocating the introduction of vaseline oil into the peritoneal cavity in the following conditions: 1. In the operations for the relief of old-standing adhesions. 2. In operations for localized or diffuse peritonitis, where handling of the viscera is unavoidable. 3. In operations for generalized peritonitis to favor subsequent drainage and intestinal peristalsis.

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PRESIDENTIAL ADDRESS.

The Betterment of the Medical Profession.

F. W. Moore, M.D., Huntington, W. Va.

Members of the West Virginia State Medical Association:

I am unable to express fittingly my gratitude to you for the honor you have conferred upon me in making me your president. I do most heartily thank you.

Our state today is advancing probably as fast as any state in the Union. The great coal, oil and gas fields are developing rapidly. The soil has in a large portion of the state been found suitable for growing the choicest fruits, and recently it has been discovered that a certain species of tobacco of the finest quality can be raised in the southwestern counties. These are only a few of the resources of West Virginia that are bringing great wealth and increased population, with the improvements that accompany these conditions. As it is essential that the medical profession keep pace with the progress being made in other directions, I take for my subject this morning The Betterment of the Medical Profession, and will make a few suggestions that I think will help us to attain this end.

First, our membership should be much increased. We have nearly 1900 reputable physicians in the state, yet our actual paid-up membership is today only 809. I am

convinced, however, of the future growth of our organization, and that the men who are entering the profession today with a training so much in advance of what we had fifteen, ten, yes, even five years ago, cannot fail to appreciate the great work being accomplished by the American Medical Association and its component state and county societies. Their superior education has taught them the advantages of such meetings as we are now holding. How very much can be learned from contact with our members who are regular attendants at numerous medical societies only too well known. This does not consist in the essays that are presented nor their discussion, valuable as these are, but it is in the little talks at the lunch table, or in the hotel lobby, or over the exhibits where suggestions are brought out that are ever afterwards useful. And it is not necessarily from our most scholarly confreres that these points are obtained, but some of the most valuable instruction that I have ever received has come from some doctor not known away from the vicinity where he practices, whose conversation and general make-up indicated very little medical knowledge. All these men are working, often under the greatest difficulties, yet they frequently make observations, or devise expedients, the reason for which they may not be able to clearly explain, that are, when used intelligently, invaluable. So I say to you, seek out your brother practitioner who has been less fortunate than you in his preliminary attainments, or less wise in selecting an environment for his work. Cultivate him, bring him into your

society, not only for his good, but for your own. Let him see, which he usually will see only too quickly, that you, like himself, are not free from error, and I will promise you that in most cases the results will be gratifying.

Second, I wish to impress upon you how much the American Medical Association means to us. I fully appreciate that in some circles there has arisen a feeling that the organization is not all that it should be; that it is an institution operated for the benefit of a few greedy souls who feast thereon. Gentlemen, I wish to show you briefly some of its accomplishments, the greatest of which I believe to be the work of the Council of Pharmacy and Chemistry. This body has especially opened the eyes of the profession to the literature of manufacturers of "elegant pharmaceuticals." This literature in many instances not only makes extravagant claims to the extraordinary powers (sic) of various preparations, but it also publishes false formulae, attributing the most exalted virtues to inert substances, and it is frequently as misleading and improbable as the blatant claims heralded and sent forth broadcast by the arrogant vendors of patent medicines.

From the labors of this Council the American Medical Association has prepared two little books that I commend to you. They are: "The Pharmacopeia and the Physician," and "The Physician's Manual of the U. S. Pharmacopeia and National Formulary." The two will cost you one dollar and forty cents. They will enable you to learn the actual contents of many semi-proprietary preparations, and teach you what to prescribe that will be at all times uniformly prepared, with great saving to your patient's purse.

The work of the Council has not alone educated the physician, (and I believe it to be the greatest instructor of our time to the medical body as a whole.) but indirectly, it is educating the laity to the false and mystic claims and dangerous results of that most pernicious evil, viz., patent medicines.

Through the efforts of the American Medical Association acting in conjunction with other forces of our time, the standard of our medical colleges has been raised, and with the movement now on foot to

eliminate those colleges that are purely commercial enterprises and which do not have the funds to meet the requirements demanded, the diplomas of the future will be recognized as an evidence of medical education equal to that of England, Germany and other foreign countries, and will not, as many of them have in the past, represent a qualification the individual does not possess, and by reason of deficient early training could never attain.

The Association gives us to day what I believe to be the best medical journal published. In my own special work of ophthalmology and otology I am sure that it compares favorably with any of the journals devoted to these subjects exclusively, and whilst I do not think that I am competent to judge its merits in other branches of medicine, I am sure that you will agree with me that it is only a reasonable deduction, that it is as valuable in other fields.

The scientific exhibits show each year what has been accomplished in the way of new instruments, appliances, office furniture, books, pharmaceuticals etc. You here have an opportunity to compare the ideas advanced by different men, and to select that which may seem best to you. The information here obtained is probably as great for the effort expended as anywhere else in the world.

Third, we must work for a National Bureau of Health. The Owen bill failed to become a law, but the efforts expended to pass it were not in vain, for they have educated the thinking public, and they have emphasized conspicuously the selfish interests that backed and controlled the so-called "League for Medical Freedom." Let me read to you what one of our leading New York papers says editorially under the caption.

"MEDICAL FREEDOM."

"Makers of patent medicines, adulterators of drugs, and practitioners of the cults of mental and osteopathic healing are up in arms. They have persuaded a few well-intentioned but misled individuals to join them, and have formed the National League for Medical Freedom to oppose the efforts of practically all the reputable physicians in the country to consolidate the agencies of public health at Washington into one efficient department or bureau.

"These efforts have been waxing stronger. The men of the American Medical Association

and of the committee of One Hundred on National Health, sanctioned by the Association for the Advancement of Science, and headed by Professor Irving Fisher of Yale, have won the approval of the entire press of the United States in urging the passage of their bill. In the various departments and bureaus of the federal government are lodged powers that cannot be wielded effectively until they shall be co-ordinated under one head. Once united, they can be used in a great propoganda for educating the people against the habit of self-dosage and a resort to quack medicines for their ailments. By a campaign of prevention the bureau would break the prevalence of epidemics and infections between the states. It would work for the passage of laws that would guard the channels of interstate commerce against the admission of adulterated drugs, and for the establishment of standards of purity and strength that would be copied by the states and cities of the nation.

"The self-styled 'League for Medical Freedom' quotes Professor Fisher accusingly as having said that the government might soon be appropriating millions yearly for the conduct of their bureau. If it should appropriate a million for every two thousand it now appropriates for the protection of the health of the hogs and cattle in the United States, Professor Fisher's prophecy would be fulfilled, and no one would have cause for complaint but these friends of 'freedom.' Their cry is an old one and well understood."

"License they mean, when liberty they cry."

And after the bill failed the same journal said:

"In the latest bulletin, the Committee of One Hundred on National Health, besides making a clear statement of what a Federal Department of Health would now or soon be doing had Congress heeded the well-nigh unanimous demand of the country's real doctors and sanitarians and passed the Owen bill, convicts the so-called League for Medical Freedom of very serious misrepresentation in claiming to have in its antagonism to that excellent measure the support of all the 'irregulars.'

"While it is probably true that representatives of all or most of the groups thus described gave more or less countenance to this absurd guardian of liberties which no one had dreamed of restricting, it seems that in doing so some of them took, in ignorance and haste, action which they have since regretted. * * *

"The Committee of One Hundred also deems it worth while to state that leaders among the osteopaths and the Christian Scientists resent and repudiate the use made by the leaguers of the names of their cults, and deny that there had been any excuse for this except the ill-advised action of a few misguided members. It is evidently still the belief of the committee that underlying and explaining the activities of the league are 'commercial interests'—the druggists and the manufacturers of proprietary medicines, and their fear that somehow or other

the proposed department would 'regulate,' not the practice of medicine, but a business that is profitable to those who conduct it and injurious to the public health and pocket. Whatever may be the truth as to this, the Owen bill, or another that would attain its desired ends, ought to be passed, and it makes little difference who opposes the plan, for the arguments against it are either false or empty."

These quotations show the change in public sentiment and mean that the people are becoming educated to their own best interests. In order that such a bill may soon become a law, we must continue to press on and not let the lesson so far learned be forgotten.

Both of the leading political parties are pledged to advanced health legislation, and President Taft in the Republican Campaign Handbook says, "as to future legislation a number of promises remain to be kept," and after alluding to important commercial and economic measures continues: "There is also the promise of the Republican platform to make better provision for securing the health of the nation. The most tangible and useful form that this can take would be the establishment of a National Bureau of Health, to include all the health agencies of the government now distributed in different departments." (Journal A. M. A. Sept. 10th, 1910.)

Today is the time for action. Each member should upon his return home instruct his patients and friends as to the benefits of such a measure to them, and particularly should our Congressmen and U. S. Senators be acquainted with its importance.

A factor whose influence we should enlist is the Women's Clubs. Why have we not cooperated with them before, not only in national but state legislation? They are now much interested in sanitary reform movements, and their power for good is very great. In Kentucky the Federation of Women's Clubs, acting with the Medical Association and the Board of Health, had Mrs. Caroline B. Crane visit the state and make a tour of sanitary inspection. Such an arousing of public conscience had never before been seen in the old blue grass commonwealth. What is true of Kentucky is true of West Virginia, and the rest of the United States, and no aid that we can obtain will be more far reaching than that of the social clubs of our sisters. You know

what they did towards the enactment of the pure food law.

Fourth, our Association should be incorporated. I am informed by able legal authority that, in case of suit brought against the organization, according to West Virginia laws, each and every member is financially liable for the amount of damage incurred. Only a short time ago an attorney came to me representing an expelled member who desired suit brought for real or imaginary damages resulting from his rejection.

We are publishing a medical journal which contracts various business obligations, and while we are liable to be sued we cannot bring suit to collect outstanding bills, such as are due the journal for advertising. I have advocated this for several years, and feel that action should not be delayed.

Fifth, our committee on Public Policy and Legislation should try to have our laws improved relative to ophthalmia neonatorum, compelling the nurse or attending physician to report to the Board of Health or local representative of same, all cases of this disease and the condition after the infection ceases. This is a malady that can be prevented absolutely by proper precaution, and a large percentage of the cases are amenable to treatment when seen early; and when we consider that this disease, before the introduction of proper prophylactic measures, was responsible for over one-tenth of the cases of blindness from all causes, it behoves us to throw all possible protection around these poor unfortunates and adopt the laws in West Virginia, similar to those that have proven effectual in foreign countries and in Massachusetts, New York, Ohio and other of our states.

I would also recommend that the same committee look to improvement in the laws regulating our vital statistics and the quarantine and control of contagious diseases. Children with whooping cough are permitted to run the streets, and yet this disease showed a mortality of 23 per 100,000 population in the state of Colorado, and 29 per 100,000 in the city of Atlanta in 1908, while that from diphtheria was less than 22 per 100,000 for the United States, and from typhoid less than 25 per 100,000. Our laws are much in advance of what they were a

few years ago, but they are still far below those of some of our sister states.

Sixth. I am in favor of having our society adopt some form of protection against suits brought for mal-practice. This has been very successful in the states where such a course has been pursued, and has done more to increase the membership than any other one cause.

The committee of which Dr. Golden is chairman, has faithfully matured a working plan, and I trust that you will give careful heed to its recommendations and not longer defer action.

And lastly, I have recently learned that the Board of Regents are considering dropping the Medical Department of the State University. This would be a mistake and should meet with the protest of every member of our profession in the state. The young men who have done the two years' work required at this institution have, I am informed, without exception graduated with the highest standing at the colleges where the two senior years have been spent. If we abandon this department our young men will very frequently seek out inferior medical colleges, that are lax in their preliminary as well as all other requirements, and will come back to us unfitted for their work, regretting the rest of their lives the mistake that is avoided by those who receive the inspiration and training that has so far characterized the work of the Medical Department of West Virginia State University. Why should the legal department be strengthened and built up, and our department torn down?

I realize that there are many more pertinent suggestions that could be made, but these seem to me to be our greatest needs today.

TRANSVERSE PRESENTATIONS.

G. Brown Miller, M.D., Washington, D.C.

(Read before Eastern Pan-handle Medical Society.)

The longer one practices obstetrics the more impressed he becomes with the necessity of having clear-cut, definite ideas as to how to deal with the various complications which may arise. The obstetrician has not (as a rule) time to consult his books when

confronted with a serious obstetrical complication, and hence must have his knowledge well in hand and ready for use or else make serious and, at times, fatal mistakes. Transverse presentations being a rather rare complication of labor, (occurring about once in 250 cases) and having been called upon to deal with four phases of the condition within the past five years, I have naturally become interested in the subject. When called in consultation to my first case I had, of course, fixed in my mind the general principles governing the treatment of the condition, but had no very clear ideas as to how I would deal with the various phases of the complication. Naturally, therefore, I took up the subject with a view of familiarizing myself with it, and this paper is the result of my reading and my own experience with this complication of labor.

By transverse presentations, trunk presentations, shoulder presentations, cross births, etc., is meant that condition in which the axis of the fetus crosses that of the mother at practically a right angle. In the early months of pregnancy the fetus may occupy almost any position in the uterus without this position being considered abnormal. In the last three months of pregnancy, through the increasing ovoid form of the uterus, the reflex movements of the fetus, and favorable outside influence, such as pressure of the thighs upon the poles of the fetus, the transverse presentation is usually converted into a direct one in which either the head or the breech of the child presents. Braun, in his text book of obstetrics published in 1857, says the earlier in pregnancy the diagnosis is made the more apt is it to change to a direct one. In five cases of transverse presentation so diagnosed by him in the seventh month of pregnancy, only one remained transverse at term. This view of Braun's being undoubtedly true, one must not expect the majority of the transverse presentations found in the seventh and eighth month of pregnancy to remain so until labor has set in. A certain percentage of them will remain transverse, however, and it behooves us to look closely after any transverse or oblique presentation found at *any* month of gestation.

An oblique presentation in which the axis of the fetus is at an oblique angle with the

axis of the mother is converted either before or during labor to a direct or transverse presentation; hence, before or in the early stages of labor we may find either a transverse or an oblique presentation, but after labor has well started the oblique variety disappears.

The causes of transverse presentations are not always clear. In a primipara the existence of a transverse or oblique presentation at the end of pregnancy can, according to most authors, be taken as *prima facie* evidence that the pelvis is contracted. The entrance of the fetal head into the pelvis which occurs, as a rule, two weeks prior to delivery in these cases, is prevented by some cause situated in the pelvis and by far the most frequent cause is contraction of the pelvis. Other causes which may prevent this entrance of the head are pelvic tumors, placenta previa, malformations of the uterus, excessive pelvic obliquity, kyphotic spine, exostosis of the pelvic bones, and hydramnios; while on the part of the fetus are hydrocephalus, fetal deformities, twins, or any condition which prevents the presenting part from readily entering the pelvic inlet. In multiparous women a factor which is considered of especial importance is the lax condition of the abdominal and uterine walls. In pendulous abdomens it can be readily understood that the condition will occur more frequently than where the abdominal walls are more or less rigid and firm. Tight lacing, which decreases the depth of the uterine cavity and thus tends to increase its width, is likewise given as a cause. In only one of my cases did I have an opportunity of studying the etiology of the condition, and the only abnormality which I could find after observations and examinations extending over several months, was an unusually long and oblique cervical canal due possibly to an old retro-position of the uterus. In this patient a transverse presentation was present at the beginning of both first and second labors. The children were not unusually large, the pelvis was roomy, and none of the conditions mentioned as causes were present unless it was an abnormally wide uterus, and there was nothing in the shape of the uterus subsequent to labor to indicate this

The diagnosis of a transverse presentation can readily be made, and in our private

cases the condition should always be detected prior to labor. Many errors in diagnosis in this as in all branches of medicine are made because of our neglect to make careful, thorough examinations. Any one with an elementary knowledge of the methods of abdominal and vaginal examinations should, at least, suspect a transverse presentation provided he examine his patient in the latter part of pregnancy. Inspection at this time usually causes one to suspect its existence, the uterus seeming unusually wide and short. Palpation of the abdomen will show the presence of the head in one flank and the breech in the other, or the head lies under the costal margin on one side and the buttocks lie in the opposite iliac fossa, or *vice versa*. The manœuvre of trying to grasp the presenting fetal part by means of the hand pressed firmly down on either side just above the pubes, will show the absence of any part of the fetus in the pelvis. The fetal heart sounds are generally heard unusually high. The vaginal examination is of great value in showing the absence from the pelvis of any presenting part of the fetus. In the early stages of labor the examining finger can detect the side of the thorax at the superior strait. Later in labor the shoulder can be detected as the presenting part and frequently an arm prolapses into the vagina.

The termination of a transverse presentation depends largely upon the time when it is seen. The cases of oblique presentation which are diagnosed early in pregnancy are nearly all converted naturally into either a vertex or breech presentation, and the same can be said to a certain extent of those seen in the early stages of labor before the membranes are ruptured. After rupture of the membranes the shoulder is forced into the pelvic cavity, and as the head and trunk cannot pass through the pelvis together, further progress is arrested and both mother and child inevitably perish when the case is left to nature except in the very rare instances of spontaneous evolution.

The treatment of a transverse presentation depends upon the stage at which it is recognized. When recognized at the proper time its treatment is much more satisfactory than in these cases seen late in labor. In the early stages of labor and in the latter part of pregnancy the indications are to

change the cross presentation to a direct one, and thus put the fetus in a position to pass through the pelvic canal unhindered. Most authorities agree that prior to labor in the latter part of pregnancy the indications are to perform a cephalic version by means of external manipulations, and to maintain the child in this position by the means of a properly fitting bandage and compresses. In the beginning of labor, so long as the membranes are unruptured and the fetus is movable, external version is indicated. Some authors recommend a cephalic version while others believe that the pole of the fetus which lies nearer the pelvis should be pushed into it. After rupture of the membranes nearly all writers agree that nothing is to be expected from external manipulations. The child is now snugly enclosed by the contracted uterus so that it can not be moved by external manipulations. At this stage either the bipolar or podalic version, say the authorities, should be done, the choice depending upon the amount of dilation of the cervix. The more time which elapses after rupture of the membranes the more closely the uterus compresses the fetus, and the more difficult and dangerous becomes the version. Should an arm prolapse into the vagina or the shoulder become jammed into the pelvis, before attempting any manœuvre have the patient completely anaesthetized and brought with her hips to the edge of the bed or table. A careful examination will give the information whether or not the shoulder can be dislodged from the pelvis and whether the tension of the uterus will still permit a version. "With the help of chloroform," says Bumm, "and the proper position, version can often be done many hours after the escape of the waters. A skillful hand is necessary and the warning of Osiander, '*non vi, sed arte*,' holds good more frequently here than in most instances."

When the signs of thinning of the lower uterine segment are pronounced, and when under complete anaesthesia the uterus remains firmly contracted upon the fetus and does not allow the shoulder to be changed by cautious pressure, version is out of the question. To attempt it under such conditions would mean a probable rupture of the uterus, and in such cases one of two things remains to be done; i. e. *embryotomy* in

case the child is dead or Caesarian section if it is living.

The following cases present four phases of transverse presentation, and I will report them and then discuss some points which arose in consideration of their treatment.

My first case of transverse or oblique presentation since I have been in Washington was seen in consultation at the Florence Crittenden Home June 1st, 1904. The patient, a multipara, began to have labor pains about six o'clock in the morning. She was seen soon after this by one of the visiting physicians who made out the presentation to be of the posterior occiput variety. She was not examined again until seven o'clock p. m., when an arm was found presenting. A consultant was called in, the patient was anesthetized, and an attempt was made to do a version. It was found impossible to turn the child, and in the effort to do it the other arm slipped down into the vagina. When I saw the patient, soon after this, both arms were found protruding from the vulva, the child was dead, the cervix was fully dilated and the chest of the child occupied the pelvic cavity. The left shoulder was anterior and the head of the child was markedly flexed upon the trunk, being above the pelvic brim. The uterine contractions were forcible. A tentative effort was made to push up the arms and bring down the head, under complete anesthesia, but it was found impossible to do this without using great force. The child being dead, it was deemed advisable to decapitate, but this was rendered difficult by the protruding arms. Accordingly the left arm was amputated at the shoulder by means of a heavy pair of scissors, and then with the fingers grasping the neck no difficulty was experienced in cutting through the neck with the scissors. The body was delivered without difficulty by means of traction on the remaining arm. The head was now forced down into the pelvis and delivered by a finger in the mouth. The patient made an uninterrupted recovery. Her pelvic measurements as given me by the physician in charge were as follows: Spines 27 cm., crests 28 cm., Baudelocque 18 cm.; the internal measurements were not made. While the measurements indicated a slightly flattened pelvis, there was no history of trouble with previous deliveries.

The following case presents two phases of the condition. On September 11th, 1907, I was called out at six o'clock in the morning in consultation to see Mrs. H., a primipara, 33 years old. The physician in charge of the case had found, on examination soon after the beginning of labor upon the evening of September 10th, a shoulder presentation with an arm down in the vagina. He had performed internal podalic version and had succeeded in delivering all of the child except the head which had hung above the brim of the pelvis. After vainly trying to deliver the child by traction upon its body, several attempts to deliver the head by forceps had been without success. The forceps had slipped

in one of these attempts, and the perineum had been lacerated and the urethra nearly severed from its attachment to the pubic arch. At 11 o'clock the efforts to deliver the woman ceased, and by telephone and messengers numerous attempts to get another consultant (one having already been called in) began, and finally at 5 o'clock a. m. I was called up and arrived at the house about 6 o'clock. I made an attempt to deliver the head by trying the usual method, and failing, did a craniotomy and extracted the broken up head. The woman was in so critical a condition that I made no attempt to sew up the lacerations. After a rather tedious febrile convalescence, she recovered with loss of control of the urine. This incontinence gradually grew less, but was not entirely overcome when the woman again became pregnant. The patient's husband and her family physician had had a disagreement, and I was asked to look after the patient in her second pregnancy, which I agreed to do after an understanding with the doctor. On making an examination about one month before the expected confinement I was surprised to find a transverse presentation. The head of the fetus lay under the right costal margin and the buttocks in the left iliac fossa, the pelvic cavity being free from any fetal part as was shown both by external and vaginal examinations. I could easily do a cephalic version, and five times brought the child's head into the pelvis, but in a little while it would rotate to its former position. An attempt to hold it there by means of a bandage and compresses also failed. In spite of the fact that enough pressure was made to cause considerable pain to the patient, she felt the head rotate to its original position about one hour after the application of the bandage. Both parents were very anxious for a living child. The patient was sent to the Columbia Hospital a few days before the expected confinement, and I directed that I should be notified at the first indication that labor had begun. Finally there was some discharge of bloody mucus and an occasional pain during one night; the next morning she discharged about one-half pint of fluid *per vaginam*, and a continual slight discharge continuing with slight pains. At two o'clock that afternoon I had her fully anesthetized, dilated the cervix so that I could introduce my hand into the uterus, (using the most complete asepsis) rotated the child, ruptured the membranes, brought the head into the L. O. A. position and held it there until the uterus contracted and regular labor set in. After a painful labor a living child was born at 8 o'clock the following morning. The patient's pelvis was normal so far as I could tell, in fact it was rather large, the measurements being: Spines 26 cm., crests 29 cm., Baudelocque 21 cm., oblique conjugate 13.5 cm. I could find no cause for the transverse presentations. The cervix was peculiar at the second labor. (I had not had an opportunity to examine it previous to labor at the first.) The vaginal portion of the cervix was flush with the vaginal vault, the external os just admitted the index finger, the cervical canal was about two inches in length.

The internal os was small and it seemed to me to be situated further forward than one would expect to find in a multipara. The placenta was not attached to the lower uterine segment, there was no hydrocephalus and no pelvic exudate or tumor except a small vaginal cyst the size of a chestnut just at the junction of the vagina and anterior lip of the cervix.

About thirty-six hours after delivery the patient was seized with a sudden sharp pain in the symphysis pubis which was so severe that any effort to turn, use a bed-pan, etc., required the assistance of at least two attendants. Pressure over the symphysis caused slight pain, but pressure over the hips so as to force the pubic bones together caused intense pain. Her temperature was 100° F. and her pulse between 80 and 90. The pain here gradually subsided, but on the fifth day after labor she had considerable pain and tenderness in the right lower abdomen and became slightly distended. Her temperature rose to 102° F. and continued slightly elevated for about ten days. Her leucocyte count was 19,000. She developed a phlebitis in the right femoral vein upon the eleventh day of her convalescence. She left the hospital at the end of three weeks, and now is as well as she was before the beginning of her last pregnancy.

My third case of transverse presentation was seen in consultation December 27th, 1907. The patient, a multipara with a normal pelvis, gave a history of having had two transverse presentations in four or five deliveries. She had been attended in the last confinement by her physician, who had found a transverse presentation. He had performed podalic version, but the child was dead when delivered. When seen by me the cervix was fully dilated and the position of the fetus was transverse. No part of the child being in the pelvis, I ruptured the membranes, did a podalic version and delivered a live child. She made an uninterrupted recovery. While I have not the pelvic measurements, the fact that she had several other living children and the ease with which the head came through the pelvis make me believe that there was little or no pelvic contraction.

The principles of treatment already shown are those now generally advocated where the obstacles to deliver are due to the abnormal presentation. When marked contraction of the pelvis exists, when pelvic tumors and other abnormalities are present, appropriate methods of treatment of course have to be instituted. There are certain points of treatment which it is desirable to elaborate, and while I will not attempt a full discussion of the subject, I will take up certain phases which I have been called upon to consider in my own cases. (1) When seen in the last month of pregnancy and before labor has started, what should be done? In one of my cases I had to consider this,

and following the advice laid down by most modern writers, I did a cephalic version by external manipulation. The head in this patient lay under the right costal margin and the buttocks in the left iliac fossa. While I could easily perform version by external manipulation alone, the fetus would rotate to its former position within a short time after the rotation, nor could I keep it in the desired position by means of a binder or compresses. This experience corresponds with that of most observers, and while it is advisable to make the attempt to correct the presentation in this manner it will generally fail. (2) Another point which came up for consideration with me was, how long should one wait after the beginning of labor in cases which will not stay converted, before interfering. The majority of authors advise waiting until the cervix is fully dilated and then rupturing the membranes, performing a podalic version and immediately delivering the child. They claim that immediate delivery is advisable on account of the possibility of prolapse of the cord. The objection to waiting, it seems to me, is that in this as in all abnormal presentations the membranes are apt to rupture before the cervix is fully dilated, and the child may then have to be delivered through an incompletely dilated cervix with great danger of its death, or else if left alone after rupture of the membranes for further dilation to occur, the dangers of loss of the child's life are many times increased. Others advise doing a cephalic version by the Braxton Hicks method and holding the head in the pelvis until labor pains fix it there. To do this it is necessary to rupture the membranes. My objection to it is that one has very little control of the head, and it is difficult or impossible to cause the head to present in an L. O. A. or R. O. A. position and in consequence an occipito-posterior, a brow, or other abnormal presentation may arise, especially in a slightly contracted pelvis.

The objection to a version so as to bring the breech into the pelvis is, that applicable to breech presentations in general, i. e., the high fetal mortality.

(3) When the membranes rupture before the cervix dilatation begins, as was the case in one of my patients, and where past efforts have shown that the head will not

stay in the pelvis, what should be the mode of procedure; in other words did I do right in doing a manual dilation, fixing the fetus in an L. O. A. position and leaving the woman to deliver herself by the usual labor? In favor of it are the following facts: I found out definitely that there was nothing in the pelvis or in the fetus to prevent a normal delivery, I gave the most favorable conditions for a living child because the *engaged* head prevented any possibility of prolapsed cord, and by *moulding* in the *natural* way made the passenger as small as possible. The results bore me out in that a live child was delivered without further interference. The objection to the method was the increased dangers of infection, and this too seemed borne out by the febrile convalescence and the phlebitis. Another question which arose and one which is difficult to answer was this: was the danger of infection increased by artificial dilatation of the cervix? Should I have rotated, ruptured the membranes and allowed the head to dilate the cervix? In other words did the dilatation of the cervix and the introduction of the hand into the uterine cavity cause any greater liability to infection than the introducing of one or two fingers into the uterus and rupture of the membranes? It is possible that the head pressing for eighteen hours upon the cervix which had been subjected to a certain amount of trauma might increase the dangers of infection. The danger cannot be great, however, as the dilatation of the cervix by artificial means and allowing the labor to proceed slowly are frequently resorted to in placenta previa and other conditions.

Another observation which to me was interesting was the case with which decapitation was performed in my first case. The blunt hook is usually deemed necessary to break the neck of the fetus before decapitation can be done. I had absolutely no difficulty in cutting through the cervical vertebrae with my strong scissors, and believe it can be done in all cases where decapitation is necessary.

1730—K Street.

MEMBRANOUS CROUP OR LARYNGEAL DIPHTHERIA.

Intubation versus Tracheotomy.

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Croup is a common and well known condition, and as the ground has been pretty well covered by text books and articles by various writers, my remarks will only deal with the etiology, pathology, symptomatology and differential diagnosis in a very general way. The specific therapy, by the administration of antitoxin, and the relief of the laryngeal stenosis by means of the intubation tube, will be treated in a brief but practical way, based on personal experience and observation while at the Willard Parker Hospital, N. Y. City.

ETIOLOGY.—PREDISPOSING CAUSES. Age. I have never seen a case under five months, and it is extremely rare beyond eight years, but occasionally occurs even in the adult. From one to three years is the common age. It usually occurs in the winter and spring seasons, and among the poor in congested districts. Measles is a potent factor as a predisposing cause. Of course the direct factor is the diphtheria bacillus, and this organism can be demonstrated by culture in at least 80% of the cases, and no doubt in every case if the seat of the lesion was reached with the swab.

PATHOLOGY. The living diphtheria bacilli act on the tissues locally, giving rise to a rather elastic, grayish membrane, which, when stripped off, leaves bleeding points. Microscopically, the membrane is made up of a network of fibrin whose meshes are filled with small round cells, few polymorpho-leucocytes and cell detritus. The submucous tissue is also oedematous and aids materially in the stenosis. This membrane may be primarily in the larynx or may be an extension from the pharynx. In my experience it has been more often primary. It may be a small patch or form a complete cast of the larynx, trachea and bronchi.

These bacilli also secrete a very diffusible toxin which has a special affinity for the tissues of the nervous system, heart muscle, and the parenchyma of the kidneys. The change produced by the toxin is usually of a

parenchymatous or albuminous degeneration of the tissues involved. In croup these changes are usually slight, so one seldom meets myocarditis, paralysis or nephritis of a grave type, as is often met in the pharyngeal type of the disease, unless the pharynx also be involved. This is undoubtedly due to the toxin not being as readily and as rapidly absorbed by the laryngeal as by the pharyngeal mucous membrane.

SYMPTOMOLOGY AND PHYSICAL FINDINGS. Onset is gradual but progressive. Patient exhibits a temperature from 100° to 101°, rather quick pulse, hoarseness, early restlessness, dyspnoea, both inspiratory and expiratory, anxious expression, epigastric and supra-sternal retraction. If not relieved, temperature and pulse go up, dyspnoea becomes marked, restlessness increases, cyanosis develops, and breath sounds are diminished or absent over dependent portion of lungs. The picture is one of the most horrible with which the physician meets.

DIFFERENTIAL DIAGNOSIS. Membranous croup should not be mistaken for the following conditions: spasmodic croup; catarrhal croup; laryngismus stridulus; foreign body in larynx or trachea; oedema of glottis; retropharyngeal abscess; broncho-pneumonia and empyema.

SPASMODIC CROUP. Spasmodic croup usually occurs at night, is sudden in onset, crowing sound on inspiration due to the spasm of adductors of larynx. Duration only a few hours, usually ended on following day, and spasm relaxes under chloroform, emetics, antipyretics or hot baths; is generally a history of previous attacks.

CATARRHAL CROUP. Onset with high temperature, more marked at night. Culture negative. In certain cases we will be unable to differentiate, so if any doubt, treat as membranous croup. I have seen lives lost by delaying the treatment until positive diagnosis is made. It is much better to be on the safe side than to let the patient go even for a few hours without the advantage of antitoxin.

LARYNGISMUS STRIDULUS. This is a condition of apnoea rather than dyspnoea, and is often followed by convulsions.

FOREIGN BODY IN LARYNX OR TRACHEA. Careful history of case makes diagnosis easy.

OEDEMA OF GLOTTIS. History. With dyspnoea on inspiration and free expiration.

RETROPHARYNGEAL ABSCESS. Digital examination. I saw one case which was brought into the hospital for intubation and a digital examination revealed the abscess.

BRONCHO-PNEUMONIA AND EMPYEMA. Broncho pneumonia and empyema might be mentioned because I have been called to intubate such cases, and it is sometimes rather puzzling on first sight to say whether or not any stenosis of the larynx exists. I simply mention these because it is so necessary to make a careful examination in each case.

TREATMENT. These patients should be kept in a quiet, well ventilated room. In no condition is fresh air more essential than in these cases of laryngeal stenosis. This is self-evident, yet in the great majority of cases this point is overlooked and the patient is kept in a close, hot room. The great majority of people are very much afraid of fresh air in all respiratory conditions, and they are generally successful in getting the physician to admit that fresh air might cause pneumonia. If the body is kept warm it matters not how cold the room may be, there is no danger of the patient taking cold.

Then, too, all things which tend to cause respiratory embarrassment should, as far as possible, be removed, such as tight clothing, loaded stomach or bowels. I think that calomel in small doses acts admirably by relieving the gastro-intestinal tract of any material which it may contain. Nothing should be given in the way of food except warm milk, cereal decoctions or water. The milk should be modified to suit the age of the patient.

Then antispasmodics are indicated to relieve any spasm of the laryngeal muscles that may be present. Hot applications either in the form of stupes or poultices greatly aid by relieving the spasm of the muscles and they also have a tendency to diminish the congestion in the larynx or trachea.

Steam inhalations or calomel fumigations may be resorted to in severe cases. Very small doses of morphine or Dover's powder allay the restlessness and are often very beneficial.

Caffein and whiskey are the best heart stimulants in these cases.

The only specific therapy is antitoxin, and it should be used liberally and early in every case. It is hardly necessary to mention that each case should be isolated, and the children exposed should receive at least five-hundred units of antitoxin as a prophylaxis. This certainly protects from three to six weeks. All debilitated cases, especially those having measles or scarlet fever, should receive one-thousand units as an immunizing dose.

There have been collected recently about one hundred cases from the literature in which administration of immunizing doses caused serum sickness, and in a large percentage caused death in a few minutes. The most of these cases gave a history of asthmatic attacks. This is singular, and I think it may be that some of these are cases of status lymphaticus, which we know are subject to asthmatic attacks, and death often occurs very suddenly and during very trivial operations.

While house physician at the Nursery and Child's Hospital, in the course of a few months I immunized most of the children in the hospital on three different occasions without noticing any marked reaction, other than occasional slight rise of temperature. About ten per cent of the injections were followed by some skin rash, varying from a localized urticaria to a diffuse erythema. The urticaria may come on within a few hours, but the erythemas usually about the tenth day. I have seen the temperature of the erythematous type reach 103° F, and give a picture which is almost impossible to differentiate from scarlet fever. The rise in temperature and the rash is usually transient, but occasionally may persist for two or three days.

I was in the Health Department about six months and had an almost unlimited experience with these cases. The capacity of their Hospital is about one thousand beds, and they seldom have less than eight hundred cases of contagion, including measles, scarlet fever, chicken-pox, small-pox, whooping cough, as well as observation cases. Only about 250 of these cases are diphtheria. Each and every patient on admission receives one thousand units of antitoxin as an immunizing dose. Besides, the children in the homes from which the diphtheria cases are taken receive an immuniz-

ing dose. I have followed these cases for a period of six months, and I have never seen a fatal result which could be attributed to antitoxin. If a child should give a history of asthmatic attacks and was not suffering from diphtheria, but had been exposed to diphtheria, I do not think that one would be justified in immunizing the case in the light of our present knowledge, but if it did not give any history of asthmatic attacks the physician should strongly advise an immunizing dose.

As to the therapeutic dose, when one is suffering from croup, or any form of diphtheria, the results depend largely on the stage at which the antitoxin is given as well as the amount, and also on amount of mixed infection, complications, etc.

When a physician is called to see a case of croup, before leaving the patient he should be sure beyond a reasonable doubt that it is not membranous croup. If not sure, it is better to explain to the parents the possibility and the danger of delaying treatment until he is sure of his diagnosis. By so doing the physician will often save himself later embarrassment as well as the life of his patient. This is a point that cannot be too strongly urged, because delay often means death, and if one errs on the safe side no harm is done outside of the cost of the antitoxin, but if on the other side, often a life, as well as the reputation of a conscientious and competent physician, is at stake.

Then the first and most important thing to do is to give antitoxin, the size of the dose, depending on each individual case, will have to be governed by the physician in charge. In mild cases, five thousand units, repeated in twelve hours, will be sufficient, or a single dose may serve the purpose. In some cases the dose should be large and repeated several times. One cannot expect too much improvement under twelve hours after the injection, and often the stenosis will have to be relieved by mechanical means. A case that is already markedly dyspnoeic at the time of injection, will likely have to be relieved before the antitoxin has time to have much effect. That is the reason why it should be given early.

There are some prominent physicians who still question the beneficial result of antitoxin, and furthermore hold that to it is largely

due the various forms of paralysis, myocarditis, nephritis, etc., that occasionally follow diphtheria. But the large majority believe in its efficiency and attribute the degenerative changes in the nervous tissue and kidneys to the toxin rather than to the antitoxin. Dr. Holt, of New York City, has collected statistics both before the days of antitoxin and after it was used and controlled by the Health Department. He shows that the mortality has been reduced in New York City fifty per cent. In Germany, in the large cities, fifty per cent, in Paris, sixty-six and two-thirds per cent. There are numerous statistics which might be quoted, but I think it useless to mention them, as the prejudice is rapidly fading even in the small towns and rural districts. The antitoxin is ordinarily given in the subcutaneous tissue of back or abdominal wall, but never in the arm or leg, as it may cause severe pain if there should be much oedema. Abscesses occasionally occur, but can be avoided by asepsis.

INTUBATION.

In the treatment of laryngeal stenosis depending upon the presence of pseudo membrane (the symptoms being sufficiently well marked to warrant operative interference), the laryngeal brush, sponge, probang, and forceps; catheterization of larynx, tubage, intubation and tracheotomy have been employed to relieve the urgent dyspnoea. The brush, probang and forceps are but temporary expedients intended to remove loose membrane and afford relief for the time being. Catheterization, tubage, and intubation, while facilitating the expectoration of membrane, are resorted to primarily for the purpose of relieving the dyspnoea, the immediate source of danger in laryngeal diphtheria. Tracheotomy also relieves the dyspnoea, but I think that it should only be resorted to in selected cases in which intubation fails.

The brush, probang and forceps are not at present used. Catheterization is an infrequent procedure and has not served its purpose as well as was anticipated.

Tubage, as advocated by Bouchut, soon fell into disuse.

Dissault, in 1801, accidentally demonstrated that the larynx would tolerate a tube, by

catheterizing a case with oedema of the glottis, leaving the canula in for nearly two days. Dieffenbach is said to have practiced it in 1839. In 1858 Bouchut read a paper before the Academy of Medicine (Paris) entitled "A new Method of Treatment of Croup by Tubage of Larynx." It was condemned by Trousseau, however, and soon fell into disuse." (Heubner).

Dr. Joseph O'Dwyer, without any knowledge of Bouchut's work, independently rediscovered and practiced intubation and has completely vindicated Bouchut's claims. His tubes, however, are entirely different from those used by the French physician. As the intubation set, as used by O'Dwyer, is now demonstrated in the medical college, it would be entirely useless for me to attempt to describe the tubes, introducer or extubator, but will give a brief discussion of the method of intubation and extubating, as well as the difficulties and dangers in the procedure.

The first essential, of course, is that the operator is competent and can introduce the tube quickly without subjecting the patient to a prolonged operation which is entirely unnecessary. This requires a certain amount of skill which is easily acquired by practicing on the cadaver or an anaesthetized dog. My first experience was on a cadaver, and after about one or two hours' work on the cadaver, I was able to introduce the tube into the living child on the first attempt. The next case, however, I failed to intubate after three trials, and had to return for more experience on the cadaver, but since that time have never had any more trouble in either intubating or extubating.

If there is any advantage in intubation over tracheotomy, which all who have had experience with both operations candidly admit, then I do not think that the man who does the tracheotomy is excusable because it requires a certain amount of skill to intubate, because, as I have stated above, this skill is easily acquired, and I think that the surgeons more especially should make themselves efficient in this very simple procedure which, once acquired, will always serve him in an emergency.

When a physician is called to one of these cases, he should first assure himself that the dyspnoea is due to laryngeal diphtheria by carefully examining the patient as well as

obtaining as good a history as possible. It should only be done in cases which demand immediate relief. This is indicated by marked dyspnoea, both inspiratory and expiratory, restlessness, supra and infra-sternal retraction, diminished or absent breath sounds over dependent portion of lungs, with cyanosis and aphonia.

It is always well to explain to the parents or friends that the operation is attended by a certain amount of danger, and that it may be necessary to resort to tracheotomy at once in case membrane is shoved down in front of the tube. The child should be wrapped in a sheet with arms included, and the sheet fastened with safety pins, then placed on a table. Have an assistant grasp the head of the child and hold it midway between flexion and extension. Insert a mouth gag in left side of mouth and have the assistant to hold it firmly; also have someone to hold the feet. The operator should stand facing the child and on left side of the table, and with the left index finger follow the tongue until the finger comes in contact with the epiglottis, which is usually firmly contracted with the tip pointing backward, thus closing the glottis. When the finger comes in contact with the tip of the epiglottis draw the finger towards you until you have it firmly against the base of the tongue, being careful not to hold the finger over the glottis. Then with the right hand introduce the tube, using the left index finger as a guide. When the tip of the tube reaches the glottis, raise the right hand until the tube is parallel to the larynx and then gently shove downwards, at the same time releasing the epiglottis with the index finger of the left hand and placing it on the top of the tube, and at the same time squeezing the spring of the obturator with the thumb of the right hand so that the tube can be shoved down with the index finger of the left hand and the obturator on the handle can be withdrawn with the right hand. In this way the air is only cut off for about one or two seconds. The tube is shown to be in place by a high metallic expiration and easy inspiration. After the operator is sure that the tube is in the larynx, he can slip the string and place finger on head of tube so that it will not be withdrawn in removing the string. Child is now placed in bed and given about

one-half teaspoonful of whiskey diluted with a small amount of water, which will excite a paroxysm of coughing, so that all mucus or loose membrane may be coughed up.

EXTUBATION.

The patient is prepared as in intubation, and the operator uses the left index finger as a guide. When the tip of the extubator comes in contact with the head of the tube, raise the right hand and gently shove downward. Then squeeze the spring of the extubator with the thumb and withdraw the tube. Occasionally the tube will be somewhat encysted and rather hard to dislodge, but with care this can be overcome. When there is much oedema of the arytenoepiglottic folds, the head of the tube may, for a time, be masked and give rise to some difficulty in introducing the extubator. This can be overcome by clearing the head of the tube with the left index finger.

The most serious accident, which should never occur in the hands of a competent operator, is the shoving of the tube down the larynx so that it cannot be reached with the extubator. It requires great force to do this, if the tube is of proper size for the age of the patient. If it should occur, tracheotomy becomes imperative. I have seen only one such case and it was due to the operator not recognizing that there was a tube already in the larynx, so he introduced a second tube which shoved the first down into the trachea. Death was the result, and the cause was revealed at autopsy.

RESULT. Intubation relieves dyspnoea completely, and the patient is able to take nourishment, and with exception of occasional paroxysm of coughing, is perfectly comfortable.

The strongest argument used against intubation is the possibility of shoving membrane down in front of the tube and thus blocking the air passage. In my experience I have had three such cases. I immediately withdrew the tube and the membrane followed, and dyspnoea was less marked. One of the cases did not have to be reintubated. I have never seen death result from such a cause, but it is a possibility to be borne in mind, and in every case the parents should be warned that such is a possibility, and the operator should be ready to perform a

tracheotomy immediately if such should be the case.

Occasionally the membrane will extend too low for the tube to reach below it, and in such cases tracheotomy should be performed. I have had three such cases. In two of them tracheotomy was refused and the patients died the following day. In the other one tracheotomy was performed, but this patient also died the following day from toxæmia.

Occasionally the larynx is extremely irritable, and there may be difficulty in preventing the child from coughing up the tube. If such should occur, the patients generally stand it several hours before the tube has to be reintroduced, which will give ample time for the operator to be called.

About one per cent of the cases become chronic tube cases, due to some ulceration, followed by stricture. Such cases are tedious, but can usually be relieved by using larger and larger tubes until the stricture is overcome.

The after treatment in tube cases is simple and does not require any skillful nurse, but of course one is always desirable if obtainable. The child can take liquids from a cup without a great deal of trouble. During each feeding, patients usually have several paroxysms of coughing, but such is desirable because it aids in keeping the tube clean. Solid foods are more easily taken than liquid.

Dr. Northup, Prof. Pediatrics, Bellevue Medical College N. Y., has repeatedly demonstrated at autopsy that food, or schluck pneumonia does not occur in these cases. Ordinarily the tube is removed about the fourth day, if all of the symptoms have subsided. If dyspnoea still exists, reintubate and wait about four days before extubating.

PROGNOSIS. Dillon Brown of New York, read a paper before the Academy of Medicine in that city in 1889, based on twenty-three thousand cases operated on by one hundred and sixteen different physicians. Mortality 72.7%. Since the days of antitoxin the mortality is quoted at about thirty percent.

There are no definite statistics to be obtained by which intubation can be compared with tracheotomy.

The following are the advantages claimed

by the early workers and Holt of New York City:

1st. Bloodless, no anaesthetic required, quicker, simpler, no pain or shock.

2nd. No trouble in getting parents consent.

3rd. After treatment simpler, no new avenue of infection or dressing of wound.

4th. Stricture less frequent than in tracheotomy.

5th. Seldom abscess, ulceration or necrosis.

6th. Gives opportunity of better explosive cough.

7th. The air is warmed and moistened by passing over the nasal and buccal mucous membrane.

8th. In infancy all who have had experience with both operations admit the great superiority of intubation.

9th. The intubation tube can be dispensed with earlier than the tracheotomy tube.

2345 Chapline St.

TYPHOID FEVER.

Report of One Hundred and Fifty Cases Fed On General Diet.

G. C. Rodgers, M.D., Elkins, W. Va.

(Read at Annual Meeting of State Medical Ass'n, October, 1910.)

The subject of Typhoid Fever has been diligently studied from many points of view. The pathologists have spent much time on their side of the question; and in fact it looks like they have told us about all there is to know about that. We all know there have been radical changes in the treatment. Instead of withholding water, as was done a few years ago, we now insist upon the patients drinking all they can; and even in my early career as a practitioner, I was dismissed from a case because I ordered a cold bath. Every phase of the subject has undergone radical changes except that of diet, but our oldest and most modern text books read alike on that subject.

Now, in discussing this subject, I will grant without argument that my views are in opposition, so far as I know, to every text book, from the oldest to the most recent, and I realize that in advocating a liberal diet in typhoid I am asking for what

many of you have never given a serious thought to, and very few of you have ever made a trial. I wish, however, to state in the beginning, that I am not unveiling to you some air castle, but I am presenting this after ten years' diligent study and considerable experience. The cases reported here are my last one hundred and fifty cases taken consecutively, and I am prepared to furnish charts and written records for each and every one of them. In this series of one hundred and fifty cases there were no deaths, no perforations, slight hemorrhages in four cases, marked distension in one case only, and that lasted twelve hours, prostration, delirium, dry tongues and tympany almost unknown; reinfections were rare, only being seven in this series. I should also state here that during the treatment of this series I have also treated ten cases on the usual liquid diet, six because they would not take anything else, from the very beginning, and the remaining four because the doctors referring them preferred it. Out of the first six four died; one from hemorrhage, one from perforation, one from meningeal involvement, and one from toxemia. But to be fair, I think the same patients would have died on any diet, for they showed almost no resistance, and became profoundly toxic very early in the course. I might also state here, that I have fed many more typhoid cases on a liberal diet, than are included in this report, but during that time I allowed myself to be bound down by the shackles of public and professional criticism, and only fed the ones that I felt sure would recover, and so do not think it fair to report them.

I am credited with making the statement while a student, that I believed more typhoids died, either directly or indirectly, from starvation than from all of the other causes together, and I believe it more firmly to-day than ever. Five years ago I advocated this same thing before our Tri-County Medical Society, and expected at least to provoke a good discussion, but to my disappointment the members were inclined to take it as a joke. Nevertheless as far as I can gather from the literature of the past few years, the tendency, while very slow, is yet decidedly towards an increase in diet for typhoids. It has been shown beyond question that insufficient nourishment low-

ers the resistance of an otherwise healthy person, and yet we expect nature to establish an immunity against the ravages of as infective and toxic a malady as typhoid fever, and yet insist that she do this on less than half food, instead of coming like men to the aid of nature, and by proper and sufficient diet assist her in overcoming this excessive metabolism and protein destruction, which is shown by May, Wood, Rubner and others, to be increased from 25% to 50%, and remember, this destruction is going on to a greater or less degree whether we furnish the repair material or not. If we do not, then our patient will soon be living on his own vital tissues, consuming that on which his only hope for recovery depends. For I think we are pretty generally agreed that we possess no specific for typhoid, and that it is only a question of whether the individual resisting power of the patient is able to overcome the germ, and establish an immunity against its ravages. An individual once becoming infected with the bacillus typhosus, there is a battle royal on, the germs of typhoid on one side, supported by their artillery, the toxins, which are weakening the bulwarks of resistance by causing an excessive metabolism with an enormous protein drain. On the other hand, unfortunately, we have no increase in phagocytosis at the time of strife, but only the normal resistance of blood and tissues. There is one question that ever sounds in my ears, and I wish I could sound it unto the echoes could be heard throughout the medical profession; and that is this, are we going to help overcome the germs, or will we help the germs to overcome the patient? If we are going to do the former, then we must furnish a diet easy of digestion, rich in carbohydrates, and a sufficient amount of protein to replace this destruction, and hold our patient in a nitrogenous equilibrium. If you want to assist the attacking forces, cut off your nourishment, and help to weaken the individual's resistance, and you have certainly done it. Some one says, "We don't do that, for I give a glass of milk every three hours". Another says, "I give a cup of broth every two or three hours, or an ounce of Liquid Peptonoids, or a glass of malted milk, or egg albumen, or some of the cold pressed meat juices after omitting milk." I will dispense with the balance of

that category, and all that belongs to it, by saying, and saying on the authority of the best physiologists and laboratory men of our land, that many of these are absolutely worthless, and the others are so nearly so that they are not worth considering. Now, if any of you doubt these statements, I only ask that you give some time and study to the recent investigations along this line. Yet on this so-called nourishment you expect to support a body where every living cell, every action and function of the organism is from proteid and mineral; without proteid and mineral, in organic combinations, there is no life. In discussing this subject, Dr. Winters of Cornell University Medical School says: "Broth is as barren of this constituent as the Desert of Sahara is of vegetation." With life in the balance, to administer as aliment that which is totally devoid of all vestige of organic constituent is to scoff at Nature's laws.

Repeated tests in the physiological laboratories have proven that a dog will live longer on pure water than on any animal broth that can be made. Prof. Lusk, in his masterly work on nutrition, in referring to one of Voit's experiments, in which Liebig's extract of beef had been given, says no account was taken of it, as it had no nutritive value.

Geo. M. Niles, M. D., of Atlanta, writing in *American Medical Journal*, in discussing these so-called foods, makes the following statement: "Another greatly overrated class of foods are the meat juices, for which fabulous powers have been claimed. Well expressed juice, obtained from freshly chopped beef, may contain a fair amount of actual nourishment in the form of coagulable proteins and meat bases, and is useful to tide over emergencies or to satisfy the patient that he is being fed. It would take the stomach of a rhinoceros, however, to hold up under a diet of meat juices for any length of time. As to meat extracts, they are a delusion and a snare."

Dr. A. L. Benedict, of Buffalo, says that a broth made at a temperature above 160° F., contains absolutely no protein nourishment, and is of about the same dietetic value as urine. Dr. Niles again says: "The dry proprietary foods are equally unsatisfactory, because taken in sufficient quantities they often disturb digestion more than or-

dinary wholesome food, while the caloric value claimed for them is unreasonable." Dr. Edsall, of Philadelphia, recently weighed a specimen of one of these foods, and says that if it were all nutritive material it would take from \$1.25 to \$1.50. to buy an amount equal in food value to a five-cent loaf of bread..

Time will not permit, or I could give you virtually the same opinion from a great number of our most learned men.

Now, as to milk, for that is the only one of the ordinary liquid diets that is worth considering, mother's milk is an ideal diet for an infant under ten months of age. In fact, Dr. Winters, of New York and many others insist that it should be reinforced, after the sixth month, and all authorities agree that it is not sufficient after the twelfth month, but should, at least, be reinforced by the carbohydrates. Again, the proportion of nitrogen in milk to furnish 3500 calories, about the amount necessary to hold our patient in a nitrogenous equilibrium, would necessitate giving about 200 grams of protein, just twice the amount admissible in an ideal diet, for a healthy individual, although it has been clearly demonstrated by many physiologists that the proteins should be reduced about one-third in all fever. We speak of a liquid diet, and yet we all know that upon entering the stomach and bowels this same milk is quickly converted into hard curds and lumps, the inside of which is probably full of germs on an ideal soil for multiplying, while the enzymes have access only to the outer surface. Milk is often impure, and is always an excellent culture medium for typhoid bacteria.

Coleman being an advocate of milk, but realizing its deficiency in food value, attempts to reinforce it by adding daily from four to six eggs, and from one to two pounds of milk sugar. My personal experience with this diet has been unsatisfactory, and it seems to be the experience of all that many patients will not take it, and others have diarrhea or tympanites. I wish to state right here that mother's milk is the ideal food for the infant and cow's milk is the ideal food for the calf, but in my judgment both are far from the ideal diet for the mature.

In my earlier studies on this subject, it appeared to me that to replace this excessive nitrogenous waste would necessitate an increase in the amount of nitrogenous diet, but experience has taught me that as a whole typhoids do not stand a nitrogenous diet well; but, on the other hand, they do stand a carbohydrate diet well, and that carbohydrates do markedly control the loss of tissue nitrogen.

This conclusion is borne out by the experiments of Dr. Shaffer, who has shown that a liberal carbohydrate diet, in combination with a small amount of protein, may completely, or almost completely, maintain the patient in a nitrogenous equilibrium throughout the typhoid course. Dr. Shaffer says: "It was only when we gave 60, 70, or even 80 calories per kilogram of body weight—between 3,000 and 4,000 calories—that the greatest sparing was observed."

May, after much experimental work, concluded that the increased protein metabolism was in a large part due to the absence of available carbohydrates and not to a toxic waste of tissues. Now, as to whether a large intake of carbohydrates prevents the waste of body protein, or whether they replace it after the waste, I am not yet willing to make a statement; but I am, however, ready to assert that if given properly and in proper amounts, they will either prevent or overcome it, to a large degree, at least, in typhoid fever. From my own experience, and after reviewing these and many other tables, it seems clear to me that a large amount of protein is unnecessary, and is often harmful, on account of its specific dynamic action. After much work of his own, and after reviewing the work of many others, Dr. Lusk says: "It may be concluded that nitrogen equilibrium may be very nearly maintained throughout the course of typhoid fever, on a diet containing from 12 to 15 grams of nitrogen, provided an excess of carbohydrates be also administered."

Now, I would like to ask, how many of you are actually trying to hold your patients in this condition of normal resistance, how many of you know the actual food value of the food you give in twenty-four hours? When you order a drug you know the physiological dose of that drug,

and you stop to calculate the amount of the drug given in twenty-four hours, but how many of you stop to calculate the physiological requirements of your typhoid patients, and to form at least an estimate of the amount of calories contained in your food order? Yet, gentlemen, this is certainly of far more importance than the selection of some drug to use.

As to the exact quality or quantity of food used, it is as impossible as it is undesirable to have any fixed rules, for each individual case must be a law unto itself, and the food should be carefully selected for each case. About the only rules I have are general ones. 1st. Don't give fried food, string beans, cabbage, mushrooms, or any diet that is not easily and wholly digestible. 2d. Feed chiefly carbohydrates, and from 3,000 to 3,500 calories per day, if the appetite and digestion will permit. If the patient is taking less than 2,000 calories, better look after the digestion and appetite.

The following is about the diet on which this series of one hundred and fifty cases have been fed: 8 a. m.—Bread (plain or toast), but well baked), two or three slices, 45 to 50 grams; butter as wanted, cream of wheat, rice, oatmeal or grits, one saucer with cream and sugar; cup of tea or coffee, with cream and sugar; and often one soft boiled egg, or the juice of an orange. 10 a. m.—A glass of buttermilk or cup of vegetable soup and crackers, or something similar. 12 m.—One egg, soft boiled or poached, or a small piece of light meat; two slices of bread; one potato, average size, baked or creamed; one baked apple or its equivalent; butter as wanted; tea or coffee with cream and sugar, if desired. 3 p. m.—One saucer of light pudding or cream of wheat with sugar and cream. 6 p. m.—Vegetable soup, 8 or 10 ounces, with crackers, a handful; bread (plain or toast), two slices, with butter and fruit. 9 p. m.—One glass of buttermilk, glass of custard, sherry, egg, or something similar. Now, I know full well that one hundred and fifty cases are nothing on which to establish a mortality rate, neither are they a sufficient number on which to establish any particular treatment; but if there was half as much danger in this diet as some physicians seem to think, it does look like I would at least have had trouble with

some of this series on account of diet. Instead of that, however, they have gone along with very little trouble, always jolly and good natured, eat well and sleep well, get up on the third or fourth day of normal temperature, dress themselves, and begin walking around, and if in the hospital leave on the fifth or sixth day, many of them weighing very little less, a few weighing the same, and an occasional one weighing more than on going to bed.

We probably get our clearest understanding of the digestibility of the carbohydrates from the work of Prausnitz, Moeller, and Kermauner. Moeller finds that no starch appears in the feces after feeding well cooked white, rye or graham bread, or potatoes and rice, even though it were fed in pieces. He also found that legumes, when prepared in the form of puree, were completely digested and absorbed, but when not in the form of puree, resist the action of the gastric juices and appear in the feces, or if heavy or imperfectly cooked bread has been eaten, it may also appear in the feces, but not so with good bread properly cooked.

Prausnitz finds that when men are fed on meat, and then on rice, that the composition of the feces does not vary with the diet; such feces he calls "normal feces." After reviewing these tables of Prausnitz, Dr. Lusk says: "It is seen from this that whether the food solids contain 1.5 per cent N., as in rice, or ten times that, as in meat, the composition of the feces remains uninfluenced. Normal feces result from the eating of any food which is completely digested and absorbed. In all such cases these feces have the same composition and are derived from the intestinal wall. It is therefore not astonishing that a vegetarian of many years standing produced the same kind of feces when fed on rice as did other men. The same quality of feces has been obtained after giving good bread." In general, Prausnitz finds no difference between digestibility and absorbability of animal and vegetable foods. Meat, rice, and bread flour are all digested and absorbed.

Voit and Bischoff have proven that the production of feces was not proportional to the amount of food taken. They found that a dog excreting 10.7 grams of feces on 500 grams of meat per day only excreted

11.2 grams of feces on 1800 grams of meat per day.

Again, Lusk makes the following statement: "These common observations would seem to justify the popular opinion, that normal feces are made up of the undigested residue of the food stuffs. In truth, however, this is very far from the fact. The feces are chiefly the unabsorbed residue of intestinal excretions."

Again, Boas, in his most excellent work on Diseases of the Intestines, says: "It has been already stated that the carbohydrates are more completely digested and utilized than any other variety of nutritive substances. This accounts for their being so constantly absent from the feces. In numerous examinations of watery extracts of the feces I have only twice obtained a distinct Trommer reaction; with Lugol's solution, I have never obtained a reaction."

Now, with these facts before me, I can find no good reason for not giving these patients a good liberal diet, but on the other hand there seems to be some good reasons for doing it: First, it is our duty to support these patients, and by so doing hold their resisting powers to normal, or as nearly so as possible; second, that their convalescence be cut to a minimum; and last but not least, one of the first things we were taught in physiology was the importance of mastication, not only that the food might be macerated, but that it would stimulate the flow of saliva, gastric, and all of the other juices.

According to Richet and Parlow, in Kirk's Handbook of Physiology, the drinking of water, milk, and soup will not stimulate the flow to any degree, but the act of chewing will; therefore, it again seems to me, that we should keep these organs as near normal as possible and not allow them to dry up like the desert plant.

The idea that peristaltic action is increased on a diet of this kind, has yet to be proven. After the first few days the above cases have been absolutely free from diarrhea, but instead, nearly all of them required a laxative each day to secure one evacuation of the bowels, which would not look as though peristaltic action were much increased. Pain or soreness in the bowels is very rare and usually clears up promptly.

DISCUSSION.—*Dr. L. D. Wilson* feels a hesitancy to employ a diet so liberal as that laid down in the paper. It is no unusual thing in practice to have our typhoid patients fed rather liberally, by untrained nurses, without our direction, and to see bad results from this kind of feeding. Much of the doctor's diet is practically liquid, as cream of wheat, which is dissolved before reaching the small intestine. Could not approve the frequent feedings spoken of in the paper. They would overwhelm the patient. They are more than many well persons can bear. Bread he did not use in his cases. Is apt to ferment. The essayist's theory may be correct, but much deviation from a liquid diet is apt to set up mischief. Would hesitate to follow the plan of feeding suggested in the paper.

Dr. Maxwell cuts down the milk largely in his cases, but feeds less freely than *Dr. Rodgers*.

Dr. Butt has seen quite a number of patients treated by *Dr. Rodgers*, and can testify that they were treated as described by the essayist, and that they got along well. They were gaining ground when he saw them.

Dr. Bonar said that many of the cases of *Dr. Rodgers* were from the lumber camps, robust men with vigorous digestive powers, able to digest anything. A diet that might be suitable for these men would not suit or be safe for all patients. Even when reduced by fever, they can generally digest well.

Dr. Godby thinks that typhoid patients do well on a mixed diet. He approves the diet as described in the paper.

Dr. Cannaday disapproved of an exclusively milk diet and regards it as the worst form of feeding. Much prefers a mixed diet. Has treated a large number of typhoid patients in hospital, and this opinion is the result of his experience.

Dr. Henry cannot agree with *Dr. Rodgers* as to diet for the reason that when the temperature is much above normal digestion is much impaired, even sweet milk being difficult of digestion. Recently have used buttermilk instead. As an argument for the lactic acid diet he told of "Old Parr," who lived in the 16th and 17th centuries. On account of his great age he was brought to London and installed in the home of Charles I. But on account of the London fogs and the rich diet of the King he died at the age of 152 years, and is buried in Westminster Abbey. His diet, before he tasted the luxuries of London, is said to have consisted of rancid butter, cheese parings and curdled milk. Old Parr is now regarded as a brilliant exemplification of the powers of sour milk bacillus.

Dr. Mason says that *Dr. Rodgers'* treatment is at variance with the usual teaching. If correct, we have been starving our patients heretofore. He advised caution in the adoption of these new ideas.

Dr. Hupp said the mixed treatment is good but may be pushed too far, and this *Dr. Rodgers* has done. There is an autotoxic and a specific germ infection to combat in these fever cases, and too free feeding cannot be borne. Is very conservative in the matter of diet.

Dr. Andrew Wilson thinks that *Dr. Rodgers* should have tabulated his cases, giving symptoms, temperature, charts, etc., to confirm diagnosis. Has he had the Widal test made so as to know definitely that he has been treating typhoid fever? He regards the feeding advised as entirely too radical a change from our accustomed methods, and fears the results if pursued generally. Would advise conservatism.

Dr. Wingerter said that we are constantly advancing and getting new ideas with regard to diseases. Our former treatment of inflammation was altogether wrong. We were wrong in our swabbing of throats in diphtheria, etc., and may be we have been wrong in adhering so closely to the liquid diet in typhoid fever. The paper enforces the idea that it is not well to adhere too closely to precedents. Told a story to illustrate the point.

Dr. T. J. McGuire said that he has had less trouble in typhoid since resorting to a more liberal diet.

Dr. Rodgers, in closing, enforced the point that we must be careful in feeding not to exceed the digestive capacity of our patients. Commence slowly, experimenting as to the patient's ability to digest, and adding as seems proper. He could not possibly give full history of cases in a short paper, but would do so at some future time, to illustrate his method of feeding.

Selections

PNEUMONIA IN CHILDREN.

LeGrand Kerr, M.D., Brooklyn, N. Y.

Professor of Diseases of Children in the
Brooklyn Post-Graduate Medical
School.

From an excellent paper in the April number of *American Medicine* we quote the following touching the treatment of this disease as it is seen in children.

The Treatment does not differ greatly from that of the adult case although there must come the modification which is demanded by the age of the patient and the ease with which the digestive system is disturbed. Some of these differences in management must of course be emphasized; for the purpose of this paper we need do nothing more.

Lobar Pneumonia.—If the child is seen early a hot bath should be given and also hot diaphoretic drinks. This is good treatment because so many cases of pneumonia in children are short-lived, and while it is impossible to say what effect treatment has

upon this result, we must assist nature as much as possible. In addition to these measures, I believe that tincture of aconite given at this stage is of great value and the only drug of any value.

When the disease is once established we have only to recall (a) that it is a self-limited disease; (b) and that there is no specific treatment.

The immediate demands are (1) a reduction of the diet; (2) the free administration of cool water; (3) mild purgation; (4) abundance of fresh and cool air; (5) frequent cool sponging to keep skin active.

With the institution of these measures drug giving is rarely needed.

Complications must be watched for and guarded against and this is particularly true of otitis media and pleural effusion. The danger from cardiac asthenia in children is much over-estimated; it is uncommon for me to be called upon to treat it. If this is watched and treated as any other complication should be, and it is not supposed to exist as a matter of course at the time of the crisis (which is usually a mild affair), it may surprise one to find how uncommonly there is call for stimulation.

It is only when certain symptoms and complications force themselves into the cyclic course of the disease that drug giving or energetic measures are justified.

Broncho-pneumonia.—Delay here is dangerous; there is no place for expectant treatment. As I have recommended one drug in the early stage of lobar pneumonia so I recommend one in broncho-pneumonia. That drug is belladonna; but to be effective it must be given in doses sufficiently large to cause flushing of the face and may be continued for the first few days. Small doses are of no value and its protracted use is not indicated. There must be secured for the child (1) the best hygienic surroundings possible; (2) a diet reduced but of such quality as to properly support the system; (3) free administration of water; (4) regularity of the bowel function (5) abundance of fresh cool air day and night; (6) strict cleanliness of the body and particularly the nose and mouth; (7) as perfect physical and mental quietude as possible.

The cautious use of the internal emetics are sometimes attended with benefit, and while an initial vomiting may prove benefi-

cial in clearing away the bronchial mucus, this method must not be persisted in. Counter-irritation with mustard paste is valuable and it is not wise to wait until pulmonary collapse is suspected, for used early it gives relief from the dyspnoea and cough. Everything that weakens should be avoided; everything that strengthens encouraged.

Stimulation is not alone wise but absolutely necessary after the first few days; delay until the necessity is present means much lost ground, for every one of these cases needs stimulation practically throughout. My preference is for a combination of small doses of camphor and whiskey; the camphor being given in sweet almond oil ($\frac{1}{4}$ gr. to five drops) and the whiskey well diluted with water.

Just as early as possible tonics should be given, for delay in this matter as in the case of stimulants may mean lost ground.

THE TREATMENT OF PNEUMONIA

In concluding an exceedingly interesting paper based on his own 460 cases of pneumonia, Alex. Napier, M.D., F.R.C.P. (*Glasgow Med. Jour.*, March) says: "In considering the *treatment* of this disease in hospital, it would be grossly wrong to omit reference in the first place to the good effect which must undoubtedly follow on the removal of the patient from a home environment which is often close and stuffy and overcrowded, dirty, uncomfortable, and destitute of the first essentials of proper nursing, to a hospital ward in which there is light and air, ample cubic space, efficient ventilation, thorough cleanliness, and a uniform and unvarying temperature. I do not think the temperature of our wards varies more than 2 or 3 degrees Fahrenheit night and day.

As regards general management and treatment, we have, in my wards, gradually developed a *routine* line of practice which seems to answer very well. The patient is, of course, kept absolutely in bed: he is fed *hourly* while he is awake, his diet during the febrile period consisting of fluids, such as milk and well-thickened beef-tea or chicken soup, about four fluid ounces on each occasion, the milk being sometimes given in the form of curds. No poultices

or other form of external treatment; no opiates or hypodermic injections of morphia. Pain, usually pleuritic, was found to be best relieved by the application of a *firm binder*, 4 or 5 inches broad, pinned around the lower ribs below the nipples. I cannot recall to mind any case in which I had occasion to order the administration of morphia hypodermically, or in which the *firm binder* failed to ease pain.

In the way of medicines, my sheet-anchor has been a combination of chloral and digitalis, given every three, four, or six hours; $7\frac{1}{2}$ to 10 grains of chloral hydrate with 10 minims of the tincture or one or two drachms of the infusion of digitalis.

This is a line of treatment identified with the name of my old friend, the late Dr. Geo. W. Balfour, of Edinburgh, who advocated it strongly, in dealing with pneumonia, in the *Edinburgh Medical Journal* (vol. xxxii, part 1, p. 93). But long before that time my attention had been directed to the use of chloral in acute febrile diseases in which the heart suffers severely, by a paper published nearly forty years ago in the *Glasgow Medical Journal* by the late Dr. J. B. Russell, on the advantages of the administration of this drug in typhus—surely of all diseases that in which the heart muscle is poisoned and weakened to a high degree; and it occurred to me that it might be equally useful in pneumonia, a disease which resembles typhus in so many respects. As Balfour remarks, "Death in pneumonia, whether it arises from sudden syncope, from pulmonary œdema, or from gradual sinking, has failure of the heart as its beginning and its end." Sharing this view most fully, the question naturally arises, is it safe to use chloral in a disease in which heart failure is the great danger to be averted? I believe it is not only safe but actually advantageous, and I think my statistics prove this; in fact, I think this is one of the instances in which laboratory results have to be checked by clinical experience. I have never found it, when given reasonably, unfavorably influence the heart's action, but very much the reverse. Indeed, the combination mentioned is one which I use probably more frequently than any other in cardiac disease with failure of compensation marked by general anasarca, lividity, and pulmonary œdema. In pneu-

monia its advantages are many: it gives sleep, eases pain and cough, tends to lower the temperature and slow the heart, dilates the arterioles and lowers peripheral vascular tension; in particular, it is one of the best and most trustworthy expectorants in the pharmacopœia. In relieving the patient's distress and soothing his irritability it seems to favor an easy and an early crisis. Most such patients drowse through their illness, presenting in their easy and quiet aspect a marked contrast to the distress shown by many others treated simply by stimulating or expectorant remedies. Incidentally also, nursing becomes a much less difficult task.

Strychnine I give when heart failure seems to threaten. It should be given freely, if given at all—5 minims of the solution hypodermically every four or six hours. Oxygen also I have found of much value when cyanosis begins to be evident; it also has to be given lavishly if any good is to be expected from its use. Stimulants I have used very sparingly—probably not at all in at least one-half of my cases.—*American Medicine.*

Correspondence

THE PARKERSBURG MEETING OF THE STATE MEDICAL ASSOCIATION.

Parkersburg has reason to be congratulated on the splendid manner in which it entertained the forty-third annual meeting of the West Virginia State Medical Association. The rooms of the Y. M. C. A. building were ideal for the meetings of the general assembly and of the house of delegates; the hotel accommodations were high class; the smoker on Thursday evening at the Elks' Club and the formal banquet at the same place on Friday evening were enjoyed in an atmosphere of most cordial hospitality which will be long remembered by those present; and, in fine, at every point and during every hour it was apparent to all that "the latch-string was out." The "Grand Old Man" of West Virginia medicine, Dr. Harris, attended the sessions every day and mingled with us in the hotel lobby, his eye beaming with the enthusiastic interest we have known for so long, and his

genial handshake making us feel the welcome that Dr. Campbell, ex-Governor White and the mayor had pronounced in words.

The scientific papers read at the meetings were of unusual merit, and the discussions on them were earnest, thoughtful, most helpful and marked by a broad-minded and calm, scientific spirit. Dr. Williams of Washington, Dr. Timberlake of Baltimore, Dr. Dabney of Marietta, and Dr. Beebe of Cincinnati, who were the distinguished out-of-state visitors, were all touched by the fire of the general interest and enthusiasm, and each added his part to the success of the literary program. Moreover, Dr. Beebe was the very center of the social warmth of Thursday night, while Drs. Timberlake and Williams at the banquet proved themselves to be witty and eloquent, as at the sessions they had shown themselves learned and practical.

While the total membership registered was not as great as at some previous meetings, it can be truthfully said that the very best men of the society, with a few exceptions, were enrolled; and, a notable point they were all to be found "on the firing line" during the various sessions. Every speaker was accorded a generous and interested audience, even to the very last session of the convention.

The writer, not having been privileged to attend the meetings of the house of delegates, can say nothing concerning their labors, but can vouch for the promptness with which their meetings were attended and the untiring perseverance of the delegates in staying at their posts. The same seemed to be the case with the board of councillors.

Several well attended and fruitful sessions of the Association of County Secretaries were held. At these meetings were discussed the very practical questions of how best to draw out a large attendance at the meetings of the component societies; how often these meetings should be held and under what circumstances; the value of calling in outside talent; how to insure prompt payment of dues; and other cognate matters of practical import. Every encouragement should be given to the county secretaries to keep up their most valuable meetings; and in the opinion of the writer every county secretary should

be made, *ex-officio*, a member of the House of Delegates; for the secretaries are the very backbone of the local societies, and are necessarily most intimately in touch with those things that make for the success or failure in the State Association.

A feature of the meeting that is of most hopeful import was, that all the distinguished laymen who spoke at the opening session and at the banquet paid tribute to the disinterestedness of the medical profession in its advocacy of laws looking to the betterment of the health of the community. One speaker said that the mere fact that a measure was advocated by the State Medical Association would be sufficient proof to him that the law proposed was unselfish in its purpose and would redound to the general welfare. This ultimate awakening of the public to the high ideals of our profession should give us new courage to pursue those ideals with the same unflinching devotion that we have had in the past.

If the members of the State Society left Parkersburg with any unfulfilled hope, it was due to the failure to see all the members of the local profession present and active at the sessions and at the banquet; and at the absence of papers on the program from the pens of Wood county's eminent practitioners. At previous meetings this same absence has been noted; we indulge the hope, however, that at the meetings to come the men of the Wood County Society will no longer hide their light under a bushel, but will lavish upon us the splendid knowledge and experience they possess and of which we feel we have a brother's right to partake.

A change in the date of the banquet from Thursday to Friday evening accounted for the absence from that delightful function of many of the members who felt compelled to return to their homes. We can not but feel, however, that the last evening of our annual session is the proper time for these joyful meetings, when every one is made to forget any little disappointment that may have come to him, and when all part with the kindest feelings and in the best possible humor. If the banquet were fixed by action of the Association for Friday evening, the members would so arrange their business at home as to be present. We suggest that the Association at its next meeting determine this matter. C. A. W.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

ASSISTANT EDITORS

L. D. WILSON, A.M., M.D., G. E. LIND, M.D., Ph.D.,
C. A. WINGERTER, A.M., M.D., LL.D.

WHEELING, W. VA., NOVEMBER, 1910.

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

MALPRACTICE DEFENSE.

As it has not been possible to print the minutes of the House of Delegates in this issue of the JOURNAL, we here present a few comments on the most important action of that body during the late session of the State Medical Association, namely, the adoption of amendments to the by-laws providing for the legal defense of members of the Association who may be sued for alleged malpractice. As is well known to the members, this subject has been under discussion in the Association for several years. A number of committees have examined into the merits of the proposition, and ex-President Golden, chairman of all the successive committees since 1903, has made a thorough investigation of the subject, communicating with the officials of a number of other societies in which the plan of defense has been in operation for several years and in all of which it has resulted in an increase of membership. Great credit is certainly due to Dr. Golden

for the thorough and painstaking manner in which he has studied this subject, and the clear presentation of the merits of the plan made by him in his report to our recent meeting at Parkersburg. We anticipate the publication of the full report which will appear in our next issue, by the presentation here of some of its facts.

Thirteen state associations and several local societies in the large cities are now giving protection to their members by plans similar to that now provided by our own State Association, and a number of other state associations have the plan under consideration, and will no doubt soon adopt it.

Dr. Golden's report claims what we all know to be true, that no physician, however skillful, honest or attentive he may be in his professional work, is free from the liability to a malpractice suit. "The general practitioner is just as liable," says the report, "as the specializing surgeon or ophthalmologist; and the physician at the cross roads as his brother in the metropolis." In the report are cited cases of suits in this state entered after an abdominal operation, lacerated perineum, hemorrhage from the stump of an umbilical cord, and alleged error in diagnosis between pregnancy and an ovarian cyst. The writer of this editorial once narrowly escaped a suit because of adhesive inflammation of the tendons of the hand following a severe injury with simple fracture of the radius, although prompt union in perfect position was secured. Let the fact be emphasized, that no physician who practices his profession is free from liability to a vile attack in the way of a suit for damages for alleged malpractice; and such suits are, alas, too often inspired by some unscrupulous, unprincipled, contemptible member of our profession, who has the aid of a no less contemptible pettifogger.

So common are these occurrences that, as pointed out by Dr. Golden, several liability companies are doing a thriving business among physicians, by furnishing them protection against these suits at a premium of ten to twenty dollars per annum, which gives to the companies a very large profit, since few of the suits are pushed to a termination through court, the claimant being frightened off when the defendant, or an association for him, takes a determined

stand and makes a vigorous preparation for defense. This same result can be secured by the plan of defense that is in successful operation in other state associations, and which we are now about to try, in the confident expectation of greatly diminishing the number of suits brought, as well as defending those that may be pushed to trial. As soon as the people come to know that the organized medical profession is united and determined to put an end to this system of blackmail, we will hear little of malpractice suits.

To secure the best results at the earliest time, it is necessary not only that we hold our present membership, but that our numbers be largely increased. The annual cost to each member, in addition to his annual dues, is but one dollar. This small sum—and most physicians can save it by reducing their cigar bills—may save any of us hundreds of dollars and (a much greater consideration) a damaged reputation. No suit can be carried through court for a less cost than this by the individual; and even though the suit be won by the physician, his reputation is damaged irretrievably. We know of one physician who, appreciating this fact, settled a suit by the payment of a liberal sum in advance; and another who had his practice so fall off after he had successfully defended a suit that in his advancing years he was almost driven to want. Prevention of these suits is far better even than successful defense, and we believe the proposed plan of defense will prove to be a prophylactic measure of first importance.

Dr. Golden's report will appear in full in our next issue, and we bespeak for it a most careful consideration, especially by those members who may have any thought of allowing their membership to lapse. The new plan of defense goes into operation January first, and it applies to none who are in arrears for the payment of their society dues. We suggest that some of the societies whose dues are already large, may find it possible to get along without this additional tax on the members, allowing a dollar for each member to go into the State Association treasury for the purpose of defense. Wherever possible, we think this should be done, as it will have a tendency to hold our present members and

gain new ones. We urge all those who may not yet have paid their dues for 1910 to do so at once, and then make preparation to pay for next year in the month of January, which is the time limit, if protection is to be secured. We have faith to believe that the proposed plan of defense will not only result in an increase in our numbers, as in other states, but that it will bind the members of the Association together in bonds of a common interest never felt before. "In union there is strength." As yet we have fewer than one-half of the legalized practitioners of the state on our membership roll. Let us now enter on a vigorous canvass for all reputable physicians, and we hope the plan of defense soon to be inaugurated may be a potent argument to convince outsiders that they ought to "come in out of the rain." Ohio County Medical Society has already entered upon such a canvass, and hopes soon to report that we are a harmonious whole, for the first time in medical history a truly united medical profession.

A FINAL WORD.

One dollar paid in January may prevent the loss of hundreds and your reputation. You cannot afford to run any chances merely to save this pittance. S. L. J.

We here extend to our long-time member, Dr. W. H. Sharp of Parkersburg, our congratulations on his safe escape from the hands of the surgeons, one of whom reports to us that he is once more at home and in a "very satisfactory physical condition and a very happy frame of mind." May he be spared to the society yet many years!

Ex-President Moore writes us, that the manager of White Sulphur Springs has informed him that the hotel was open this year from June 15th to October 6th, and "another season we will probably open June 1st and remain open even later than we did this year." So the Association will have no trouble in having arrangements made for our accommodation at or near our usual time of meeting. A local Committee of Arrangements will soon be appointed to arrange for next year's meeting at "The White."

Society Proceedings

MINUTES OF THE FORTY- THIRD ANNUAL SESSION

Of the West Virginia State Medical Association,
Held in Parkersburg, October 5,
6 and 7, 1910.

GENERAL SESSION

WEDNESDAY, OCTOBER 5TH, 10 A. M.

Called to order by the President, Dr. T. W. Moore.

Prayer by the Rev. M. F. Compton.

Address of welcome on behalf of the city by ex-Governor A. B. White.

On behalf of the medical profession of Parkersburg by Dr. H. M. Campbell. Response by Dr. C. A. Wingerter, Wheeling.

The President, Dr. T. W. Moore of Huntington, delivered his address. See page 147.

The following committee, Drs. J. E. Cannaday, H. M. Campbell and T. K. Oates, were appointed to act upon the recommendations contained in the President's address and report to the House of Delegates.

On motion of Dr. T. J. McBee a telegram of congratulations and greetings was sent to the Penna. State Medical Society now in session at Pittsburgh.

Adjourned at 11 o'clock.

WEDNESDAY, 2:40 P. M.

Called to order by President Moore.

Dr. W. H. Sharp being absent owing to illness, his oration, "Some of the Problems in Medicine," was read by Dr. O. D. Barker.

On motion it was ordered that the secretary be directed to send a telegram to Dr. Sharp expressing our hope for his early recovery.

Dr. G. C. Rodgers read his paper, "Feeding in Typhoid Fever—Report of One Hundred and Fifty Cases Fed on General Diet Without a Death."

Discussed by Drs. L. D. Wilson, Maxwell, Butt, Bonar, Godbey, Cannaday, Henry, Mason, Andrew Wilson, Wingerter and McGuire. Discussion closed by Dr. Rodgers.

"The West Virginia Physician and Tuberculosis" was read by Dr. George A. McQueen.

Discussed by Drs. A. Wilson, Henry, Yeakley, Wise and Bonar. Closed by Dr. McQueen.

Dr. C. H. Maxwell read his paper, "The One at Home." Discussed by several members.

Adjourned at 5:40.

THURSDAY, OCT. 6TH, 9:45 A. M.

Called to order by President Moore.

Dr. H. W. Daniels read his paper, "Management of Normal Labor."

"Methods of Prevention and Repair of the Perineum" was read by Dr. W. A. McMillan.

The two papers were discussed by Drs. A. Wilson, Gardner, Jepson, Hupp, Rodgers, Nicholson, Mason, Daniels & Rodgers.

Dr. A. J. Kemper read a paper entitled "Ectopic Gestation as It Concerns the General Practitioner."

"A New Sign of Tubal Pregnancy" was read by Dr. W. W. Golden.

These papers were discussed by Drs. Gardner, Bonar, McNeilan, Hupp, Kemper and Golden.

On motion Dr. Andrew Wilson was asked to report a recent successful Caesarean section. A full report will appear in the JOURNAL soon.

Dr. W. L. Weaden's paper, "Cystic Degeneration of the Ovaries as Related to Repeated Abortions," was read by Dr. P. A. Haley. Discussed by Dr. Kemper and others.

Adjourned.

THURSDAY, OCT. 6TH, 2:15 P. M.

Called to order by President Moore.

Dr. C. R. Enslow delivered the oration in Surgery, "Injuries to Cranium and Contents."

Dr. J. E. Burns, of Wheeling, was asked to read a paper entitled "A Recent Successful Operation for Brain Cyst."

Dr. B. F. Beebe, of Cincinnati, was asked to open the discussion on Dr. Burns's paper. Drs. Dabney, Hupp and Burns also spoke.

Dr. Frank LeMoyné Hupp read a paper entitled "Malposition of Liver."

Dr. T. Jud McBee read his paper, "Asepsis in Tonsorial Parlors." Discussed by Drs. T. A. Harris, Grimm, Golden and Jepson. Closed by Dr. McBee.

"The Physician's Responsibility in Relation to the Defective Classes" was read by Dr. C. H. Benton.

Dr. J. R. Bloss read a paper on "The Treatment of the Recently Insane."

The papers of Drs. Benton and Bloss were discussed by Drs. Jepson, Henry, Yeakley, Wise, Wingerter, McQueen, Beebe and J. A. Campbell. Closed by Drs. Benton and Bloss.

On motion of Dr. Jepson the matter of legislative action with regard to better provision for the early care of insane patients was referred to the House of Delegates.

The following telegram was received from the Penna. State Medical Society: "Thomas W. Moore, President West Virginia State Medical Association: The Medical Society of State of Penna. now in session reciprocates greetings and best wishes." Theodore B. Appel, Pres.; Cyrus Lee Stevens, Sec'y.

Adjourned.

FRIDAY, 9:30 A. M.

Called to order by President Moore.

On motion the following executive committee was elected to carry out the provisions made for malpractice defense: Dr. L. D. Wilson for one year, Dr. J. W. McDonald for two years, and Dr. W. W. Golden for three years.

Dr. E. A. Hildreth III read his paper, "Glaucoma." Discussed by Drs. Hildreth II, Moore and the author.

Dr. H. G. Nicholson read a paper entitled "Hyperemia as a Curative Agent."

"Ethical Hints" was read by Dr. W. E. Neal. "Adenoids" was the title of the next paper by Dr. P. L. Gordon, read by title.

Dr. Tom A. Williams, of Washington, read a paper on "The Diagnosis and Treatment of Locomotor Ataxia and Other Late Manifestations of Syphilis of the Nervous System." Discussed by Drs. Timberlake, Jepson, Hupp and others.

On motion Dr. W. A. Quimby, of Wheeling, who had kindly thrown Dr. Williams' slides on the canvas, was asked to exhibit a number of lantern slides of his own illustrating fractures, dislocations and kidney stones *in situ*.

During the morning session the following telegram was received from the W. Va. Fraternal Association in session in Weston:

"The President and Members of the West Virginia State Medical Association, Parkersburg, W. Va.: The W. Va. Fraternal Association in convention assembled this day unanimously passed resolutions asking our next state legislature to establish a state tuberculosis sanitarium. Petitions will be circulated, submitted to a committee, and will be sent to Charleston to secure favorable action. Your active co-operation is respectfully solicited. The W. Va. Fraternal Association, P. G. Fisher, Vice Pres.; P. C. Parker, Sec'y."

Dr. Henry then moved to reconsider a previous motion to refer to the House of Delegates the matter of the establishment of a tuberculosis sanitarium. Carried.

Dr. Henry then offered the following resolution:

WHEREAS, The West Virginia State Medical Association deems it the duty of the State of West Virginia to establish and maintain sanitarium for the care and treatment of our citizens suffering from tuberculosis; therefore, be it

Resolved, That a committee be appointed to represent the sense of this Association on this important subject to the W. Va. Legislature at its next session, and that an official copy of this resolution be furnished the committee as its credentials.

Carried.

FRIDAY AFTERNOON, 2:30.

President Moore in chair.

Dr. G. Timberlake, of Baltimore, read his paper, "Symptomatology and Diagnosis of Diseases of the Prostate."

"The Surgical Treatment of Hypertrophied Prostate with Some of the Advantages of a Two-Stage Operation" was read by Dr. J. E. Cannaday.

Discussion was opened by Dr. Hupp, closed by the authors.

Dr. Harriet B. Jones read a paper, "Misplacements of the Uterus." Discussed by Drs. Keever, Hildreth II, Fulton, Covert and Ogden. Closed by Dr. Jones.

"Essentials to Success in the Operative Treatment of Inguinal Hernia" was read by Dr. Robert J. Reed. Discussed by Drs. Ogden, Covert, Keever and L. P. Jones.

Dr. Latimer P. Jones read his paper, "The History and Technique of Skin Grafting."

Dr. G. D. Lind read a paper on "Internal Secretions." Discussed by Dr. C. A. Wingerter.

On motion a resolution of thanks was offered to Parkersburg physicians and druggists, to the Stout Drug Co. for lemonade furnished, and to the Y. M. C. A. for the use of building.

On motion it was ordered that the janitor of the building be paid the usual fee of ten dollars.

The newly elected president was called on for some remarks.

Dr. Wingerter replied by thanking the Association for his election and asking the co-operation of its members during the coming year.

The papers that were not presented were read by title and referred to the JOURNAL for publication.

Adjourned to meet at White Sulphur Springs in 1911.

A. P. BUTT, Sec'y.

T. W. MOORE, President.

MEMBERS PRESENT DURING THE MEETING.

T. W. Moore, Huntington.
G. H. Benton, Chester.
James R. Bloss, Huntington.
H. W. Daniels, Elkins.
B. O. Robinson, Parkersburg.
W. S. Link, Parkersburg.
C. E. T. Casto, Parkersburg.
O. D. Barker, Parkersburg.
M. McNeilan, Parkersburg.
H. M. Campbell, Parkersburg.
A. P. Butt, Davis.
J. E. Cannaday, Charleston.
P. A. Haley, Charleston.
H. G. Nicholson, Charleston.
L. O. Rose, Parkersburg.
M. V. Godbey, Charleston.
D. E. Musgrave, Standard.
A. L. Grubb, Berkeley Springs.
H. W. Yeakley, Keyser.
J. A. Dye, Minora.
T. Jud McBee, Elkins.
A. B. Bush, Weston.
L. T. Hall, Freemansburg.
J. E. Coleman, Fayetteville.
E. W. Smoot, Madison.
B. B. Wheeler, McKendrie.
T. K. Oates, Martinsburg.
J. N. Simpson, Morgantown.
R. W. Miller, Martinsburg.
C. A. Wingerter, Wheeling.
J. W. Boyer, Parkersburg.
J. A. Burk, Crawford.
W. W. Waden, Mt. Carbon.
T. A. Harris, Parkersburg.
Robt. L. Brown, Parkersburg.
T. J. McQuire, Parkersburg.
N. P. Yerdley, Parkersburg.
Jas. W. Nelson, Parkersburg.
Rolla Camden, Parkersburg.
Geo. W. Jeffers, Parkersburg.
H. P. Linsz, Wheeling.
C. A. McQueen, Charleston.
A. S. Grimm, St. Marys.

W. F. Fawcett, Alderson.
 M. D. Cure, Weston.
 A. B. Eagle, Martinsburg.
 J. E. Barrows, Ravenswood.
 A. M. Edgell, Smithville.
 W. M. Paden, Parkersburg.
 M. L. Corbin, Ellenboro.
 H. R. Johnson, Fairmont.
 C. O. Henry, Fairmont.
 G. L. Conley, Middleton.
 C. H. Maxwell, Morgantown.
 A. P. Jones, Pennsboro.
 Claude L. Holland, Fairmont.
 Samuel R. Holroyd, Athens.
 Latimer P. Jones, Pennsboro.
 S. L. Jepson, Wheeling.
 Randolph J. Hersey, Wheeling.
 J. Edward Burns, Wheeling.
 Frank LeMoyne Hupp, Wheeling.
 S. M. Mason, Clarksburg.
 J. J. Goff, Parkersburg.
 G. Timberlake, Baltimore, Md. Visitor.
 C. N. Slater, Clarksburg.
 R. B. Nutter, Enterprize.
 M. M. McCullough, Deep Valley.
 E. W. Strickler, Kingwood.
 G. A. Aschman, Wheeling.
 W. A. McMillan, Charleston.
 G. C. Rodgers, Elkins.
 W. P. Bonar, Moundsville.
 J. W. Good, Paden City.
 Andrew Wilson, Wheeling.
 L. D. Wilson, Wheeling.
 W. S. Stille, Parkersburg.
 P. W. McClung, Elizabeth.
 A. Bee, Cairo.
 W. S. Keever, Parkersburg.
 I. N. Houston, Moundsville.
 E. L. Armbrrecht, Wheeling.
 H. Deem, Parkersburg.
 A. H. Kunst, Parkersburg.
 C. J. Scott, Parkersburg.
 H. B. Stout, Parkersburg.
 G. W. Wentz, Chester.
 Glenn Mooman, Parkersburg.
 S. Warren Bush, Parkersburg.
 J. A. Reyburn, Ravenswood.
 U. L. Dearman, Rudy.
 J. E. Rader, Huntington.
 D. C. Casto, Parkersburg.
 L. Casto, Ripley.
 W. T. Dye, Grantsville.
 R. H. Powell, Grafton.
 T. B. Murphy, Philippi.
 A. J. Kemper, West Milford.
 D. H. Taylor, Wheeling.
 Tunis Nunemaker, Williamson.
 Brooks F. Beebe, Cincinnati, visitor.
 S. P. Roberts, Parkersburg.
 S. D. H. Wise, Parkersburg.
 L. B. Harless, Arnoldsburg.
 M. F. Harless, Clothier.
 M. R. Stone, Parkersburg.
 E. A. Hildreth III, Wheeling.
 A. M. McGowen, West Union.
 A. Poole, West Union.
 Wm. W. Golden, Elkins.
 W. S. Gardner, Baltimore, Visitor.

J. A. Campbell, Wheeling.
 C. B. Williams, Philippi.
 E. B. Fittro, Salem.
 J. J. Osburn, Wheeling.
 E. A. Hildreth, 2d Wheeling.
 D. A. Sayre, New Haven.
 H. M. Rymmer, Harrisville.
 O. F. Covert, Moundsville.
 C. R. Enslow, Huntington.
 J. W. McDonald, Fairmont.
 A. S. Warder, Jr., Grafton.
 B. F. Matheny, Meadowbrook.
 J. Riley McCullum, St. Marys.
 W. T. Highberger, Maysville.
 E. H. Douglass, Petroleum.
 H. Allen Whisler, Smithfield.
 W. H. Young, Sistersville.
 H. H. Veau, Richwood.
 I. T. Prickett, Parkersburg.
 Horace D. Price, Parkersburg.
 J. G. Walden, Wheeling.
 W. S. Fulton, Wheeling.
 G. D. Lind, Greenwood.
 A. J. Noome, Wheeling.
 Robert J. Reed, Wheeling.
 J. O. Eddy, Pullman.
 C. T. Arnett, Clarksburg.
 L. H. Forman, Buckhannon.
 D. C. Peck, Grafton.
 Dudley W. Welch, Parkersburg.
 J. S. Biddle, New Haven.
 J. K. Biddle, Belleville.
 E. D. Tucker, Wallace.
 Chester R. Ogden, Clarksburg.
 W. A. Quimby, Wheeling.
 J. R. Caldwell, Wheeling.
 John H. Kelly, Parkersburg.
 Wade Gaston, Parkersburg.
 W. J. Davidson, Parkersburg.
 H. E. Gaynor, Parkersburg.
 G. Samuels, Parkersburg.

Total—152.

AMERICAN PROCTOLOGIC SOCIETY

(Continued from October Issue.)

"THE TUBERCULIN REACTION IN CASES OF PERIRECTAL INFECTION."

By COLLIER F. MARTIN, M.D., of Philadelphia, Pa.

The author was so impressed with the frequent coincidence of pulmonary tuberculosis and perirectal infections that he began a series of tests and examinations to determine their relation.

He uses the Moro tuberculin reaction, combined with physical and bacteriologic examination.

In his preliminary report of 36 cases, which he divides into two groups, he got the following results:

Group I.—Rectal pyogenic infections, including here fistulae, abscesses, and deep rectal ulcerations. There were 20 positive reactions out of 21 cases. The negative case was one profoundly tuberculous.

Group II.—Non-pyogenic rectal cases. There

were 11 cases, including hemorrhoids, fissures, and catarrhal proctitis, with three positive tubercular reactions. This he holds, is probably the ratio of tuberculosis in this class of cases. One negative case in this group was intensely tubercular, with extensive lung lesions evident, and with abundant tubercle bacilli in the sputum.

Accepting the tuberculin test as a specific one, he got 100% positive in Group I, and about 36% in Group II. The four cases giving negative reactions, yet being proved tuberculous, by sputum examination, proved to be of very low resistance, two dying in a few months and two, at present, in a precarious condition.

He emphasizes "continued history taking" as being extremely valuable to the proper appreciation of the case.

The author places particular stress on the prognostic value of the tuberculin test.

Accepting the positive reaction to tuberculin as indicative of a tuberculosis lesion somewhere in the body, his conclusions are as follows:

1.—Two consecutive, negative reactions, with no physical signs in evidence, is conclusive proof of the absence of such lesions.

2.—Two consecutive negative or feeble reactions, with physical signs of a lesion somewhere, is indicative of a very grave prognosis.

3.—The degree of the reaction is directly proportionate to the degree of the resistance of that individual.

4.—That the tubercular bacillus, like no other, reduces the bodily defences to pyogenic invasion.

5.—That in practically all rectal pyogenic infections, there is a tuberculous lesion somewhere in the body.

6.—That the classification of perirectal infections into tuberculous and non-tuberculous is untenable.

His investigations have caused the author to raise the following questions:

1.—Is the primary tuberculous lesion pulmonary?

2.—Is the local infection tuberculous?

3.—Do the tubercular bacilli gain entrance into the body through the respiratory or the alimentary tract?

4.—Is such infection carried to the rectal and perirectal tissues by the blood current, the lymphatics, or directly, by the fecal current?

5.—How does the tubercular bacillus influence the pyogenic infections—locally, as mixed infection, or by lowering the body-resistance to the invasion by pyogenic bacteria?

"LANE'S CONCEPTION OF CHRONIC CONSTIPATION AND ITS MANAGEMENT."

By A. B. COOKE, M.D., of Nashville, Tenn.

In his monograph entitled "The Operative Treatment of Chronic Constipation" Mr. Lane first defines the scope of the treatise by stating that the term, chronic constipation, as he employs it, includes all those conditions which are 'the consequences of the accumulation of material in the intestinal tract for a period sufficiently in excess of the normal to produce on the one hand alteration in the gastro-intestinal tract and in other

viscera, and on the other hand toxic changes from absorption'. The fact is emphasized that while constipation is usually marked by infrequent hard stools, there may be a daily evacuation, and in exceptional cases the motions are loose and frequent.

The two chief pathologic factors in the production of chronic constipation, according to the author, are enteroptosis and acquired mesenteries or adhesions, the latter resulting not from inflammation, but being developed to oppose the displacement of viscera, the tendency to which exists whenever the erect posture of the trunk is assumed. The displacement and fixation of the several portions of the colon in faulty positions result primarily in defective drainage, and secondarily in auto-intoxication and pathologic changes both in the gut itself and in the other abdominal viscera.

After describing these changes in detail, the author proceeds to discuss their immediate and remote effects, advancing the idea that in many cases diseases of the appendix, gall-bladder, stomach, duodenum, pancreas, kidneys, ovaries, etc., must be regarded as sequelae of chronic constipation. In addition the phenomena resulting from toxic absorption are graphically described and the importance of their recognition stressed.

With reference to treatment Lane states that 'in no circumstances should operative interference be contemplated till the surgeon has satisfied himself that every means of treatment has failed, whether medical or mechanical.' The surgery indicated depends upon the conditions present. In mild cases in which non-operative measures have failed, division of the adhesions and constricting bands may be effective. Severer cases call for more radical surgery consisting either in dividing the ileum and anastomosing it with the sigmoid or upper rectum, thus short-circuiting the fecal current, or, when pain is a prominent factor in the case, removal of the colon in addition.

The writer of the paper, after personal observation of Lane's work, regards his conception of the nature and management of the malady with much favor and thinks it entitled to serious consideration at the hands of the profession.

"A UNIQUE CASE OF LACERATION OF THE SPHINCTER ANI."

By DR. A. B. COOKE of Nashville, Tenn.

On February 26, 1910, the patient a boy, seven years old, was brought to him at St. Thomas Hospital, accompanied by his father and physician. The following remarkable history was related:—About noon on the day named, the boy, who lived on a farm, went out to his favorite place behind the corn-crib to attend to a call of nature. While engaged in the act, a pet dog, a hound of middle size, came up from the rear and mounting him affected entrance into the anus became accoupled. The boy's outcries quickly brought his mother upon the scene. The dog had reversed his position and was in the same relation to the boy as is ordinarily assumed in the natural act with a bitch. The mother's excitement was naturally marked and in her frantic efforts to disentangle the two she used consider-

able violence and finally succeeded in separating them.

The family physician on his arrival found that the hemorrhage had practically ceased, but upon inspection of the bowel found the parts were badly lacerated and advised the patient's removal to Nashville for treatment.

Dr. Cooke's examination found very little evidence of external injury. Traction upon the anus, however, showed that several internal lacerations of considerable extent were present. Under general anesthesia the deepest of these was found to be in the middle line posteriorly, extending from a point two inches up the rectum through the sphincter muscles, and out upon the skin surface for a distance of approximately one inch. The external sphincter was torn in two places at this site, one tear being complete, and other partial. Anteriorly there was a second laceration, into but not through the fibers of the sphincter. In addition there was a number of minor tears in the anal margin involving the superficial tissue only.

Fourteen interrupted cat-gut sutures were used in repairing the posterior laceration, and four in the anterior one. The others did not require suturing. The result was entirely satisfactory. Union was prompt and complete and the patient returned home in two weeks with perfect sphincter control.

"MULTIPLE ADENOMATA."

By GEO. W. COMBS, M.D., of Indianapolis, Ind.

An adenoma is the result of an increase in number and a crowding together of elongated and enlarged secreting follicles. It is an exaggeration of epithelial cells. This epithelium is prone to penetrate the basement membrane. When it does so and reaches the muscularis and other sub-mucous tissues it is malignant. Irritation causes the transformation from the benign to the malignant. This irritation may be through the normal function of the bowel, that caused by parasites, or as a result of surgical removal singly. Surgical disturbance in situ of a benign adenoma, a widening experience shows, will be followed by malignancy.

A case was reported in which occurred the malignant degeneration without surgical interference. This does not necessarily show an inherent tendency of benign adenomata to malignancy, but the adenomata, through the factor of irritation, predisposes the patient to cancer. In the case to which reference is made above, one or more of the adenomata lay down in the rectum had undergone the malignant transformation. On account of the extent of involvement and the extreme exhaustion of the patient, extirpation of carcinoma was deemed inadvisable, but a left colostomy was made reaching a portion of the sigmoid above the growth limit. The tenesmus and diarrhea were at once relieved and the patient made comfortable until the carcinoma reached the cutaneous margin. Through the colostomy lavage was administered, the solutions being normal salt, boracic acid and sodium salicylate. The adenomata between the colostomy wound and the carcinoma, through functional rest of the bowel and cleanliness, disappeared.

If degeneration has not taken place a colostomy, right or left, high enough to get above the growth limit, is advised, and through this soothing and cleaning solutions used, rather than the removal of the whole bowel proximalward above the high limit of growth. The latter is a very serious operation for the strong and one in which the mortality will necessarily run high in these patients, as they present themselves usually late in the disease.

After malignant transformation has taken place, it would seem useless to remove the malignant portion unless the entire bowel involved may be removed at the same time.

OHIO COUNTY SOCIETY.

September 26. The society met with President Fulton in the chair. Dr. Drinkard gave a lecture on diagnosis. He impressed the importance of getting a complete history of each case, and went fully into the manner of doing this. He insisted on each part or system of the patient being closely interrogated, as the head, chest, abdomen, etc. He then gave a very detailed history of a case of abdominal tumor, with all the symptoms that could be elicited, and asked the members to give their opinions as to the correct diagnosis. Various suggestions were made, after which the doctor said that he and Dr. Ackermann had concluded that the tumor was a cystic degeneration of the right kidney.

Dr. Best reported his recent experience with an epidemic of diphtheria in Bridgeport, across the river. The cases were very malignant, and he had observed that antitoxin had very little effect in controlling the disease when the patient's sanitary surroundings were very bad. Others had made the same observation. Dr. Campbell suggested that malignant cases require larger doses, and he thought that the doctor had not been giving enough. He doubted whether the sanitary condition had any modifying influence on the action of the antitoxin, and advised very large doses, even up to 10,000 or 20,000 units. Cases with laryngeal or glandular involvement require larger doses. Dr. Osburn said, if there is a specific in diphtheria it is whiskey, and he feared that this remedy is very much neglected. Reported cases to illustrate its influence. He also thought calomel exerted a good influence and also the old-fashioned poultice. Dr. Armbrecht adheres to the tincture of iron in addition to the antitoxin. He thinks it has a beneficial influence in supporting the patients. Dr. Baird wanted to differ with Dr. Osburn as to specifics in diphtheria. If there is a specific, it is not whiskey but antitoxin.

October 3. The society met, 25 members present. The censors reported favorably on application of Dr. Harry Hubbard, and a ballot of those present was taken. In the absence of the lecturer of the evening, the secretary presented for discussion the new Ehrlich remedy for syphilis, "606," and read from recent Journals several articles giving experience of a number of clinicians to date. Dr. Jepson, asked to open the discussion, said that it is rather difficult to discuss a remedy which none of us have tried. In the

September issue of the W. VA. JOURNAL he had digested several papers in an editorial, and the results thus far had certainly been very favorable. Ehrlich had proceeded very cautiously; not being a clinician himself, he had given the remedy to experienced practitioners to test in the hospital wards, and the reports thus far have been uniformly most encouraging. We must remember, however, that we once expected to cure all of our tuberculosis cases with tuberculin, and while this is no doubt a very valuable remedy in the hands of careful men, it has not yet come into general use. It seems difficult to conceive of a remedy that in a single dose will dissipate all the symptoms of a disease that few would care to promise to cure under three years' careful management. He would advise watching and waiting, and a moderation of enthusiasm until a wider experience has been had. An interesting thought in connection with this so-called specific is, the effect it may have on the morals of young men. Will it make them less careful in regard to promiscuous sexual contact? Dr. Wingert also took a conservative view of the new remedy, counselling caution as to cultivating too great enthusiasm. Even quinin will not cure all cases of malaria, and yet it is recognized as a specific. Arsenic has been long used in syphilis, but just why this special preparation of Ehrlich is to accomplish so much we do not know. Time and careful observation will determine the proper status of the remedy. Dr. Noome thinks that Ehrlich "has made good," but also advises a careful waiting for further experience. The application of the remedy seems to be very painful, and this is an objection as far as the patient is concerned. Dr. Drinkard spoke of the high standing among scientific observers of Ehrlich. He has been seeking a remedy which, while it will kill the parasites, will not damage the host. To kill all parasites quickly is desirable, lest many become immune to the remedy and live and propagate. Contraindications to the remedy must be looked for and considered. The remedy will probably become a valuable aid to diagnosis, as its prompt results will clear up doubtful symptoms in some cases. Dr. Gadosh remarked that not all cases of syphilis are cured in three or even ten years, and this is because the medicine is given by the mouth. Hypodermic injection renders a cure more certain. President Fulton reported a case of chancre in a man who denied having the disease, but the diagnosis was later confirmed. He had been treated by a weekly hypodermic of hydrarg. salicylate for six months and all symptoms were controlled, but he had received one injection of "606" recently in New York, but it was too recent to report results. Adjourned after some miscellaneous business.

October 11. Sixty-two present, including visitors from several near-by towns. Dr. Reed of Cincinnati, who chanced to be in the city, was present and gave a talk on "medical politics"; told the story of the fight in Ohio against Senator Foraker, who favored osteopathy and opposed the Pure Food law. He counselled union in efforts to secure legislation for the benefit of the public, dropping politics in the selection of legis-

lators and working for the public good. Dr. W. C. Bryant of Pittsburg then read a paper on "Ulcer of the Male Bladder," a disease little known before the invention of the cystoscope. Ulcers are simple, tubercular and malignant. The tubercular are generally secondary to the disease elsewhere. Is very intolerant to local treatment. The malignant may originate in the bladder but generally secondary to same disease in the prostate. Ten per cent of cases of prostatic disease are malignant. Simple ulcer is spontaneous and consecutive to bladder inflammation. The subjective symptoms are ambiguous, the cystoscopy being necessary to a correct diagnosis. All signs may be absent. The writer told briefly of the treatment, largely local. Dr. Reed of Cincinnati opened the discussion. He urged the more common use of the cystoscope, without which justice to these cases can not be done. Dexterity in its use must be secured, and remedies chosen judiciously. Sixty to 70 per cent can be cured by the use of this instrument. Many can be cured by prostatotomy and drainage. There is too much delay in resorting to the cystoscope, medicines and antiseptics being used until the ulcer becomes chronic. Early diagnosis and cystoscopic treatment prevent disastrous results. Persistent irritation is often the starting point of malignancy. Therefore, prompt cure is essential. Remarks were added by Drs. Hupp, West, Noome, and Jepson. Dr. Bryant, in closing, remarked that the solitary ulcer is a distinct entity. The tubercular is usually multiple. Ulcers may exist that are not traceable to any infection. Can not always fix the cause. An embolic infarct or a cystitis may be the beginning. Some cases recover without treatment. "Cystoscopic ulcer" has been referred to. There should now be none, since skill in the use of the instrument can be easily secured. Has never seen any ill effects from local use of cocaine applied to the bladder. Amount used should be limited. An abraded surface absorbs it rapidly. Satisfactory supra-pubic drainage is impossible to secure, because the patient's general condition is generally bad, and urine will escape around the tube. Permanent fistulae sometimes remain. Adjourned.

S. L. J.

Medical Outlook

CANCER AND THE STRENUOUS LIFE.—Dr. Isaac Levin has contributed an article on "The Study of the Aetiology of Cancer Based on Clinical Statistics" to *Annals of Surgery*, in which he considers the data of 4,000 cases of cancer collected from the hospitals in Manhattan, Brooklyn, and Philadelphia, and from surgeons in various parts of the country.

"He thinks," says *The New York Medical Journal*, "that it appears evident that a local trauma or previous disease of the affected organ is of less importance in the causation of cancer than the increased vulnerability and lessened resistance of the organism, caused by the ever-increasing strain of modern life.

"This is certainly the only explanation that may

be offered for the increasing frequency of the occurrence of cancer in civilized communities. That this increase is not only apparent is very evident from the mortality statistics of the United States in 1907, which show a ratio of 73.1 per 100,000 population, as compared with the ratio of 70.8 in 1906.

"The investigation has clearly shown that an analysis of a large number of cases of carcinoma and sarcoma, well prepared both clinically and anatomically, is the main if not the only method for the study of the aetiology of cancer and consequently for the investigation of the possible means of prevention of the disease.

"Without such co-operation of purely clinical study, experimental cancer research on lower animals will hardly produce results which may have a direct bearing on the understanding of the aetiology of human cancer." F. L. H.

FOURTH-OF-JULY CASUALTIES IN 1910.

—The number of deaths and injuries from the use of fireworks during the celebration of the Fourth of July are decidedly lower than they were heretofore. There were only 72 cases of lockjaw this year, where last year there were 150. This is the lowest number of tetanus cases reported since THE JOURNAL began the compilation of these statistics in 1903. There were 131 deaths this year as compared with 215 last year, and 2,923 injuries this year as compared with 5,307 last year. This remarkable decrease in deaths and injuries is undoubtedly due to the adoption by a number of cities, such as New York, Chicago, Boston and Toledo, of restrictive measures, whereby the number of casualties was largely reduced, and also by the adoption of prohibitive measures by a number of cities, such as Baltimore, Washington, Cleveland, Trenton and others, whereby deaths and injuries were entirely prevented or reduced to the minimum. A large number of cities also furnished special programs in which music, the marching of soldiers, the flying of flags and banners, children's parades, historic floats, etc., were prominent features. This more sensible method of celebration of the Fourth of July is rapidly coming into vogue.

THE BEST OINTMENT FOR LUMBAGO.—

R Ac. salicylici, 1 dram.
Camphoræ, 2 drams.
Chloral, 2 drams.
Oleresin Capsici, 30 grs.
Ol. Sinapis, 15 drops.
Petrolati, ad 2 ounces.
S.: Apply with strong friction three times a day.—*The Critic and Guide.*

EHRLICH'S "606" IN SYPHILIS.—H. J. NICHOLS and J. A. FORDYCE, New York (*Journal A. M. A.*, October 1), report experience with Ehrlich's "606" in the treatment of syphilis. They first give an account of the researches which led Ehrlich to the discovery of the remedy. The animal parasites causing malaria, syphilis, etc., apparently can not be successfully attacked by immune sera. Hence the search for substances which would attack the parasites without injuring

their host. In this line of investigation about 630 substitution products have been made and tested, of which only four gave promise of value, possessing the required parasitotropic properties without at the same time being injurious to the organs of the host. These substances are: acetylatoxyl; arsenophenylglycin, or "418," trypanosan, and arsenobenzol, or "606." Excepting the drug trypanosan, arsenic is the active principle in all the preparations, the other chemical groups present merely serving to fix this substance to the parasite. Thus for example it has been found that the acetyl group has a special affinity for trypanosomes, and the amino and hydroxyl groups an especial affinity for the spirochetes. Of course this could only be determined by animal experiments, and after the discovery that syphilis could be transferred to the lower animals, the end became the discovery of a drug which in a single dose would destroy all the parasites without injuring the host, and this has apparently been accomplished with "606." Patients who have resisted the action of mercury, or who could not from idiosyncrasy use it, have improved at once under the use of "606" to which no special idiosyncrasy has as yet been observed. The drug is described as a yellowish powder rapidly oxidizing in the air and hence put up in vacuum tubes. It dissolves in water with difficulty, making a strongly acid solution which is very painful on injection. Hence the substance is administered either as a neutral or as an alkaline salt. The administration is by injection deep into the muscle or veins, or beneath the skin. At present it is recommended that the administration be subcutaneous. "According to this method, the drug, in a dose which has varied up to the present from 0.3 to 0.6 grams, is dissolved in a mortar in from 1 to 2 c.c. of ordinary solution of sodium hydrate. Acetic acid is then added, drop by drop, until the base precipitates out in the form of a fine yellowish suspension. This precipitate is collected in from 1 to 2 c.c. of sterile distilled water, and there is added either 1/10 normal sodium hydrate, or 1 per cent, acetic acid, as needed, until the reaction becomes precisely neutral to litmus. According as the reaction is or is not accurately neutral, the injection will be followed by much, little or no pain. It is moreover desirable to subdivide the precipitate as finely as possible, which drawn into a suitable syringe and injected subcutaneously below the shoulder blades after previous cleansing and disinfection of the part. It often happens that there is slight pain lasting a few minutes following the injection, and in some instances a slight swelling arises on the second or third day following the injection, but no bad effects are produced. There may be slight rise of temperature and in some instances an urticarial eruption has occurred, but no specific toxic effects on the eyes, kidneys, or nervous system, have been observed." The authors report their personal observations in detail. Fourteen patients received the injections and the results are also given in tabulated form. In two cases the doses were too small, but the other twelve have apparently got rid of the parasites and there

has been no relapse in four months, all the Wassermann reactions remaining negative. None of the patients received more than 0.3 grams and the first two much less. This is about half the dose now being used abroad, 0.6 grams being found non-toxic to man. The final work in regard to the drug will not be said probably for some years, but the authors say the fact remains that we have no drug the extraordinary effects of which in syphilis equals that of "606." The article is illustrated.

BACTERIN THERAPY IN URETHRAL AND PROSTATIC INFECTIONS.—DR. MARK of Kansas City presents, in the July *American Journal of Urology*, a resume of his work in bacterin therapy as applied to infections of the urological tract. While Dr. Mark acknowledges certain shortcomings in his technique and avers that his results have not been uniformly good, they have been sufficiently convincing to demonstrate the efficacy of this mode of treatment. It seems beyond questions that bacterin therapy is the most valuable adjunct that modern science has contributed to the treatment of diseases of the urogenital tract. Based upon 75 cases his conclusions are as follows:—

1st:—Autogenous bacterins should be used whenever possible. On account of the great uncertainty of culturing the gonococcus, it will suffice to use a stock culture prepared from a reliable strain. In using a stock culture, frequent replants should be made. Occasional examinations should be made to determine if the organism is still Gram negative. If not Gram negative, the cultures should be rejected.

2nd:—In all mixed infections, the different organisms should be isolated and replanted in flasks, affording a wide surface for growth. From these segregated colonies, the bacterins should be prepared in the usual manner with physiological salt solution.

3rd:—The bacterins should now be rendered sterile by heat. The degree of heat used and the duration of heating should depend upon the organism being worked with.

4th:—The sealed tube containing the bacterin should now be shaken thoroughly for one hour, in order to thoroughly break up the clumps of bacteria.

5th:—The bacterin should be standardized carefully and preserved in one per cent. lysol solution in a rubber-capped bottle.

6th:—The bacterin should not be used until it has been demonstrated by replanting from the mother emulsion that all of the organisms have been killed.

7th:—Where a mixed infection is present we have found it perfectly satisfactory to mix the bacterins, making a mixed bacterin. F. LEM. H.

ADRENAL THERAPY.—DR. SAJOUS closes a paper on this subject with this summary: The list of disorders in which adrenal preparations have been tried could be greatly extended, but I have limited myself to those in which their use has proven advantageous in the hands of a sufficiently large number of practitioners to war-

rant their being added to our trusted remedial agencies. Of these, a certain number may even be said, interpreted from my viewpoint, to exceed other means at our disposal in value. These are:—

1. Addison's disease. In this affection adrenal preparations compensate for the deficiency of adrenal secretion, and, therefore, for deficient general oxidation, metabolism and nutrition. The dosage should be adjusted to the needs of each case. Beginning with three grains of the desiccated extract three times daily after meals, the dose should be gradually increased until the temperature and the blood-pressure become normal, when the last dose should be maintained.

2. Surgical heart-failure, collapse from haemorrhage, shock, asphyxia and submersion. Here the adrenal active principle (suprarenalin, adrenalin, etc.), as a catalyser and a constituent of the hemoglobin, promotes energetically the intake of oxygen and its utilization by the tissue-cells, including the muscular elements of the cardio-vascular system, and thus causes them to resume their vital activity. It should be very slowly administered intravenously, five minims of the 1/1000 solution to the pint of warm (105° F.) saline solution. In urgent cases, ten drops of suprarenalin or adrenalin in one drachm of saline solution can be used instead, and repeated at intervals until the heart responds. Artificial respiration hastens its effects.

3. The toxæmias, including bacterial infections, surgical septicæmias, etc., when collapse threatens, especially when a persistently low blood-pressure, hypothermia, and cyanosis, are present. Besides enhancing pulmonary and tissue respiration, the adrenal principle, administered in the same way, enhances the efficiency of the immunizing process.

4. Capillary haemorrhage from the pharyngeal, œsophageal, gastric or intestinal mucous membrane. The mastication of tablets of adrenal substance, or the oral use of powdered adrenal substance in five-grain capsules arrests the flow, by causing active metabolism in the muscular elements of the arterioles of the mucosa and construction of these vessels.

I may add to these a series of disorders in which adrenal preparations will probably prove of great value when sufficient evidence will warrant a final conclusion. These are:—

1. Sthenic cardiac disorders with dilatation of the right ventricle, dyspnoea, and possibly cyanosis and œdema, owing to the direct action of the adrenal principle on the right ventricle and improved oxidation and metabolism in the cardio-vascular muscles and the tissues at large. Tablets of from one-half to two grains of the desiccated gland can be taken after meals.

2. Asthma, to arrest the paroxysms, by augmenting the pulmonary and tissue intake of oxygen and the cardio-vascular propulsion of arterial blood. From five to ten minims of the 1/1000 solution of suprarenalin or adrenalin in one drachm of saline solution should be injected drop by drop into a superficial vein, or hypodermically.

3. To prevent the recurrence of serous effusions in the pleura, the peritoneum, the tunica vaginalis, etc., after aspiration, by reducing the permeability of the local capillaries and restoring the circulatory equilibrium. From eight minims to two drachms (according to the size of the cavity) of suprarenalin or adrenalin, in four times the quantity of saline solution, should be injected into the cavity.

4. In neuralgia or neuritis, applied to the cutaneous surface over the diseased area to produce ischemia of the hyperæmic nerves and thus arrest the pain. One to two minims of a 1 to 1000 adrenalin ointment should be applied by inunction.

The doses advocated will appear small to many. I can only urge in explanation that the power of the adrenal principle, as shown by physiological chemists and my own investigations, is such, that it should be used with the greatest circumspection. Several recently reported deaths from its use emphasize the need of precautions when employing the hypodermic intramuscular and intravenous methods. Their oral use is at best unreliable. This does not apply to that of the gland itself, nor to the desiccated gland, one grain of which represents six grains of gland substance. These prove quite effective, though slow in most instances, when the disorder or condition present actually involves the need of the adrenal principle, to enhance either the oxidizing power of the blood or its immunizing properties.—*Monthly Cyclopaedia*, Feb. 1910.

FRIEDREICH'S DISEASE OR F'S ATAXIA.—DR. W. L. ROBINS, Washington, D. C., after a study of one hundred cases of this disease, draws these conclusions:

Judging from a clinical study of this series of one hundred cases of Friedreich's Disease, one is led to conclude that the term "hereditary ataxia" as applied to this disease is clearly a misnomer.

The more important positive and negative signs and symptoms (as modified from B. Bramwell) would appear to be as follows:

More Important Positive Signs and Symptoms.

—1. Onset of disease usually before the twelfth year. More than 25 per cent. of cases begin before the sixth year.

2. Familial character of the disease in about 80 per cent. of cases.

3. Ataxia, beginning usually in the legs, and finally extending to the arms.

4. Some impairment of motor power of legs and especially the muscles on front of legs. Limbs are thin, but there is usually no localized atrophy.

5. A peculiar gait, which may be termed inebrious, or ataxic cerebellar.

6. Absence of knee jerk. Highly characteristic symptom.

7. A peculiar form of club-foot. Markedly characteristic.

8. Lateral curvature of the spine. Present in about one-half the cases. Anterior-posterior curvature may be found in a small percentage of cases.

9. A peculiar affection of speech, which may best be described as jerky, slurring or ataxic.

10. A vacant or dull, torpid expression of countenance with lessened mobility of the facial muscles under emotion or in talking.

11. Nystagmus. This symptom is found in about one-half the cases. Lateral nystagmus is usually found.

12. Presence of choreiform twitchings and movements, especially of the head and trunk, when the body is at rest.

13. Inability to maintain erect position with eyes closed. Constant attempt at balancing, when standing with eyes opened.

14. Vertigo, faintness, occasional pains or cramps in the legs, and dull backache have been observed in some cases.

More Important Negative Signs and Symptoms.—1. Absence of lightning pains and of any marked impairment of the muscular sense, or the sensibility of the skin (to touch, heat, cold and pain) and absence of derangement of the special senses.

2. Absence of any derangement of the functions of the bladder and rectum and of the sexual apparatus.

3. Absence of Argyll-Robertson pupil, or myosis, of optic atrophy, and of paralysis of the external muscles of the eyeballs.

4. Absence of trophic derangements in bones, joints, skin, hair, nails and teeth.

5. Absence of headache, vomiting, optic neuritis and of derangements of memory and the intellectual faculties.

6. Absence of scanning or bulbar speech.—*Washington Med. Annals.*

BEST TREATMENT FOR CHANCIROID.—

Cleanse the chancroid with a bichloride solution (1 grain to the ounce); anesthetize with cocaine, eucaine or alypin; cauterize with a 10 per cent. solution of formaldehyde (i. e. 1 part of formalin or the official liquor formaldehydi to 3 parts of water). Then let the patient apply calomel, airol, aristol or europhen, 3 to 6 times a day. Do not use silver nitrate.—*Therapeutic Medicine.*

SARCOMA OF THE HEART.—H. A. BALDWIN, Columbus, Ohio (*Journal A. M. A.*, August 20), reports a case of large spindle-celled sarcoma, pedunculated and originating from the margin of the vein returning from the base of the left lung. The tumor practically filled the left auricle, measuring 3 inches in its greatest length, 2½ inches in thickness and 8¼ inches in circumference. The heart was greatly enlarged. The symptoms favored the diagnosis of solidification of the lung, but sputum examination showed no tubercle bacilli. The only antecedent mentioned was bruise of the left chest from a fall 3 months previously. Baldwin briefly reviews some of the literature of the subject, finding only 16 cases reported, his own making the seventeenth authentic case of primary sarcoma of the heart. Of course, in the early cases, the pathology must remain in doubt, and it is probable some of them were secondary to overlooked foci.

FOOD AND ALCOHOL—A PARALLEL.—By PROF. W. S. HALL, Northwestern University, Chicago, Ill. The following comparative statements represent demonstrable facts and the teachings of laboratory work, and will serve a very useful purpose of emphasizing in a condensed form the results of years of study.

FOOD.

1. A certain quantity will produce a certain effect at first, and the same quantity will always produce the same effect in the healthy body.

2. The habitual use of food never induces an uncontrollable desire for it, in ever increasing amounts.

3. After its habitual use a sudden total abstinence never causes any derangement of the central nervous system.

4. Foods are oxidized slowly in the body.

5. Foods, being useful, are stored in the body.

6. Foods are the products of constructive activity of protoplasm in the presence of abundant oxygen.

7. Foods (except meats) are formed in nature for nourishment of living organisms and are, therefore, inherently wholesome.

8. The regular ingestion of food is beneficial to the healthy body, but it may be deleterious to the sick.

9. The use of foods is followed by no reaction.

10. The use of food is followed by an increase in the muscle cells and brain cells.

11. The use of food is followed by an increase in the excretion of CO.

12. The use of food may be followed by accumulation of fat, notwithstanding increased activity.

ALCOHOL.

1. A certain quantity will produce a certain effect at first, but it requires more and more to produce the same effect when the drug is used habitually.

2. When used habitually it is likely to induce an uncontrollable desire for more, in ever increasing amounts.

3. After its habitual use a sudden total abstinence is likely to cause a serious derangement of the central nervous system.

4. Alcohol is oxidized rapidly in the body.

5. Alcohol, not being useful, is not stored in the body.

6. Alcohol is a product of decomposition of food in the presence.

7. Alcohol is formed in nature only as an excretion. It is, therefore, in common with all excretions, inherently poisonous.

8. The regular ingestion of alcohol is deleterious to the healthy body, but may be beneficial to the sick (through its drug action).

9. The use of alcohol, in common with narcotics in general, is followed by a reaction.

10. The use of alcohol is followed by a decrease in the activity of the muscle cells and brain cells.

11. The use of alcohol is followed by a decrease in the excretion of CO.

12. The use of alcohol is usually followed by an accumulation of fat through decreased activity.

13. The use of food is followed by a rise in body temperature.

14. The use of food strengthens and steadies the muscles.

15. The use of food makes the brain more active and accurate.

13. The use of alcohol may be followed by a fall in body temperature.

14. The use of alcohol weakens and unsteadies the muscles.

15. The use of alcohol makes the brain less active and accurate.

Journal of Inebriety.

POISONING FROM BITES OF COPPER-HEAD SNAKE (ANCISTRADON CONTORTRIX).—PRENTISS WILLSON, M.D., Washington, D. C., (*Jour. A. M. A.*, Aug. 27), reports one case in detail and discusses others of bites by copperhead snakes. In the case reported, a boy of 13 was bitten in the index finger. He was taken to a hospital and the finger incised to the bone along its entire length and potassium permanganate crystals applied. Strychnine was used hypodermically. In a few days the boy was discharged well. In two other cases discussed sepsis, fatal in one case, followed incision of the wound and Willson thinks that incision is not necessary in bites from this snake. He condemns the treatment by administration of large quantities of alcohol, and thinks that in some cases death is due to the whiskey consumed and not to the snake bite. The ideal treatment, he says is application of a ligature just tight enough to impede the return flow of blood and lymph, but not tight enough to cut off the arterial supply and cause gangrene. He concludes as follows: The general treatment is simple but important. The copperhead venom produces a very marked fall in blood-pressure and exerts a selective depressing effect on the respiratory center. The low blood-pressure should be treated by the administration of adrenalin by intravenous injection, if the condition promises to be at all serious. Of course, in such cases as the second and third reported above such a procedure would be highly unnecessary. Strychnin is probably as likely to be useful as any other stimulant, especially in those cases where there is a tendency toward respiratory depression. Caffein and camphorated oil would seem to be indicated on theoretical grounds, in bad cases, as in young children. The recumbent posture with the head low and external heat should be used. Bandaging the extremities, abdominal compression by a tight binder, and artificial respiration may be tried in very serious cases, but such cases will be very rare except in young children.

BEST OINTMENT FOR PURITUS ANI.—

R Phenol, 20 grs.
Calomel, 1 dram.
Tar, 1 dram.
Menthol, 10 grs.
Zinc oxide, very fine, 1 dram.
Petrolatum, 6 drams.
Lanolin, 2 drams.

Bathe with water as hot as can be borne and apply twice daily.—*Therapeutic Medicine.*

Miscellany

MILLIONS SPENT IN TUBERCULOSIS CRUSADE.

Based on reports gathered from all parts of the United States, the National Association for the Study and Prevention of Tuberculosis has issued a bulletin in which it is stated that \$8,180,621.56 was expended during the year 1909 by the various interests fighting consumption in the United States. The bulletin shows that in the year 1909 over 10,000,000 pieces of literature were distributed, and that 117,312 patients were treated and assisted by the sanatoria, dispensaries and anti-tuberculosis associations.

By far the largest amount of money spent during the past year was for the treatment of tuberculous patients in sanatoria and hospitals, \$5,292,289.77 being expended in this way. The anti-tuberculosis associations spent \$975,889.56, the tuberculosis dispensaries and clinics, \$640,474.64, and the various municipalities, for special tuberculosis work, spent \$1,111,967.53. The anti-tuberculosis associations distributed the most literature, spreading far and wide 8,400,000 copies of circulars, pamphlets, and other printed matter for the purpose of educating the public about consumption. The health departments of the different cities also distributed more than 1,056,000 copies, which, with the work done by the state departments of health, brings the number of pieces distributed during the year well over 10,000,000. The largest number of patients treated during the year was by the dispensaries, where 61,586 patients were given free treatment and advice. The sanatoria and hospitals treated 38,758 patients, while anti-tuberculosis associations assisted 16,968.

New York State leads in the anti-tuberculosis work done during the past year, having spent more money, distributed more literature and treated more patients than any other state. Pennsylvania comes next and Massachusetts is third. The next seven states are Illinois, Maryland, New Jersey, California, Colorado, Connecticut and Ohio. The following table shows the work done in these ten states:

State	Expenditures	Literature, pieces distributed	Patients treated
New York	\$1,669,179.76	4,997,600	41,779
Pennsylvania	1,515,664.02	251,300	24,410
Massachusetts	1,059,123.53	217,605	10,645
Illinois	202,820.53	254,500	4,826
Maryland	195,691.07	29,500	5,829
Ohio	245,502.17	127,000	3,197
New Jersey	211,660.62	287,500	2,159
Colorado	566,205.17	37,000	3,229
California	254,707.14	107,075	1,900
Connecticut	220,190.98	13,500	1,141

As an indication of the forces of the crusade against tuberculosis, the National Association for the Study and Prevention of Tuberculosis in a bulletin issued recently points to the fact that while 53.5 per cent of the expenditures for tuberculosis in 1909 were made from public resources, appropriations made for 1910 indicate that over

75 per cent of the money to be spent this year will be from federal, state, city and county funds.

In 1909, out of the \$8,180,621.56 spent for the prevention and treatment of tuberculosis, \$4,362,750.03 was spent from public money, and \$3,817,871.47 from funds voluntarily contributed. For the carrying on of state, federal and municipal tuberculosis work in 1910, over \$9,000,000 has been appropriated. Of this sum, the state legislatures have granted \$4,100,000, the municipal and county bodies, \$3,975,500 and the federal government, \$1,000,000.

In the States in which the most preventive anti-tuberculosis work has been done, the percentage of public funds spent is the highest, while in states where little or no effort has been made to prevent tuberculosis, and the treatment of the disease alone has been considered the percentage of public expenditures is very low. For instance of the \$1,600,000 spent in New York in 1909, nearly 60 per cent was from state and city funds. In Massachusetts nearly two-thirds was from public money; in Maryland about one-half; and in Pennsylvania three-fourths; in Colorado, on the other hand, less than one per cent was from public money; in California about 15 per cent, and in Arizona none at all. These facts indicate that wherever an aggressive educational campaign has been carried on by private organizations, states and cities have been induced to make liberal appropriations for the prevention of tuberculosis.

Twelve years ago, Massachusetts made the first appropriation for a state sanatorium. Since that time, over \$10,000,000 has been appropriated by state legislatures for the prevention of tuberculosis and about an equal sum by municipal and county authorities. The federal government has over \$1,000,000 invested in tuberculosis hospitals, and spends annually about \$500,000 in their maintenance. Every year the percentage of appropriations made from public funds for tuberculosis work has increased.

While private societies have led the way in the tuberculosis campaign, every effort has been made to have states, cities and counties do their share. The bulletin of the National Association states that the final success of the anti-tuberculosis crusade depends on every city and state providing funds to treat and prevent consumption.

EFFECTS OF DEEP BREATHING.

The effects of rapid and prolonged deep breathing are described in *Science* (Dec. 3, 1909) by D. F. Comstock of the Massachusetts Institute of Technology. They are sufficiently startling to warrant more attention from physicians, for he truly states that though they are well known in a general way, scientists as a rule are ignorant of the matter and there are many occasions in which the process can be put to valuable uses. Briefly it may be explained that the blood is thus so supersaturated with oxygen, that all the functions are stimulated to greater activity and respiration can be suspended for three to five minutes. Consequently, there is a rise in the pulse-rate, mental fatigue is lessened, sleepiness disappears and muscular power is greatly increased

as in the case of oxygen inhalations of athletes. These results follow deep respirations of less than four minutes. Pearl divers practice the method and stay under the water five minutes or longer, but as they are notoriously short-lived, we must warn against the dangers lest the method might be adopted by swimmers to their ultimate ruin. It is the ordinary method of respiration of whales, but they have evolved lungs which are not strained by one very deep inspiration which supplies enough oxygen for many minutes. Yet it is a good thing for swimmers and firemen to know, when rescue work demands a cessation of respiration for some minutes even at some risk.—*American Medicine.*

MEDICAL EDUCATION; STATISTICS FOR 1910.

The *Journal A. M. A.*, Aug. 20, 1910, the annual Educational Number, contains statistics of medical colleges, students and graduates for the year ending June 30, 1910. There were 21,526 students studying medicine last year, the lowest number in seventeen years. These are divided into 20,147 in the regular colleges, 867 in the homeopathic colleges, 455 in the eclectic, 49 in the physio-medical and 19 in unclassifiable colleges. There were 4,436 medical graduates last year, likewise the lowest number in seventeen years. The regular colleges had 4,113; the homeopathic, 179; the eclectic, 114; the physio-medical, 16, and the unclassifiable colleges, 14. There are 11 less colleges than in 1909, the total now being 133, consisting of 111 regular, 13 homeopathic, 7 eclectic, 1 physio-medical and 1 unclassifiable colleges. Women students constituted 4.2 per cent. of all students. Statistics show that college terms are being gradually lengthened.

Tabulated statistics of college fees, including matriculation, tuition and laboratory fees, show that 64 colleges charge from \$75 to \$125 per year, 19 charge less than \$75 per year, 36 charge between \$125 and \$175 per year and 25 charge \$175 or more. Some high-grade colleges charge very small fees and some low-grade colleges high fees. There is no excuse, therefore, from the monetary standpoint why a student of limited finances should attend an inferior college. Among the colleges charging low fees are several strong, state university medical colleges. Of the 133 existing colleges, 34 now require one or more years of work in a college of liberal arts for admission. Eight state licensing boards have also established this requirement of preliminary education, thereby supporting the better class of colleges which have adopted that standard.

THE DEATH PENALTY; IS IT JUSTIFIABLE?

Says the *New York Times*:

We are in receipt of a pamphlet by Mr. Arthur MacDonald, Honorary President of the "Third International Congress of Anthropology," containing valuable statistics of capital crimes and their punishment in the various chief countries, and noting that in many of them the death penalty has ceased to exist, while historically it "has

been enforced less and less" in all of them. Nevertheless, Mr. MacDonald thinks that its enforcement ought not to cease altogether, and he gives his reasons.

First, upon such statistics and with such comparisons as are obtainable—they are not very complete—it seems that in certain localities the death penalty has at times probably lessened crimes of violence. Criminals themselves in their secret compacts make death the penalty of their violation, and the fact that they fear death above all other punishments is shown also in the choice by astute criminals of fields of operations where it has been abolished. Much sympathy is wasted upon a few murderers found guilty, while the public manifests little or no sympathy for the murders of hundreds of innocent and unavenged victims, hence public sentiment is no adequate gauge in determining the justice of the penalty. At any rate, its infliction makes it certain that the criminal, who frequently has killed more than one person, will never take the life of another. The death penalty seems to give, too, firmness to the execution of all the laws "by a sort of radiation."

Mr. MacDonald's argument against life imprisonment, where capital punishment is abolished, is that the whole class of robbers, burglars, and assaulters committing crimes subject to imprisonment for life would be encouraged to get rid of dangerous witnesses by killing them, without fear of increasing their punishment if finally convicted; also, a prisoner for life could kill his keepers without further punishment.

These arguments for retaining capital punishment are strong. But Mr. MacDonald's admission that public sentiment in its favor is vanishing seems to set them all at naught. So long as the jury system lasts no penalty that lacks public support can be enforced. Murderers in this country go free or are convicted of lesser crimes because of the general unwillingness to put them to death. Better that a moderate penalty be rigorously enforced than that a heavier penalty be ignored.

F. L. H.

Conservatism, with its object to preserve and build up rather than tear down. Renunciation if needs be—but not denunciation. Optimism rather than pessimistic agnosticism. Faith not only in oneself, but in the armamentarium upon which one depends. Empiricism has stood the test of Time and should not be discarded or discounted in favor of so-called Scientific Medicine, until the latter has been fully tried and not found wanting.—*Doctor's Factotum.*

The pulse rate is a very important guide in determining the necessity for operation in acute appendicitis; but sometimes it should be altogether disregarded. If distinct pain and tenderness have not abated after twenty-four to thirty hours (especially if vomiting and more or less rectus rigidity coexist, but even without these) it is proper to operate without waiting further, no matter what the temperature and pulse rate; a gangrenous appendix may be found in a patient whose pulse is 70 and temperature 100°!—*American Journal of Surgery.*

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Original Articles

VICTORIES TO BE ACHIEVED AND PROBLEMS TO BE SOLVED BY MEDICINE.

Oration in Medicine.

W. H. Sharp, M.D., Parkersburg, W. Va.

(Read at annual meeting of State Medical Ass'n,
Parkersburg, Oct., 1910.)

Mr. President and Gentlemen of the West Virginia Medical Association: You will, I hope, pardon me for indulging in some short personal mention, preparatory to this address. Some 41 or 42 years ago I had the honor and pleasure of preparing my first paper for the Medical Society of West Virginia, a report on "New Remedies," and I esteem it a very great honor to be asked to give this address on Medicine, thus rounding out my long association with this society. Then the paper was addressed to a society which was in that period of life when it was first "the infant mewling and puking in the nurse's arms," and now it has grown to robust manhood, full of strength, courage and ambition to press on to great achievement, long lived usefulness for years to come. In looking back over the vista of these years since then, I now realize how much pleasure and profit I have received from this association, and can sincerely exhort my younger associates, whether located in the city or country, to cultivate the medical society habit, especially first the county and then the State society. It will amply repay you with the sat-

isfaction one derives from knowing that he follows a learned profession rather than an ordinary trade.

My subject proper is "Some of the Victories Achieved, and Some of the Problems to be Solved by Medicine."

In these days, when surgery has been advanced to the high pinnacle of success it occupies, exciting the admiration of the world and the ambition of the young medical men to follow it because of the reputation and the large reward it gives, it is well to recall to them that the other branch of medicine is not inferior either in the importance of its problems presented or the beneficence of its results achieved. For as "peace has her victories no less renowned than war," so hath medicine her triumphs equal, if not greater, than those of surgery; victories won by hard labor done in the laboratory, hospital, or in the broad field of practice; and today new problems are constantly presented for her to solve, upon the solving of which the happiness, prosperity, and safety of countless millions depend. These problems, whether solved by preventive or curative medicine, will be hailed as victories no less renowned, no less brilliant, or beneficent to mankind than those of an Edison, a Morse, Stephenson, or any of those whose names adorn the "halls of fame" or whose statues grace the Westminster Abbey, to whom we all bow in humble admiration.

Were I addressing a general audience it would be proper to dwell at length on the many triumphs of medicine proper, in the prevention and cure of disease since the days of the grand old general practitioner, Edward Jenner, down to the days of this

century, when the causes of so many diseases have been discovered, the means of their prevention made plain, and their cure made more certain by the labors of students in the laboratory, hospital, and even in the daily life of the hard working practitioner. But so much of this would be but a twice-told tale that it would be a waste of time. Still I cannot refrain from citing a few of these triumphs to illustrate and establish my claim as to the value of medical victories. We all know that in writing of medicine we cannot limit ourselves to the treatment of disease by drugs alone, but must include preventive medicine as well; nor in this country confine one's self to diseases with which we are familiar for many years, for with the revolution in the modes of travel and the increase of communication between all lands, we have to consider new diseases arising from importation, or developed from new conditions of which we have been ignorant, or known only from reading as existing in foreign lands. To cite, for instance, the knowledge we gained of uncinariasis, the prevalence of anaemia resulting therefrom in the Island of Porto Rico after it became a part of our possessions. A few years pass by, and lo! we find that it is widely prevalent in our southern states.

First and foremost in these days comes preventive medicine, which has as its foundation stone the discoveries made of the causes of disease and the means to destroy them, and prevent their effects when attacking the system. You all know that these have been our greatest triumphs.

Perhaps the greatest discovery has been that which showed the relation between various parasites, insects, vermin, and man's diseases—these acting as intermediary hosts for disease germs, in their life cycle or more directly carrying the germs to the victims from others afflicted. We have, so to speak, a vicious circle, the patient infected, the insect carrier, and the now immune awaiting attack, or protected by some preventive serum or vaccine.

What history, what poetry, what romance more interesting or more marvelous than the recital of the discovery of the cause, mode of invasion and prevention of malaria, and the relation of the mosquito to this disease; or the relation of the same insect to yellow fever, or of the flea to the Asiatic plague, or of the "tsetse" fly to the sleeping

sickness of Africa. By reasoning and logic based on the solid foundation of facts demonstrated by animal, aye, even by human experiment, these histories of disease have been written for us. Medical historians tell us that kingdoms have been destroyed, whole peoples wiped out, and the affairs of the world materially affected by these causes. For instance, in Central Africa, 400,000 people destroyed in the fertile regions of the great lakes there by sleeping sickness.

There is a constant battle going on in this world between the powers of light and darkness. It is exemplified in the history of the Asiatic plague. The rat is not an attractive or useful animal; it seeks the dark places; the flea is a very insignificant insect, pestiferous and active. Given a case of plague, a rat and a flea—it is a combination capable of infinite destruction. The dreadful ravages of this disease in the East have been much lessened by the use of several serums, most promising of which are Lerssen and Roux's serums, and Haffkine's vaccine. It is claimed that the latter reduced the mortality in those already affected by 30 per cent, and in those where used as a preventive by 80 per cent. In this country, with modern conditions of rapid communication, we can not hope to escape except by constant diligence. You all know how diphtheria has been robbed of its terrors, that dread foe of childhood, and even of adult life by the use of antitoxin of diphtheria, and when used promptly we have the mortality reduced at least four-fifths. But now, in the end of this first decade of the new century, we have promise of another victory. Those of us who have encountered an epidemic of cerebro-spinal meningitis know how hopeless seemed the efforts at our command, how helpless the means we used, and we have seen a mortality of from 80 to 90 per cent; and most of those who recovered were left mere wrecks fated to drift through life of little use to themselves and a burden to their friends. Thanks to Drs. Flexner and Jobling, of the Rockefeller Institute, we have a serum which, injected into the spinal dural sac in a proper manner, saves from 70 to 80 per cent and those to restored health in place of the old mortality of from 80 to 90 per cent. At first this serum was only produced at the Rockefeller Institute, but of late it is

prepared by one or more firms who prepare animal vaccines and serums. The use of this antitoxin presents much more difficulty in its use than that of diphtheria, and will require more skill in technic, and the skill of a bacterologist in the distinguishing of the germs causing the disease. But nevertheless this is a very notable victory, worthy of loud sounds of rejoicing, as a result of animal experimentation. There are other victories gained by discoveries of the causes of diseases, and thereby learning how to prevent or cure them. Some have more value or more certain effects than others, but many are meritorious and of promising value, viz., antitetanic serum especially used as a preventative, the use of an antityphoid vaccine, especially useful in army life, or during the prevalence of a typhoid epidemic. I would like to touch on the treatment of tuberculosis, but it is all too familiar to you all. So enough of victories accomplished.

Let us turn to the problems arising for the future. Yesterday we hardly knew of these disease problems, today they are present and demand our most urgent attention. The first of these I wish you to consider with me is the lately-announced uncinariasis or hook-worm disease. For many years we have known this as prevalent in certain of the subtropical countries. It prevailed extensively in the West Indies—and after the occupation of Porto Rico many cases were treated there. In the early part of this century cases were discovered in the southern states. One of the earliest cases of native origin was described by Dr. Harris, of Atlanta; we at that time knew of only one or two specimens infesting man. About 1902 Dr. Chas. W. Stiles, of the government service, discovered a second species, which he named "*uncinaria duodenalis*." This disease is also known as ankylostomiasis.

There was a disease prevalent in the south especially known as the ground itch. Thanks to many observers, we know that uncinariasis and ground itch are closely related. The larvae develops outside the body, and are carried through the skin into the lymph channels, through the blood vessels, finally reach the intestinal tract, and there develop into the mature worms. At first it was supposed that they gained access through the food and drink, but later studies have established this ground itch as the first stage, or the stage of invasion. The

larvae, when they reach the intestinal tract, are scarcely distinguished by the eye. The adult worm is from $\frac{1}{4}$ to $\frac{3}{4}$ -inch in length. The diagnosis can be made a certainty by finding the ova in the feces, or oftentimes on the ground.

A decade ago our text books only described three forms of intestinal parasites as occurring among us, viz., the taenia or tapeworm, the ascaris vermicularis or round worm, and the oxyuris or pin worm. In Gould's Student's Dictionary of 10 years ago no mention of the hook-worm is made. Since the investigations made by early observers, especially Stiles and Harris, the discovery is made that it is very prevalent in the south, and is no doubt intimately connected with the anaemia. The sluggishness and the ill health of a large portion of the poorer class, especially among the whites, which had been largely attributed to the presence of malaria, has attracted national inquiry. You no doubt know of Mr. Rockefeller's munificent gift of a million dollars to be expended in its investigation and treatment, and that in January of this year was held at Atlanta, Ga., the first southern health conference on this disease. There were read interesting papers, full of descriptions of the presence of the worm, how it attacks the body, and how, when it reaches the bowel, it attacks its victims, living in the mucus and deriving its nourishment by sucking blood from its victim. It is a question not decided as yet, I think, whether the profound anaemia in some cases is due to this constant loss of blood, or the generation of a toxemia from some poison generated by the parasite, for some patients succumb where few worms are present. The hook-worm, according to Dr. Stiles, was introduced into this country by importation of slaves, and hence spread.

The changes resulting are universal, so much that one is astonished at reading the symptomatology given by Dr. Dock and the pathology given by Dr. Evans, of Nashville, at this conference. The prevalence of the disease has been insisted upon, as due to faulty sanitary conditions in the rural districts of the south, in the careless disposal of the feces. Those studying the disease show that the majority of cases occur in the country among the whites and blacks alike, and to that point must be directed our greatest effort. That among the blacks there

may have been established an immunity derived from the long existence of the disease among them, while this does not exist among the whites; consequently the whites suffer more from it. As Dr. Stiles has said, the negro race has given us "uncinariasis," and we, the white race, have given the black the tuberculosis.

The predisposing causes aside from the infection are early age and poor diet. It is most destructive among the young, especially among those between 10 and 20 years of age. There is a marked cachexia, also irregular action of the bowels. In severe cases marked symptoms due to the impoverished blood, which becomes more marked as the disease progresses. In the young there is retarded bodily development. The appetite may be perverted, sometimes absent, sometimes voracious. At times we have dropsies due to anaemia. The sufferers are indolent, sluggish in body and mind. It is a composite picture and easily mistaken for chronic malaria, or the early stage of tuberculosis; but the microscopic examination of the feces reveals the disease. Dr. Harris gives the treatment which is very simple and satisfactory if followed up. First an active cathartic in the afternoon, either calomel or salts; no oil, however, if thymol is to be used. As soon as the bowels have been thoroughly acted upon, give half the quantity of thymol finely powdered, from 5 to 60 grains, according to age. Patient still fasting, these doses can be given an hour apart; he must remain in bed, lying best on the right side to favor prompt passage of drug from the stomach into the bowels. Late in the afternoon a saline is administered. In two weeks examine the feces for ova. If found, repeat treatment. These examinations should be repeated until all ova disappear. Others use the betanaphthol with success, others oil of eucalyptus. Some advocate a continued treatment with iron in some of its forms to overcome the anaemia. Dr. Harris does not think this necessary. The important point in this campaign is one of education as to a sanitary disposal of feces, which has been almost entirely neglected in these regions, especially among the rural population, both among the whites and blacks. Query—Have we the disease among us, has any one ever recog-

nized it? Certainly in some sections the conditions have been favorable.

Another problem which has arisen in the last two years in this country is the discovery of the presence pellagra. For upwards of 250 years it has prevailed in those parts of Europe where maize or Indian corn was cultivated and used as a chief article of food; especially in the north part of countries where the seasons were short and the ripening of the grain not fully assured. In France, Spain, Italy, Austria-Hungary and the Balkan States it principally prevailed. We find that it also prevailed in other sections bordering on the Mediterranean. Our knowledge of the disease was limited to reading, our text books never mentioning it. The student studying foreign works found it described to us, but he passed it by as of no practical interest to us, just as we read of beriberi or Malta fever. At long intervals a few cases had been diagnosed without attracting much notice. But in the last three or four years we have found that this disease does prevail in larger sections in this country, especially in the southern states, and many cases have been found in insane asylums, both north and south. Immediately attention was called to its extensive prevalence in those countries alluded to, that is in Europe.

There were established asylums or hospitals for its victims who are known as pellagrins. For years it has been the subject of much study, many volumes written by the leading men of these countries, and the government commissions have been investigating its causes, and wisely, too, for one estimate gives us 100,000 as the number of its victims in Italy alone. So we have been rudely aroused from our indifference. Why this land has escaped so long when it is the home of the corn, was difficult to tell. What is pellagra? I find this definition given. "Pellagra is a chronic epidemic disease caused by eating Indian corn infected by a specific micro-organism. It is characterized by digestive disorders, dermatoses on those various parts of the body which are exposed to the sunlight, and later by mental phenomena principally by depression referable to spinal degeneration."

For many years it has been attributed to eating corn which was diseased, because not fully ripe when cured and dried. In Europe there have been two schools among those

studying the disease. First the Zeists, who believe it always originated from diseased maize; and those not accepting this belief. For a complete summary of the views of the many investigators I refer you to two papers by Dr. Howard O. King, of New Orleans, in the *Journal of the A. M. Association* of Nov. 9, 1909, and March 12, 1910. Suffice to say the weight of authority seems to be with the Zeists, yet they differ widely as to the exact agent causing it.

Prof. Lambrose, of Treun, Dr. Sandwiche, E. J. Woods and Lavine agree on one side, while Dr. Sandburn and Sir Patrick Manson on the other. These are weighty names, and thus far as we have such diversity of views that we find nothing settled. One thing, however, seems to be settled, that it is in some way connected with the seasoning of the grain before using it, and in this country to changed conditions in sending the grain to market before fully matured and seasoned. Of late this disease has attracted so much attention that in 1909 a conference on pellagra was held at Columbia, S. C., under the auspices of the State Board of Health of that state. The disease is characterized by extreme chronicity, although there is an acute form which runs a more rapid course. The early symptoms are those of a gastro-intestinal disorder; at times there is complete loss of appetite, at other times an inordinate one. There are attacks of diarrhoea, stomatitis with salivation. These symptoms are accompanied with lassitude and lack of energy in ordinary duties of life. Later we have the dermatitis so characteristic of the disease, an erythema of those portions of the skin which are exposed to the sunlight. This requires a fuller description. It commences as a severe sunburn on the backs of the hands and forearms up to where the sleeves protect the forearms; does not effect the flexor surface. After a time the skin desquamates in fine scales, if the attack is mild, in larger flakes where the disease is severe, leaving denuded surfaces. As the redness fades the skin assumes a light liver or chocolate color. In severe cases the palmar surfaces become affected. This eruption commences in February or March and continues to July or August, when it gradually disappears to reappear in the next spring. As the result of repeated attacks, the skin becomes pig-

mented and rough, resembling that of an old person. It also affects the feet and legs of those who go barefooted. Diarrhoea is nearly always present, which is very resistant to treatment. This has periods of exacerbations and remissions, like the erythema and dermatitis, and generally reappears in the winter season. The nervous system is finally affected, especially the spinal. The mind becomes more diseased, an insanity of a depressive type comes on, and many become helplessly insane. In Italy ten per cent of the patients become insane. The gait is that of a paralytic spastic, they walk with legs far apart and with a peculiar shuffling gait.

So far medical treatment has been of little avail, while a number of drugs have been used, especially preparations of arsenic. I see in late journals notes of cases treated successfully by transfusion, by the direct method of Dr. Crile. This will require the aid of some one who has studied and practiced this method; it should hardly be undertaken by a novice. As to prognosis, it is bad, a large portion of the cases dying. In Italy the per cent of deaths is given at 20 to 50. In this country sufficient data have not been collected from which to draw conclusions. So we see here in this land, the native habitat of the maize, after several centuries of its use as an article of diet so extensively, this problem has arisen to have some definite conclusion worked out as to its cause and prevention. What is the nature of this disease; is it an affection arising from germs generated in the diseased grain, or from some other source? But we can see the necessity of much study and investigation to accurately determine its nature, which will be accepted by all. This question has great importance, owing to the vast uses of the grain in this country. It becomes one of vital importance both to the producer and the consumer.

At the last meeting of our society Dr. Bloss read a lengthy and interesting paper on this disease, and described a fatal case occurring at the West Virginia Asylum at Huntington. This was published in our State Journal for July. To this paper I gladly refer you, as giving much fuller information than I have here given.

Besides those named there are many other problems arising in other countries or in this one that, owing to the rapid increase of in-

tercommunication of nations. In a cursory manner we may refer to the two forms of dysentery that depend on different agents. We have found them existing in this country. We have not as yet found protection from or remedies for them, either curative or preventive. Surgery is offering its aid in cases which resist other remedies. There we see the interchangeable region between medicine and surgery. Again the subject of infantile paralysis or anterior poliomyelitis is before us. It prevails as an epidemic and infectious disease and demands the closest attention. Only of late has it been so considered. No doubt some measure of prevention or cure will be discovered through animal experiment, to prevent the ravages of this disease which are equal perhaps to those of cerebro-spinal meningitis. We who years ago heard of the ravages of the tsetse fly as described by Livingstone and other explorers in Africa, little thought at that time that it would ever affect the human race and become an interest to European nations by reason of the dread sleeping sickness which has depopulated whole provinces in Central Africa. It has been and is being investigated by the ablest medical investigators in Europe, as having relation to the colonization of that country in some of its fairest regions. These matters become thus of international importance. By this imperfect sketch I have endeavored to show that internal medicine in the past is of no less value than its brother surgery, and before us lie problems to be solved of no less difficulty or results to be obtained of no less value to the human race.

THE WEST VIRGINIA PHYSICIAN AND TUBERCULOSIS.

G. A. McQueen, M.D., Charleston, W. Va.

(Read at annual meeting of State Medical Ass'n,
Parkersburg Oct., 1910.)

Mr. President, ladies and gentlemen, members of the West Virginia Medical Association: Tuberculosis has perplexed the mind and made arduous the duties of the physicians to a date as remote as the most searching ray of the light of medical history will guide us into the ages. "On Those Who Are Attacked With a Cough After Illness" was the title of a book written by Democritus. Hippocrates recognized

the disease as a fever, and associated it with pleurisy and haemoptysis. He gave a good description of the phthisical habit, described the general appearances of the chest and of the bulbous fingers. The etiology was dropping of the pituita from the head into the lungs, which produced ulceration and caused fever. Celsus recommended long sea voyages, change of climate (particularly Egypt), and a milk diet. Frascariolus recognized the contagious character of the disease, and that residence with a consumptive was one of the most common sources. He insisted that the germ could remain on the clothing and in the room for a year or longer. Richard Morton and Sydenham were both valuable contributors in the seventeenth century.

From Laennec we have the first careful study of the healing of tuberculosis. His article, written nearly a century ago, remains today one of the best descriptions clinically and anatomically of this process. I might go on naming other scientific investigators who have contributed to our store of knowledge on this subject until the great search light of science, in the hands of Koch and his co-workers marked a new epoch in the history of the disease.

Dr. Koch, in 1882, announced a specific bacillus for the disease, and since that time no disease in history has received so much of the world's attention or has been so widely and ably discussed in both the medical and lay press.

I will not attempt in this paper to give you anything new on the subject, neither shall I try your forbearance with a rubbish of gleanings from the journals and text books which you have all read.

To the physicians of West Virginia, tuberculosis is not necessarily a more difficult problem than it is to physicians of other states and localities, but it is a different one in some respects, and I shall endeavor to speak of it as it applies to us at home.

Etiology and Prophylaxis.—Our people are farmers, miners and lumbermen, with a small percentage of manufacturers. They live chiefly in the country and small towns. Our few cities are small and uncrowded, and free from tenements and many of the other productive factors of tuberculosis found in the large cities. We have a small percentage of the unemployed and very

poor, as compared with the more densely populated localities. (I mention this to show the effect that it has on our etiology and prophylaxis).

Association with those affected by the careless and ignorant unaffected, occupying infected homes, exposure and under nourishment, are the chief causes we have to deal with. We have a small percentage of factory workers who contract the disease as a result of their occupation, and an occasional case following other diseases that cannot at all times be traced to above named causes. Heredity as an etiological factor, I think, is generally conceded to be of little importance. I have never seen a case of tuberculosis that could be traced to bovine origin in West Virginia, but I would not say that it could not be a factor in rare cases.

One thing that has impressed me is the great number of cases that develop in our farming districts, where the people live among the hills and lead an out door life the greater part of the year. On investigation, you will find that during the hard winter months those people are closely housed in crowded and poorly ventilated rooms, and, as a rule, are under nourished. They eat food enough, but their diet list does not contain enough of the nitrogenous elements to keep their opsonic index up to par. They read very little, and have not learned in some instances, and refuse to believe in others, that consumption is an infectious disease. When you ask them to stop expectorating all over the floor and bedding, and to not cough in your face while examining them, they are likely, even after all that has been said and written on the subject, to look at you, and in a tone of great surprise say, "Why, Doc, this thing I have ain't *ketchen*, is it?"

It is almost an impossibility to get these people to use any hygienic measures, and you wonder how a single member of the family escapes.

The direct cause with us, as elsewhere, is of course the lodgment of the tubercle bacillus in some part of the body that has not the resistance to prevent its propagation.

There are two objects to accomplish in the prophylaxis, destroy and prevent the dissemination of the bacilli, and increase the resistance of our people. To accom-

plish these objects, we, the physicians of West Virginia, must relentlessly prosecute the educational work that has been begun in our state. We, as individuals, should see that not a single family which depends upon us for medical services remains uninstructed on the contagious character of consumption, or upon the hygienic measures necessary to prevent the infection of others. In the absence of laws in this state, placing tuberculosis in the list of contagious and infectious diseases to be dealt with by our public health officials, the duty of seeing that houses are properly disinfected after being occupied by consumptives falls on the physicians having knowledge of the case until we can secure the necessary legislation to relieve us of that responsibility.

Our people should be reminded constantly of the dangers of improper ventilation, darkness, dampness, dust, promiscuous spitting, eating and drinking after others, moving into houses that have not been thoroughly disinfected, using milk that is not known to be produced by healthy cows, overwork and worry.

The Dangers of Anaemia and Under Nourishment.—This is a condition very prevalent among a great number of our mountain farmers, whose meat supply is salt cured bacon. They sell their chickens, eggs and hams to the grocer for coffee, sugar and calico, and do not drink milk because they have never provided a place where it can be well kept, and consequently acquire a dislike for it. It is among this class of farmers that I have seen the highest percentage of tuberculosis that I have ever seen anywhere, and all from their manner of living.

Do not discharge your patient after an attack of la grippe, pneumonia, measles or whooping cough without impressing upon him the necessity of consulting you at once if he continues to have a little cough, or does not grow strong again within two or three weeks. Teach your patients that they are being constantly exposed to the danger of infection, and that one of their greatest safeguards is not to neglect or invite a condition of lowered vitality from any cause.

Where a case of tuberculosis is diagnosed, inform your patient kindly but positively of his condition, and impress the fact upon him that he is a menace to his

friends unless he observes strictly and consistently the hygienic code you give him for the protection of his friends. Be kind to him only so long as he is mindful of his duty to those around him. He deserves no sympathy where he refuses to use the necessary care to prevent the infection of others.

Not long since, I was chiding a man and his wife for their disregard for my advice, which was given in an effort to prevent the husband from contracting the disease from the wife, who was well advanced with it. Her frank reply was that if she had to die with it, she wanted him to get it also, and the sooner the better. The husband was present, and I prescribed an immediate divorce.

The tenement house is a productive factor that West Virginia does not have, and the medical profession should see that we are kept free from it if possible. We need very badly a statute requiring a health officer's permit by any person moving into a vacant dwelling that has been occupied before.

Symptoms and Diagnosis.—I will only allude here to the early or incipient cases of pulmonary form. It is in the incipient stage that a diagnosis is of value to the patient, for after the case is advanced, the layman can make it as well as we can. The valuable diagnosis is the one that is made clinically. When we wait until we are able to secure a specimen of sputum that contains the bacilli, we have lung tissue already broken down and a tardy diagnosis.

A great many of our patients are learning to consult us on the first appearance of any disturbance that is at all suspicious, and a careful physical examination often reveals a condition that satisfies you clearly as to its nature, but at the same time you would find it impossible to verify with your laboratory helps. Too many of us are learning to depend too much on our laboratory methods of diagnosis, and are neglecting to develop and improve our clinical methods. Because of this fact, many good men are losing confidence in their ability to reach a conclusion through their means of physical examinations and the clinical history of the patient.

When the physician is consulted by a patient feeling weak, losing weight, poor

appetite, easily tired out, nervous, skin clear, anaemia of more or less severity, slight cough in the morning (or cough may be a more marked symptom), careful observation discovering some elevation of temperature, usually in the afternoon, and usually subnormal on rising in the morning, history of slight chills, pulse rapid, night sweats, etc., inquire into his history, find out what disease he has had and where and how he has been living, get his family history, and see if he has moved into a house that was infected, or worked with some one suffering with tuberculosis. Get all the subjective information possible, then require him to strip to the waist and make a careful and painstaking examination.

I would refer you to the article of Physical Diagnosis in Arnold C. Kleb's late work, by Charles L. Minor, as the best review of this subject that I have seen.

In the early case, the physical findings will not be marked. If they are, the case is either acute miliary tuberculosis, or has been neglected, if not previously diagnosed. A little localized increased vocal resonance and prolonged expiratory murmur are often the only abnormalities that I can be sure of in my physical examination of the lungs, and still the clinical history will be so clear and corroborative that I will venture to make a positive diagnosis and insist that the patient accept it and begin treatment as earnestly as though I had found the bacilli in his or her sputum. If the diagnosis is not accepted absolutely, I think it is wise here to call in a consultant, that your findings may be verified and the question definitely settled in the mind of the patient.

I do not think that we can afford to place much reliance on the various tuberculin tests that are used and advocated to-day. I have used the tuberculin tests rather extensively, that is the Moro and Von Pirquet methods, and must say that my experience has completely shattered my faith in them, so far as being of reliable value in influencing or confirming my diagnosis.

In the examination of an incipient case of pulmonary tuberculosis, the most careful, thorough and painstaking work is demanded, and the frequent failure to diagnose the disease in its beginning is due

chiefly to a lack of sufficient care and time in the examination. Physicians accustomed to seeing acute diseases do not always realize that the slight changes existing in early tuberculosis can produce, at most, only slight alterations from the normal, which can easily be overlooked unless an amount of time and pains be given to the examination, which is not always necessary in more acute troubles.

In these days, when the laboratory and clinical methods are working together so efficiently, the recognition of pulmonary tuberculosis need no longer be postponed until the disease is well advanced, and for the modern physician, the diagnosis of this trouble means principally and practically its early diagnosis. When the disease has reached the stage which justifies the use of the term "consumption," its discovery makes no demand upon our diagnostic skill, and offers little assistance to our therapeutic efforts, and the physician who hopes to be of use to his patient must remember that his results, save in a few cases, will be in direct proportion to the earliness of the diagnosis. He must be prepared to recognize the trouble in its very beginning, when the signs and symptoms, unless closely and logically studied, can be so ambiguous as to be confusing, and when he will, more often than not, be deprived of that absolute proof which can be given only by the discovery of the bacillus in the sputum.

With the diagnosis made, the question of treatment confronts us, and if your patient has an early diagnosis, a good average physique, is intelligent, with an average education and a well balanced nervous system, and if he or she can be reasonably free from family, business and financial cares, we can give them an encouraging prognosis, and feel reasonably sure that the patient and physician will realize its verification. With such a patient, our first duty is to be perfectly frank and tell the individual exactly the condition, and insist upon the absolute acceptance of the diagnosis. Tell them that it is up to them now, and that they will get well if they follow your instructions for a sufficient length of time, and that period of time will vary from six months to two years, depending on circumstances, chief among which is the natural resistance of the patient. Tell

them frankly that it means suicide for them to disregard the advice that you are going to give them.

My instructions are to go home or some other suitable place, and go to bed in a room well supplied with windows and sunlight. If the room does not have sufficient windows and doors, I try to have another made. I always try to visit the patient at the home so as to see the surroundings and be able to make practical suggestions, and if I find them with their windows closed, often suggest taking them out of the casing entirely. I insist upon them remaining in bed for about four to six weeks after all elevation of temperature has ceased, and give them my reasons for requiring what often seems to them an unnecessary time spent absolutely at rest in bed. The rest I regard as the most important part of the treatment, and the hardest to carry out.

Try to make the patient's surroundings as comfortable and as pleasant as his circumstances and your ingenuity will permit, and it will help you keep him in bed. Now he gets interested in his case if you have done your part, and will enjoy reading any and everything you can furnish him on the subject, and as literature on this subject is very plentiful with most of us, and can be so with all of us for little more than the asking, we can keep all of our patients who care for it supplied until they get a pretty liberal education on the subject of tuberculosis. This all makes the physician's work easier, because the patient is better satisfied because of the information he acquires, and also more encouraged, for most modern literature is encouraging to the incipient case. I then have them secure a good, well bound tablet and pencil, and keep a complete diary of every day of their life. I have them note the weather and number of hours of sunshine; how they feel in a general way; number of hours of sleep and time; just what, how much and how often they eat, and the condition of their appetite and digestion; bowel movements and kidney action; some times have them keep their temperature, and some times do not. I do not, if I find that it worries them to find an elevation of temperature, and it usually does.

As to diet, I make it as liberal and constructive as the digestion of the patient

will permit. I never attempt to force feeding much beyond the amount necessary to satisfy the patient's appetite. I will insist upon a liberal amount of milk, eggs, and meats, and let the patient have most anything in the line of fruits, vegetables and relishes that his appetite calls for in addition.

As to the medical part of the treatment, it is purely symptomatic, I think. I often give my cases medicine. In fact, there are few that I do not give considerable medicine in course of their treatment, and am sure it does good. If they are anaemic, I give some easily assimilated haematinic. If they are down in weight, I often give them some form of cod liver oil, if it does not disturb digestion. If they have an irritating cough, I try to relieve it. If their appetites are poor, I give bitter tonics. If their digestion is impaired, I try to correct it. I keep their secretions active, etc., but I do not believe in any of the so-called "specifics," and do not use them. I have used mercury, as proposed by Leslie Wright, without any noticeable results, good or bad.

I noticed an article in a recent issue of the *A. M. A. Journal*, rapping the mercury treatment quite severely. I had no bad results, and noted little benefit, did not find it very practical for private practice in very many cases.

I do not think that the tuberculin treatment is practical, except in institutions, and then only in the hands of a very careful observer.

Above all things, do not forsake your patient, because I think if any disease should be kept under careful observation of the physician, it is the tuberculous case, and they should be induced, if possible, to visit you every month or two, and be carefully looked over for at least a year or two after they are able to assume their vocation again after treatment.

With a patient as described above, I think the prognosis is good. Many of them are cured and many more have years of comfort and usefulness added to their lives.

All this looks easy, but, unfortunately, the treatment as described applies to only a small percentage of the tubercular cases that we are called upon to treat, and the physicians' difficulties begin with the con-

sideration of the large percentage of these cases that he finds that cannot be handled in this way. There are the poor, who have no means of support, except their earning capacity. The ignorant, the superstitious, and the extremely nervous, who are uncontrollable, except in institutions, and the homeless. What are we going to do with these cases, fellow practitioner? What is your answer? Shall we, as one mighty body, demand that our proud and rich commonwealth provide facilities for caring for these people properly, or will we go quietly on, allowing them to demand our pity by day and haunt us in our dreams by night, until we grant them one by one our last favor in the form of a burial permit.

We are on the eve of another convention of our State Legislature. What is the opinion of the medical profession of West Virginia on this subject. I hope to hear the subject liberally discussed by this eminent body, each and all of which I thank most heartily for your kind attention.

Discussion.

Dr. Wingert said he had recently had a talk with *Dr. Frick*, an authority on tuberculosis, and he had impressed the importance of watching the dying cases, during the last three months. These patients, however intelligent, become careless in their habits, and neglect hygienic laws. Early cases are not dangerous because the lung is not broken down. If the state is to destroy tuberculosis, it must provide sanitarium for the terminal cases, since these are the cases that transmit the disease. The important thing from a prophylactic standpoint is the segregation of terminal cases.

Dr. A. Wilson spoke of the lack of interest on the part of the profession in this subject. They were negligent in deferring a correct diagnosis too long. Frequently cases not reported to the health department until far advanced, as indicated by the abundance of bacilli in the sputum sent in. Has known death to occur only a few weeks after the first report of a case. In incipient cases the bacilli may be hard to find, yet they are worth looking for, and if the first examination is negative, later investigations should be made in suspected cases. Does not think the fact of tuberculosis should be concealed from the patient. To properly care for himself he must know the nature of his disease. The essayist is wrong in losing faith in the tuberculin tests. A negative reaction proves nothing, but a positive laboratory diagnosis should convince.

Dr. Henry spoke of the lack of interest on the part of most physicians and the government. The latter is more interested in the health of animals and trees than in tubercular men and women. If disease breaks out among the hogs an expert is at once sent to investigate. We need a sanitarium. Rest, sunshine, pure air, can't be had in the homes of the sick poor. Our health board

never recommends anything for the benefit of the public health. He is opposed to a board that does nothing.

Dr. Yeakley enforced the necessity of early diagnosis. His experience is that it is very hard to secure a second specimen of sputum if the first is negative. The fraternal associations are now engaged in interesting the public and our legislature in the importance of establishing a State Tuberculosis Sanitarium, and this association should co-operate with those organizations in their very commendable efforts.

Dr. Wise said that he had made observations in the west, and he urged that no tubercular patients should be advised to go far away from home, unless possessed of plenty of means. It is difficult to secure boarding. Such patients are not wanted by boarding houses, and the comforts of home are exceedingly difficult to secure. He knows of no more heart-breaking sights than are seen in the west, poor patients vainly seeking comfortable lodging places, far removed from friends, home-sick, discouraged. Many of these would get along very well at home, if the laws of health as we now know them were enforced.

Dr. Rodgers pressed the importance of educating the people to care properly for themselves and those around them. Public lectures should become more common, that all may be taught the proper care of these patients.

Dr. Bonar thought that the proper time to get after our public men to secure proper legislation is when they are candidates for the legislature, and that time is just now. He is familiar with the use of mercury as used in the penitentiary in tubercular cases. The results were for a time exceedingly good, the patients taking on fat, and greatly improving in appearance, but this improvement did not last long. Suspected cases in the prison now use their own spit cups, which are cleaned twice daily. They are kept in the open as much as possible, and he thought the cases were diminishing in number. Unfortunately they must go to small, poorly ventilated cells at night.

Dr. McQueen was pleased at the apparent increase of interest in this subject. Hoped that it may continue until the legislature meets, and makes itself felt on that body, in the effort to secure a sanitarium. He had lost faith in the tuberculin reactions in diagnosis because he had so frequently had the reaction in perfectly healthy subjects, and in himself a number of times. He had generally used the von Pirquet method. Tuberculin is valuable as a curative agent, but it is not practicable outside of institutions. The patients need to be kept under close observation, and this cannot be secured in private practice.

One of the simple and best differential signs between renal and vesical hematuria is obtained by standing the urine in a conical glass for twenty-four hours. In hematuria of vesical origin, all the blood has settled to the bottom by this time; in renal hematuria, the whole fluid still remains smoky.—*American Journal of Surgery.*

THE MANAGEMENT OF NORMAL LABOR.

H. W. Daniels, M.D., Elkins, W. Va.

(Read at annual meeting of State Medical Ass'n, Parkersburg, Oct., 1910.)

The subject which I have chosen upon which to write a paper to be read to you today may seem at first thought to be a very common-place one. True, in a sense it is common-place, yet upon more mature consideration you cannot but realize that it is the most important subject with which we have to deal in our professional lives. Vastly important. Why? Because, from the dawn of creation when the stars sang together for joy and the sons of man first saw the light of day in the beautiful valley of the Tigris and Euphrates, up until the present hour, ninety-six to ninety-seven per cent of the countless millions of human beings who have breathed the breath of life have been ushered into their new existence by means of what we call normal labor. By normal labor we mean the natural process by which a pregnant woman expels the product of conception at the expiration of the period of pregnancy, normally two hundred and eighty days after conception, or where this process is affected solely by the power of the maternal organism. Now in the discussion of this subject I am not going to take up all the details of the management of normal labor, for in regard to the majority of the details there can be no question, and it is taken for granted that all modern and up-to-date physicians know them. I shall simply take up a few of what I think, after an experience of sixteen years in this work, are the most important things.

First, the importance of the early engagement of the physician. This is, I think, one of the most important things in connection with this subject, for who can better guide a woman through the perils of her pregnancy than the physician. The physician who is expected to attend during labor should be engaged as soon as pregnancy is suspected and surely not later than the period of quickening. Then it is his duty to examine her frequently.

He should give her specific instructions in regard to her diet, her clothing, her baths, her exercise and her general hy-

giene, he should examine her urine once every week. This is extremely important. He should determine the diameter of the pelvis, the position of the child and the conditions of the foetal heart sounds, and lastly advise her, if it be possible, to enter some well kept maternity a few days before her expected confinement and remain until she is able to be removed to her home. We should have more maternities; we should advocate the establishment of one in every community and educate the people to patronize them. The advantage of having a woman in one of these institutions absolutely under your control, away from over-anxious friends and meddling neighbors and under the care of trained nurses, can never be appreciated until it has been experienced.

In regard to the directions to be given to the expectant mother as to the preparation she is to make for the confinement, and the instructions to be carried out by the obstetrical nurse, I will not go into detail, as these things are varied by most physicians and I have not the time and space in this paper to enumerate them fully. But I will say that in each case the instructions should be printed in clear and concise terms so that no mistakes can occur. For a full list of directions to be given to the expectant mother and also the instructions to be carried out by the nurse I will just refer you to Williams's 1909 Edition of *Obstetrics* where you will find, I think, the best and most complete list of instructions I have ever seen. These should be copied and printed in card form so that they can be easily distributed to the proper persons.

Next we come to the closing scenes in the great life drama, the real labor, and the part played by the obstetrician in its management. Again I shall not go into minute details, but shall mention the things I think most important. The physician should go fully armed in every instance to meet any and all emergencies that may arise; his armamentarium should be complete. After his instructions as to the preparation of the room, the bed, and the patient have been carried out, the physician then prepares himself for the fray, first by scrubbing his hands and arms to the elbows with green soap, brush and water, along with careful attention to the nails. This should be kept up diligently until he feels that his

hands are in safe condition to enter the peritoneal cavity; then after emerging hands and forearms in a one to one thousand solution of bichloride of mercury, he should be assisted into a sterile gown, then again immerse hands and forearms in the bichloride solution, after which a pair of thoroughly boiled rubber gloves should be carefully drawn on the hands. Let me urge the use of rubber gloves in each and every case. After a little experience in their use the sense of touch is very slightly interfered with. Use what method you will or may, you cannot thoroughly sterilize your hands, but you can thoroughly sterilize rubber gloves; and, further, they may be the means sometimes of protecting the physician against serious infection. My experience with them leads me to believe that I cannot too strongly advocate their routine use. Now after the attending physician is surgically clean, he should very carefully examine his patient as to the presentation and position of the child, the progress made, the character of the pain and the condition of the parts. If all these are found normal, he should keep hands off until the appearance of the head at the vulva. There is, as a rule, absolutely too much meddling in normal labors. Do not be giving something to increase the pains. Do not be giving douches either before or after labor. They are dangerous, do not be in a hurry to apply forceps just because labor is a little tedious or you are in a hurry to get away, or you want to make a show or increase your bill, as I am sorry to say I have known physicians to do. This is criminal. When the head has reached the perineum, carefully guide it over the danger point between pains, using every effort to keep this body intact, and do not pay any less attention to the shoulders, for they often do more damage than the head. After the child is delivered, do not be in a hurry to cut the cord unless some emergency demands it. Do not cut it until it stops pulsating; that is nature's time, and you will have stronger children and less trouble afterward if you adhere to this rule. The eyes of the infant should be promptly attended to; and here let me urge upon you the importance of strict and careful attention to the eyes of the new-born infant. It is certainly horrifying when we come to realize that about fifty per cent of

the total blindness in the world today was caused by the negligence or ignorance on the part of the attending physician or midwife at time of birth. Can we imagine a sadder sight than that of a beautiful and intelligent child groping its way through life in darkness. We must admit to our own discredit that our social conditions are such today that we find the gonococcus lurking where we least expect. So in each and every case immediately after the birth of the child drop in each eye a drop or two of a one per cent solution of silver nitrate, afterward washing it out with normal salt solution, or what I like better, putting in a few drops of a twenty per cent solution of argyrol. This being done, tie and sever the cord at the proper time, hand the new born infant to the nurse and again direct your attention to the mother. But here again let me advise you, unless something arises demanding it, do not be in a hurry to deliver the placenta, do not be manipulating the fundus of the uterus, do not be making traction on the cord or giving some oxytocic to start up pains; let the tired uterus have a little rest, give it time to regain some of its lost tone and contractal power, and then it will contract, and when it does you can carefully by Crede's method deliver the placenta. I have frequently waited an hour for a contraction after the delivery of a child. Too often physicians either become impatient or alarmed, declare they have a case of adherent placenta, introduce their hands into the uterus to deliver it, when if left alone it would be expelled normally. In my experience I have never had to resort to forcible delivery of the placenta but twice in full term deliveries.

Anesthetics in Normal Labor.—As to the routine or promiscuous use of anesthetics in normal labor, I mention it only to condemn it. I have known physicians in certain localities to prate of the fact that they always use them, that there is no need of a woman suffering during labor, that they will not permit it. They give chloroform, and they have the mothers circulate these glad tidings of great joy through the whole country side, and they become famous for a while. But watch the end of those men, for they will strike a rock by and by. Do not delude yourself into thinking that there is no danger in giving an

anesthetic to a woman during labor. There is danger. Women have died under their use on the confinement bed, and others will die if precautions are not used. Do not understand me to say they should never be used in normal labor. Sometimes they do good if properly and carefully administered. But in my experience they tend to prolong labor, superinduce hemorrhage, and lower the vitality of the mother, thereby rendering her more susceptible to septic infection. Of the anesthetics used I believe ether to be the safest in obstetrical work. Finally let me say, that it is hardly an exaggeration that the greater proportion of the sins of midwifery practice are committed in the management of normal labors. It is equally easy to fall into errors of omission. It is as necessary to know when to abstain as when to interfere. It is an old but always good rule not to meddle with the physiological performance of the functions, but the rule when applied to obstetrics presupposes a thorough familiarity with the physiological process of child birth and the contingencies to which women in child birth are exposed. The obstetrician should not impose a blind, unreasonable confidence in the powers of nature, for indeed legitimate grounds for interference are liable to arise in the simplest of labors. The attitude of the medical attendant should be one of watchful expectancy. He should be ever ready, if the occasion demands it, to relieve pain, to forestall dangers, and to limit the duration of suffering. And in conclusion let me say, be natural, simulate nature as near as possible, for nature knows more in one minute about making laws than man has learned in the six thousand years of his existence.

PRESERVATION AND REPAIRS OF THE PERINEUM.

W. A. McMillan, M.D., Charleston, W. Va.

(Read at annual meeting of State Medical Ass'n, Parkersburg, Oct., 1910.)

The preservation of the perineum and the many methods of repair by writers upon this subject have been so thoroughly discussed, that it seems folly upon my part to attempt anything in addition to what has already been gone over. My object, then, is simply to first give a brief descrip-

tion of the anatomy of the pelvis and perineum, with special stress as to the duty of practitioners of medicine who are called at all times to attend women during confinement.

The anatomical structures of the perineum between the anus behind and the symphysis pubis in front make up the space which is of greatest importance to the obstetrician and the gynecologist. From without inward we meet with the following structures: the skin, the superficial fascia, the deep fascia, the transversus perinei and the sphincter vaginae muscles, the anterior and posterior layer of the triangular ligament and the levator ani muscle. The above-named muscles surround and support the openings of the vagina and the rectum. The meeting of the muscles and fascia mentioned go to form the perineum, and are held in the proper position by those structures. The narrow muscular strip of muscle called the transversus perinei takes its origin from the ramus of the ischium, and is inserted in the median line to meet its fellow of the opposite side. The sphincter vaginae takes its origin in the perineum and is inserted around the clitoris. The origin of the levator ani, the repair of which is of such vast importance, is from the symphysis pubis and the ascending ramus of the ischium, and is inserted in the perineum and the lower part of the vagina.

This band of muscles and fascia supports the openings as previously stated. The direction of the vagina is upward and backward, and the tense feeling of the tissues in primiparae impart to the examiner's finger the presence of a strong resisting band of tissue. It has been the experience of almost every physician to wait many tedious hours. It may have been in the city or country home, in the comfortable palace-like surroundings or the humble little cottage of one or two rooms; wherever this duty has called us we have waited and put forth every effort to do our duty to the suffering woman soon to become a mother. How anxiously have we watched the head come down upon the perineum and recede. This is, I think, the time when the conscientious physician can save future suffering and prevent many operations that fill the gynecologist's field of work. This is the time to prevent future trouble which may

manifest itself in either (1) a slight median line laceration, (2) one involving the sphincter ani, (3) or a subcutaneous laceration involving both muscles and fascia. Following the tear, depending upon the degree of the same, we almost certainly meet with relaxations, retroversions and prolapse, saying nothing of the results of tear in the anterior wall of the vagina with its long list of bladder complications.

It is in this field of work that the well skilled physician can with patience render very valuable service to the child-bearing woman. It is here that frequently the woman's future good health is maintained or she is robbed of that pleasure of "feeling well." It is following just such complications that the gynecologist is kept busy trying to do an operation in which he cannot equal the obstetrician should he do his duty, namely, put forth every effort to support the perineum and prevent tears, and if tears should occur repair under the very cleanest precautions.

In the preservation of the perineum the English obstetricians as a rule attach quite a degree of importance to the oiling of the perineal tissues daily for one or two months before delivery. They use for this purpose castor oil in preference to others. I am of the opinion this does good, and in the primipara advanced in years should be resorted to. It is my custom to instruct the nurse to keep hot towels to the perineum during the early stages of labor, and when the head begins bulging the tissues to support with a pad about six layers of sterile gauze. By the timely precautions of the obstetrician during this stage of labor, he can very often prevent a tear, and if one should occur be ready to repair it. It has been my rule in the primipara always to have sterilized a long curved needle with three or four strands of silk-worm gut, needle holder and scissors to meet the needs of a tear be it ever so small.

We are very frequently deceived in the appearance of the perineum after child birth. The tissues very often contract so as to give the appearance of a very minor degree of tear, and upon investigation we may find a long deep laceration extending either up one of the sides of the vaginal vault or down towards the tissues of the rectum. It is always better to investigate under the cleanest precautions and repair

at once. It has been my custom to use chloroform during the second stage of delivery. I find it only takes a few minutes (and this is accomplished under the anesthetic), when everything has been previously sterilized, to carry in my sutures. I start about one-half an inch from the edge and carry the needle well back and downward, taking care not to invade the rectum. Generally two or three stitches so introduced and loosely tied are sufficient, as to close too tightly a lacerated perineum tends to prevent drainage and causes sloughing of the tissues.

It is too frequently the case that physicians become either excited or want to rush through with a case that is tedious, and forceps are very often resorted to too early. I am just as heartily in favor of the legitimate use of the forceps as any man, but so often do we see cases that have suffered the deep tears into the rectum, due to either too early use of the forceps or injudicious traction. If we would always remove the forceps when the head is well down on the perineum, instead of continuing their use as is so often practiced, it would save many perineums. It is not my object to discourage the use of the forceps, but when we meet so many suffering women whose condition has been so often induced by the injudicious use of the forceps, it causes us to stop and think awhile. There is no need in many labor cases for a woman to suffer very much. We can resort to the use of morphine gr. $\frac{1}{4}$ and atropine gr. $\frac{1}{100}$. This rests the patient and relaxes the tissues to a very marked degree. Frequently I repeat in two or three hours, depending upon the progress of the case, and later resort to the use of chloroform. In this field of preventive suffering then let us work, for I am more firmly convinced every day of my life in the practice of obstetrics that if the general practitioner attending obstetrical cases would attend to his duty conscientiously, and promptly repair injuries of the perineum, the field of work would be made much smaller for the gynecologist.

Truly we can bring about many splendid conditions of secondary perineorrhaphy, and the poor suffering patients are very grateful too, but how much better it is for us to spend a few more minutes of conscientious work beside the bed of the suf-

fering woman, and prevent all the cause for future surgery to her perineum. There are surely enough causes left for trouble to keep the gynecologist busy in his work of cleaning out and repairing due to the infections and displacements from other causes.

Discussion on papers of Doctors Daniels and McMillen.

Dr. A. Wilson thought that the objection to meddlesome midwifery by the essayist was well taken. Labor generally ends favorably if judiciously let alone. The douche should not be used unless there is a positive indication for it. Has known it to set up infection. The vaginal canal is generally aseptic, and if let alone will remain so. The caution as to care in the delivery of the shoulders is also proper. It probably causes more perineal tears than does the head. The infant's eyes should always receive an application of silver solution. Some physicians use it only "in suspicious cases," but we never know when infection is present. Anesthetics must be used with judgment and caution. Prefers chloroform. Little is needed. *Dr. McMillen's* advice as to repair of the perineum is wise. A careful examination should always be made, otherwise tears may be overlooked.

Dr. Gardner (Baltimore) said a damaged perineum has no resistance. In all cases the vulva after labor should be widely opened in a good light, when often vaginal laceration will be found, and even when no external tear is present. This laceration should be promptly repaired, inserting the stitches from above downward, and thus tying them.

Dr. Jepson said that he was taught "to support the perineum," and he was satisfied that, until he had unlearned his early teaching, he had caused many lacerations by too vigorous support. "Management" of the perineum was a better word than support. Keep the hands off as long as possible. When the head is about to emerge, insist on the patient ceasing her bearing-down efforts, and this she should be taught before the crisis comes. He is satisfied that most tears are caused by the too vigorous efforts of the patients. The voluntary efforts accomplish more than does the involuntary action of the uterus. Hence he instructs his patients to withhold these hard efforts, and often the head can be peeled out slowly, and the perineum be saved. He would also urge that too great haste be not had to deliver the placenta. Does not use the Crede pressure at the first post-partum pain, but now waits for several, when it will generally be found that the placenta is detached. In this way the danger of hemorrhage is reduced to the minimum.

Dr. Hupp, of Wheeling, in speaking of the secondary operation for complete lacerations of the perineum including the sphincter and anterior rectal wall, referred to the frequency with which infection follows the line of the primary stitches, how the work does not receive the prompt and skillful attention it deserves at the time of the birth of the child; how the obstetrician hurries with his work, slurs with the technic, operates

with poor light, with no assistants, performs a piece of surgery the success or failure of which makes or breaks the future health and happiness of his patient.

After speaking of Kelly's method of delivering the sphincter ends for direct suture, Dr. Hupp described with blackboard illustrations a technic which he had used successfully in two cases. The vaginal wall was dissected loose from the rectal roof and a silk worm gut suture whipped along the denuded rent in the loosened anterior rectal wall. This suture is tied just before the sphincter ends are united, thus the rectum is drawn or slid down beneath the sphincter obliterating with onestitch any communication between rectum and vagina. The denuded vaginal areas are approximated in the usual way, bringing muscle to muscle, completing the operation. A firm triangular perineum can be established in this way and unless infected, sphincteric control can be assured. The technic is simply to obviate the placing of stitches within the lumen of the bowel.

Dr. Rodgers said that some physicians say they don't get any lacerations. Such men do not look for them. They are therefore neglected and the patient suffers as a consequence. Anterior tears, he thinks, cause about as much trouble as the posterior ones. To get the best results the operator should know his anatomy perfectly. He should know the location and direction of each muscle, and how to approximate the torn ends, so as to have them as before the injury. The sutures should not be tightly placed, lest the later swelling cause them to cut out. Referring to the use of morphia to relax the perineum in labor, he thought he had seen narcotized babies as a result of this practice.

Dr. Nicholson, in the repair of the perineum, is in the habit of reinforcing the cat gut with silk-worm stitches.

Dr. Mason regards the paper of Dr. Daniel as ideal, but we have to attend patients under all possible circumstances, and the ideal conditions are rarely obtainable. It is impossible to go prepared for all possible emergencies. The usual ones can generally be met.

Dr. Daniel, in closing, said he was treating of normal labor as generally met with. He strongly advised that patients be confined in maternities when possible. He insisted that we can prepare for all emergencies, and advised that the members consult Williams's work on Obstetrics, and follow his directions. He thought that forceps are used too often and too soon.

Dr. McMillen, closing, said that secondary operations on the perineum can often be prevented by the general practitioner exercising more care in the management of labor, and in doing the primary operation, if carefully and properly done. More care is needed in examination of the patient after labor, that all tears may be found and repaired with extreme care. If we do our whole duty more fully at the time of labor, later repairs will not be required.

ONE HUNDRED CATARACT CASES.

John L. Dickey, A.M., M.D.,
Wheeling, W. Va.

The synopsis of one hundred consecutive operations for senile cataract may be of some benefit and interest.

Fifty-eight of the patients were men and forty-two women.

Fifty-one of the operations were on the right eye and forty-nine on the left eye.

The average age of the one hundred patients was sixty-seven years, the oldest one was ninety-two and the youngest thirty-eight.

Several of the patients were operated on sitting in an arm chair, facing a window.

In all of the cases local anaesthesia was obtained by a few drops of a solution composed of ten grains of cocaine, ten grains of boric acid and one ounce of distilled water.

The first double bandage was left on as long as there was no pain nor discomfort, three, four or five days, and in a few cases as long as a week.

In only one case was the simple operation done (without an iridectomy) as the iris seemed well out of the way. In all the others the four steps were done at one operation; the corneal section, the iridectomy, the capsulotomy, and the extraction.

A serious loss of vitreous did not occur in any of the cases.

Ten of the operations were failures, from various causes. One eye was lost by infection from an unknown source, the surroundings being good, in a hospital; but good vision was secured in the other eye. In one case the operation was followed gradually by iritis, scleritis, panophthalmitis, and enucleation. One operation was followed by plastic iritis and poor vision. In three cases the lens was dislocated, poor vision resulted, and the patients went elsewhere. In three cases a dislocated lens was followed by poor vision, but a good result was secured in the other eye. In one case about two-thirds of the cataract was extracted in a soft mass, but the nucleus disappeared, and the operation was followed by scleritis, keratitis, and finally a white cornea. Within a year, however, the patient went to Philadelphia and DeSchweinitz secured a perfect result in the other eye.

The seven cases of dislocated lenses could not all be attributed to nervous and unruly patients, nor to a nervous, bungling operator, for several of the lenses seemed to drop gently back into the vitreous without being subjected to bad treatment of any kind. These cases of dislocated lenses I have counted as failures, and yet nearly all of them were capable of some vision and might have been considered successes in the days of couching.

PERFORATION OF THE BLADDER BY A CANDLE.

Reported by C. E. Grimm, M.D.,
St. Marys, W. Va.,
House Surgeon, General Hospital, Elizabeth, N. J.

Mrs. M. A., colored, aged 24, a widow, entered the house Sept. 24th, 1910, with the following history: "For five years she had been on catheter life for supposed vesical calculus. She lost her catheter and on the day before admission proceeded to dilate the urethra with a large candle. The patient lost control of the candle and said that it entered the bladder.

On examination it was found that the patient had no vagina, no uterus, no ovaries. The caliber of the urethra was such that one could easily pass the thumb into the bladder. The patient had never menstruated. The urine was very foul and contained much pus. Extreme tenderness was elicited suprapubically.

The patient was cystoscoped with the Kelly instrument very carefully on two different days by several of our visiting staff; but no evidences of the candle could be seen. She was sent up to the ward and treated for cystitis. She developed an abdominal tumor and all the signs of peritonitis.

On Oct. 11th the abdomen was opened in the median line. A great quantity of pus and putrid urine was evacuated, and about four inches of the candle was removed from the pelvic cavity. The Fowler-Murphy treatment with continuous catheterism was instituted, but the patient died of toxemia on the third day after operation. During the patient's married life her husband had had intercourse through the urethra.

Selections

OBSTETRICAL ACCIDENTS CAUSING MENTALLY DEFECTIVE CHILDREN.

Edward P. Davis, A.M., M.D.,
Philadelphia.

Professor of Obstetrics in the Jefferson Medical College and the Philadelphia Polyclinic; Member of the American Pediatric Society.

(Read before the Philadelphia Pediatric Society, March 22, 1910.)

We may consider this subject under first, the accidents of pregnancy; second, the accidents of labor.

Experiments show that continuous or violent disturbance of an impregnated ovum results in malformation and the production of monstrosities. Maternal impressions from fright or physical violence are undoubtedly followed by the birth of individuals malformed, and in many respects with altered minds. The coincidence is too widely observed to admit of doubt, but the precise manner in which the effect is produced is not clearly demonstrated. Sufficient is known to make it of the utmost importance that the pregnant woman be not subjected, in the interest of her offspring, to sudden or violent mechanical force or to great nervous shock.

Great disturbance in maternal metabolism may result in the birth of malformed and defective children. Mal-nutrition in the mother is followed by intrauterine rickets, hydrocephalus, and other lesions.

Hereditary peculiarities of metabolism may also influence the development of the fetus. Such are, hereditary hare-lip and cleft-palate, which affect not only the anatomy of the fetus but interfere with the mental development of the child. Disturbances in fetal metabolism may also result in the production of defective offspring. Amniotic dropsy producing polyhydramnios and fetal dropsy, are a familiar example.

Toxemia from the absorption of intracellular placental ferments producing multiple thrombosis and embolism may threaten the mother's life and seriously endanger her offspring. Children born during mater-

nal eclampsia, if they survive toxemia, may themselves perish from eclampsia, or suffer permanent injury to the nervous system.

Race degeneration from alcoholism and syphilis, furnish familiar examples of the birth of deficient offspring.

Acute infections attacking the mother may seriously damage the nervous system of the fetus. The writer recalls the case of a vigorous woman who became the mother of several unusually well developed and intelligent children. In one pregnancy she suffered a severe typhoid infection accompanied by high fever and hemorrhages. Her child, a girl, was born with a permanently damaged nervous system. Although now a grown woman, she is hemiplegic with disordered speech. Her mentality and disposition seem normal, and education and good hygiene have enabled her largely to overcome the defects of birth; but during her younger life she was greatly crippled, and regained useful health with great difficulty.

Acute gonorrhoeal infection in the mother may be transmitted to the fetus in utero, producing ophthalmia, which may lead to blindness. Impairment of the sense of sight may seriously impair mental development in children.

The accidents of labor affect the fetus through birth pressure and asphyxia. Birth pressure may injure the brain directly through pressure upon the cranium, and secondarily through pressure upon the viscera. Cranial pressure results from long continued labor, with premature escape of the amniotic liquid.

In normal labor the fetal cranium is subjected to lateral pressure, causing a diminution in the transverse diameters, and elongation of the depth of the fetal head. This enables the brain to accommodate itself to normal birth pressure, the retrocession of the cerebral fluid into the spinal meninges preventing serious cerebral pressure. In long continued labor the physiological limit is exceeded, the cerebrum becomes excessively compressed, and multiple hemorrhages into the cerebral centres follow.

When disproportion in size between mother and fetus exists, birth pressure becomes more pronounced and dangerous. In these cases the head is excessively drawn

out, and if the pelvis be malformed, pressure is exerted unequally upon the parietal portion of the fetal head by the promontory of the maternal sacrum, resulting in injury to the middle meningeal artery and its branches. Abnormal presentations, as brow presentation, may result in serious pressure upon the cerebral convolutions. In face presentation, the face may be severely bruised but the cerebral hemispheres often escape. Precipitate labor unattended, may cause cerebral injury to the fetus through impact with the floor or surrounding objects as the fetus falls from the body of the mother.

Ill-chosen and badly performed obstetric operations often result in cerebral injury. The application of the forceps to the fetal head before the head has engaged and moulded and the fetal cerebrum has accommodated itself to the altered shape of the cranium, is a frequent cause of injury. Applications of the forceps over the face and occiput, and obliquely over the head, are also dangerous. Version and extraction through contracted pelvis or partially dilated birth canal, often results in cerebral injury.

The pathology of cranial injury in labor consists in fracture of the cranial bones with bruising and laceration of the meninges, laceration of vessels, bleeding, the formation of clots, with pressure upon cerebral centres. In cases not promptly relieved by treatment, should the fetus survive, the pressure of the clot may cause softening and permanent damage to cerebral tissues.

In abnormal labor, where the position of the fetal arms becomes abnormal, or excessive torsion upon the neck occurs, injury to the axillary plexus may develop accompanied by rupture of nerve fibres, and the subsequent development of paresis and paralysis.

Birth pressure may also damage the fetus by producing visceral apoplexies. Severe and continued pressure upon the thorax, with efforts at respiration, may result in the extravasation of blood into the lungs and the formation of thrombi and emboli, which may be carried to the cerebral substance. Severe pressure upon the abdomen may be followed by hemorrhages into the liver.

In difficult delivery with disproportion,

the eyes may be subjected to such injury that the anterior chamber of the eye may be ruptured, and partial or total blindness result.

Asphyxia during labor occurs when pressure upon the umbilical cord interferes with the passage of oxygenated blood to the fetus. Involuntary respiratory movements result, over-distending the right heart and favoring the occurrence of cerebral hemorrhage.

In cranial fractures with depression of the bone occurring during birth, the patient should be subjected to operation, and the depressed bone elevated without anesthesia so soon as possible. In injury to the axillary plexus, the injured nerve trunks should be resected and the newly cut ends united so soon as the child is able to take an anesthetic.

Strict enforcement of the proper hygiene of pregnancy will protect the fetus from the accidents which threaten its intrauterine existence. Clinical experience and a better knowledge of pathological chemistry enable us to detect maternal and fatal toxemia before eclampsia results, and to save the lives of mothers and children. Pregnant women attacked with acute infections should be treated for the existing infection, care being taken to reduce the maternal temperature below 104° F., by all safe and reliable means. The use of vaccines promises well in these conditions.

The prevention of alcoholism, syphilis, and gonorrhoea, is obviously important.

Pelvimetry and the study of the relative size of mother and fetus enable the obstetrician to diagnose disproportion. If the induction of labor be selected, care must be exercised that vaginal delivery is not undertaken until the fetal head has engaged and moulded and complete dilatation of the birth canal has been secured. It must be remembered that the interruption of pregnancy exposes the fetus to greater danger than delivery by other methods at full term.

In complicated labor the fetus as well as the mother should have the benefit of modern surgery. If moulding and engagement be present, the birth canal distensible, and the transverse diameter of the pelvis at its outlet be sufficiently large, the forceps may be applied to the sides of the fetal head under anesthesia and delivery effected by

axis traction. Used under these conditions, the proper employment of the obstetric forceps saves the lives of mothers and children, and prevents cerebral injury. Version and extraction must not be undertaken in the interests of the fetus unless disproportion be absent, and thorough dilatation of the birth canal secured. In this operation, care must be exercised to prevent asphyxia and premature respiration.

In moderate disproportion pubiotomy will save the lives and nervous system of many children, with a moderate risk to the mother.

To save the life of the fetus, and to avoid injury to the cerebrum by pressure and by asphyxia, delivery by abdominal section stands pre-eminent among the operations of obstetric surgery. Under no circumstances should this be undertaken unless the child is in good condition. Where mother and child are the victims of septic infection abdominal section with the removal of the uterus will sometimes save the lives of both.

Essential improvement in fetal mortality and morbidity is one of the most striking results of the development of modern obstetric surgery. Still further improvements can only be obtained by applying to all complicated labors the principles and practice of modern surgical technique. — *Pediatrics*, May, 1910.

THE SECRETARY OF THE COUNTY MEDICAL SOCIETY.

C. Norman Howard, M.D., Warsaw, Ind.

First, catch your secretary. And in catching, catch a man who has all the virtues and none of the vices. A man who hears no evil; sees no evil; speaks no evil. Let him be a saint with a surplus of energy. Should all such have escaped, then the society will have to take a plain member—just an ordinary doctor; who, perhaps, may have a feeling of kindness toward his neighbors, even as you and I.

Probably one of the first things the secretary has to consider is the annihilation of loose ends. The organization must be compact. It must be solid. The doctors and laymen throughout the county must know

of the society definitely and not vaguely. They must come to understand that it is synonymous with all that is best in the profession. When an organization is simply a name, when no one accepts responsibility, then it is soft and mushy. Then you can run a stick through it anywhere and strike nothing. If, however, it can be made into a compact, working, clean-cut organization old members will want to stay and new men will want to come in. For please remember, gentlemen, that what will keep an old member in is just exactly what will induce a new one to join.

The organization can be made more compact by the secretary knowing the status of every doctor in the county. He can have this record in a book, keeping it up to date as changes come. *He should answer all letters on the day they are received or the next day at latest.* It helps a great deal to carry the effect of the society being alive if these answers are typewritten on attractive paper bearing the letterhead of the society and enclosed in a society envelope. Printed postal cards mailed regularly four days before each monthly meeting remind the busy men throughout the county and give them time to arrange their work. Sometimes add personal comment in your own handwriting. Whenever necessary individual doctors can be called up by telephone. When some special speaker arrives a list of all the members can be turned over to central, and telephone messages can be sent broadcast throughout the county. It does not cost so much as you might think.

The programs should be printed and let there be plenty of them. As the spirit moves him, the secretary can occasionally get out a circular letter, sending one to each physician, telling him how the society is getting along, asking his opinion, etc., etc. Let me say at this point, that while I consider the secretary should do all the headwork of which he is capable, he should not be expected to do a great deal of purely clerical work when it comes in lumps. When he thinks best he can call in an obliging stenographer and typewriter from a neighboring office, and charge the bill to the society. The expense of all these things and other things which some of you are doing, is comparatively small. If there is

not enough money the dues can be raised. The raising of dues does not necessarily result in riot, for in fact my observation leads me to believe that men will more gladly pay a reasonable amount for something which appeals to them than a very small amount for practically nothing at all.

If the secretary gives a short account of each meeting to the local newspapers it will help familiarize the laity with the society; it will be an additional reminder to those members who did not attend, and it will make those who are not members feel that something "is doing." Adjectives were better omitted from this news account, simply the fact of the meeting, subjects and names of essayists being given and perhaps the names of the members present, with any general remarks about the society as a whole that might be illuminating. From time to time the secretary could also give little additional items in regard to district, state, and national meetings, in the extent of membership, etc. He should also make a regular report to our State Journal. These reports should be made as interesting as possible by giving the gist of each number of the program. Tear the meat out of each man's talk, condensing perhaps a five minutes' discussion into three sentences. This is not such bad mental gymnastics for the secretary, either. If each essayist would prepare a resume of his paper it could be sent into the Journal. This, I believe, is also the wish of the editor, who takes care of these matters.

What shall be done to induce non-members to join? Suppose Dr. Stay Out down there in the southwest corner of the county, old Dr. Grudge ten miles east, Dr. Sour close at honte and Dr. Never Comein have not as yet unlimbered. You suggest, write each one a letter? Yes, do that and say in that letter that practically all the other good men in the county have joined, that there are probably no physicians of state or national prominence who are not members of their local organizations, that the society wants him and that he will in all probability find out he wants the society. By the same mail a request can go out to the editor of the State Journal, asking that another sample copy be sent to our friend. Perhaps we might wait now until it comes near time for the next meeting, then write again,

enclosing application blank and program, and say just whatever you feel like saying to each one. By that I mean each secretary should throw his own personality into his letters. They may not amount to much as letters but they will pull more because there is a human element back of them. Then, after awhile, you can figure out with what member he is on particularly good terms and perhaps press that member into service.

If the old members as well as the prospective ones can be made to feel that they are wanted, much has been gained. Not wanted in a perfunctory way but in an earnest, frank, enthusiastic, "come in and make yourself at home" way. We must remember that it is not satisfactory to any one to feel that his comings and goings are a negative factor to others. Therefore, another duty of the secretary should be to make all reputable physicians in the county feel that the society is glad when they come and misses them when they stay away. This attitude is not an artificial one, either, because the life of any society depends on the attendance. There is inspiration in numbers.

Unless the society is blessed with an energetic program committee such as we have at home, the secretary would better write to each essayist two weeks before the meeting, calling attention to the labor ahead of him and asking, should he foresee its non-fulfillment, that he notify the secretary at once, so that the space will not be empty. For, as you know, gentlemen, men will not continue to travel several miles to find each time a depleted program.

* * * * *

But I must not omit the last duty of a tactful secretary. He must be ready to retire gracefully at any moment for the good of the cause. You know that when Miss Watson talked to Huck Finn for awhile about hell he finally said he wished he was there. You member she was shocked beyond measure, but Huck said: "I didn't mean no harm; all I wanted was a change; I warn't particular." And so the county society might mean no harm but just wanted a change.

Finally, the secretary should school himself to feel friendly toward all; looking ever for the sunlight, for the wholesome

things; remembering that no man is perfect. Should he forget this he has but to look in the mirror. This feeling of good will, this belief in his fellows, should run through all his official relations with them. If the sheep is so black that it cannot enter the fold, then hope for the day of its purification. If there is enough of the white to squeeze a new member in, then play the white for all it is worth, and perhaps by and by all the black will be gone.

You say these things are basic? That they dip down into man's relation with man? You are right. But why not? For how else shall you and I boost along this new idea we hear so much about? How else shall we begin to learn this latest lesson that evolution is pressing upon the world—this Brotherhood of Man?

If one fails to quiet a frightened, crying child sufficiently to determine the presence of a tender area, necessary to diagnosis, the administration of chloroform to the point of *primary* anesthesia will make the examination easy and, at this stage of narcosis, pressure on a tender spot will be answered by reflex movements.—*American Journal*

A CHEERLESS LOOKOUT FOR THE COMING GENERATION OF DOCTORS.

If preventive medicine continues to push forward as steadily in Canada, during the next twenty-eight years, as it has since 1882, the outlook for practitioners of medicine in 1938 will not be a cheerful one. If a disease can be prevented, what is the use of having a physician? None at all. The astonishing part of this outcome is that doctors, as sanitarians, are helping to dig the pitfall for the practising physicians. It may be that they believe that the slowly-moving reforms, now in view, will not mature in their own days, and that they themselves will escape the burden of non-support, which will be transmitted to their successors.

Perhaps—and this is a more probable reason—the medical profession of today, being more scientific in its aims and practice than empirical, strives for the prevention of disease, instead of its cure. Without making pretensions to altruism, physicians strive to get, and frequently do secure, what altruists talk about or write about—the prevention of disease. And this aspect of modern medicine appears in the efforts of sanitary physicians and chemists, who advise legislative bodies to place on the statute books laws providing for the proper disposal of sewage, the maintenance of the purity of water supplies, the efficient ventilation of inhabited places, the conservation and preservation of foods, and the rest.—*Canada Jour. of Med. & Surgery.*

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

ASSISTANT EDITORS

L. D. WILSON, A.M., M.D., G. D. LIND, M.D., Ph.D.,
C. A. WINGETER, A.M., M.D., LL.D.

WHEELING, W. VA., DECEMBER, 1910.

THE JOURNAL is issued on the first of each month.

Subscription,	\$1.00 per year
Single Copies,	15 cents

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

BUSINESS.

Before the American Medical Editors' Association in 1909, the genial editor of the Medical World mildly scolded the organization journals for seeking advertising patronage. He was rather hard on Jones of the California Journal, who boasted that 'two pages of new advertisements have already been received, and others are anticipated.' (Jones should have said "expected," instead of "anticipated," but) Dr. Taylor, the World editor, refers to this quotation as "only a mild example of the commercialism that has for years appeared in this very offensive journal." Now we propose here to give cause to Dr. Taylor, the sensitive editor, to direct his arrows of criticism our way, for we see no good reason why we organization editors should sit with folded hands and allow the so-called "independent journals" to gather in all the good advertisements along with very much that is very bad. We cannot live on air, even "hot air," and since we go to the cream of the profession in all the states, which,

we opine, is more than can be said of the Medical World, we claim the right to inform our readers where the book publishers, the instrument makers, the drug manufacturers, the hospitals, and other good things are found. If by chance we occasionally let into our columns an advertisement that is open to criticism, the complaint certainly should not and can not with propriety come from the "independent" editor, for, oh my!—Our readers can complete this sentence, lest we make it a too intense sentence.

To get down to business, in our annual report of the journal's work for the year we called attention to some points which we desire here to emphasize. If the Association is to grow continuously, the membership dues must be collected early in the year. Every society should aim to have the dues of every member in its treasury in January, and certainly never later than April. Indeed this is a legal requirement. See By-laws, Chap. IX, sec. 13-14. And since we have adopted the plan of defense against malpractice suits, it is rendered absolutely necessary to pay dues in January if we wish to secure the protection offered. Aside from this there are several excellent reasons why our society dues should be paid early in the year. It is necessary that the editor shall know how many copies of the Journal to have printed each month. We can not afford to send the Journal regularly to those who at the close of the year prove delinquent. This we have been doing for several years, and the Association has footed the bills. Then it is quite sure that the member whose dues are paid is more attached to the society and feels a greater interest in its meetings. A member who has a debt hanging over him is not quite sure that he is going to continue his connection with the society. If the debt is paid in January the membership is secure for the year, and the Journal is paid for. Early payment is absolutely necessary to the Journal's prosperity. Thus far we have sent out approximately the same number of copies monthly during the year, and have annually lost from \$50.00 to \$100.00 by lapses in membership, none of those who have allowed their membership to lapse having paid for the Journal. Some have left the state, others have changed their resi-

dences, and thus we lose sight of them. Since each copy of the Journal costs us for the year about 75 cents, we have thus lost a not inconsiderable sum. None of the delinquents seem to reflect that, by neglecting to notify us or the local society of their intention to drop out, they entail on us this loss. The early collection of dues will obviate this loss. If any fail to pay in January we should be definitely informed of the fact, that the names may be stricken from our mailing list, and that we may certainly know the number of copies of the Journal to order. An active and alert secretary should be able to reach the object aimed at in this suggestion, and learn of every member in January whether or not he is going to continue his membership.

We may suggest that some who drop their membership may be induced to subscribe and pay for the Journal. And in every county there are men who for one reason or another will not join the medical society, or whose membership may not be desirable, and yet who, by tactful presentation of the subject, would consent to take the journal. This is a matter worthy of the efforts of every local society, since every dollar coming into the Journal fund reduces the State Association's expenses; and if our receipts are materially increased we will be enabled to send you a better and larger Journal. And as our circulation is increased we will receive more for our advertisements and get a larger number of them.

And this leads us to Dr. Taylor's "commercialism." We need to have our advertising patronage increased. The greatest part of our present revenue is from this source, and has been secured largely by the efforts of the editor by extensive correspondence. Hundreds of letters have been written for this purpose. We have also received a limited patronage through agents and several advertisements have been secured by members of the Association. We are confident that more in this direction can be done, especially in the larger communities of the state, if the local societies will take up the matter. To each member who sends us the advertisement of a responsible firm we pay 20 per cent commission on the total receipts on the original contract, and 10 per cent on renewals.

We sincerely hope that the suggestions

here made may be seriously considered by every society in the state, and let us conduct our business affairs in a business-like way. By thus acting we may reasonably expect to see our State Association constantly increase in numbers and influence. By the present methods, especially in the collection of dues, we never know until the annual meeting opens, whether we are gainer or loser by the year's efforts. At present the Association has fewer than one half of the registered physicians of the state in its membership. We should, and by earnest effort certainly can, soon have at least 75 per cent in our organization, and thus will our power for good in the state be enhanced.

In conclusion, we urge the local secretaries to send us, at the close of the year, the names of all members who persist in refusing to pay their dues for 1910, and we will make proper effort to collect a dollar from each one who has received the Journal for the full year. Certainly no honest man will refuse to pay this just obligation. We also need to have the names of delinquents that they may be removed from our mailing list.

With great sympathy for the secretary, the most valuable member in each society, and the man most taxed and most abused, and with apologies to Dr. Taylor for our "commercialism," which is possibly the exclusive right of the "independent" journalist, we remain,

Sincerely,

THE EDITOR.

We have received several society programs, indicating that good work is being done in a number of the societies, but why are no reports of the meetings sent us? We are quite sure that an outline of the proceedings of any society, if carefully prepared, will interest our readers and stimulate effort throughout the state. Send in your reports and do not be satisfied with sending your program. And when an unusually good paper is read, of which your scientific committee should be the judge, capture it and send it to the Journal. Stir yourselves.

We have information that a number of physicians, both men and women, are urgently needed for immediate service in

foreign mission fields. If any of our young physicians possess the missionary spirit, and desire to lead a most busy and useful life in India, China or other eastern country, they should address Mr. Wilbur B. Smith, Act'g Candidate Sec'y, 125 East 27th St., New York City.

An unusual criminal trial was held last month in Pulaski, Va.

The case was that of the commonwealth vs. Price Cecil, otherwise, the "Holy Roller." It will be recalled that some time since the defendant allowed one of his children, a boy some eight years old, to die from diphtheria, and another child to be down with that disease without calling in medical aid.

Mr. Cecil is a man of means, of great natural intelligence, a good neighbor, a kind friend, and has always been of most exemplary habits. Yet he and a number of his kindred neighbors embraced the religion of the sect known as "Holy Rollers."

They follow strictly in cases of disease, the regimen prescribed by the Apostle James: "Is any among you sick? Let him call for the elders of the church; and let them pray over him, anointing him with oil in the name of the Lord; and the prayer of faith shall save him that is sick and the Lord shall raise him up."

Receiving none other save this scriptural treatment, the Cecil child died of diphtheria. Cecil was arrested and tried but made no defense. We have not learned what punishment was inflicted. Our Christian Scientist lunies had better look out.

A SWINDLER ABROAD.

Hotels, druggists, physicians, livery men and others, are warned against a man traveling from place to place presenting a card with the name "R. F. Hall" printed in the center. In the lower left hand corner are the words "Parke, Davis & Co." and in the lower right hand corner the words "Detroit, Mich." This man is described as follows:

"5 ft. 6 or 8 inches, 150 lbs., fiend for Turkish cigarettes, about 27 years, complexion medium, wears nose glasses and continually takes them off and on; he is a swell dresser, good talker, fine appearance, wears one of those light colored slip on or off rain coats."

This individual has no connection with Parke, Davis & Co. and so far as heard uses the card to facilitate the passing of bogus checks.

Because of incidents like these nearly all concerns employing "drummers" forbid them to bor-

row money or seek credit, except upon individual responsibility and acquaintanceship. Therefore, those seeking credit or loans, especially from comparative strangers, on the strength of their alleged connection with some important concern, should be treated as imposters.

PHYSIOLOGIC THERAPEUTICS, the live, new journal published by Dr. Henry R. Harrower of Chicago, will celebrate the New Year with a Special Double Number.

Several thousand extra copies will be printed and sent with Season's Greetings to such physicians as may be interested in seeing this able exponent of the progress in the non-medical methods of treatment.

Those who desire a copy should send a postal request to Dr. H. R. Harrower, Park Ridge, Illinois.

W. B. Saunders Company now have going through their presses a three volume work on Practical Treatment, written by international authorities and edited by those able clinicians, Dr. John H. Musser and Dr. A. O. J. Kelly, both of the University of Pennsylvania.

In looking over the list of contributors we can come to but one conclusion; namely, that this work will undoubtedly take rank as the very best on Treatment extant. The names of the authors carry with them the positive assurance of thoroughness. Indeed, each chapter is a complete monograph, presenting the most recent therapeutic measures in a really practical way.

As the general practitioner is required to know certain therapeutic measures more or less of a surgical nature, leading surgeons have been selected to present such subjects. This is an important feature, and, to our knowledge, not included in any similar work.

In every case the men have been most aptly chosen for their respective tasks, and under the wise editorship of Drs. Musser and Kelly there has been produced a work on Treatment that will remain for many years the last word—a source of practical information, easily obtained and readily digested.

The work will sell for \$6.00 per volume, in sets only.

A TRIUMPH IN PILL-MAKING.

Parke, Davis & Co. confess that their soft-mass pill, which is now receiving so much favorable attention from the medical world, was for a long time a "hard nut" to crack. They had set out to produce by the soft-mass process a pill that should be a credit to their house and to manufacturing pharmacy. The task at first seemed simple enough, but as a matter of fact, a good deal of experimentation had to be done. In the end, of course, ingenuity triumphed.

In structure the soft-mass pill, as manufactured by Parke, Davis & Co., consists of a plastic mass encompassed by a thin, soluble chocolate coating. It may be flattened between the thumb and finger like a piece of putty. An important advantage of the soft-mass pill is the readiness with which it dissolves or disintegrates in the

digestive tract. Another commendable feature is that, no heat being applied in the process, such volatile substances as camphor, the valerianates, the essential oils, etc., are not dissipated, so that any pill embodying one or more of these substances may be depended upon to contain just what the label says it contains.

Parke, Davis & Co. are putting out close to thirty formulas by the soft-mass process—all of them listed, we believe, in advertisements now appearing quite generally in the medical press. Practitioners may profitably write the company, in Detroit, for a copy of a recently issued folder on "Soft-Mass Pills," which contains titles and complete formulas of all the pills now manufactured by the firm, together with some other important information.

POPE SAID

"The learn'd reflect on what before they knew."

As the winter approaches, conditions prevalent with the season will present themselves for the consideration of the physician.

At this time it might be well to recall that Antiphlogistine, applied applied thick and hot, will offer unmeasurable relief in those cases of Bronchitis; Tonsillitis; Laryngitis; Pleurisy and other throat and chest affections you will be called upon to treat.

Satisfactory therapeutic results invariably follow the application of Antiphlogistine and to guard against substitution, it is well to specify an original package, thus protecting your patient as well as yourself.

State News

Dr. Chas. M. Scott of Bluefield was recently called to Paintsville, Ky., to make a professional visit to Mr. J. C. C. Mayo, a wealthy coal operator. The case was so urgent that a special train was made up for the occasion.

* * *

Dr. Yeakley of Keyser is in Philadelphia engaged in post-graduate work.

* * *

Dr. J. E. Coleman of Fayetteville has recently been in attendance at the clinical meeting of the surgeons of America which began on November 9th. He went from Chicago to the Mayos at Rochester, Minn.

* * *

Drs. Ackermann, Noome, Schwinn and Reed of Wheeling, also attended the above-named clinics in Chicago.

* * *

Dr. W. J. Judy of Kerens, Randolph county, has leased the office of the late Dr. McLaughlin at Webster Springs, and will hereafter practice his profession at that place.

* * *

Dr. Henry Brown, aged about 87 years, recently died at Valley Fork.

Our worthy State Association Secretary, Dr. A. P. Butt, was recently chosen as President of the School Board at Davis.

* * *

We regret to note the death, in Grafton, of Miss Dorothy Thayer, a daughter of ex-President Thayer of the State Association. Miss Thayer was but 19 years old.

* * *

Dr. H. B. Jones of Wheeling, on invitation of the civic department of the Women's Club, delivered a lecture at Fairmont on Medical Inspection of the Public Schools, a theme in which she is deeply interested. A large audience greeted her. She has been lecturing on the Passion Play, which she witnessed during the past Summer.

* * *

We are pained to announce the death, from apoplexy, of Dr. M. L. Corbin, late of Ellenboro. Dr. Corbin attended the recent meeting at Parkersburg, and was in the best of health and spirits. He was a genial and most agreeable man, and enjoyed an excellent reputation as a physician. Soon after returning home from the meeting he was stricken down and died very suddenly, at the age of 58 years. A son, Dr. E. Corbin, will succeed to his practice.

* * *

Died, on September 27th, in South Park, Morgantown, Dr. John W. Michael, aged 71 years. Dr. M. was a resident of Morgantown but two years, having practiced for many years at Fellowsville, Preston county. Dr. W. S. Michael of Hendricks and Dr. M. D. Michael of Junior are sons.

* * *

Early in September, Dr. Wayne Hatfield was shot and instantly killed by a boy of 16 years, ten miles from Wharndcliffe. Dr. H. was a brother of Senator H. D. Hatfield, so well and favorably known to the medical profession. Whiskey is said to have been the cause of this murder.

* * *

Married, at Verdon, Va., Dr. J. J. Durett of Fairmont and Miss Cardwell of Verdon.

* * *

Married, at the First Presbyterian Church, Wheeling, on December 1st, at 8:30 o'clock p. m., Miss Isabella Harwood Jepson, daughter of Dr. and Mrs. S. L. Jepson, to Mr. Charles Winning Bates, son of Dr. W. J. Bates, Jr. (retired), and grandson of the late Dr. Wm. J. Bates, the first President of the State Medical Association. The bridal tour extends to Cuba, via steamer from New York.

* * *

President Wingerter is starting out to aid the different medical organizations in the state. He lectured to the Monongalia Society on November 22nd, and on December 6th he expects to address the Kanawha Society on the subject of "Crime and Its Prevention."

* * *

On November 15th Dr. Wingerter lectured before the State Board of Trade in Parkersburg on the theme "Civic Health is Civic Wealth." As a result a new committee was formed on "Public Health and Sanitation."

Society Proceedings

MINUTES OF THE FORTY-THIRD ANNUAL SESSION

Of the West Virginia State Medical Association, held in Parkersburg, October 5th, 6th and 7th, 1910.

HOUSE OF DELEGATES.

Tuesday, October 4th, 1910, 10 p. m.

The House of Delegates was called to order in the Y. M. C. A. Building by President Moore.

The following members were present:

A. L. Grubb, B. O. Robinson, W. S. Link, C. E. T. Casto, P. A. Haley, L. O. Rose, B. B. Wheeler, W. H. Yeakley, J. E. Cannaday.

The secretary reported as follows:

Mr President and Fellow Members of the House of Delegates of the West Virginia State Medical Association:

Our membership is now 810. During the past year we have added about one hundred new members, and have lost about one hundred old ones, some by non-payment of dues, some by death, some by removal. I regret that it is impossible to get a perfectly accurate report concerning each member.

Many of our county secretaries are very particular to keep an accurate record of these matters, but others do not. I report each month to the A. M. A. such changes in our membership as I am cognizant of.

As has always been the case the greatest loss comes from dropping members for the non-payment of dues. That part of our By-Laws in Chap. IX, Sec. 13, which says, "The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates and list of non-affiliated physicians of the county to the Secretary of this Association on or before April 1st," is, as I think you all know, almost unobserved.

On the first of last April we had but three hundred members paid up. This causes considerable hardship and loss to the JOURNAL, but I see no way to avoid it.

I kept the matter of non-payment of dues constantly before the county secretaries and as a last resort wrote each delinquent at least two letters.

The number of paid up members in each society is: Barbour-Randolph-Tucker, 64; Boone, 11; Braxton, 21; Brooke, 11; Cabell, 43; Doddridge, 3; Eastern Panhandle, 37; Fayette, 46; Grant-Hampshire-Mineral-Hardy, 33; Greenbrier Valley, 12; Harrison, 60; Hancock, 9; Kanawha, 61; Lewis-Upshur, 19; Logan, 6; Little Kanawha & Ohio Valley, 45; Marion, 35; Mercer, 27; Mason, 7; Marshall, 19; McDowell, 26; Mingo, 15; Monongalia, 15; Nicholas-Webster, 14; Ohio, 59; Pleasants, 3; Pendleton, 5; Preston, 17; Raleigh, 15; Ritchie, 14; Summers, 13; Taylor, 15; Tyler, 6.

I am happy to say that no county has dropped out. Two new societies have been organized--

Ritchie and Wetzel. In compliance with your instructions I had published a large number of copies of the report of the Committee on Malpractice Defense. These I distributed throughout the state. Several hundred copies of the Constitution and By-Laws were received. One was sent to each member.

About the first of the year I sent out about three hundred letters to non-members, urging them to send in their application. How many were sent to the county secretaries I have no way of knowing. I received a number which were turned over to the proper officials.

Some years ago a former secretary, Dr. Golden, advised that some action be taken for the purpose of relieving certain aged members from the further payment of dues. I also ask that something of this sort be done.

Respectfully submitted,

A. P. BUTT, *Secretary.*

The following committee was appointed to report upon the recommendations contained in the report of the secretary: Drs. Yeakley, Benton and Wheeler.

The report of the treasurer, Dr. H. G. Nicholson, was read by him and was referred to the Council for audit.

On motion of Dr. Daniels the Council was asked to make some recommendations on a seeming conflict between Sec. 2 of Chapter IV and Sec. 2, Chapter IX of By-Laws.

Tuesday, October 5th, 1910, 11 a. m.

The following resolution was introduced by Dr. J. W. Simpson:

Resolved, That the Medical practice act should be so amended that candidates for a license must show evidence of having had at least a four-year high school course or its equivalent, equal to the 15 points now demanded by the Association of American Medical Colleges, before coming before the State Board of Health. These credentials to be passed upon by the Committee on Classification and Grades of the West Virginia University.

Adopted.

Dr. J. E. Cannaday offered a resolution asking for the publication of the Transactions of the West Virginia State Medical Association. Resolution was amended by Dr. Linsz to the effect that a committee be appointed to consider the advisability of such publication. Amendment carried. Drs. P. A. Haley, M. V. Godbey and J. W. Simpson were appointed.

On motion, Dr. Linsz, Smoot and Daniels were appointed to confer with the committee of arrangements concerning time of holding banquet.

Adjourned at 11:30 to meet at 11 a. m. October 6th.

Thursday, Oct. 6th, 1910, 11:40 a. m.

A resolution, which had been introduced by Dr. S. L. Jepson at Elkins, in October, 1909, calling for a change in the manner of electing officers, was tabled after Dr. Jepson stated that he would not ask for its passage.

Dr. Jepson reported for the Committee on Publication. Report was referred to Council. It is as follows:

REPORT OF THE COMMITTEE ON PUBLICATION.

To the State Medical Association, Gentlemen:

Herewith is submitted the financial report of the JOURNAL for the year ending June 30th, 1910. It shows a net balance in the treasury of \$854.18, and were all the bills due and collectable paid, this would be increased by at least \$200.00, thus showing for the first time that the JOURNAL has at least paid all its own expenses, including salary of the editor. The receipts from advertisements have increased considerably, those from membership but little—certainly not as much as they should, since we are yearly having a large number of young men entering upon practice in the state who should be gathered into our societies. In this connection I beg to submit a few suggestions that seem to be in the interest of the prosperity of the association and hence of the JOURNAL.

If the Association is to grow continuously, the membership dues must be paid very early in the year. Every constituent society should aim to have the dues of every member paid in January, and never later than April 1st. This is really a constitutional requirement. (By-Laws, Chap. IX, Sec. 13-14.) Our private debts are paid in January, and we should accustom ourselves to consider our society dues just as much of an obligation as are the grocery or dry goods accounts.

Again, we desire to call your attention to the fact that every year we are losing members by lapses in the payment of dues. Some of these could be prevented by an active and persevering secretary. Where failure occurs, some of the men may be secured as subscribers to the JOURNAL, which is better than losing sight of them altogether.

Then we need to have our advertising patronage increased. This is now the source of our largest revenue, and it has been secured almost entirely by the editor by extensive correspondence. Several advertisements have been secured by members of the Association. We are confident that more in this direction can be done, especially in the larger communities, if the local societies will carefully consider the matter. To each member who sends us advertisements from responsible firms we pay 20% commission on first year's receipts and 10 per cent on renewals.

I hope that these suggestions may receive your careful attention. Let us conduct the business of the Association in a business-like way, and success will certainly crown our efforts.

In conclusion, I urge the local secretaries to send me, at the close of the year, the names and addresses of all who have received the JOURNAL for the year 1910 and yet refuse to pay dues, and effort will be made to secure payment for the JOURNAL. Surely no honest man will refuse to pay this just obligation. Since the JOURNAL has gone to these men regularly at a cost of about 70 cents each to the Association, they never sending us any notice to discontinue it, they will certainly pay the subscription price of \$1.00.

With great sympathy for the secretary, the

most important member in the society and the man most taxed and most abused, I remain,

Fraternally yours,
S. L. JEPSON, *Ch'n.*

FINANCIAL REPORT.

Receipts from membership dues.....	\$ 830.00
Receipts from advertisements.....	969.42
Receipts from subscribers	21.80
Receipts from JOURNALS sold.....	4.60
Receipts from interest on deposit.....	10.00
Total	<u>\$1,835.82</u>

EXPENSES.

Printing JOURNALS	\$869.29
Mailing JOURNALS	32.55
Postage stamps and cards.....	18.95
Reprints	17.35
Half tones for JOURNAL.....	23.00
Binding three volumes of JOURNAL	3.00
Commissions on ads.....	6.00
German Journal	6.00
Printing envelopes, letter heads, etc	5.50

Total\$981.64
Profits of the year.....\$ 854.18

Audited and found correct, Oct. 6, 1910.

H. P. LINSZ, *Ch'n of Council.*
P. A. HALEY, *Sec'y.*
G. H. BENTON, *Committee.*

THURSDAY.

Dr. W. W. Golden, chairman of the Committee on Malpractice Defense, read his report.

On motion of Dr. Taylor a committee of three was appointed to confer with Dr. Golden and report Friday morning. Committee consisted of Drs. Godbey, Taylor and Murphy.

Dr. J. A. Cannaday reported for the Committee on the President's Address as follows:

The committee appointed to report on the president's address wishes to commend and indorse all the suggestions contained in the address, particularly those in regard to the quarantine of whooping cough cases, the protest against the abolition of the Medical Department of the State University, the legal action concerning the prophylaxis of ophthalmia neonatorum, and the incorporation of the West Virginia State Medical Association.

(Signed) J. E. CANNADAY, *Chairman.*

Dr. W. H. Yeakley reported as follows from the Committee on the Secretary's Report:

We recommend that the suggestion in the secretary's report concerning the remission of the dues of certain aged members be left to the censors of the component society in which such members live.

W. H. YEAKLEY, *Chairman.*

Dr. Taylor, of the committee appointed to confer with Dr. Golden on his report, offered the following amendments to the report: "That in section 2 add the words, 'in association with the local attorney,' to render more clear the intention to employ a local attorney; and in section 7 add the words, 'or within thirty days

thereafter,' thus giving the members thirty days of grace." The amendments were adopted. The report as amended is as follows:

Report of Committee on Medical Defense.

The committee having had no opportunity to meet together, I am compelled again to take the liberty of offering my personal views and such information as I could gather on the subject. In my report of last year I referred to the fact that ten state associations and three county societies had adopted some plan of medical defense, and I furnished you with letters from the secretaries of a number of these organizations, giving their views on the desirability of such defense. You will recollect that nearly all of them expressed themselves very favorably. Since that time the Bulletin of the American Medical Association under date of November 15, 1909, reports that three more state societies have adopted some plan of medical defense, namely, Michigan, Minnesota and New Jersey, thus making, up to that time, thirteen state associations and two local societies furnishing protection to their members. The same Bulletin reports New Hampshire, California, Arkansas, Ohio, Indiana, Montana and our own state as those that are considering the adoption in the near future of a plan of medical defense, and it is quite probable that some of them have acted favorably by this time.

It is my conviction that before very long medical defense will become a permanent feature of every state medical organization. I shall very briefly touch upon the reasons for the same. Every physician is liable to become a defendant in a suit for alleged malpractice. The general practitioner is just as liable as the specializing surgeon or ophthalmologist, and the one practicing at the cross roads as his brother in the metropolis. The history of our own state amply exemplifies this. The infamous persecution of one of our illustrious members in Parkersburg because of an abdominal operation had its parallel in a pitiful attack upon an honest practitioner in Pendleton county on account of a lacerated perineum. The groundless attack upon one of our members because of an alleged surgical mistake in the diagnosis of an ovarian cyst, in one part of the state, had its parallel in an absurd malpractice suit against another member in another part of the state because of the bleeding from an umbilical stump. If any one present flatters himself that he will never be the victim of such persecution, and perhaps strengthens this belief by the fact that so far he has been left in peace, he is greatly mistaken, and may perchance find a malpractice suit awaiting him on his return home. This being the case, it behooves us to take measures of prevention and cure. Inasmuch as the root of every malpractice suit can always be found in a misguided and jealous fellow-practitioner, the ideal prophylaxis is to be found in a more effective dissemination and fructification of the noble principles for which our organization stands; and surely the day is bound to come when the great improvements in the standards of medical education will fill the ranks of our profession entirely with men of principle and character. Meanwhile, however,

the unscrupulous are with us and likely to continue to be with us for some time to come. Several liability companies are doing a thriving business among physicians by furnishing them protection against malpractice suits at a very handsome premium. This fact alone proves that many physicians are alive to their liability to malpractice suits. These companies obligate themselves to pay the amount of judgment up to a certain sum as well as the expenses of the suit, and it is because of this that the premium is high. But as a matter of fact it is very rare indeed that a physician has any verdict against him, as most of these cases are simply blackmail. In view of this the rate charged by these companies is needlessly high. The smallest premium, I believe, is fifteen dollars per year. Members of the Wisconsin Medical Society, for example, get the same practical protection for one dollar per year. But apart from that, the defense furnished by a medical society is more desirable. What we physicians are after more than anything else is the discouraging of the bringing of such suits. The real damage done by such suits is in entering them, as thereby gossip is turned loose and character and ability are assailed. The trial, if it follows, is usually a vindication. All that the liability companies can do is to pay expenses and judgments. They are powerless to prevent the instituting of suits. Should the physician be poor, the fact that he is the holder of a policy with a liability company may even encourage the bringing of a suit against him. On the other hand, it has been the experience of every medical society that has adopted a plan of medical defense that it has markedly diminished the number of malpractice suits; and it is my opinion that this has been accomplished not so much through its effect upon the lawyer and incipient plaintiff, as upon the medical culprit who is instigating the prosecution, and whose sole object is persecution. The hope of keeping his hand from exposure can not be great, because he knows that the officers of the medical society will do some investigating and will more than likely spot him. Again, the liability companies act upon the law of averages. Out of a certain number of policy holders they expect a certain number of suits to defend every year, and their interest cannot be extreme or personal. They expect to lose a certain amount of money every year, and they are content as long as this is kept within certain statistical limits. Another point. Should a policy-holder be so unfortunate as to have more than one lawsuit against him in a short period, the liability company may take advantage of its right to cancel his policy, and I know that this has been done. How different in many of these respects is the defense furnished by medical societies. The personal interest in the defendant's case and the practical sympathy extended to him by members of his profession have a value which is beyond calculation. However, let it be clearly understood that there is nothing in the methods of medical defense practiced by medical societies to interfere in the least with the benefits offered by liability companies to their policyholders. The contrary is true.

Another point of interest is this: Those who have had some experience with malpractice suits know how little informed even our best lawyers are on the subject of malpractice. The lawyer in charge of such a case often finds himself unable to find enough time to thoroughly inform himself on the precedents and decisions to the best advantage of the case, and this is even more true of the prominent lawyers, for the demand upon their time is very great, and it is my belief that this fact accounts for the strikingly numerous cases in which the defendant is driven to find his vindication in the supreme court. Were the necessary information easily accessible, many of these cases would probably never reach the jury. In the proposed plan of medical defense that an attorney be retained by the year, it is not intended that this attorney should conduct the trial of each case by traveling all over the state. What is mainly wanted of him is to keep a close watch on medico-legal topics of interest to the physician, more especially those pertaining to malpractice suits, and that he have on file ready references pertaining to this branch of the practice of law. He would then become of invaluable assistance to such local attorneys as the Association may employ in the defense of a given case; and if it becomes desirable he may be engaged to reinforce the local attorneys with his presence. This feature alone makes the adoption of a plan for medical defense highly desirable, and the one dollar a year is certainly a small sum to pay for such a benefit.

There is another consideration, and a very important one, in connection with this matter. The size of our membership is not what it should be, and the efforts to bring it up to its present size have been enormous. In my judgment our growth will continue to be slow; in fact, I believe it will become slower unless the Association can hold out to its members some material inducement. To be sure, to you and to me the scientific, ethical and social benefits are sufficient inducements to be members and to contribute all in our power to the progress of our Association. But it appears that there are an equal number of physicians in the state to whom these attractions are insufficient. I look therefore upon the adoption of a plan of malpractice defense to prove our greatest organizing factor. Theoretically this is correct, but what is more interesting, this has actually been found by experience to be the case. Dr. Townsend, secretary of the Medical Society of the State of New York, says: "We believe it has been one of the greatest aids in securing new members. We find that members often distinctly say they joined to secure defense in case of alleged malpractice." Secretary Stevens, of the Pennsylvania Medical Society, says: "It has helped both in securing and holding members." Secretary Sheldon, of Wisconsin, says: "I think the effect on the membership has been most helpful." Secretary Wise, of Illinois, says: "I am certain it has increased our membership almost one thousand." In view of all this I most earnestly recommend that a plan of medical defense be adopted at this meeting to be put into operation

not later than the first of the year. In order to facilitate the matter I herewith submit a plan in detail to be adopted as an amendment to our By-Laws. The plan may not be perfect, but it is certainly better than none, and we can correct any defects which we may detect in it when tested by actual experience.

AMENDMENTS TO BY-LAWS.

MEDICAL DEFENSE.

Article —

1. The Committee on Medical Defense shall consist of three members specially elected for this purpose and the members of the Council ex-officio. The three specially elected members to constitute the Executive Committee.

This Executive Committee shall be perpetuated by the general meeting by electing one member each year. The term of service of each member shall be three years, provided that at the first meeting they shall be chosen for one year, two years and three years, respectively, the term of service to begin January 1, 1911.

2. The Executive Committee of Medical Defense at each annual meeting shall appoint an attorney-at-law for the term of one year, who shall keep a ready reference file of information on the subject of malpractice. He shall represent the Association, if needed, in suits for malpractice, in association with local attorney, and shall represent the Association in other legal affairs.

3. On and after January 1, 1911, it shall be the duty of the Executive Committee, through its chairman, to investigate all claims of malpractice against members, properly brought to their attention; and if in their judgment the case is one worthy of defense, to forthwith forward all papers connected with the case received from the applicant to the attorney of the Association; but they shall not pay, nor obligate the Association to pay a judgment, claim or settlement against any member.

The same benefit is to be extended to the estate of a deceased member.

4. The chairman of the Executive Committee shall have charge of the Medical Defense Fund, which fund shall be secured as follows:

Each member of the State Association shall be assessed one dollar a year for this fund alone, to be paid with the regular State Association dues, and which shall be placed in the hands of the chairman of the Executive Committee by the secretary of the State Association as soon as the latter receives the same from each component society.

5. The Executive Committee shall, at each annual meeting of the State Association, make to the Council a detailed report of all expenses incurred and work done during the year ending the first of the month in which the annual meeting of the Association takes place, and the Council is to transmit as much of the report as it deems wise to the Association.

6. No action shall be taken by the State Association to an act committed prior to January 1, 1911, or before the date of qualification of the accused as a member of the Association. Furthermore, no member shall be entitled to the

privileges of defense by the State Association whose dues to the Association are not paid in advance as elsewhere provided in the Constitution and By-Laws, or within thirty days thereafter, and such defense shall be granted only to members residing in West Virginia, not to non-resident or affiliated members.

7. Any member desiring to avail himself of the provisions of this article shall proceed as follows:

He is to obtain a written statement from the secretary of his official local society that he is a member of that society in good standing, and that he has paid his dues for the current year within thirty days of the beginning of it, and has paid all assessments. This statement he is to present to the chairman of the Executive Committee of Medical Defense, along with an accurate and complete history of his treatment of the case from which the alleged malpractice arose. He is also to furnish a statement authorizing the Association, through its attorney, to defend the action and granting the Association and its attorney sole power to conduct the defense thereof, agreeing not to compromise or settle claim for damages for said alleged malpractice without the consent of the Association or its attorney. For this purpose the Executive Committee is to furnish the applicant suitable blanks.

8. The Executive Committee then is to act as provided in Section 3, and is to keep in touch with the progress of the defense, both in the preparation for and in the actual trial. It shall furnish all necessary legal services, all medical expert services and pay all the necessary expenses connected with the case, provided, that nothing in this understanding between the State Association and its members shall conflict with united action in the defense by the officials of any corporation organized for this specific purpose with which the member may be connected, and, provided, that when such connection exists, the State Association's share of expenses shall not exceed one-half.

WM. W. GOLDEN, *Chairman*.

The report as it appears above was adopted.

The report of the committee appointed by the Council to change the By-Laws was read by Dr. Benton: We recommend that the words "to each 25 members or fraction thereof, above 10," in Chap. IX, Sec. 11, be stricken out, and these words inserted, "and one additional for every twenty-five or fraction thereof above ten members," be added.

G. H. BENTON, *Chairman*.

Report was adopted and committee discharged.

Adjourned at 1 p. m. to meet October 7th, 1 a. m.

FRIDAY, OCTOBER 7,

Election of officers was the first order of business and resulted as follows:

President, C. A. Wingerter, Wheeling.

First Vice President, J. E. Cannaday, Charleston.

Second Vice President, Glenn Moomau, Petersburg.

Third Vice President, C. D. Jeffers, Parkersburg.

Secretary, A. P. Butt, Davis.

Treasurer, H. G. Nicholson, Charleston.

Before calling for nominations for Councilors the president, Dr. Moore, read to the House the duties of each councilor, and asked that no one accept the nomination unless willing to fulfill the duties of the office.

Dr. H. P. Linsz, of Wheeling, was elected for the First District; Second District, W. H. Yeakley, of Keyser; Third District, P. A. Haley, of Charleston; Fourth District, W. S. Link, Parkersburg; Fifth District, S. R. Holroyd, of Athens.

Delegates to American Medical Association, Frank LeMoyné Hupp and C. O. Henry; alternates, J. G. Walden, T. K. Oates.

Dr. J. W. McDonald, chairman of the Committee on Public Policy and Legislation, gave a verbal report on matters pertaining to his committee.

Dr. T. J. McBee offered the following amendment to the Constitution:

Resolved, That we amend Article V of the Constitution under head of "House of Delegates" to read as follows:

The House of Delegates shall be the legislative and business body of the association and shall consist of (1) delegates elected by the component county societies, (2) the councilors, (3) ex officio the President and Secretary of this Association, and (4) the county secretaries.

Accepted and laid on the table until next year.

On motion of Dr. W. H. Yeakley it was ordered that the Association of County Secretaries of the West Virginia State Medical Association be allowed a sum of money not to exceed \$25 for postage and stationery.

White Sulphur Springs was selected as next place of meeting. Time of meeting to be determined by Council.

The minutes of the Council were presented as follows:

MINUTES OF COUNCIL.

October 5, 1910.

Council met and was called to order by Dr. H. P. Linsz, chairman, with the following Councilors present: Drs. G. H. Benton, B. B. Wheeler, A. S. Grimm, L. O. Rose, J. E. Rader, P. A. Haley and H. P. Linsz.

The report of the treasurer, Dr. H. G. Nicholson, was audited and found correct.

H. P. LINSZ, *Ch'm.*

P. A. HALEY, *Sec.*

The reports from the Councilors present, from their respective districts, were received and filed. These reports were very interesting and showed an increase in membership over last year as well as an increased interest in the welfare of the Association. This year we have about 830 members in good standing, last year 809.

It was moved by Dr. Linsz, seconded by Dr. Haley, and carried:

1. That the treasurer's salary be fixed at one hundred dollars for the ensuing year, and that he be reimbursed \$25 for last year, to make his salary for that year \$100, he having received but \$75.

2. That the secretary's salary be fixed at \$300

for the ensuing year (\$200 for his services and \$100 for clerk hire).

3. That the salary of the editor, Dr. S. L. Jepson, be fixed at one thousand dollars (\$1,000) for the ensuing year.

4. That Dr. L. D. Wilson, assistant editor, be paid fifty dollars (\$50) for his services for the past year.

5. That Dr. G. D. Lind, associate editor, be paid \$25 for services rendered the editor for the past year.

Adjourned at 11:40 a. m. to meet at the call of the chairman.

The above report was presented and read to the House of Delegates, Oct. 6, 1910, and was adopted by that body, unanimously.

H. P. LINSZ, *Chairman*.

P. A. HALEY, *Secretary*.

October 6, 1910.

Councilors' meeting was called to order with Dr. Linsz in the chair.

The financial report of the editor, Dr. S. L. Jepson, was audited and found correct.

H. P. LINSZ, *Chairman*.

P. A. HALEY, *Secretary*.

Council took under consideration the resolution of Dr. J. E. Cannaday, providing for the publication of Annual Transactions of the Association. After due consideration that body decided such publication inexpedient.

The above report was presented and read to the House of Delegates October 7, 1910, and adopted by that body, unanimously.

H. P. LINSZ, *Chairman*.

P. A. HALEY, *Secretary*.

October 7, 1910.

After the annual election of officers of the Association, the Councilors met and organized.

Present: Drs. Rader, Grimm, Haley, Link, Wheeler, Benton, Rose, Linsz, Yeakley, Holroyd. Dr. H. P. Linsz was re-elected chairman, unanimously.

Dr. P. A. Haley was re-elected secretary, unanimously.

Chairman Linsz addressed the Councilors regarding the vast amount of work yet to be done in the state by them. He said that heretofore each Councilor allowed his work in his District to drag along until almost the day of the annual session. He emphasized the importance of getting to work at once, organizing unorganized counties, securing new members and attending to the wishes of the various county societies. He further said in order to know what has been done the first half of the year, and what must be accomplished the remainder of the year, it would be necessary to meet some time before the annual meeting and report, and then adopt some definite plan of campaign.

It was therefore decided to hold a semi-annual meeting at Parkersburg in March, 1911, the date to be arranged and set by the chairman.

Adjourned. H. P. LINSZ, *Chairman*.

P. A. HALEY, *Secretary*.

This report was read to the House of Delegates and unanimously approved.

The House then adjourned.

T. H. MOORE, *President*.

A. P. BUTT, *Secretary*.

LIST OF DELEGATES.

H. W. Daniels, Elkins, B.-R.-T. Society.
 B. O. Robinson, Parkersburg, L. K. & O. V.
 W. S. Link, Parkersburg, L. K. & O. V.
 C. E. T. Casto, Parkersburg, L. K. & O. V.
 J. E. Cannaday, Charleston, Kanawha.
 P. A. Haley, Charleston, Kanawha, Councilor.
 L. O. Rose, Parkersburg, L. K. & O. V., Councilor.
 W. H. Yeakley, Keyser.
 J. E. Coleman, Fayetteville, Fayette.
 E. W. Smoot, Madison, Boone.
 A. B. Bush, Weston, Lewis-Upshur.
 T. Jud McBee, Elkins, B.-R.-T.
 B. B. Wheeler, McKendrie, Councilor.
 T. S. Oates, Martinsburg, Eastern Panhandle.
 John N. Simpson, Morgantown, Monongalia.
 W. L. Weadon, Mt. Carbon, Fayette.
 W. P. Fawcett, Alderson, Greenbrier Valley.
 H. R. Johnson, Fairmont, Marion.
 G. T. Conley, Middleton, Marion.
 E. Strickler, Kingwood, Preston.
 W. A. McMillan, Charleston, Kanawha.
 W. P. Bonar, Moundsville, Marshall.
 G. W. Wentz, Chester, Hancock.
 J. E. Rader, Huntington, Cabell, Councilor.
 F. B. Murphy, Philippi, B.-R.-T.
 D. H. Taylor, Wheeling, Ohio.
 A. S. Grimm, St. Marys, Pleasants, Councilor.
 A. J. Kemper, W. Milford, Harrison.
 C. N. Slater, Clarksburg, Harrison.
 R. B. Nutter, Enterprise, Harrison.

AMERICAN PROCTOLOGIC SOCIETY.

"SOME OBSERVATION ON THE PATHOLOGY OF MULTIPLE ADENOMATA."

By JEROME M. LYNCH, M.D., of New York City, N. Y.

Who presented the results of his observations on two interesting cases of rectal multiple adenomata. He hoped that others would be sufficiently interested to record and report their own cases, and that our admittedly scanty information on the pathology of this unusual and serious diseased condition would be materially added to.

It was his impression that approximately 46% of recorded cases of the adenomata terminate in cancer and that the ultimate results are commonly fatal; yet the scientific investigation of these tumors has been so comparatively rare and isolated that our actual knowledge of the causes and conditions is lamentably meagre. It may be said that the pathology is not at all established.

Location.

According to Lichtenstein the relative number of instances of these tumors in the different parts of the intestinal tract is indicated in the following arrangement (the most frequent site of occurrence being in the rectum), rectum, ileum, colon, ilio-cecal valve and duodenum.

Malignant degeneration naturally affects the parts named in about the same comparative order of distribution, with the exception of theileum; this latter being less exposed to insult by reason of the fluid condition of the feces in that region.

It may be noted that these tumors usually manifest themselves in patients between 25 and 35 years old, and the malignant degeneration consequently occurs much earlier than cancer usually occurs.

About 50% of the cases collected from the literature were under 35 years of age.

A brief summary of the current theories followed.

Pathological Findings.

Several tumors were removed from each case, from the smallest size to the largest. The smaller tumors (that is, those that had recently sprung up) were shown to be composed mostly of granulation tissue, which showed numerous small blood vessels and interstitial fibroblasts. The entire structure is infiltrated by an acute exudate of leucocytes and serum, showing an acute inflammatory process. At the base of the polyp are a few slightly hypertrophied but rather typical glands. The surface epithelium over the polyp shows complete desquamation. The tumor appears to be composed almost entirely of an inflammatory granulation tissue.

Diagnosis—Inflammatory Tissue Polyp.

The section through the large polyp, taken from the same individual as the above, but at an advanced stage, showed a growth composed of adenomatous glandular proliferation. There is a narrow peripheral margin in some places about the growth, which shows granulation tissue. The greater part of the growth about the periphery is composed of simple adenomatous glandular proliferation. Throughout the polyp there is an exudate of serum and leucocytes, the latter showing a predominating number of eosinophiles. There is complete desquamation of the superficial epithelium. Some of the glands in the adenoma appear typical; but the greater number are very much larger than those of the rectal mucosa, and are in a condition of marked hyper-secretion.

Diagnosis—Adenomatous Polyp.

These two reports were selected as being typical of what was found in the small and in the well-developed tumor; and go to show an inflammatory starting point, with a later proliferation of glandular tissues, which corresponds, to a great extent, with the findings of Lebert and Schwab. Much more might have been learned, had the writer been fortunate enough to have secured a post-mortem on the case that died, as he was confident some of the tumors in the upper part of the sigmoid would have shown carcinomatous degeneration. Again, a section through a growth, down into the bowel, might have thrown some further light on the subject.

He hoped to continue the investigation when another opportunity offered.

Reports of cases followed.

"SKIN MANIFESTATIONS OF AMEBIASIS."

By JOHN L. JELKS, M.D., of Memphis, Tenn.

The author had observed cutaneous affections among a number of persons suffering with chronic amebic infection. In April, 1909, he reported cases before the annual meeting of the Desoto County, Mississippi, Medical Society. In

May, 1909, he made similar allusions to these conditions before the annual meeting of the Arkansas State Medical Society. Again in April of the present year, at the Tennessee State Society in a paper, "Amebiasis, complicated in one instance by pellagra, in another, by eighteen adenomata," he referred to these associated condition.

In one case, observed two years ago, with very chronic amebic infection and ulceration, the patient had for more than forty years observed that the skin lesions, which were erythematous and macular, and at times edematous, depended very greatly upon the condition of the bowel at that time. This patient was returned to her family physician as incurable owing to the scarred, distorted and stenosed condition of the bowel. She has since died, apparently from exhaustion produced by a most extensive desquamative dermatitis.

Another case which was observed in the winter of 1908-1909, of chronic amebic ulceration, with liver abscess complicating, presented extensive macular, papular and pustular skin lesions which quickly cleared up under treatment, which was directed solely to the intestinal infection and ulceration.

Recently a case was presented, which had been diagnosed by several able physicians and skin specialists as one of pellagra. The case presented all symptoms of amebic infection, which preceded the skin lesions, and the author found the *ent-ameba histolytica* in the mucopurulent material taken from the rectum, and concluded that the condition known as pellegra may have its solution as to etiology when systematic examinations are made for parasitic infections and intestinal conditions.

The author expressed the belief that those may help explain the prevalence of the condition known as pellegra in the south. A report of six cases were presented in support of his views and he emphasized the singular co-incidental, if not consequential, skin lesions in so many chronic amebic cases which have been observed by him and which responded to treatment directly solely to the intestinal infection and ulceration. He quotes other authority both in this and other countries which are supportive of his views.

"INCONTINENCE FOLLOWING RECTAL OPERATIONS."

By GEO. B. EVANS, M.D., of Dayton, Ohio.

We understand the external sphincter to be a flat plane of muscular fibers, elliptical in shape, and intimately adherent to the integument and joining with the peronei, levator ani and accelerator urinae. It is a voluntary muscle and supplied by a branch of the fourth sacral nerve.

The internal sphincter is but a muscular ring, half an inch in breadth, in thickness two lines, and but an aggregation of the involuntary circular fibers of the intestine. Evidently the only true sphincter ani is the external—the internal sphincter ani is not subject to volition—and its sphincteric influence must be largely due to the support afforded it by the practically amalgamated muscles which form the floor of the pelvis and whose main function is the support of the

hollow viscera of the pelvic cavity. Would it, therefore, be illogical, to believe that the internal sphincter is not, neither can it be made by any surgical procedure an efficient voluntary constrictor? Certainly, it is true that efficient and satisfactory sphincteric function is dependent on normal support of the bowel by a normal muscular floor, with a normal interdependent power of sphincter muscles, hence any trauma which interferes with muscular function disables proportionately to the extent of the injury.

That incontinence does follow division of the external sphincter, that incontinence does follow division of the internal sphincter, is not denied and when their division becomes a necessity the best way, if there is one, of making the incision should be chosen. Can we hope that ere long there will be a method of cure for fistula-in-ano that will exclude even the possibility of incontinence?

Considering the anatomical conformation of the perineum, the mutual dependence of perfect function, I would admonish those engaged in rectal surgery to not forget that indifferent and multiple injuries (even surgical injuries) should not be indulged in, for fear of a result that would prove more painful and unendurable than the condition which indicated operative interference.

We believe that incontinence can be obviated by relieving the tension of the fibers of the levator ani muscle at their attachment to the external sphincter, or both the external and the internal sphincter by nicking the fibers of said muscles on either side of the fistulous tract, and thus permitting an incision of the muscle at right angles to the same.

OHIO COUNTY SOCIETY.

October 17—Dr. Wingerter read an interesting paper on The Physiological Effects of Opium. He discussed in detail the physiology of sleep and pain, and impressed the point that since we use opium to produce sleep and relieve pain, we should clearly understand the physiology of these two conditions. Dr. Campbell thought that we are unable to account for some of the results of opium. Thought that it should be used alone, as in some combinations we destroy some of its effects, or fail to understand them. Considered it dangerous in large doses, especially in children. Repeated small doses sometimes gives gratifying results. Dr. Noome said it should not be given in kidney disease, and quoted Tyson as having reported a case of Bright's disease in which one-eighth grain of morphia hypodermically caused death. Dr. Drinkard did not approve of giving opiates to children. Reported disastrous results in several cases: Dr. Thornton reported good results from morphia in minute doses in some forms of cardiac disease. Dr. Burns deprecated the indiscriminate administering of a hypodermic of morphia in acute abdominal conditions. Has seen grave results from it. It often obscures the symptoms and interferes with diagnosis. Dr. Hupp stated that he has seen

many grave results from the routine administration of morphia after operations. It may at times be used with good effect, but discretion should be used in the determination of suitable cases in which to give it. Discussion closed.

Dr. Osburn reported an interesting obstetrical case. He was called in the evening, and patient felt "something coming." Examination revealed the amniotic sack protruding from vulva. A foot the cord and a portion of the placenta were felt. He ruptured the membranes, and was able under full anesthesia to effect prompt delivery of the child and placenta. The child was living. The uterus was made to contract promptly. He reported the case to impress the fact that under complete anesthesia he had full control over the uterus. Dr. Baird said that he perhaps ought not to criticize a successful case, but he thought the doctor should have ascertained the degree of dilatation of the cervix before attempting delivery, or rupturing the membrane.

Dr. Harriet B. Jones reported the case of a woman of 56 years, referred to her by Dr. Howells, of Bridgeport. On examination she found a mass filling the vagina. This bled freely when handled. A hardness was felt on the right side as high as she could reach. She considered it cancerous, but no microscopic examination was made. The mass in amount to fill a half tumbler, was curetted away, the cautery used, and in three weeks the patient left the hospital, greatly improved. Twenty months have passed, and the woman has had no trouble since. Is apparently in perfect health, and no disease is present in the uterus or vagina.

Dr. Jepson took occasion to emphasize the importance of early diagnosis in cancer, whether of the uterus or breast. He thinks that public lectures should be given on this subject. The history of very many of the cases of uterine cancer is, that pain is a late manifestation. Women often have a free vaginal discharge, even attended with odor, and pay no attention to it, because they are so often the victims of leucorrhoea. Thus the cases too often pass the stage when a radical operation can be done. He reported a case seen first 30 months ago with extensive cervical disease, and vaginal involvement. Treatment similar to that used by Dr. Jones was used, followed by the use of acetone through a tubular speculum twice per week. There was but little discharge after, and the case progressed very slowly and without pain, the patient dying recently, never taking a dose of anodyne. Cases of uterine cancer differ much as to pain and rate of progress, and all he could claim for the acetone was, that the patient was made very much more comfortable by the diminished discharge and absence of odor. It may have rendered the progress more slow. This was the first case in which acetone had been used here. Dr. Noome had secured better results with the radical operation than with palliative treatment. He thinks that pain results from infiltration and adnexal involvement. Adjourned.

Reviews

LIPPINCOTT'S NEW MEDICAL DICTIONARY.—A Vocabulary of the Terms Used in Medicine and the Allied Sciences, with their Pronunciation, Etymology and Signification.—By HENRY W. CATTELL, A.M., M.D. Illustrated Philadelphia and London: J. B. Lippincott Company. Leather, \$5.00.

This is not a first edition, but is a new dictionary based upon a scholarly work compiled by Drs. George Piersol and the late John Ashhurst, and Professor Jos. P. Remington. It has not, therefore, the faults that are apt to be found in first editions. A number of excellent features in this dictionary may be briefly noted. The words to be defined are in bold-face type, thus at once attracting the eye. They are divided into syllables and the proper accent indicated. Capitals are used only in words which should always be capitalized, all others commencing with the small letters. The definitions, although generally brief, are very clear, and when necessary are elaborated. Much information, conveniently arranged, is presented and made more available by a system of cross reference. We have here presented the definition of such terms as "Adams-Stoke syndrome"; "Babinski's sign"; "Nogochi's method"; "Argyll-Robertson pupil"; "Banti's disease"; "Wassermann reaction"; and many other special names, the finding of which in medical books would consume much time. Small and simple words, as adjectives, adverbs, etc., whose meaning is self-evident, are left without definition and thus considerable space is saved. A number of cuts, where illustrations clarify the definition, are introduced. The portraits, though but few in number, might have been omitted without loss.

Bound in black flexible leather, with dark blue, smooth edges, and with paper thin but very firm, with thumb index, this dictionary, although having over 1100 pages, is of most convenient size for easy handling. Altogether this book, fresh from the press and up-to-date, is worthy of a place on the table of every physician needing a *NEVER-TOLD TALES*, by WM. J. ROBINSON, M.D., New York. Editor *The Am. Journal* new dictionary. See advertisement on this cover page.

of Urology, The Medical Review of Reviews, The Critic and Guide, etc.

The author of this little book is well known to the profession as a skillful and fearless writer. A specialist in venereal diseases, he is familiar with the dread consequences of these diseases. Some of these tales are facts of personal observation drawn from his large experience. The book opens with the Story of Rose and Edward that has been widely copied in the *Journals*. Another is of a girl brought to suicide as a consequence of betrayal by her trusted lover. A third is of a woman led into the opium habit by pain which was the result of gonorrhoeal pelvic inflammation received from her husband's infection. These are but samples of the many tales of horror that we physicians might tell if we would and perhaps should, as a warning to

the innocent public against the terrible diseases, too often contracted by the innocent, and, alas, even after marriage. The tales are well told. The book, though a sad one, is very interesting, and it should have a wide circulation.

Published by The Altrurians, 12 Mt. Morris Park, N. Y. Price, \$1.00.

INTERNATIONAL CLINICS.—A Quarterly of Clinical Lectures and Special Articles by eminent members of the profession. Edited by Henry W. Cattell, M.D., Philadelphia, assisted by Musser, Osler, Billings, Mayo, Rotch, Clark and others. J. B. Lippincott Co., Philadelphia. \$2.00.

We have had occasion to speak in the highest terms of this series of books. They are issued quarterly, and the articles are fresh and of the highest character. The whole field of medicine is covered. Papers appear by such men as John C. Clark of the U. of Penna., Dieulafoy of Paris, Fussell of Philadelphia, Palmer of Cincinnati, Wuerdemann and others of equal standing. The series can be highly commended.

Pamphlets and Reprints Received.

Government Hygienic Laboratory Bulletin No. 62—The Taxonomic Value of the Microscopic Structure of the Stigmal Plates of the Tic Genus *Dermacentor*.—By Ch. Wardell Stiles.

Bulletin No. 63—Digest of Comments on the Pharmacopoeia of the U. S.—By Murray Call Motter and Martin L. Wilbert.

Bulletin No. 64—Studies upon Anaphylaxis with special reference to the antibodies concerned.—By John F. Anderson and W. H. Frost.

Bulletin No. 65—Facts and Problems of Rabies.—By A. M. Stimson.

Bulletin No. 66—I. The Influence of Age and Temperature on the Potency of Diphtheria Antitoxin.—By John F. Anderson, II. An Organism Isolated from Water, Agglutinated by the Serum of Typhoid Fever Patients.—By W. H. Frost.

Bulletin No. 67—The Solubilities of the Pharmacopoeial Organic Acids and Their Salts.—By Atherton Seidell.

Bulletin No. 68—The Bleaching of Flour and the Effect of Nitrates on Certain Medicinal Substances.—By Worth Hale.

Bulletin No. 69—The effects of a restricted Diet and of various Diets upon the Resistance of Animals to certain poisons.—By Reid Hunt.

Public Health Bulletin. No. 32. Hookworm Disease.—By C. W. Stiles. No. 33. Studies upon Leprosy.—By W. R. Brinckerhoff and A. C. Reinecke. No. 34. Maritime Quarantine.—By Leland E. Cofer, Ass't Surgeon-General. No. 35. The Relation of Climate to the Treatment of Pulmonary Tuberculosis.—By F. C. Smith, Passed Ass't Surgeon. No. 36. Tuberculosis, Its Nature and Prevention. By F. C. Smith, Passed Ass't Surgeon. No. 37. The Sanitary Privy; Its Purpose and Construction.—By C. W. Stiles, Ph.D. No. 38. General Observations on the Bionomics of the Rodent and Human Fleas.—By Maurice B. Mixmain, M.S., Ass't Plague Laboratory U. S. Public Health and M. H. Service.

Davis Memorial Hospital. Biennial Report for 1908-'09. Elkins, W. Va. Surgeon, Dr. W. W.

Golden, Resident Physician, Dr. T. M. Wilson. Patients treated 710, males 442, females 268; Deaths 40. Principal surgical operations done: Appendectomy 67, curettage 24, herniotomy 4, laparotomy 9, gall-stones 6, gun-shot wounds 8, salpingo-oophorectomy 20.

complicate, to precipitate, or to develop phthisis remarkably." G. D. L.

MEDICAL TREATMENT OF EXOPHTHALMIC GOITRE.—Paper read by J. E. Crewe, M.D., of Rochester, Minn., before Southern Minn. Med. Soc., published in *Jour. Minn. State Med. Assoc.*, October 15, 1910.

Medical Outlook

TUBERCULOSIS AND PREGNANCY.—L. M. Allen, M.D., of Winchester, Va., in a paper read before Shenandoah Valley Medical Society and published in *Virginia Medical Semi-Monthly*, comes to these conclusions: "That a woman, although she has a good family history, may, because of lowered resisting power, the result of pregnancy and confinement, especially if these be repeated in rapid succession, be more susceptible to tuberculosis infection. That if she has the disposition the disease is more apt to come on in pregnancy or after confinement than at other times; if she already has the disease, although it be only in a mild form, it will be aggravated by pregnancy and labor. That marriage should be discouraged in those who are tuberculous, but if this advice is not followed and pregnancy ensues it should be interrupted at any time in the presence of marked activity of the disease. If pregnancy continues to full term under such conditions it will be of advantage to both mother and child that it be removed from its mother's surrounding and kept away continuously, until she is cured."

Cause and treatment of this malady now claiming much attention. Do not understand as yet the chemistry and physiology of the gland, hence medical treatment varies greatly. Surgical technic of operation has been greatly improved and surgical treatment in hands of the most experienced is quite safe and satisfactory. Cases seen early should be treated medically, as a large per cent can be cured. Early diagnosis important.

In this connection it is well to quote Huber, who, in his work on Consumption and Civilization, says: "Conception must be advised against in consumptive women, they stand the puerperium badly. The disease often assumes its most acute form after childbirth and then proves rapidly fatal. To save the mother's life interference may have to be counselled. Multiple births should certainly be discouraged." Huber quotes Osler as saying: "Pregnancy is found to

The term exophthalmic goiter is a misnomer, for if patients are seen early enough, diagnosis can be made before exophthalmos appears. The disease is not only more frequently recognized than formerly, but there is an actual increase in the number of cases. Crewe for the last ten years has treated all classes of goiter in about the same way and with about equal results whether simple or exophthalmic. Simple cases were treated at home by simply painting the neck with tincture of iodine every night. Severe cases were given galvanism on alternate days, the negative electrode saturated with decolorized tincture of iodine and placed over the gland. For exophthalmic cases, rest, mental and physical, with good food and fresh air was advised. When heart was very rapid codeine in increasing doses was given. Patients were encouraged, and at first the pulse was counted at each treatment, and they were told that it was slower and better, and it usually was. Anemic cases were given iodide of iron and sometimes potassium iodide.

Notwithstanding the fact that some authorities assert that iodine is contraindicated, Crewe thinks that this drug has been the principal element in the cure of his cases, but believes that suggestion plays an important part. G. D. L.

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Original Articles

THE IMPROVEMENT OF THE HUMAN RACE.

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Wheeling, W. Va.

Address to the Public at opening of Annual Meeting of State Med. Ass'n, October, 1910.)

Chas. Darwin, the centenary of whose birth was celebrated last year throughout the civilized world, says in his "Descent of Man:

"It is surprising how soon a want of care, or care thoroughly directed, leads to the degeneration of a domestic race; but, except in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed. With savages, the weak in body or mind are soon eliminated, and those that survive commonly exhibit a vigorous state of health. We civilized men, on the other hand, do our utmost to check the process of elimination; we build asylums for the imbecile, the maim and the sick; we institute poor laws; and our medical men exert their utmost skill to save the life of every one to the last moment. . . . Thus the weak members of civilized societies propagate their kind. No one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man."

At the last meeting of the West Virginia Medical Association it developed that the twenty-five scientific papers read before its members there were not less than three whose subject matter dealt with the possible

prevention or diminution of degeneracy and crime, which are so increasingly prevalent throughout this broad land. The medical profession has long recognized that, while there are many criminals of apparently sound minds, who have been driven to crime by the force of circumstances alone, there is a larger percentage of those of unsound mind, and those who have inherited from ancestors of unsound minds certain degenerate tendencies. As it is recognized that crime, pauperism, insanity, etc., are social diseases, so it is a fact that these are often due to actual physical disease in offenders against society. And there is no subject upon which medical men are so universally agreed as upon the subject of the hereditary nature of most of the social diseases. The authors of the above mentioned papers, as well as other experts throughout the world, have shown that not only is the medical profession fully alive to the importance of preventive measures, but that (to quote our fellow-member, Dr. G. D. Lind), "while the punishment of crime and the protection of the people from the insane and the criminal have been almost entirely in the hands of the lawyers, the time has arrived when the doctor should come in for a share of the work and of the responsibility."

As very little can be accomplished without legislative enactments, it is first necessary to create *public sentiment* in favor of proper and effective laws, by showing the people at large the necessity for such measures. Only after many years of hard work and agitation were the people sufficiently educated to bring about "Pure-Food" legis-

lation, and to impress legislators with the importance of laws for the prevention and cure of Tuberculosis. And so, in presenting this public address, I have deemed it not inappropriate to set you to thinking upon a subject-matter, and to ask your cooperation in improving conditions, which affect not only our own, but all generations to come.

The study of the special breeding of animal stock has developed into a science. The great improvement in the qualities of our domestic animals, resulting from a carefully selected breeding process, is a well established fact. But man is not so wise as the bull in the fable: "A magnificent Durham bull was quietly munching the juicy clover in a field one fine morning, when he was observed by a man who was passing. The man went up to the fence near which the bull was grazing, gazed at him admiringly, commenting audibly upon his fine points, and exclaimed: 'What a magnificent animal! Really, nothing could be nearer perfection in his species.' The bull turned his head, gazed at the man pityingly, and much to his amazement, replied: 'Yes, you poor little degenerate shrimp, I am a fine animal, but if half as much pains had been taken in selecting your father and mother as were taken in choosing mine, you'd have been a fine animal yourself instead of a measly little two-legged nothing.'"

In spite of the moral contained in this fable, man has done very little to improve his own race. Lycurgus of old set a new pace in the magnificent physical development of his own Spartans; but while the splendid results have been admired through all the ages ever since, the cruel method of destroying defective offspring shortly after birth found no emulation. Only of late has an interest in the improvement of the human race been revived in a systematic and scientific way by the consideration of methods along *two* different lines, namely:

Prevention of the propagation of defectives, on the one hand, and

Increase of productivity of the best human stock, on the other.

First let us consider the feasibility of preventive measures. Granting that human degeneracy underlies all social disease, it follows that the most effective treatment is that which furthers the prevention of degeneracy. Inasmuch as the underlying

conditions are chiefly hereditary, it is obvious that attention should first be paid to the *parentage* of the prospective degenerate. It has been truly said that every child has a right to be well-born. A condition of society in which this should be guaranteed to every child would indeed be Utopian. While not beyond the range of possibility, it is certainly not within the bounds of reasonable probability that this condition of affairs will ever prevail. The social millenium is a castle of dreams. That great betterment of conditions is practicable, every sociologist is well aware; the chief obstacle in the way of advancement being the unintelligent and illogical sentimentality and phariseism of the majority of the general public.

Degeneracy, or a degradation of development from the average normal type, is the fundamental cause of most of the multi-form antisocial acts included under the captions of vice and crime. To this common cause may be attributed a large proportion of cases of inebriety, insanity, epilepsy, pauperism, and prostitution. Dr. G. Frank Lydston, of Chicago, in his recent book on "Diseases of Society" says: "America has for many years furnished conditions peculiarly favorable to degeneracy. The strenuous life of the average American, certainly of every ambitious citizen, has many aspects bearing upon degeneracy in general, and vice and crime in particular. Lust for wealth, desire for social supremacy, ambition for fame, love of display, late hours, lack of rest, excitement, the consumption of alcohol, especially by women—all these factors combine to cause what Beard termed a distinctively American disease, 'American Nervousness'." The body social is growing more and more neuropathic. In the train of this widespread neuropathy comes degeneracy, with all its evil brood of social disorders."

The science of medicine has of recent years made great strides in the relief and cure of diseases in general, but the improvement of treatment has been due, not to the discovery of panaceas, but to a more accurate knowledge of the *causes*, and means for the *prevention* of diseases. Before there was felt the importance of prevention, or prophylaxis, as it is called, medical men were content to cure diseases after they appeared, provided they were curable.

But we must ever keep in mind that there are certain mental and physical disorders not amenable to treatment, which are caused by errors in procreation. While prophylaxis in medicine dates back to the 13th century, during all these intervening centuries no decided effort has been made by which to control diseases and improve the race by controlling marriage. Of a necessity such control, properly carried out, would diminish the amount of sickness and debility among the people. No one will gainsay the proposition, that a great deal of *future* happiness and prosperity depends upon *the health* of those who may then be living and able to contribute to the general well-being. But it can be plainly seen that if the indiscriminate marriage of those who have hereditary diseases is permitted to continue unchecked, there is little hope for an ideally healthy community. No race, country or community can, in the true sense of the word, prosper when affliction stamps its individuals. According to divine revelation such affliction may be visited upon offspring unto the third and fourth generation, and every physician is sufficiently familiar with instances where just such has occurred, their deductions leading them to believe that the like is apt to continue *ad infinitum* so long as no united effort is made to curtail it.

Society, then, begins its self-contamination at the marriage-license office. Here is the fountain-head of the stream of degeneracy that sweeps through all social systems. The keystone of society is the matrimonial relation. Its assumption is the most important step that a human being can possibly take, and upon the conditions that surround it depend the most important interests of our social system. Taking this into consideration, and laying aside the selfish apparent interests of the individual, it is astonishing that no rational effort at regulation, control or supervision of the marriage relation is made by society. The license-office is a place where the honest citizen and the criminal, the sane and the insane, the diseased and the healthy, the intellectual and the weak-minded may meet upon common ground, always providing the important consideration of the license-fee is forthcoming. The criminal, the insane, the epileptic, the syphilitic and the drunkard are here authorized by law to begin

the procreation of their kind, the number of their progeny being limited entirely by the volition and physical capacity of the individuals immediately concerned. In a discussion of the marriage question in its relations to criminality, Hon. C. A. Reeve ("The Prison Question") says: "If the vilest mortal that lives sees proper to marry, the law issues the license for the asking, takes the fee, makes the record, and leaves the offspring and society to shift for themselves the best they can. Even paupers, while in the poor-house, and criminals, while in jail, are in every way encouraged and given licenses to marry, and are protected by the law. No thought is taken for the unfortunate offspring, or for the body politic or social, and the irreparable evils that must fall upon all. The church adds its sanction, and its ministers aid in making these civil contracts by performing a ceremony with prayers and benedictions. If it is wise to prohibit polygamy, marriage between relations, and between persons whose insanity or idiocy is self-evident, it is equally wise to prohibit it in all cases where evil may follow. If the law has the power to prohibit and punish violation in the one case, it has equal right in all others. There is an endless procession of children from all these sources coming into the mass of population to live lives of crime, immorality, want, suffering, misfortune and degeneracy, transmitting the taint in constantly widening streams, generation after generation, with the ultimate certainty of the deterioration of the race and final irreparable degeneracy."

Has society a *right* to protect itself against its own vicious off-scourings? I believe it has. As Dr. Lydston remarks: "Society assumes the right to defend itself against the *finished* product of its matrimonial factory of degenerates, and there is no logical reason why it should not also assume the right to protect itself from the conditions which set the machinery of evil in operation. I firmly believe that the time will come when it will be no longer possible for our army of recognizable degenerates to procure licenses to marry. I believe that it should be, and one day will be, a statutory crime for a person in the active stages of infective disease of a venereal character to marry, and thus risk the almost inevitable infection of innocent persons. There

can be no greater crime against an individual than inoculation with contagion, the effects of which may perhaps outlast several generations, and carry affliction to unborn innocents. The rights of the unborn will one day be considered!

The wisdom, then, of measures to control the marriage of diseased and defective persons cannot be doubted when we look at it from a medical point of view, but blinded public sentiment is strongly against it as an interference with individual rights. This sentiment seems absurd in view of the legal formalities with which matrimony is even now hedged about. The law stipulates as to *age* of candidates. In certain States consanguineous marriages, even to the fourth degree of blood-relationship, are forbidden; in all States consanguinity up to the second degree is a bar to matrimony. In many of our States, both Northern and Southern, miscegenation is prohibited. It will be seen, therefore, that sentimental objections to the regulation of matrimony are even now sometimes honored in the breach rather than in the observance.

Just ten years ago, so far as I can determine, the subject of marriage-control was for the first time considered in a serious way by one of the States through its legislature in official capacity. In the same year a health officer of another State recommended such a measure, but the storm of unfavorable comment defeated the suggestion, before it could be discussed and acted upon in an impartial way. Since then several medical bodies and a few of the States have been agitating the subject; the medical bodies by recommending useful measures, and the State legislatures by passing acts designed to a greater or less degree to control marriage. The State of Indiana has taken the lead in dealing with this matter, and in 1905 passed the following law: "No license to marry shall be issued except upon written and verified application. The form of application shall be supplied by the State Board of Health, and said board may revise same from time to time, as may be advisable. No license to marry shall be issued when either of the contracting parties is an imbecile, epileptic, of unsound mind or under the guardianship of a person of unsound mind, nor to any male person who is or has been, within the last five years, an inmate of any county asy-

lum or home for indigent persons, nor shall any license be issued 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 clerk for issuing a license contrary to law, and the same penalty lies against any person authorized to marry, who does so when the applicant has no license."

Shortly after this Indiana law became known, one of our own State papers (*Wheeling News*) saw fit to ridicule these restrictions, finally advising marriage in some other State. So unless all States and communities can and will work in perfect harmony to make legal such provisions, we cannot hope to ever accomplish the most good that would undoubtedly arise from such enactments. People who desire to marry solely on account of sentiment, and whose physical condition really renders them unfit, do not stop to consider their own health, nor do they display any great amount of regard for their probable progeny. Such people who have been declared *physically* and *morally* unfit to be joined together can enter some State whose inhabitants have not been aroused to the importance of restriction in such matters, and be joined together according to law, although there are staring them in the face all the possible dire results of such union. If, then, such measures are to be made effective, they should prevail everywhere. Some writer has said that the marriage of the insane, of idiots and degenerates is but slightly impeded in spite of laws enacted in a number of countries to govern such cases largely through the inability of priests and magistrates to determine the mental condition of candidates for wedlock. Surely, if such decisions are to be left to the clergy and to magistrates, we can understand why inadvisable marriages have not been impeded; not because these men are not capable of judging wisely, but because they are not proficient in matters pertaining to medicine. A *commission* composed of intelligent, conscientious, upright physicians should render the verdict, and a decision thus carefully rendered should not be subject to appeal. Previous to the issuance of a marriage license, statutory law should demand that both persons immediately concerned obtain a certificate as to their phys-

ical condition from a non-political, and therefore non-partisan, commission of medical examiners, which should be an appendage of the Health Board of the district in which the application for a license is made. Necessarily the commission should have at hand and consider all data that have any bearing whatsoever on each individual case. When properly used, the power of such a commission would prevent a number of projected marriages, would control the propagation of many contagious, hereditary and loathsome diseases, and hold in check the procreation of diseased and degenerate progeny. Those diseases that are known to be hereditary in their nature, certainly could not be transmitted to children of healthy parentage, for the offspring of such a marriage cannot possibly be tainted. In the dim vista of the future the word "congenital" would become a misnomer, and the word "hereditary" almost erased from our medical vocabulary. Stop and consider the ravages of those widespread scourges, syphilis, gonorrhoea, tuberculosis and cancer, all of which in parents can be either transmitted *directly* to their progeny, or can so influence the bodies of their children that they easily succumb to the devastation of these diseases. Let some of us who are healthy assume ourselves in the realm of those who are afflicted with some incurable or disgusting malady, and who would dare question the ultimatum would be for the medical control of marriages? It is quite clear that children who have been imbued indensively with hereditary diseases or frail constitutions, in a manner at present sanctioned by civil law, are in no way to be censured. It is equally clear under these circumstances that the *parents* are responsible for their children being physical and social lepers in the community; and let us emphasize the fact that *civil law* is particeps criminis so long as it does not enact preventive measures.

During the last few years the Church has been greatly agitated over the question of marriage and *divorce*, but only the latter has at all been considered on account of its alarming and overwhelming increase in this country. But sentimental reasons have prevented consideration of one of the chief causes back of divorces, not incompatibility of temper, as is usually and politely announced, but incompatibility of

connubial relations—brought about by some physical defect or by disease, which is sometimes acquired innocently (especially on the part of the woman), but in the majority of cases otherwise. Instead of such troubles becoming manifest to the life-partner *after* the nuptial knot has been tied, how much wiser would it be if the discovery were first made by the medical commission, thereby frequently giving the matrimonial candidate an opportunity to previously rectify matters, or, if not curable, preventing innocent persons from being deceived. Just think of the *untold* unhappiness in the world that could thus be eliminated!

Thirty or more years ago Dr. Gideon Lincecum, an accomplished physician and scientist, appeared before the State Legislature of Texas and ably advocated the substitution of *castration of criminals* for capital punishment. He was set down as a crank, while a howl of condemnation and derision arose all over the land. This protest was generally accepted as a convincing argument against the then startling suggestion of castration as a remedy for social disease. The wave of disapprobation that inundated Dr. Lincecum, and all of the objections since advanced whenever his radical treatment of crime has been alluded to, have depended entirely on sentiment for their support. Most frequently the method is opposed because of its alleged barbarity. From the *humane* standpoint, however, a comparison of the operation under anesthesia with the average execution, and more especially with bungling executions, should be sufficient to convince the most sentimental observer of the fallacy of his position. The objection has been urged to castration that inasmuch as the eunuch of the East is traditionally vicious and savage, criminals subjected to the operation would acquire similar qualities. This is an illogical assumption, for the Oriental eunuch comes from a race of African savages. If the experience of ages counts for anything, the operation would on the contrary be likely to tone down the savage instincts of the adult criminal. This is shown by observations on animals, and by thousands of cases of emasculation of human subjects.

But leaving the *fallacious* idea of *punishment* by castration aside, and considering

only the prevention of the propagation of degeneracy, the same results can be obtained by a method of treatment less objectionable and less severe than castration, in all forms of crime save rape. *Sterilization* accomplishes precisely the same results, is practically safe under modern methods, is not mutilating, and interferes in no way with the sexual function, save in so far as the *procreative* capacity is abolished. To a non-medical audience I need only say, that in the male it is an operation to which no objections can possibly be urged on the ground of danger, disfigurement or complexity of technique, necessitating an incision only one-fourth of an inch in length, which can be very quickly performed under *local* anesthesia. In the female a similar operation, while more dangerous than in the case of the male, is practically safe in competent hands and under modern precautions. Sterilization, in both the male and female, should have a wide range in the practical application of human stirpiculture. Individuals whose physical or moral status is such as to insure the unfitness of their prospective offspring should be given the alternative of submitting to sterilization as the only condition upon which matrimony is legally permissible. Persons with a history of insanity, epileptics, confirmed drunkards, incurable syphilitics, certain persons who suffer from deformity or chronic disease, criminals and persons with criminal records, should not be permitted to marry upon any other conditions. Incurable criminals, epileptics and the insane should invariably be submitted to the operation irrespective of matrimony. This was the stand taken by the State Legislature of Pennsylvania, when at one of its recent sessions a bill was introduced directed towards the prevention, by means of castration or sterilization, of procreation on the part of idiots and imbeciles in *public institutions*. The bill passed both houses by a requisite majority, but the governor of the State in his wisdom saw fit to veto it, at the same time choosing to administer what he appeared to consider a rebuke to too enterprising anatomists and surgeons. He based his objection to the bill on the fact that the nature of the intended operation was not sufficiently described, its only qualification being that "it shall be the safest and most effective in the minds of a neurologist, a surgeon and a

physician." By a process of subtle reasoning the Governor reached the conclusion that the "safest and most effective" method of preventing procreation among the individuals under consideration would be to cut off their heads, but he was charitable enough to express the view that this means would probably not be resorted to, and only some part of the human organism would be destroyed. He made the startling discovery that "scientists, like all other men whose experiences have been limited to one pursuit, and whose minds have been developed in a particular direction, sometimes need to be restrained." It is his gratuitous judgment that "men of high scientific attainments are prone, in their love for technique, to lose sight of broad principles outside of their domain of thought." He thinks "a surgeon may possibly be so eager to advance in skill as to be forgetful of the danger to his patient." The Governor, who was a judge on the bench before he was placed in that office by the "organization," reasons that "if idiocy could be prevented by an act of assembly, we may be sure that such act would long ago have been passed and would have been approved in this State, and that such laws would have been enacted in all civilized countries." The learned Governor is not without views on the *etiology* of idiocy. "This mental condition," he states, "is due to causes many of which are entirely beyond our knowledge. It existed long before there were such inmates of such institutions." It would thus appear that his action was *not* taken merely because the exact nature of the operation contemplated by the act was not specifically mentioned in the bill. Rather he sets his opinion against that of conservative experts who recommended the operation as looking toward the elimination of the most important factor in the continuance of degeneracy. I have thus quoted ex-Governor Pennypacker's objections in detail, in order to show the difficulties encountered in trying to impress, not only the public at large, but especially representative officials with the necessity and feasibility of preventive measures, even in such well-marked degeneracies as idiocy and imbecility.

Of our ability to control *criminal heredity* some writers upon the crime question take a pessimistic view. They all admit heredity as a cause of crime, and immedi-

ately deny that heredity can be controlled by putting habitual criminals beyond the possibility of procreation. This position is hardly logical, for it is obvious, in so far as such criminals are a factor in transmitted criminality, that heredity would be controlled by their permanent isolation or asexualization. Any measure that prevents this class of individuals from having descendants is necessarily preventive of crime. But some people are apparently jealous of the *individual rights* of the criminal; and a few even go so far as to believe in permitting a criminal to breed because of a tender consideration for his posterity. Such sentimentality in behalf of the criminal's right to procreate is decidedly illogical, in the face of the fact that the more radical measures for the suppression of crime now in vogue do not show any particular sensitiveness on the part of society as to the criminal's right. The law does not hesitate to hang the murderer, though the primordial right of man is the right to live; nor does the law hesitate to imprison for life, on occasion, though liberty is a right of man which cannot be gainsaid. In capital punishment or imprisonment for life it would be somewhat difficult to see any conservation of the rights of the criminal's posterity from the sentimentalist's standpoint. On the other hand, the sterilization of criminals for the protection of the public against a vicious posterity in no way compares in severity with capital punishment or imprisonment for life. The right to procreate should not exist in the case of habitual criminals, nor in a large proportion of occasionals. They should be put beyond all *possibility* of procreation, for under present conditions a sentence of imprisonment for life does not insure the protection of society against the criminal so sentenced, because of the danger of escape, on the one hand, and of pardon, on the other.

It is, of course, obvious that the application of sterilization to the crime-class would require some discrimination, and should be made under strictly scientific supervision. If thus performed as a method of *preventing crime only*, and not for the purpose of punishment, there is this to be said in favor of sterilization, comparatively no mistakes would likely be made, and those mistakes by no means so serious in results as many that are made by courts of law in the con-

viction and punishment of the innocent.

In March, 1907, the Indiana legislature passed the following law: "A bill for an act to prevent the procreation of confirmed criminals, idiots, imbeciles and rapists; institutions where such persons are confined shall have the authority and are empowered to appoint a committee of experts, consisting of two physicians to examine into the mental condition of such inmates.

"Whereas, Heredity plays a most important part in the transmission of crime, idiocy and imbecility; therefore,

"Be it enacted by the General Assembly of the State of Indiana, That on and after the passage of this act, it shall be compulsory for each and every institution in the State, entrusted with the care of confirmed criminals, idiots, rapists and imbeciles, to appoint upon its staff, in addition to the regular institutional physicians, two skilled surgeons of recognized ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the mental and physical condition of such inmates as are recommended by the institutional physician and the board of managers.

"If, in the judgment of this committee of experts and the board of managers, procreation is inadvisable and there is no probability of improvement of the mental and physical condition of the inmates, it shall be lawful for the surgeon to perform such operation for the prevention of procreation as shall be decided safest and most effective. But this operation shall not be performed except in cases that have been pronounced unimprovable.

"Provided: That in no case shall the consultation fee be more than three dollars to each expert to be paid out of the funds appropriated for the maintenance of such institution."

Within two years of the passage of this act over 800 convicts have been sterilized, some 200 of them at their own request. A year ago the State of Oregon passed a similar act, but it was, I believe, vetoed by the governor. Illinois, and some other States, have similar bills under consideration.

The problem of the betterment of the human race has recently been taken up from an entirely different standpoint by Francis Galton of London, who for a generation past has been recognized as an authority on heredity and inheritance, and is

looked upon as the father of eugenics, the science of improving stock, whether human or animal. In his Huxley lecture (*Popular Science Monthly*, Jan., 1902) Galton took for his subject, "The Possible Improvement of the Human Breed Under Existing Conditions of Law and Sentiment," declaring that the question had not hitherto been approached along the ways that recent knowledge has laid open, and in consequence occupies a less dignified position in scientific estimation than it might. It is smiled at as most desirable in itself, and possibly worthy of academic discussion, but absolutely out of the question as a practical problem. Galton hoped to induce anthropologists to regard human improvement as a subject that should be kept openly and squarely in view, not only on account of its transcendent importance, but also because it affords excellent but neglected fields for investigation. He is very optimistic about the *practicability* of a movement in this direction, but takes the stand that the possibility of improving the race of a nation depends upon the power of increasing the productivity of the *best* stock. This he considers of far more important than that of repressing the productivity of the worst. The tremendous social and industrial value of an individual of the best class so overbalances the worthlessness of a defective that it is clearly most economical to spend our efforts in getting just these best individuals into the world. But difficulties present themselves at once when the question is asked: What is to be considered as the *best* human stock? The learned Huxley lecturer is somewhat vague on this part of the subject, although by means of statistics he tries to reduce it to a mathematical problem. He starts out with the trite proposition that the natural character and faculties of human beings differ at least as widely as those of the domesticated animals. Whether it be in character, disposition, energy, intellect or physical power, we each receive at our birth a definite endowment, allegorized by the parable related in St. Matthew, some receiving many talents, others few; but each person being responsible for the profitable use of that which has been entrusted to him. Experience shows that while talents are distributed in endless different degrees, the frequency of those different degrees follows certain statistical laws, of which the best known

is the "normal law of frequency." On the strength of this law Galton proceeds to elaborate upon the distribution of the normally talented man, and comes to the conclusion that civic worth is distributed in fair approximation to the normal law of frequency. While we agree with him, that the brains of a nation lie in the *higher* of our classes, it is very questionable whether these same classes furnish the best stock for stirpicultural purposes. The belief that children inherit the greatness of their parents does not, unfortunately, stand the test of experience. There are too many glaring proofs to the contrary at present. The most prominent progeny is not to be found among the children of the intellectual few or of the well-to-do, neither among the abundant offspring of the very poor; but it is generally furnished by the middle class, which is well fed, fairly well educated and fairly well-to-do. Average people are the parents of the *best* children, and these are what we want. This is in line with ex-President Roosevelt's tenets on the question of preventing race-suicide for which he has been so unjustly criticised and ridiculed. He would like to see the *best* raising children, and by the best people he does not mean the fashionable or rich exclusively, but those who by their sound intelligence and well-nourished bodies can produce children endowed from birth with intelligence and strength. Of this class of children there cannot be too many. The cultured will never overrun the world, while the vicious may, and, but for the laws of nature, would. It is too much to be hoped for that a great proportion of the world's population will ever be cultured, but the proportion of good to bad will be raised by the cultured leaving children in such numbers that the good will increase. By this means, as well as by the repression of the bad, will we attain the desirable condition of a relatively higher general standard. It is Galton's opinion that it must be largely left to medical men to determine the special fitness of individuals for marriage, and to teach the best that is known about the production and bringing-up of offspring.

But, granted that it were possible and practicable to pick out young men and women with a view to their ability to produce worthy children, how are they to be induced to marry each other at the earliest

suitable age and beget a number of children compatible with healthy production and development? Galton proposes the granting of *diplomas* to the selected class. The practical inducements he wishes to see employed are dowries, especially for those to whom moderate sums are important, assured help in emergencies during the early years of married life, healthy homes, the pressure of public opinion, honors, and above all, the introduction of motives of religious or quasi-religious character. Indeed, an enthusiasm to improve the race is so noble in its aim that it might well give rise to the sense of a religious obligation. In other lands there are abundant instances in which religious motives make early marriage a matter of custom, continued celibacy being regarded as a disgrace, if not a crime. The customs of the Hindoos, also of the Jews, especially in ancient times, bear this out. In all costly civilizations there is a tendency to shrink from marriage on prudential grounds. It would, however, be possible so to alter the conditions of life that the most prudent course for a well-adapted person should lie exactly opposite to its present direction; for he or she might find that there were advantages and not disadvantages in early marriage, and that the most prudent course was to follow their natural instincts.

Let us now consider the *probable gain* in the number and worth of adult offspring to these favored couples. First as regards the effect of reducing the *age* at marriage. There is unquestionably a tendency among cultured women to delay or even to abstain from marriage; they dislike the sacrifice of freedom and leisure, of opportunities for study and cultured companionship. This is to be reckoned with. The reply of a lady official of a College for Women to a visitor who inquired as to the after-life of the students, is significant. She answered that one-third profited by their education, another third gained little good, and a third were failures. "But what becomes of the failures?" "Oh, they marry!" There appears to be a considerable difference between the earliest age at which it is physiologically desirable that a woman should marry and that at which the ablest, or at least the most cultured women usually do. Acceleration in the time of marriage, often amounting to seven years, as from 28 or

29 to 21 or 22, under influences such as those mentioned above, is by no means improbable. What would be its effect on productivity? According to Galton it might be expected to act in two ways: (1st) By shortening each generation by an amount roughly proportionate to the diminution in age at which marriage occurs. Suppose the span of each generation be shortened by one-sixth, so that six take the place of five, and that the productivity of each marriage is unaltered, it follows that one-sixth more children will be brought into the world during the same time, which is, roughly, equivalent to increasing the productivity of an unshortened generation by that amount.

(2nd) By saving from *certain barrenness* the earlier part of the child-bearing period of the woman. Authorities differ so much as to the *direct* gain of fertility due to the *early* marriage that it is dangerous to express an opinion. The large and thriving families are usually the offspring of mothers who married very young.

The next influence to be considered is that of healthy homes. These and a simple life certainly conduce to fertility. They also act indirectly by preserving lives that would otherwise fail to reach adult age. It is not necessarily the weakest who perish in this way; for instance, zymotic disease falls indiscriminately on the weak and the strong.

Again, the children would be healthier and therefore more likely in their turn to become parents of a healthy stock. The great danger to high civilizations and remarkably so to our own, is the exhaustive drain upon the rural districts to supply large towns. Those who come up to the towns may produce large families, but there is much reason to believe that these dwindle away in subsequent generations. In short, the towns sterilize rural vigor.

Many will doubtless consider it an absurd idea that outside influences should hasten the age of marrying and make it customary for the best to marry the best. The objection is sure to be urged that the fancies of young people are so incalculable and so irresistible that they cannot be guided. No doubt they are so in many cases. Galton tells of a lady who belonged to a country family of position and who scandalized her domestic circle by falling in love with the undertaker at her father's funeral and in-

sisting on marrying him. Strange vagaries occur; but considerations of social position and of fortune, with frequent opportunities to learn to know each other's good qualities, tell much more in the long run than sudden fancies that lack roots. In a community deeply impressed with the desire of encouraging marriages between persons of equally high ability, the social pressure directed to produce the desired end would be so great as to insure a notable amount of success.

Galton has himself acknowledged his plan to be rather Utopian; and such, certainly, are some of the details. The general idea, however, has been taken up by many followers, and the application of race culture to present conditions made more practicable. You are all, doubtless, familiar with the remarkable and eminently successful work of Luther Burbank in creating perfect types of fruits, vegetables and flowers. He and others have had in mind the application to the human race for its improvement, mental and physical, of methods at least analogous to those by which he has turned little flowers into big ones, produced new and finer fruits, and made trees grow two or three times as fast as "nature" intended. As the Burbank plan consists of little more than raising seedlings by the hundred thousand and the ruthlessly killing and getting out of the way all except a few that happen to show variations in a desirable direction, the impracticability of elevating or changing humanity in that way is obvious—so obvious that many thoughtful people have been led to view the whole subject of eugenics with irritable impatience, as unworthy of serious consideration. Others have been misled by arguments based upon rules so successfully followed by the breeders of prize horses, cows and sheep. Naturally, they have dismissed the thought of human breeding with disgust. Thus has a great science, potentially of incalculable value to the race, been brought into disfavor by the misunderstandings and mistakes of incompetent teachers. An able and enthusiastic champion of the cause has arisen in the person of Dr. C. W. Saleeby; and one need only read his book, "Parenthood and Race Culture," published last year, to learn that there is nothing to inspire either impatience or disgust. He also emphasizes the importance of dividing

the proposals for eugenics into two classes: *positive* eugenics and *negative* eugenics. The former would seek to encourage the parenthood of the most desirable, the other to discourage the parenthood of the least desirable. In regard to positive eugenics, Saleeby believes that at present they must largely take the form of removing such disabilities as now weigh upon the desirable members of the community, especially of the more prudent sort. But, he says, "it is in negative eugenics that we can accomplish most at this stage, and in so doing can steadily educate public opinion, the professional jesters notwithstanding. There is here a field for action which does not demand a great revolution in the proper point of view; and, further, does not require us to wait for certainty until the facts and laws of heredity have been much further elucidated. The services which a conscious race-culture, thus directed, may even now accomplish, can scarcely be over-estimated. And even if we cannot reach the public heart at once, we can reach the public head by means of the public pocket—which will benefit obviously and greatly when these proposals are carried out. As Thoreau observes, for a thousand who are lopping off the branches of an evil there is but one striking at its roots. If we strike at the roots of certain grave and costly evils of the present day, we shall abundantly demonstrate that this is a matter of the most vital economy."

Furthermore, the practice of eugenics may be commended and accepted as the business of the patriot, for there seems nothing more certain than that the choice for the leading nations of today is between national eugenics and the fate of all their predecessors from Babylon to Spain. National eugenics teaches that the first duty of all governments, and patriots and good citizens is, to quote Ruskin: "The production and recognition of human worth, the detection and extinction of human unworthiness." This idea is not new-fangled, but was clearly laid down by Plato, and by Theognis two centuries before him.

Two years ago the Eugenics Educational Society was founded in England, the object of which is to "uphold the ideal of parenthood as the highest and most responsible of human powers; to proclaim that the racial instinct is therefore supremely sacred,

and its exercise, through marriage, for the service of the future, the loftiest of all privileges. It stands for a transfigured sentiment of parenthood which regards with solicitude not child and grandchild only, but the generations to come hereafter—fathers of the future creating and providing for the remote children. That which too many schools of thought and practice have derided or defiled it seeks to elevate and ennoble. Parenthood on the part of the diseased, the insane, the alcoholic—where these conditions promise to be transmitted—must be denounced as a crime against the future. In these directions the society stands for active legislation, and for the formation of that public opinion which legislation, if it is to be effective, must express. Parenthood on the part of the worthy must be buttressed, guided and exalted. The Society stands for the education of the young regarding the responsibility and holiness of the racial function of parenthood."

As it is to be hoped that this Society and its tenets will find emulation in this country, it is the object of my address to show that, in seeking for the improvement of the race, we aim at what is apparently possible to accomplish, and that we are justified in following every path, in a resolute and hopeful spirit, that seems to lead towards that end. The faculties of future generations will necessarily be distributed according to laws of heredity, and it rests with the present generation to study and apply these laws in a common-sense way. While the Anglo-Saxon race now leads the world, to no nation is a high human breed more necessary than to our own; for it is increasingly threatened by an overwhelming immigration of vicious alien stock. Recent events call for watchfulness in another direction, lest we forget the ascending power of the "little brown man" in the far East, and that the tide of possible future aggression can only be stemmed by opposing it with the *very best* Anglo-Saxon stock!

Here is a good motto for consultants, who are so often late:

"I owe all my success in life to having been always a quarter of an hour beforehand."—*Lord Nelson*.

ACUTE POLIOMYELITIS.

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(Read before the South Branch of the Philadel-
phia County Medical Society, October
28, 1910.)

It is surprising that, notwithstanding the fact that before 1907, the date of the New York and one of the Pennsylvania epidemics, there were 35 epidemics of poliomyelitis, it is only comparatively recently that general widespread interest in the disease has been awakened and its seriousness has been recognized. It took the horrible epidemic in New York, in which 2500 cases were recorded, to initiate this awakening in America, while it was only in 1905, when Geirsvold¹ and Wickman² published their studies of this disease as occurring in the Norwegian epidemics, that the seriousness of the disease was fully appreciated abroad.

Collins³ collected from the literature reports of 20 epidemics since 1907. These occurred in Sweden (1907), Australia (1908), Austria (1908), Germany (1908), England (1908), Westphalia (1908), Russia (1908), and in this country in Pennsylvania (1907-1910), New York (1907), Michigan (1907), Wisconsin (1907), Minnesota (1908), Virginia (1908), Massachusetts (1908), and Nebraska (1909). According to Starr,⁴ the earliest recorded epidemic was in 1841, occurring in Louisiana, and reported by Colmar. It is not improbable that a number of smaller epidemics have escaped notice and have not been recorded.

The epidemics in this country have been carefully studied by the State Boards of Health in Massachusetts, Pennsylvania, New York, Wisconsin and other states, and the published reports of these have added important data to our knowledge of this disease.

More recently Flexner's epoch-making experiments upon monkeys have advanced

very materially our knowledge of the subject and have opened the field to the possible discovery, in the near future, of a specific treatment.

While the infectious nature of this disease was suspected by Medin² and Cordier³ (1888), the studies of Wickman indicated definitely that the disease was not only infectious but communicable by direct or indirect contact. A study of the statistics collected by Collins showed, that more than one case occurred in one family in 12 of 20 epidemics occurring since 1907. It is interesting to note in this connection, that the hygienic conditions were good in most epidemics. The density of population and deficiency of rainfall were found by Lovett,⁷ in his studies of the epidemic in Massachusetts in 1909, to have no relation to the distribution of the epidemic.

The symptomatology of epidemic poliomyelitis varies somewhat from the text-book descriptions of the sporadic cases. This is explained by the fact that the sporadic cases rarely come under the observation of the neurologists until after the acute stages are well over.

The stage of incubation varies from one day to two weeks. Wickham gives the stages of incubation as one to four days, but in Mueller's⁸ six cases the period of incubation was from five to ten days, and in the New York epidemic from four days to two weeks. The incubation period in experimental poliomyelitis, according to Flexner,⁹ was nine days, which was on the whole somewhat longer than the average incubation period of man.

There is an initial rise of temperature in these cases, usually to 101° or 103° and rarely to 104°, and lasting from one to several days. This symptom can be considered an almost constant one. The increase in pulse rate and respiration is out of proportion to the temperature. The fever is rarely preceded by a chill, and only occasionally by general convulsions. The severity of the paralysis, according to Mueller, does not have any relation to the height of the temperature. Vomiting is not infrequent, and while it occurred occasionally in the Pennsylvania epidemic, it was noted in one-third of the cases collected by Mueller.

A fairly constant early symptom is retention of urine, as has been described by

Medin and Foerster¹⁰. It was found by Fox¹¹ in the Pennsylvania epidemic and was present in about one-fifth of the 150 cases studied by Lovett.

An early and constant symptom, and according to Mueller one that is pathognomonic, consists of general aches and pains occurring in the head, neck, shoulder and legs. Stiffness of the cervical muscles has been noted by Fox and Mueller, though in the experience of the latter it is not very marked. Kernig's sign and Lasegue phenomenon were observed only twice by Mueller.

Gastro-intestinal disturbances are not infrequent. Diarrhoea, according to Starr, occurred frequently. On the other hand this was met with only in one-third of the cases studied by Mueller. Constipation was a marked feature in Fox's cases, and in the epidemic in Massachusetts Lovett noted this symptom in about three-fifths of the cases.

Psychic disturbances are seen only in the early stages. Only exceptionally are there disturbances of consciousness or the presence of delirium. Prolonged headache was never observed.

Sweating in the early stages, a symptom first described by Krause, Mueller looked upon as one of the cardinal symptoms.

Skin eruptions occur occasionally. Herpes was present in four of Mueller's cases, and in five cases there was a scarlatinal or measles rash. In Lovett's cases skin eruptions occurred in six cases.

Some form of catarrhal involvement of the naso-pharyngeal mucous membrane occurs frequently. Eichelberg (in Mueller) found in thirty-four cases that some form of angina or bronchitis was present in fourteen cases, and Mueller's studies showed that an initial angina was not infrequent, while some disturbance of the respiratory tract was found in one-half of his cases. Angina has also been noted by Geirsvold.

The studies of the blood have not thus far yielded uniform results. Mueller quotes Krause, who studied the blood in three cases and found a "hypoleucocytosis" associated with a slight increase in the lymphocytes. Wickman's studies did not yield any definite data along these lines, while in fifteen cases studied by Mueller, and in ex-

perimental poliomyelitis, the number of the leucocytes in the febrile stage was not increased; in fact, they were diminished in a number of cases, constituting therefore a leucopenia. Gay and Lucas¹² also studied the blood and spinal fluid in experimental poliomyelitis and in four cases in children, and concluded that in the acute stage in human beings and monkeys there was a distinct leucopenia and a relative increase in the eosinophils and lymphocytes. Contrary findings were obtained by Fox, however, who found an increase in the number of leucocytes in some cases.

The paralysis usually appears as the fever subsides, or during the course of the fever, usually on the second or third day (Wickman; Mueller).

In four-fifths of the cases (Mueller) the lower extremities are involved, and more frequently both than one. The trunk muscles come next in the order of frequency. Weakness of the belly muscles, either unilateral or bilateral, is frequent, (Mueller, Mills¹³, Wickman). Indeed Mueller looks upon this symptom as of value in the early diagnosis of this affection. Involvement of both arms and one leg is rare, while paralysis of both arms and both legs is comparatively frequent.

Involvement of the cranial nerve distribution is not infrequent. The facial nerve is by far the most frequently implicated, (13 out of 100 cases, Mueller; six in 13 cases, Hoffman¹⁴), the paralysis being usually unilateral, though residual bilateral facial palsy (Medin) is not unknown. Ocular palsies (Starr) and hypoglossus paralysis (Wickman) have also been noted. In 133 cases studied by Stephens¹⁵ in the epidemic of Victoria, the third, sixth, seventh and twelfth and possibly the spinal accessory nerves were found involved.

As the initial palsy improves certain groups of muscles remain permanently paralysed. The palsies which recover are probably due, as Flexner has pointed out in connection with experimental poliomyelitis, to temporary vascular disturbances outside the lumen of the vessel which becomes narrowed by pressure, or to slight recoverable change in the nerve cells, or finally to focal hemorrhages and edema. Destruction of new tissue involving nerve cells causes unrecoverable palsies.

The tendon reflexes are habitually lost early, though the Achilles jerk may remain later than the patellar jerk. In some cases I have seen the knee-jerk present or even slightly increased, confirming the observation of Spiller¹⁶ and others. Mueller found in the stage of reparation that the tendon reflexes may return or even become exaggerated at times, and exceptionally he found ankle clonus. I have myself observed a return of the knee-jerk in at least one case of sporadic anterior poliomyelitis.

An abortive form of poliomyelitis has been observed generally in epidemics, and consists of constitutional symptoms, such as fever, headache, irritability, dilated pupils, pain and stiffness of the neck, gastro-intestinal disorders, and strawberry tongue (Fox). Mueller's description of the abortive form agrees with that of Wickman, who classified these cases as follows:

(1) Cases with predominant gastro-intestinal disturbances with diarrhoea at the onset; (2) cases with initial disturbance of the respiratory organs, especially early angina; (3) cases with meningeal symptoms without the usual spinal manifestations, and these were rare; (4) cases with fever and general symptoms without predominating objective or subjective local symptoms.

The mortality varies in different epidemics. Mueller gave it as 13.5% in an average of 695 cases in four epidemics. The mortality in the Pennsylvania epidemics, according to Fox, was 9%. It has been variously given as from 5 to 20%, though in Sweden it rose to 46% (Collins).

Several forms of the disease have been described. Of these the most common is the usual spinal form. The bulbar type is less common, and when in the fatal cases it is associated with a quickly-developing ascending palsy, it is spoken of as the Landry's type. The cerebral form is rare; in fact Wickman in the Swedish epidemic saw no case of this character, though some were described and collected.

The abortive form is probably very frequent and is therefore of especial interest from the standpoint of hygienic and sanitary control. In addition to these, other types have been described, namely, the ataxic, poly-neuritic and meningitic forms.

Pathologically the epidemic variety differs little from the sporadic cases. The

studies of Harbitz and Scheel¹⁷ showed a diffuse infiltrating inflammation related closely to the vessels, involving the pia mater, the white and gray substance, not only of the cord but the medulla oblongata and pons, the cerebellum, the central ganglia, the gray substance along the aqueduct of Sylvius, and the central and frontal gyri. The peripheral nerves did not show any change.

The lesion is an infiltrative disseminated meningo-encephalomyelitis. The anterior central arteries are chiefly involved and the distended lymph spaces are the seat of a round-cell infiltration composed of lymphocytes, large mononuclear cells and leucocytes.

Focal areas of round-cell infiltration are found in the gray matter, and there may be cell accumulation around the ganglion cells, which are found in various stages of degeneration, showing neurophagia at times.

By the courtesy of Dr. Herbert Fox, I have been afforded the opportunity of studying the spinal cords of wild animals in captivity suffering from paralysis of the limbs, from the Zoological Garden of Philadelphia. The findings correspond in part with those found in human cords of fatal cases of poliomyelitis. In brief, there was a round cell infiltration of moderate degree in the pia of the brain and spinal cord. There were edema and congestion of the gray matter and a round-cell infiltration, slight around the vessels and more marked around the nerve cells of the gray matter. The cells constituting the infiltration around the nerve cells and elsewhere in the gray matter appeared to be proliferated glia cells. The nerve cells themselves showed typical degenerative changes. These studies permit, I think, looking upon these cases as probably the result of a process similar to poliomyelitis in man. The histological picture is not, however, identical in that the cell accumulations are not of the type usually found in human and experimental poliomyelitis, though Starr and Goldscheider described the cell accumulations as being due in part to the emigration of leucocytes and in part to proliferation of the neuroglia cells.

While Krause (quoted by Mueller) has described, in cases with severe initial gastro-intestinal symptoms, extensive change in

mucous membrane of the intestines, especially in the neighborhood of the ileocecal valve, consisting of congestion of the mucous membrane and swelling of the Peyer's patches, Mueller found these changes inconstant and insignificant. On the other hand, Robertson and Chesley¹⁸ claimed as a result of a study of six cases occurring in the Minnesota epidemic (1909), that acute poliomyelitis was a specific infectious disease, characterized pathologically by general toxemia implicating the parenchyma of the heart, liver, kidney and the lymphoid tissue of the body, attacking chiefly, however, the structures of the spinal cord. These studies and those of Wickman and Krause go to show that this disease is probably a general infection with a special localization of the process in the spinal cord.

Bacteriological studies thus far have not thrown any definite light upon the etiology of this disease. Geirsvold isolated a diplococcus, which agreed with one described by Jaeger and Heubner¹⁹, Looft and Dethloff²⁰ and Harbitz. Fox and Rucker also found a bacterium in the nose, throat and spinal fluid, which, however, proved not to be pathognomonic.

Efforts to cause poliomyelitis in animals experimentally with this organism have unfortunately been fruitless. This disease, however, has been experimentally produced in monkeys by inoculation with the cord of fatal cases in man.

While Landsteiner and Popper²¹ successfully inoculated monkeys in the peritoneal cavity with human cord from a fatal case of poliomyelitis, and this was successfully done also by Knoepfelmacher²², Ieiner and Weisner²³, Landsteiner and Levaditi²⁴, Roemer²⁵, and Gay and Lucas, it is to Flexner's elaborate studies that we are indebted for the discovery of the virus of this disease.

Flexner and Lewis²⁶⁻²⁷⁻²⁸⁻²⁹ based the result of their studies upon experimental work done upon 81 monkeys. The clinical features show that the disease in monkeys corresponds closely to the disease found in human beings, differing, however, in that the prodromal symptoms and symptoms occurring during the stage of incubation are slighter than those that occur in man, the incubation period being longer. Sponta-

neous transfer of the infection among the animals was not observed. Their experiments show that the naso-pharyngeal mucous membrane contained the virus.

The virus was transmitted successfully through the naso-pharyngeal mucosa, subcutaneously, through the medium of the blood into the peritoneum, spinal canal and the large nerves, and less easily subcutaneously than by way of the peritoneal cavity. The lesion set up in the spinal cord is similar to that found in man. The vascular lesions, according to Flexner and Lewis, are the primary cause of the lesion of the nervous system.

They have found that the blood of cases that have passed through an attack of poliomyelitis contains neutralizing principles for the virus, though the neutralized virus produces no immunity, and further, that monkeys could be made immune by subcutaneous injections of the virus. These principles are not present in normal serum. They also were able to protect monkeys against an attack of poliomyelitis by previous injections into the subarachnoid space, of serum from immune monkeys and monkeys that had passed through an attack of poliomyelitis. This is true also of the serum of children who have suffered from poliomyelitis. The virus was not only found in the nervous system but in the mesenteric lymph glands in human beings. The virus, they state, is destroyed by a dilution of perhydrol, containing 1% of hydrogen peroxide. The serum treatment of this disease is still in the experimental stage.

The mortality is higher in experimental poliomyelitis than in man, Flexner and Lewis calculating it to be 54.3%.

The Treatment: So far no specific treatment is known. While the studies of Flexner and Lewis have brought us to the verge of a discovery of a preventive and curative treatment, we know of nothing at present that is capable of modifying the early course of this disease. Among the most essential features of the treatment is absolute rest, both physical and psychical. The patient should be disturbed as little as possible for any purpose. Bathing should be done with great care and with a minimum amount of movement of the body. The patient should be isolated at once, all excretions thorough-

ly disinfected, and the mucous membrane of the nose should be sprayed with antiseptic solutions. The bed clothing and other linen in contact with the patient should be thoroughly disinfected. The drinking water should be boiled and no uncooked food taken.

In cases of bulbar or cerebral symptoms, local applications of cold are indicated. Warm applications to the abdomen are advisable when gastro-intestinal symptoms are present. Lumbar puncture has been advised and seems to have had a favorable effect in some cases. In grave cases the advisability of blood-letting, especially at the nape of the neck, must be taken into consideration. The gastro-intestinal functions must be regulated. Early massage and the application of electricity should be employed for the purpose of keeping the muscles in as good condition as possible, pending the restoration of those cells in the spinal cord which have not suffered permanent damage. The galvanic current is indicated and should be applied daily, employing a large electrode in the lumbar region connected with the negative pole of a galvanic battery, while the affected muscles are stroked gently with the positive pole, using three to five milliamperes.

The deformities which result from the residual paralysis may call for orthopaedic and other surgical interference, such as transplantation of the tendons and nerve grafting. These operations in my opinion should not be done early and only after every measure has been exhausted to restore the muscles to their maximum degree of development by gymnastic work, galvanism and massage.

Recently the use of hexamethylenamin has been recommended in the hope to influence the process by the formaldehyde which is liberated in the blood when this drug is administered. I have had no experience with the use of this drug and no convincing reports have thus far been recorded.

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THE ONE AT HOME.

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W. Va.

(*Read at Annual Meeting of State Medical Ass'n,*
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The greatest disgrace of modern times was the attempt of the Chinese government to destroy the foreign legations at Peking. When the relief expedition of the allied powers battered down the gates of the capital, an American, a West Virginian, the son of a Preston county physician, was the first man to rush through the battered down gate into the Celestial City. It was the Russian, not the American column, that battered down the gate. This young man was in the signal service of the American army, and was assigned the hazardous task of sending reliable despatches to the other advancing columns.

What has this to do with the West Virginia Medical Association? Let us go back a little. Not many years ago a young man graduated in medicine and settled in a little town high up in the Allegheny mountains. His teaching had been idealistic. He had been taught, not that self-preservation is the first law of nature, but that self-sacrifice was the stepping-stone to

earthly and eternal reward to the physician. He was taught, and believed, that the sick demanded his time, his energy, his skill, his comfort—his life if need be. This thought seemed uppermost in his mind, and he acted on it, and lived up to it, until he actually sacrificed himself to his beliefs, and died young, leaving a widow with a house full of little children, with scant means provided for them.

When he first commenced practicing, he began looking about for a wife. He paid attention to a beautiful young woman of the neighborhood, one that stood well in the estimation of the community. One stormy night, while calling on her, some one rapped at the door and told the doctor that he was wanted four miles in the country to see a sick child. The young woman said to him: "Don't go away out there tonight, it is too stormy and cold. The Joneses are not much good anyway." The young doctor went to see the child at once. But he never went to call on the young woman again.

He was much hurt to think that this apparently fine young lady should try to dissuade him from doing his duty. He said: "I don't need a wife of that kind. My profession is too full of temptations to shirk my responsibility. I need encouragement at home above anywhere else." He married a woman who, in his estimation, possessed all the beauty of Esther, the modesty of Vashti, the magnetism of Cleopatra, the constancy of Penelope, the acumen of Josephine, and the virtues of Victoria. And she proved to be an ideal wife of the general practitioner. During their courting days the doctor inspired her with his own high ideals and the sacrificial responsibilities of his profession. And they carried them out to their fullest extent. She never lost one iota of her ideals of the sacred relation of physician and patient. She always maintained this attitude, even when she saw her husband growing prematurely and rapidly old, and his powers of endurance sinking lower and lower; and when he finally worked himself to death, and made a widow of her and orphans of their children, she still clung to these impressions of her courting days.

Let no woman marry a doctor if she expects a life of ease and comfort, for it will be one round of cares and trials and re-

sponsibilities and disappointments. Her leisure and recreation will be meagre, for on her must fall most of the burdens of life. On her depends the proper training of the children at home and their progress at school. If she would avoid these responsibilities let her enter no matrimonial alliance with the general practitioner, for on her must fall most of the hurrying and worrying of the grocer, the butcher, the milkman, the fruit and vegetable dealer, the washer-woman, domestic help—the whole gamut of domestic cares. Yet she bears it and bears it well.

She is the best geographer of the whole region. She studies every road, every by-path, every farm, every telephone in her husband's bailiwick. She knows the distance between all the telephones, and can always know within a few minutes where to reach her husband and prevent his having to double back to make an extra call.

When Mrs. Tattler comes to the doctor's wife and tells her that Mrs. Noser said that Mrs. Idle heard Mr. Bumm say: "I wouldn't let that doctor treat a dog for me," the doctor's wife never showed the least sign of irritation, but said in the most good-natured way imaginable: "I don't blame Mr. Bumm for wanting someone else to doctor his hound. I have heard my husband say he wasn't much of a veterinary anyway; he wasn't trained to doctor animals, yet he had had some of the very worst kind of cattle and dogs and hogs to wait on." Mrs. Tattler saw the irony of the pun, and went home much chafallen because she had been unable to get a fresh bit of gossip to take away with her.

When the doctor found a penniless and penitent wayward girl at the hotel, ill or homesick, he played the good Samaritan, and took her to his home. His wife said: "She is young and fair, but I doubt the propriety of bringing her home. I fear your judgment has erred." But the doctor was sure he read human nature aright, and his wife treated the girl as a daughter. As soon as the girl began to feel better, her penitence abated, her homesickness vanished, and she began to show signs of restlessness. The wife saw the change, but the doctor was still sure there was good in the girl. One night the doctor got home at 12, and his wife said: "Emma went out at 8 and has not returned." "And she

shall never come in this house again," said the doctor, and went in high dudgeon and locked the door. His wife said, in her meaning way: "Now don't do anything rash," and quietly unlocked the door. The girl came in a few minutes later and went to her bed. The girl's mother came next day and took her home, and she is now leading a useful life in a western state.

The doctor was telling his wife one day as they were driving along about a particularly distressing case he had found the day before—a sick mother, with no comforts, few necessities, and many helpless children. And the mother seemed so intelligent, and was so thankful for the favors shown. He gave her medicine for her illness, and handed her two dollars to get some necessities at the store. And the doctor leaned back in the buggy at the thought of how much good he had done to the helpless poor. His wife said: "I am so sorry for the poor thing. Yet might it not be that some of the thankfulness was only assumed?" "O no! if you had seen the gleam of those soulful eyes, you could never even suspect that she was not true through and through." And he seemed to be musing on how brilliant the new star in his crown of glory would shine in the celestial world.

Presently they met one of the boys, and the doctor stopped him and said: "How is your mother today?" "O she's better."

"You got the things for her, I suppose?"

"No, we didn't get 'em. But she's doin' good now. We took that two dollars and got a good doctor with it."

The doctor flushed to the ears, and hadn't his wife been present, he would have sworn the conventional blue streak, forgetting all about the stars in his crown of glory. But his wife saw his confusion, and slapping him on the back, said: "That's the greatest joke of the season! Now, doctor, if you wouldn't brag so much about your charity work it would look better. Remember the Bible says: 'Let not the right hand know what the left hand does.' Here you have let your right and left both know it, and now I know it, and am going to put it in the Medical Journal," and the wife, who always smoothed things over, had him in a good humor before he said one "cuss word."

"Your house is always so brightly light-

ed," said a neighbor to the doctor's wife. The neighbor did not know that she kept the lamps trimmed, chimneys brightened and windows burnished so that the light might send its welcome beams to the doctor as he came home late at night. And also that anyone seeking the doctor in the dead hour of night should have no doubt of the welcome he would receive. There were no drawn curtains and lowered blinds at that doctor's house.

When the County Medical Society admits members that the doctor feels are entirely unfit for ethical affiliation, his wife says to him: "Now because you see no good in Dr. Jones, and he has mistreated you, is no reason why you should refuse to attend the meetings and lose all their benefits. He may do better if he gets to know you better. You surely will not let your own self shrivel up because he has done so. Show him your broadness, and he will see his own littleness." So the wife was the real cause of the reconciliation of the neighbor physicians.

She always finds time to help the children with their Sunday-school lessons, and explains things so well that they can discuss the questions with the best people of the Sunday school in a most intelligent manner.

In the long winter evenings around the family hearthstone, there is one always absent—the doctor. The wife must help with the lessons. She must help with a b c, or spelling, or reading, or geography. She assists with multiplication, or percentage, or mensuration, or cube root, or quadratics. She must help look up the intricate history reference in cyclopedia or dictionary. She helps out in Caesar or Homer or Chaucer. Whatever comes, she must help the children, little and big. The wonder is how she can retain all this versatility of her school days and impart it to the children in such a tactful manner that the best teachers must be envious and jealous. This is why the doctor's children always stand at the head of their classes in school work—their mother's self-sacrificing devotion.

When the epidemic of automobile fever struck the mountain town, and Dr. Rich-wife bought one, the doctor was about to buy one on time. His wife said to him: "Better wait a year or two. Your horse and buggy will do a while yet. There is still \$1,000 mortgage on our home. The

roads are unfit for automobiles seven months in the year, and you have to keep a horse anyway." So his wife reduced the fever in his case, and he soon was free from all sequelae.

"Don't put your horse out; you are needed at Joneses. Come in and have a cup of hot coffee. It is ready." This is the greeting the doctor often gets when he arrives home late at night, worn and haggard, after forty hours of unceasing toil. But he knows there is always a cup of hot coffee and lunch ready, and in ten minutes he is off for another siege, and the wife goes to bed with a sigh of regret, to listen for the rattle of the telephone, and to long for a time when sickness and telephones will be banished forever.

Let her arrange a surprise party on the doctor's birthday, or invite some friends in to dinner, or want to celebrate their wedding anniversary, or to take a day off for a picnic, just as sure as fate some emergency or confinement case calls him away. Let her invite the children's teachers for supper in order to cultivate a more friendly feeling among parents, teachers and children, the doctor is called away a half hour before the meal, and the mother must entertain alone. Let the pastor and Sunday-school superintendent be invited to spend a social evening, or the young folks have a birthday party, or let a family reunion be arranged, and the kith and kin are gathered from the four corners of the earth, there is one always absent—the doctor.

When they plan for a month to visit their childhood homes together, and the anticipated pleasures are heightened by discussions, a series of typhoid cases makes it impossible for the doctor to leave, and the wife must go alone, tugging the children with her. This is to be expected in the doctor's life, and he is sustained by the interest he has in his cases. But how about his wife? How can she endure these continual disappointments, this absence of the husband and father from the functions of home? How can this seventeen hours of daily absence from home be of any comfort to her, when all the cares and responsibilities of the children and household are on her? This she expects, and endures it, and performs her duties infinitely well. Is it any wonder the busy doctor's wife has a

trace of sadness, a touch of melancholy about her?

Yet she strives heroically to do her duty as she sees it. Her mind seems never to think of self but of the comfort of others.

"Here's a glass of jelly. Take it over to Mrs. Brown to make her a cooling drink," his wife would say to him as he starts out on his rounds. Or: "Here's a bundle of clothes; take them over to Widow Jones's children." Or: "Take this roll of papers to the consumptive girl. Or: "Here are some toys; give them to the boy with the broken leg." The doctor generally mumbled something about being bothered, but always took the things his wife prepared, proud in his heart of one so thoughtful of little things that smoothe the way of those in distress.

"Let me burnish your bottles. They look dingy," or "Let me dust your clothes, you are careless; or, "Here's a warm pair of gloves, the old ones are threadbare;" or, "Here's your raincoat, the weather is threatening;" or, "Here are sandwiches. It's a long time before you get back." It was always something for the comfort of others, always a thought for the distressed, always an act of kindness—never a thought of self, except that her health be spared to be useful to others. It is no wonder he thought her the embodiment of all the good qualities of all the good women of all the world. It is no wonder the United States signal corps in a foreign country should pick on the son of such a mother to send on a hazardous mission when reliable information was imperative.

When John the Revelator saw in his vision the final consummation of all things, when the wicked were cast out into utter darkness, and the vast multitude that no man could number was gathered around, there stood out an hundred and forty-four thousand above all others, those who had come out through great tribulation and had withstood the envy and strife and disappointments of the terrestrial life and were counted worthy of special honors in the celestial life. Probably these hundred and forty-four thousands represented the wives of general practitioners. For of all mortals the doctor's wife receives the least compensation in this life for her self-sacrifices, and must look to the next world for the reward of all her disappointments and trials and tribulations. For she is worthy to sit above

kings and potentates of earth, above popes and cardinals, above preachers and teachers, above scientists and philanthropists, above sages and martyrs, above physicians and surgeons, and to sit in the very highest ranks of heaven by the side of Florence Nightingale.

CYSTIC DEGENERATION OF THE OVARIES AS RELATED TO REPEATED ABORTIONS.

W. L. Weadon, M.D., Mt. Carbon, W.Va.

(Read at Annual Meeting of State Medical Ass'n, October, 1910.)

The only excuse I can offer for presenting the above subject for your consideration is to learn whether my experience has been an unusual one. From none of the numerous works on Gynecology or Obstetrics have I been able to even find a suggestion as to the possibility of a small cystic ovary being a factor in the production of miscarriages.

Were it definitely settled as to the relationship between normal ovulation and the changes incident to the phenomena of menstruation, there might be a beginning to work upon, but this is still a debatable question. What the relationship is no one seems to know conclusively, but it is the concensus of opinion that there is some relation between the two. Accepting this statement as a "base of operations," and proving it more or less conclusively, by removing both ovaries and witnessing a complete cessation of menstruation—is this not very good evidence that the ovary or its internal secretion has some effect upon the uterus or the centers which control its destinies? After impregnation has taken place the ovary evidently ceases to discharge more ova, since a second or a third does not become impregnated; then, is it not reasonable to suppose that this ovarian secretion, which before has influenced the unimpregnated uterus, should assume a different function and take part in the physiology of pregnancy? To my mind, this supposition appears very reasonable, and should it be true it would not be absurd to state that the effect of this same secretion from an ovary undergoing cystic degeneration might be very deleterious to the pregnant uterus. We know that cystic disease of the

ovaries is an occasional cause of dysmenorrhoea, and this must be brought about by an untoward action of this diseased secretion upon the healthy uterus or its governing nerves. In some of the above cases of dysmenorrhoea, the internal administration of ovarian extract or emulsion has been of great benefit in the treatment. Is this not almost positive proof of the effect of cystic secretion and the counter effect of a normal secretion?

I beg to submit the following clinical evidence:—

About five years ago I was consulted by a colored woman, age 32, mother of six living children, the youngest of which was five years old. During the preceding three years she had four miscarriages, each near the end of the fifth month. There was nothing in her history suggestive, and nothing discoverable from a complete examination except a slightly enlarged, tender ovary which was diagnosed as cystic. Having no authority from the current literature, I did not advise removal of this ovary, but while she was under constant attention she had the fifth miscarriage in spite of all measures to prevent it. Finally operation was advised, and I removed a portion of a small cystic ovary, and punctured several small cysts on the opposite side. Eleven months after the operation she was delivered of a healthy, full-term child, and a few weeks ago she gave birth to the third full-term child since the operation. This single case led me to believe that cystic ovarian disease might be a factor in the premature emptying of the uterus.

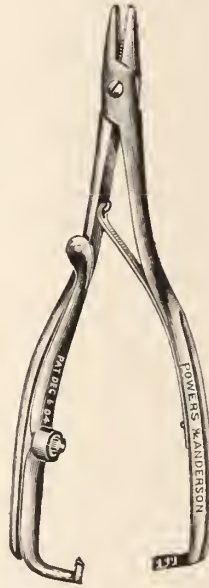
Since then twelve cases of continuous and persistent abortion in which no other cause could be found, except a cystic ovary, have come under my observation. In each of these there had been from four to ten successive miscarriages. The diagnosis has been confirmed in eight of the twelve through operative measures, and six of the eight operated upon have borne one or more full-term children since the operation, and not in one instance has there been a premature birth.

There is no bank account that can balance a sweet, gracious personality; no material wealth can match a sunny heart and an ability to radiate helpfulness and sweetness.—*Backbone.*

A MODIFICATION OF THE RICHTER NEEDLE-HOLDER.

John Egerton Cannaday, M.D., Charleston, W. Va.

A few months ago I had a modification of the Richter needle-holder made up by Powers & Anderson of Richmond. As



most surgeons know, the Richter holder has a patent spring release, which can be worked by the thumb or fore-finger, while the end of the upper jaw presses against the needle in holding it. For the jaws of a needle-holder to grasp a needle readily and quickly, the jaws must be pointed and capable of holding the needle at the extreme tip, should be light so as not to be clumsy, hollowed along the center so as not to break a curved needle, and their edges serrated so as to hold the needle firmly.

The jaws of a needle-holder intended to give long service should be held by a screw so that when loosened by wearing it may be tightened. A lock and jaws fulfilling the above requirements, I have had applied to the ordinary Richter holder with extremely gratifying results. The needle-holder has no points or catches to tear rubber gloves, responds quickly to the manipulation of the operator, and holds needles firmly without breaking them. The accompanying cut gives a very good idea of the general appearance of this holder. I have had this needle-holder in almost daily use and find it to be satisfactory in every way.

Cor. Capital and Virginia Sts.

RULES FOR NURSES.

CHARLESTON-KANAWHA, W. VA., Oct. 3, 1910.
Editor *W. Va. Medical Journal*:

At chairman of a committee appointed for the purpose, I have gotten up a set of rules for the surgical nurses of The Charleston General Hospital Training School, and since they embody rather radical departures from the methods practiced in many hospitals, I am submitting them to

you for publication along with an explanatory note. We have had considerable difficulty to get a nurse to do thorough work unless some regular routine is followed.

Fenwick in London and Grossich of Berlin, as well as many others, have been using iodine as an agent for disinfecting the skin site of incision. It has been found that unless the skin is absolutely dry at the time of application the iodine has but little penetrating power; when the skin is wet the surface epithelial cells are so swollen as to obstruct the microscopical spaces between them. (See Sept. W. VA. JOURNAL, p. 110.—EDITOR.)

These rules have been gotten up in an endeavor to obtain a smooth and easy technique in which there will be no breaks. We also had in mind the institution of rules that would be conducive to economy in the matter of dressings and other hospital supplies without endangering the safety of the patient in any way.

Very truly yours,

JOHN E. CANNADAY.

RULES FOR THE OPERATING ROOM AND NURSES IN CHARGE.

Patients to be prepared for operation should be given a laxative (compound liquorice powder one drachm) unless ordered differently by the physician in charge; this laxative if possible should be given from twelve (12) to fourteen (14) hours before the time set for the operation. A low enema of warm normal salt solution should be given the patient two hours before the time set for the operation. In case the operation involves the lower bowel, enemas must be given until they return clear. If the patient is in the hospital only a short time previous to the operation, a high enema of soapsuds should be given. Give enemas slowly, have the foot of bed elevated, and induce the patient to retain the enema as long as possible. The patient should have a full tub bath with soap and hot water the day previous to the operation except in cases that are confined to the bed; these should be given a sponge bath. The operation site should be shaved and cleansed with soap and hot water. In operations involving the lower abdomen the pubes should be shaved. The skin should be rubbed with a cotton sponge and not with a brush. The area to be prepared should be made large, as a somewhat different location for the incision may be used to that expected by the nurse. After thoroughly cleansing the skin with soap and hot water, warm sterile water should be applied until all of the soap has been removed; after this a cotton sponge should be saturated with alcohol and the operation site carefully rubbed with this.

Two hours before operation the skin should be painted with a 10% solution of tincture of iodine in alcohol (iodine one part, alcohol ten parts). One hour before operation the site shall be again painted in the same way. In the preparation of women for any abdominal operation, the vagina should be thoroughly cleansed with soap and water and a cotton sponge, the nurse taking care to reach the upper portion of the vagina about the neck of the womb, and a copious

douche of hot normal salt solution should be given; for this not less than four quarts of solution should be used. After the patient is under the anesthetic, swab the vagina with iodine solution. All operative patients should have a hypodermic of 1/4 gr. of morphine with atropine 1/150 gr. forty-five (45) minutes previous to the time set for the operation unless otherwise ordered by the physician in charge. The operating nurse to be held responsible for this, as well as for the preparation of the patient. The patient's bladder must be emptied by catheterization immediately before being brought to the operating room if the patient is unable to void properly. All patients to be operated on at a specified time shall be on the stretcher in the anesthetic room at that exact time regardless of whether the physician in charge has reached the hospital or not, unless otherwise ordered. In order to insure the patient's readiness for the anesthetic, the operating-room nurse should allow ample time beforehand for the patient to be made ready and have the necessary supplies in the anesthetic room. There should be present in the anesthetic room, towels, vaseline, ether, chloroform, inhaler, a stool for the anesthetizer and a stand or table on which to place the things he needs. After the patient has been brought to the anesthetic room the doors should be kept closed and there should be no unnecessary passing through the room. The patient should be kept carefully wrapped in blankets, and if at all chilly should have hot-water bottles at sides and feet. All hot-water bottles must have heavy covers to prevent burning the patient. The operating-room nurse should begin preparing the operating room sufficiently in advance of the time set for the operation so as to have things in readiness at the proper time and not have to rush at the last minute.

Gloves should be sterilized by boiling, these to be boiled separately from the instruments. The gloves are to be tested with water for leaks, then wrapped in a heavy towel and boiled for five minutes in a solution of bicarbonate of soda, one teaspoonful to the pint of water. The operating-room nurse should have her gloves in a separate package and after having scrubbed her hands and arms and having her face mask, cap and gown properly adjusted, should put on her own gloves and then dry the gloves of the operating physicians both inside and out, and dust them with sterile talcum powder, then wrap them in a sterile towel. The talcum powder should be sterilized by baking in the oven of the kitchen range for at least two hours. The packages of talcum powder should be placed in a wire basket or rack for that purpose, so that it will not burn, when placed in the range. After having been baked for the specified time they shall be removed and each package of talcum powder be wrapped in a sterile covering. After a package of this talcum powder has been used for an operation it shall be re-sterilized. The operating-room nurse must not handle sterile dressings, sutures or instruments until she has put on gloves, gown, etc.

Alcohol used in the operating room should be full strength, and after having been used in the operating room, shall be placed in a jug or bottle

kept for that purpose and used again as long as clear, after which it shall be kept for bathing patients.

Punctured or torn gloves shall be laid aside and not thrown away in any instance. The punctures or tears, if not too large, shall be mended by the operating-room nurse by the use of patches cut from old gloves and applied with rubber cement. There shall be no unnecessary conversation in the operating room during the progress of the operation. The operating-room nurse should endeavor to anticipate the wants of the surgeon. In a series of clean cases it will not be necessary for the operating-room nurse to change her gloves and gown. Unless the operating-room nurse knows from experience exactly what sutures the operator wants, she should ask him in each case specifically what sutures he will need. She should never under any circumstances, after finding out what sutures he wants, have more than two tubes of catgut broken at any one time. The linen or silk sutures should only be placed on the table at the request of the surgeon, excepting those operators who habitually use a short linen suture for the appendix purse string. A test tube containing six strands of silk-worm gut should be sterilized by boiling when the operation in question is an abdominal section. In case of an amputation or other long incision, two tubes will suffice. The nurse should always hand the operator a round-pointed needle, that is, a needle having a point like that of the woman's sewing needle for any work in the abdomen, and previous to the closing of the skin unless requested differently by the operator. She should never under any circumstances hand the operator a round-pointed needle with which to close the skin; the only needle suitable for this work is one with a sharp point and *cutting edge*. Rubber drainage tubing should not be boiled with the supplies unless the nurse knows that it will be required or has been requested by the operator to have it. The tubes of catgut shall be kept in a container filled with one (1) to five hundred (500) bichloride, made up in normal salt solution in order that the bichloride may keep and not lose its strength. Previous to operation the assistant operating nurse should take out each tube with a long dressing forcep, and dip it in boiling water for one-half minute (30 seconds). The operating-room nurse should always have at least one extra pair of sterile rubber gloves and several finger cots in order to avoid contamination in case the operator tears his gloves or contaminates them so that a change may be necessary. The operating-room nurse should wear caps made of gown drilling with a draw-string around the border so as to include all the hair and forehead. During the progress of the operation the operating-room nurse shall keep constantly in readiness two basins filled with sterile water for the use of the operator in rinsing his hands. If either one of these basins of water becomes contaminated with blood or pus, it shall be changed immediately by the assistant operating-room nurse. Water shall be kept boiling in the instrument sterilizer during the entire progress of the operation, so that if any instruments or

appliances are needed they may be sterilized without delay. Knives or other instruments that are not to be boiled should be sterilized by placing in a 20% solution of carbolic acid (one part of carbolic acid to five parts of water) for five minutes and then in alcohol.

Old and badly torn rubber gloves should be kept for the following purposes: to mend punctured gloves with, and to furnish pieces of rubber dam for the covering of cigarette drains, and for protecting exposed or granulated areas, skin grafts, etc. These pieces of rubber when needed are to be sterilized by boiling with the instruments.

After the patient has been brought into the operating room the assistant operating-room nurse shall bare the site of operation and paint the skin with a cotton sponge and iodine solution. The clean sponges used in the preparation of the patient and during the operation should not be thrown away but have the blood and soap rinsed out of them with cold water, be dried and re-sterilized for future use in dressings. This preparation should apply to all dressings and bandages that have not been contaminated by pus. In dressing a closed operation incision in the operating room, the operating-room nurse should sponge the blood away from around the incision, always sponge away from not towards the cut, one layer of plain gauze should be placed on the incision and after this an abdominal pad. If the wound has not been drained, one of these pads will be sufficient, and adhesive strips must be applied over this.

The suits of the operators must be inspected after each operation, and if bloody or soiled, the blood must be soaked out in cold water and then sent to the laundry. When they are returned the operating-room nurse must look them over and see if each piece has been returned, and if any shortages report to the housekeeper. The operating-room nurse shall see that any ripped places are mended and that any broken or absent buttons are replaced. She shall place each in a separate package, mark with the name of the owner and sterilize for his use. All solutions and drugs used in the operating room shall be kept in bottles properly and neatly labeled.

A small sterile enamel basin for the soiled sponges should be placed on the patient in easy reach of the operator and his assistant. The small sponges used in sponging blood from wounds during an operation must be folded square and be about three inches in diameter each way; the cut edges must be folded inside so that no threads or bits of gauze will be left in the wound. They should be made from a piece of cut gauze about twelve inches square. These sponges should be put up one dozen in a package in order that the operating-room nurse may know how many sponges have been used and to know whether any have been left inside the patient. The "flats" or larger sponges are made in a similar manner from pieces of gauze about sixteen inches square, and should be put up one-half dozen in a package. Cotton balls are made from pieces of cotton cut three inches square and sterilized four in a package. The

operating-room nurse shall make a careful count of the sponges just before and after each operation, the last count shall be made while the surgeon is closing the peritoneum (first layer of the incision) and if there is a shortage his attention must be called to that fact.

An abundant supply of normal salt solution, both hot and cold, must be kept on hand during every operation. Ordinary table salt, one teaspoonful to the pint, must be used in the preparation of this solution.

After the operation the instruments should be well cleansed of blood, etc., by washing with cold water, they should then be sterilized by boiling for a short time in bicarbonate of soda solution, then wiped dry while hot. The operating-room nurse should take care to unlock all scissors and artery forceps, etc., and carefully dry each piece so as to avoid rust.

MENDING RUBBER GLOVES.

Put the glove finger to be mended over the round end of a test tube so as to hold the spot firmly, cleanse around the puncture with gasoline or benzine away from fire of any sort, let dry and apply a thin coating of rubber cement, then apply a small patch of rubber which has been prepared in the same way with gasoline. Hold patch in place with the finger until it has time to set firmly. The patch remains in place more satisfactorily if the glove is turned so that the patch will be inside.

DIRECTIONS FOR DRESSING NURSE—CLEAN CASES.

For doing the wound dressing in a clean case the nurse should have one pair of bandage scissors, for cutting the adhesive, dressings or bandages, one or more cotton pads covered with gauze done up in separate sterile packages, four cotton balls in a sterile package, one sterile towel open in center, one pair dressing forceps, sterile tray or basin, one small basin containing normal salt solution. In case there are stitches to be removed, she should have a pair of sterile scissors in addition, one two-ounce bottle containing alcohol, and a thin package of cut gauze on the tray. If the nurse is doing the dressing, she should have her hands well scrubbed with soap and hot water. The nurse assisting her should cut the adhesive plaster strips in two in the middle, lay over the ends over each side and turn back the outside layer of the dressing. The fenestrated towel should be laid over the wound so that the dressing nurse may work through the opening, she should remove the remainder of the dressings, and if not soiled lay them on the sterile towel. If there is any blood or other wound discharge it should be sponged away with a cotton ball wet with normal salt solution, and handled with dressing forceps, not with the fingers. If there is a drain in the wound or if the stitches are to be removed, one of the cotton balls should be moistened with alcohol, and the skin about the stitches or drain should be sponged with this. (Some of the physicians will use bichloride solution instead of the normal salt and alcohol.) When ready cover the wound with one layer of fresh sterile gauze, and if the cotton pads that were used previously on the wound

have not been soiled replace same, otherwise use a fresh pad for this purpose. The ends of the adhesive plaster strip which has been cut in two in the middle and laid over each side must be fastened together either by safety pins or pieces of tape. In pus dressings, remove all of the pus by irrigation with a fountain syringe and normal salt solution, otherwise proceeding as before with the exception that a large dressing may be required in order to take care of the wound discharge. In case of urinary sinuses which soil large quantities of dressings, use sterile pads made of oakum and cover with gauze. All gauze dressings and bandages not soiled with pus should be re-sterilized for future use.

DIRECTIONS FOR USE OF HYPODERMIC SYRINGES.

They are to be kept clean by filling with alcohol and forcing same through needle; for use, the needle should be sterilized by boiling for one minute. The tablet should be dissolved in sterile water and shaken or stirred up until there are no solid particles left to clog the needle of the syringe. The skin of the patient should be cleansed at the point of injection by wiping with a cotton sponge moistened with a little alcohol. Before giving the hypodermic, force all air out of the syringe by elevating the point of the needle, push the piston in until a drop of the solution appears at the point of the needle. The skin of the patient should be held between the thumb and the forefinger of the left hand at the point of injection, and the needle pushed in with the right hand. The needle should be pushed under and not into the skin. After giving a hypodermic the needle should be withdrawn quickly. The wire in the hollow of the needle should always be replaced immediately after the needle has been used and cleansed.

DR. KEEN GIVES FIRST AID TO THE INJURED.

Dr. W. W. Keen of Philadelphia has great repute as a surgeon. In New York, one winter afternoon last year, he saw a man slip on an icy pavement and fall heavily. He hastened at once to the poor fellow's assistance, and found that he had broken his leg.

Dr. Keen used his umbrella as a splint, and with his own and several borrowed handkerchiefs bandaged the broken limb tightly. As he finished his task the ambulance arrived.

"You've bandaged this rather well," the young white uniformed ambulance surgeon said to Dr. Keen.

"Thank you," replied Dr. Keen.

"I suppose," the youth continued, "that you have been reading up some 'First Aid to the Injured' treatise, eh? They say a little learning is a dangerous thing, but really, the little you have learned about surgery you have put to a good account. Give me your name and address and I'll forward your umbrella to you."

"I'll give you my card," said Dr. Keen. He did so, and the young surgeon flushed as he read upon the card the name of the greatest of modern surgeons.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

A HAPPY NEW YEAR!

To all who have remembered the editor with kind wishes at this holiday time, as well as to all patrons and readers of the JOURNAL, we send greetings in the language of the immortal Dickens, whose "Christmas Carol" has taught the whole world the true lesson of the glad Christmas day.

"So may the New Year be a happy one to you, happy to many more whose happiness depends on you! So may each year be happier than the last."

A CANCER CRUSADE.

We have just finished re-reading "Rab and His Friends," that delightful, touching little story by good old Dr. John Brown, late of Edinburgh. The fine old gentleman was still alive but retired from practice

when we were in that splendid city as a post graduate student—over thirty years ago and we shall always regret that we failed to accept an invitation from one of his former patrons to call on the famous physician and author of the little story that has been so widely read the world over.

Have you read this story? If not, we advise that you do so at once. If you have any good red blood in your vessels you will enjoy the dog fight with which it opens and that had such a tragic end. And if you have the tender heart and compassion for human suffering that should be the possession of every true physician, you will be touched even to tears by the painfully pathetic tale of a cancer case where the merciful knife of the surgeon was used too late to banish disease or to postpone death.

The owner of the conquering dog, Rab, was the plain Scotch husband of Ailie, of whom he reports to the doctor: "As I was sayin', she's got a kin' o' trouble in her breast, doctor; wull you tak' a look at it?" And after an examination "there it was, that had once been so soft, so shapely, so white, so gracious and bountiful, so full of all blessed conditions,—hard as a stone, a center of horrid pain, making that pale face, with its gray, lucid, reasonable eyes, and its sweet, resolved mouth, express the full measure of suffering overcome." Far advanced as was the disease, a surgical operation was by the experienced surgeon determined to be the best remedy, and the hour was set for it. The students, then as now anxious to witness operations which but a limited number of them will ever perform, gathered eagerly and somewhat boisterously in the operating room. "Do n't think them heartless; they are neither better nor worse than you or I. They get over their professional horrors and into their proper work,—and in them pity as an *emotion*, ending in itself or at least in tears and a long-drawn breath, lessens, while pity as a *motive* is quickened, and gains power and purpose." In the presence of the suffering patient, a woman of 60 years, all noise subsides, for the enthusiastic embryo doctors feel the influence of her presence and calm demeanor. She lay down on the operating table and closed her eyes. No God-given anesthetic was known in that day, and so a tedious, terribly painful operation was done, but no cry of pain escaped the lips of the brave

patient, who, after the surgeon's work was completed, "steps gently and decently down from the table, looks for her husband, then turning to the surgeon and the students, she courtsies—and in a low, clear voice begs their pardon if she has behaved ill." Behaved ill, indeed! The bravery of that plain Scotch woman has immortalized her and the story of her patient endurance has caused the tears to freely flow from the eyes of many a man who, under the same painful operation, would have made loud lamentation, or demanded to be filled with whiskey as a stimulus to his fast-fleeing courage.

"Why was that gentle, modest, sweet woman, clean and lovable, condemned by God to bear such a burden?" it is asked. Why in this more modern day, we ask, are such women in every community permitted to postpone consulting a physician until the disease is beyond hope of radical cure? Why is not every woman so instructed in matters of this kind that she will seek medical advice at the earliest possible moment? And why does not every physician, on first detecting a tumor of the breast, either do a life-saving operation or turn the patient over to a more competent operator? Within a year we have seen a case of cancer of the breast so far advanced that the nipple was sunken and the skin firmly adherent, and the patient suffering shooting pains, and yet a reputable physician had but recently said to her: "There is no urgency as to an operation. We will just watch it awhile." Two cases of uterine cancer recently under our care had at the first examination progressed so far that not only was the uterine cervix deeply ulcerated, but the ulceration had extended an inch on the vaginal wall. Both patients had suffered marked symptoms of cancer for many months, and yet they had not suspected serious disease, because no pain had been experienced. Don't you know, dear reader, that pain is by no means an early sign of cancer, and many cases proceed to a fatal termination, as did one of our recent cases, without a single dose of anodyne being required? Then let no opportunity pass of impressing this fact on your female patients, who so badly need such information.

A recent report shows that nearly \$15,000,000 was expended in 1910 in the crusade against tuberculosis. Over \$11,000,000

was for treatment in institutions; \$760,000 was expended by anti-tuberculosis associations; and \$889,000 by tuberculosis dispensaries. As a result of the active work in educating the people, and of improved treatment of the disease, this fell destroyer is reported to be on the decrease. Cancer is said to be on the increase, and the recent Census Report confirms this statement. The public has had tuberculosis management and proper living preached to them so freely that they have learned much as to its early recognition and the proper care of patients. What do the people yet know of the early symptoms of cancer? When have our women been told that every lump in the breast is an omen of danger, and that it must be investigated; that an early removal is a trifling operation that holds out great hope of permanent cure? How many women, even among the more intelligent classes, have yet learned that a bloody or offensive vaginal discharge after the cessation of menstruation is an almost certain evidence of serious disease; and that irregular bleeding from the uterus at any time demands investigation? Who has ever publicly lectured to women, pointing out the early signs of cancer, and impressing the importance of early investigation by a competent physician?

Now that the war on tuberculosis has progressed so well and with such excellent results, we here make earnest plea that a similar campaign of education be organized with a view to enlightening our women, the best part of God's creation, and the greatest sufferers, so that they may come to know the very early symptoms of this other dread disease, and be taught to seek medical aid so early that they can, by prompt interference, be saved the painful experience of the patient, courageous Ailie, whose pitiful story Dr. Brown so touchingly tells.

—S. L. J.

TO THE COUNTY SECRETARIES.

We have recently written privately to all of you, asking for the names of all members who have **not** paid dues for 1910, in order that we may remove their names from our mailing list, and thus save the expense of sending the JOURNAL longer to those who have not paid for it. Several secretaries have sent us lists of **paid** members.

This is no guide to us, as we have not your former membership. Please send the names of delinquents only, and if you will do this *to-day*, you will save us needless expense. Collect an extra dollar for 1911 for mal-practice defense. Read the State Secretary's letter below.

TO DELINQUENTS.

Those who may have formerly affiliated with some local society and who have not paid dues for one or more years, have received the JOURNAL regularly, since neither you nor your secretary has notified us to stop it. Will you, therefore, kindly send us one dollar for last year's JOURNAL. It has certainly been worth that much to you. If you have fully determined to drop your membership, we shall regret it and think that you have made a mistake. Our State Association was never so large, and you ought to be among the progressives who attend medical meetings. But we do not doubt that you will see the justice of paying for a Journal that has come to you during the past year, and which you could have stopped by a postal card notice to us costing one cent. We hope you liked it so well that, even if you do drop out of the society, you will send us an additional dollar for the Journal for the year 1911. With the best wishes for the New Year, The Editor.

IMPORTANT. READ CAREFULLY!

DAVIS, W. VA., Jan., 1911.

DEAR DOCTOR:—

Please allow me to call your attention to a very important matter. After many years' deliberation the Association adopted at the Parkersburg meeting a system of Medical Defense. It was made a part of our By-Laws. It is predicted by those who have kept closely in touch with its workings elsewhere, that it will mean great things for the Association.

Naturally, it can not work as smoothly at first as it will later on when better understood. Just now the two most important changes it makes are: First, the amount of *State Dues* is now \$3.00, not \$2.00 as heretofore. Second, the dues should be paid in January. In many of our larger towns and cities this will not mean that the dues which you have been paying will have to be increased. Some of our societies have for a

long time had a yearly assessment of as much as \$5.00. Two of this was forwarded to the State Association, the balance kept for local purposes.

I understand that many of these societies will not raise the \$5.00 rate. On the other hand, many societies, my own for one, have a rate of \$3.00. These will be compelled to raise in order to have anything left for local expenses. I trust that all those who can, will refrain from raising the rate.

Many members have formed the idea that it is a voluntary matter. If they desire the protection they will pay "an extra dollar," if not they will pay as heretofore. This is not correct. It can not be left off. It must be paid by every member.

There is every reason why it should be paid in this month. Any one paying after January 31st will only get protection from suits arising after his dues are paid. Thus if he paid on July 1st he would not be protected from suits arising from any alleged act committed on June 30th. County secretaries will keep an accurate account of the date of each payment. The Executive Committee having charge of the enforcement of this act has just met in Grafton and this is their decision. So please hand in your dues this month to your secretary. By doing this you will help him, you will help me, you will greatly help the editor of the JOURNAL of the Association, you will be on the safe side.

By the way, don't be uneasy about your certificate. I can't send it to you until I receive the money. I will send it to you within a day or so after getting the money. Usually your name is not sent in until most of the other members have paid up.

I have received but two complaints regarding spelling of names or addresses as given in December JOURNAL, so I presume yours is all right.

Do you belong to the A. M. A.? If not, would it not be a good thing? You are entitled to membership. You would get the greatest medical journal in the world by joining. By the way, only those who have belonged for two years can serve as Delegates to the A. M. A. This gives us trouble every now and then. We elect men who have not belonged that length of time.

How many outsiders can you bring in this year? If each of you will get just one

new member there will be no such thing as an outsider.

Have you a paper in contemplation for next year's meeting? If so, let me know soon. I can't promise to use all the papers that might be offered, but so far we have never had too many. Can use about forty.

Would like to have papers on any live subject. Could use something along these lines:—

The Uselessness of Routine Drug Giving.
Some Common Mistakes in Diagnosis of Skin Diseases.

Two papers on genito-urinary topics.
End Results of Gynecological Operations.
Something on the good and bad side of uterine curettement.

A Plea for Less Operative Work.
A Plea for More Operative Work.
A Plea for More Exploratory Operations.
Infant Feeding.

A paper on Board of Health work.
If you have never had a paper for the annual meeting, you are especially invited to have one this time.

Is this office being conducted as you think it should be? If not, write me how you think it could be bettered.

Wishing you a prosperous year, I am,
Very truly yours,

A. P. BUTT,

Sec'y W. Va. State Medical Association.

SPECIAL SOUTHERN NUMBER.

The January issue of the *American Journal of Surgery* will be composed entirely of original contributions from the pens of well known southern surgeons. Among those to appear we would mention:

Pyuria, by Howard A. Kelly, M.D., Baltimore, Md.

Transfusion of the Blood, its Indication and Technic, by J. Shelton Horsley, M.D., Richmond, Va.

Tumors of the Lower Jaw, the Form Most Frequently Found in the Negro, by Willis F. Westmoreland, M.D., Atlanta, Ga.

Pylorospasm, by Stuart McGuire, M.D., Richmond, Va.

Prevention of Immediate Post-Operative Pain by Quinine Injections, by Drs. V. and V. W. Pleth, Seguin, Texas.

The Importance of Educating the Public in regard to Cancer, by Southgate Leigh, M.D., Norfolk, Va.

Aerogenes Infections, by George R. White, M.D., Richmond, Va.

Stricture of the Rectum, Complicating Fistulae, by C. S. Venable, M.D., San Antonio, Texas.

Gastric Symptoms from a Surgical Viewpoint, by Loris Frank, M.D., Louisville, Ky.

Dr. Edgar D. Capps, of Ft. Worth, Texas, and H. Berlin, M.D., of Chattanooga, Tenn., will also contribute original articles to this number.

The National Confederation of State Medical Examining and Licensing Boards will hold its twenty-first annual meeting in Chicago, Ill., on Tuesday, Feb. 28th, 1911, at the Congress Hotel.

The subjects to be taken up at this meeting will be a consideration of the State Control of Medical Colleges; a report by a special committee on Clinical Instruction; a report on a proposed Materia Medica List by a special committee; the report on a paper presented at the St. Louis meeting by Mr. Abraham Flexner of The Carnegie Foundation for the Advancement of Teaching; and some special papers on such subjects as the Regulation of Medical Colleges, Necessity for Establishing a Rational Curriculum for the Medical Degree, and others, by men eminently qualified to prepare papers upon such subjects.

The symposium will be composed of ten papers and be presented from the view-points of state law, medical colleges, state medical and licensing boards and the medical profession. The contributors of papers to the Symposium on State Control of Medical Colleges are men of the highest attainments in matters pertaining to state, law and the medical profession, and their production will be worthy of the most careful consideration. The chief object of the symposium is to determine, as far as possible, the feasibility of placing medical colleges under state control. The special committee on Materia Medica made a report at the St. Louis meeting of the Confederation June 6th, 1910, and it was continued and instructed to report again at the next annual meeting of the Confederation in 1911. The report of this committee made at St. Louis has received very favorable comment by many of the editors of medical journals, and should receive at the Chicago meeting extended and careful consideration. The report on Mr. Flexner's paper is published in the Proceedings of the St. Louis meeting of the Confederation, page 64, and will be open for discussion at the Chicago meeting.

An earnest and cordial invitation to this meeting is extended to all members of State Medical Examining and Licensing Boards, teachers in medical schools, colleges and universities, delegates to the Association of American Medical Colleges, to the Council on Medical Education of the A. M. A., and to all others interested in securing the best results in medical education.

The officers of the Confederation are: President, J. C. Guernsey, M.D., 1923 Chestnut street, Philadelphia, Pa.; Secretary-Treasurer, George H. Matson, M.D., State House, Columbus, Ohio.

If a scalp wound extends through the periosteum it is safest to sew the periosteal wound at once and leave the scalp unsutured for twenty-four hours. Fracture should be excluded, if possible, before closing the periosteum.—*American Journal of Surgery*.

State News

STATE BOARD OF HEALTH.

Report of examination held at Morgantown, November 14, 15, 16, 1910. Number of subjects examined in, 9; total number of questions, 120; percentage required to pass, 80. Examination was partly oral and partly written. Total number examined, 29; number passed, 24; number failed, 5.

The following applicants passed:

Name, R. A. McDaniel; School of Graduation, Howard University; Year of Graduation, '10; School of Practice, Regular; Home Address or Previous Location, Kearneysville, W. Va.

T. H. Nichols, Howard University, '04, Reg., Huntington, W. Va.

E. G. Kesler, Ec. Med. Inst., '10, Ec., Williamsburg, W. Va.

G. H. Lance, Univ. Louisville, '10, Reg., Gay, W. Va.

A. E. Altizer, Univ. Louisville, '10, Reg., Man, W. Va.

W. H. V. Jones, Univ. Louisville, '10, Reg., Painsboro, W. Va.

W. H. Gabbert, Univ. Louisville, '10, Reg., Big Creek, W. Va.

F. N. Lilly, Univ. Louisville, '10, Reg., Fayette, W. Va.

G. S. Schoyer, Georgetown Univ., '10, Washington, D. C.

V. L. Pennyacker, Woman's Med. Col. (Pa.), '10, Reg., Huntington, W. Va.

L. O. Weldon, Louisville & Hosp., '08, Reg., New York, N. Y.

W. L. VanSant, Med. Col. (Va.), '10, Reg., Hot Coal, W. Va.

W. R. Bender, Univ. South, '08, Reg., Davis, W. Va.

A. T. Jordan, Col. P. & S. (Chicago), '10, Reg., Frazier's Bottom, W. Va.

J. A. Stockler, Univ. of Pa., '09, Reg., Star Junction, Pa.

L. L. Thompson, Univ. of Pa., '10, Reg., Pittsburg, Pa.

E. J. Horgan, Geo. Washington, '08, Reg., Fairfax, Va.

C. R. Meghan, West Penn. Med. Col., '07, Reg., Eldersville, Pa.

J. M. Barr, Univ. of Pittsburg, '08, Reg., Hollidays Cove, W. Va.

R. L. Focer, Univ. of Pittsburg, '10, Reg., Pittsburg, Pa.

E. A. Keay, Woman's Med. Col. (Baltimore), '10, Reg., Hambleton, W. Va.

A. R. Mackenzie, Univ. of Md., '10, Reg., Blakeley, W. Va.

J. K. Pronty, Mccharry Med. Col., '10, Reg., Brownsville, Pa.

W. C. McDonald, Los Angeles Col. of Osteopathy, '10, Ost., Romney, W. Va.

CHEMISTRY AND MEDICAL JURISPRUDENCE.

1. What are some of the various forms of Carbon, physical properties and economic uses? 2. Mention three standard solvents? 3. What are chemical incompatibles and give example? 4. How would you identify each one of the following gases: Hydrogen sulphid, Carbon dioxid,

Laughing gas, and Ammonia? 5. Give one method for producing in the laboratory each of the following gases: Oxygen, Hydrogen, Chlorin and Ammonia? 6. Name any four medicinal substances which are obtained from coal tar and state their uses in medicine? 7. Describe Marsh's test for Arsenic? 8. What are the signs of death by drowning? 9. How do gunshot wounds differ from other wounds? 10. Give the distinguishing marks between ante-mortem and post-mortem wounds?

DR. L. S. BROCK.

BACTERIOLOGY AND HYGIENE.

1. Define Bacteria, Pathogenic, Saprophytic, Leukocytes and Phagocytes. 2. What is an Antiseptic? Give an example. 3. Define Toxins, Antitoxins, Leukomains and Ptomain. 4. What is infection? 5. Discuss Hereditary Predisposition. 6. What patients would you not send to a high altitude? 7. What climate would you recommend to a rheumatic patient? 8. What is a fair average death rate? 9. What is the most sanitary method of disposing of a city's garbage? How dispose of sewage? 10. In what different ways may Typhoid fever be communicated?

DR. JOHN L. DICKEY.

SURGERY.

1. Describe the symptoms of Pyothorax (empyema) and an operation for its relief. 2. Mention the dangers of anaesthesia, and treat case of Chloroform, Ether and Cocaine poisoning. 3. Mention the most common causes of Iritis. Give the symptoms and the surgical treatment of Iritis. 4. Mention the indications for draining a wound and describe the methods of securing drainage. 5. Write briefly the history of a typical case of Appendicitis with perforation, stating the order in which the symptoms most commonly develop. 6. Give the symptoms and the surgical treatment of Hydrocele of the Tunica Vaginalis. 7. Give in detail the examination tests that should be applied to determine the causes of coma in a patient whose history is unobtainable. 8. Describe the early symptoms of Tuberculous disease of the hip joint and mention conditions for which it may be mistaken. 9. Give indications for operative interference in Cholelithiasis. 10. What are the varieties of dislocation of the shoulder joint? How would you reduce one variety?

DR. R. E. VICKERS.

ANATOMY AND EMBRYOLOGY.

1. Into what two general classes are muscles divided? Give a macroscopic and a microscopic description of each class. 2. Describe the external Carotid Artery as to origin, distribution and branches. 3. At what stage of embryonic life does the development of the alimentary canal commence? 4. Give the general characteristics of a Vertebra. Describe the Atlas. 5. Give the classification of joints. 6. Describe the Kidney and give its relations. 7. Describe the Thorax; mention its contents. 8. Give the coverings of the brain. Describe the humerus and give its muscular attachments. 10. Describe the Oesophagus.

DR. M. V. GODBEY.

MATERIA MEDICA AND THERAPEUTICS.

1. What is a drug? What are Cerates, Colloids, Confections? 2. What are Motor Depressants? Name three. 3. What are Hydriatics? Name three. 4. Name two preparations of Ar-

senic. Give physiological action and name official antidote. 5. Mercury: Name three preparations, therapy and dose. 6. Nux Vomica: Name two preparations, physiological action, therapeutics and dose of each. 7. Chloral: Source, dose and indications for use. 8. Salol: Dose and indications for use. 9. Give procedure in writing a prescription. Give example. 10. What are the actions and uses of Emmenagogues. Name two.

DR. A. R. WARDEN.

OBSTETRICS AND GYNECOLOGY.

1. Name the external and internal female organs of generation and describe the uterus. 2. Differentiate Ascites, Ovarian cyst and pregnancy before the fifth month. 3. What is Placenta Praevia? Name the different attachments of the Placenta in the same. Give the method of management. 4. Give the symptoms and treatment of Toxemia of pregnancy. 5. How would you treat a shoulder presentation with arm down? 6. Describe the various methods of preventing infection during child birth. 7. Name some of the causes and some dangers incident to protracted labor. 8. Make a diagnosis of Syphilis of the new born; state something concerning the prognosis. 9. Give two indications for Hysterectomy. Which do you prefer, vaginal or abdominal? State upon what grounds you would base your preference? 10. Give cause and treatment of Pruritis Vulvae.

DR. H. H. RYMER.

PHYSIOLOGY AND HISTOLOGY.

1. Describe deglutition. 2. Describe the difference between Tetanic Contraction of a Muscle and Rigor Mortis. 3. Arterial pressure: Describe it and how is it regulated and estimated. 4. Sight: Describe it; what is Myopia and Hypermetropia? 5. Tobacco: Describe some of the deleterious effects of tobacco when used in excess. 6. Name the organs of reproduction, male and female, and where is the ovum impregnated? 7. Pneumogastric Nerve: Give origin and function. 8. Describe the clotting of blood; give theory of the Genesis of Fibrin. 9. Give general location of the Motor areas of face, arm and leg. 10. Give the histology of the human red blood corpuscles and wherein do they differ from those of reptiles?

DR. J. E. ROBINS.

PRACTICE OF MEDICINE AND PEDIATRICS.

1. Give cause of Endocarditis. 2. What is Sciatica? Give treatment. 3. Describe cause, give prognosis and treatment of Erysipelas. 4. How would you treat a case of Cholera Morbus? 5. What causes Spotted fever? Give treatment. 6. How many different kinds of tapeworm? Give treatment for its expulsion. 7. Give the three different varieties of Stomatitis and treatment of one. 8. Describe the peculiarities of the digestive organs in babies. 9. Ague: Peculiarities of and treatment in childhood. 10. Diarrhoea: Symptoms, forms and treatment of Simple Diarrhoea.

DR. FRAME.

SPECIAL MEDICINE.

1. Define and describe compensation and its failure. 2. Name the important points to be noted on inspection and palpation of chest. 3. How may the exanthemata affect the eye? Give treatment. 4. Diagnose and treat foreign bodies in the eye. 5. Diagnose and treat Diphtheritic Rhini-

tis. 6. Diagnose and treat Peritonsillar abscess. 7. Differentiate Catarrhal croup and Membranous laryngitis. 8. Give pathology, diagnosis and treatment of paralysis of the vocal cords. 9. Diagnose and treat paralysis of the Musculo-spiral nerve. 10. Give the history, signs and symptoms from which you would make a diagnosis of tabes dorsalis.

DR. C. V. HALTERMAN.

MATERIA MEDICA AND THERAPEUTICS. (ECLECTIC.)

1. Describe physiological action of Gelsemium. Therapy and specific symptomatology. 2. Name three preparations of opium. Give dose and indications for use. 3. Give properties, dose and specific indications for Hyoscyamus. 4. Give properties, dose and indications for Cimicifuga, Pulsatilla, Cactus. 5. Define Alkaloid. Name five of different source. Give dose and therapeutic application. 6. How manage threatened abortion? What remedies generally used? 7. What remedies are generally indicated for the relief of anasarca and ascites? 8. How would you treat an attack of asthma for immediate relief? 9. Name remedies usually indicated in catarrh of the bile-passages. 10. Name therapeutic measures indicated for the relief of Synovitis.

DR. C. W. HALTERMAN.

PRACTICE OF MEDICINE. (ECLECTIC.)

1. Describe Broncho-Pneumonia in children. Give treatment. 2. Give symptoms, diagnosis and treatment of cystitis. 3. Diagnose and treat Cirrhosis (atrophic) of the liver. 4. Give pathology, diagnosis and treatment of Angina Pectoris. 5. Diagnose and treat acute Articular Rheumatism. 6. Differentiate the coma of Apoplexy, Opium Narcosis and Alcoholism. 7. Define Arterio-Capillary Fibrosis. Etiology and treatment. 8. Diagnose and treat Erysipelas of the face. 9. Define Exanthemata; name three; differentiate and treat. 10. Give symptoms, diagnosis and treatment of multiple Neuritis.

DR. C. W. HALTERMAN.

OSTEOPATHIC DIAGNOSIS.

1. Give symptoms and lesions found in Chronic Appendicitis. 2. Diagnose Ulceration of the Stomach. 3. Diagnose a case of Sciatica. 4. Diagnose a case of Scarlet fever in early stages. 5. Diagnose a case of Typhoid fever in early stages. 6. Diagnose Pregnancy in early stages. 7. Diagnose a case of Cystitis. 8. Tell how you would diagnose Small-pox. 9. Diagnose a case of Rheumatoid Arthritis. 10. Differentiate functional and organic diseases of the stomach.

DR. W. A. FLETCHER.

PRINCIPALS OF OSTEOPATHY.

1. Give causes and symptoms of Acute Intestinal Obstruction. 2. Give the symptoms and diagnosis of Renal Calculus. 3. Give the causes, symptoms, diagnosis and prognosis of Acute Nephritis. 4. Give symptomatology, diagnosis and prognosis of Chronic Lead Poisoning. 5. How could a twisted tenth rib cause Renal Hemorrhage? 6. Give technique of correcting an Innominate which is downward and backward. 7. Give causes for Chronic Constipation and lesions causing same. 8. Explain: (a) Stimulation; (b) Inhibition. 9. Chorea: Define, give treatment and usual lesions. 10. How treat a case of Asthma? Give usual lesions.

DR. A. W. FLETCHER.

PRACTICE OF OSTEOPATHY.

1. Give causes, treatment and prognosis of Locomotor Ataxia. 2. How would you treat a case of Diphtheria. 3. Gall Stones: Define, give lesions and treatment. 4. Give treatment for Chronic Indigestion and lesions causing same. 5. Describe treatment for Appendicitis, lesions found and prognosis of same. 7. Describe a case of Typhoid fever and give treatment. 8. Give etiology, symptoms, treatment of Lobar Pneumonia, and prognosis. 9. Give symptoms, pathology and treatment of Acute Articular Rheumatism. 10. How treat a case of Neurasthenia? Give usual lesions. DR. A. W. FLETCHER.

Dr. W. S. Hutchins of Wheeling, whose advertisement appears in another column, has recently returned from New York City, where he spent some time in attendance on the Post Graduate Schools. He has for many years been one of our most expert refractionists, and proposes now to widen his field of work.

President Wingerter of the State Medical Association lectured before the Barbour-Randolph-Tucker Society several weeks ago, and will appear before the Little Kanawha and Ohio Valley Society at Parkersburg soon.

Dr. H. L. Kirkpatrick of McDonald, Fayette County, a member of the County Court, was some time ago in a railroad wreck in Ohio, and has since been under treatment in the Battle Creek Sanitarium. We are glad to note that he has fully recovered and returned to his home.

Dr. Rader of Huntington has recently been a sufferer from asthma, and confined to his home.

A large addition to the Davis Memorial Hospital in Elkins is about completed, and will soon be ready for patients. Like the original building, it is fireproof. It almost doubles the capacity of the institution, which is one of the most beautiful hospitals in the state.

We are very glad to see that Dr. H. C. Skaggs of Kay Moor, Secretary of the Fayette County Medical Society, was at the November election chosen as a member of the House of Delegates. The Doctor is among the leading physicians of his county, and a man well qualified to serve his people well. We have a letter from the Doctor in which he says he will be very glad to have suggestions from any of the officers of the State Association as to needed legislation. A man who seeks information is of the kind that we need in the legislature.

The hospital that is being erected in Huntington by Drs. J. A. Guthrie and J. H. Steenbergen is nearing completion and will soon be ready for occupancy. Dr. A. K. Kessler is also erecting a new hospital which is well on the way to completion.

Dr. O. A. Kent of "The Second City" is in New Orleans doing special work on the eye, ear, nose and throat.

Dr. M. H. Malcolm of Fayetteville, one of the oldest and best known citizens, was some time ago thrown from his horse and sustained painful injuries, from which he has not yet entirely recovered. The doctor is said to be a fine horseman, and this is his first accident in thirty years.

Dr. Wade H. Young, late of Ben's Run, has purchased the property of Dr. C. F. Kahle, late of Sistersville, and will hereafter practice in that city. Dr. Kahle has removed to Oklahoma City.

Dr. E. B. Stephenson, formerly a practitioner of Clay County, but for some years in the lumber business, has been appointed to the vacancy on the State Board of Control caused by the resignation of Col. Hodges. It takes a big man to fill the colonel's place, but Dr. S. is said to be a man of that kind.

The Board of Education of the City of Wheeling, which numbers twenty-one, contains five physicians, namely, Drs. R. J. Reed, E. L. Armbrrecht, E. B. Plant, Andrew Wilson and W. C. Etzler. Not a lawyer's name appears on the list of members. Drs. Birney, J. A. Campbell, Dickey, Hildreth II, Monroe, J. W. McCoy and Jepson are former members of the Board. The profession believes in education, and has shown its willingness to help on the cause. Among deceased physicians who have served the city on the Board we recall the names of Drs. Bates, Todd, J. C. Hupp, Geo. Baird, Pipes, Hildreth I, J. B. Reed. In view of the services thus rendered by the doctors, our Board of Education should be very liberal in their dealings with the profession.

Dr. R. J. Reed, who was confined to his home by an attack of jaundice for several weeks, and has been for a little time at the Battle Creek Sanitarium recuperating, is reported as greatly improved, and he will soon be at his work again. He has been on his forced vacation for almost two months.

Dr. S. M. Mason, superintendent of Kessler Hospital, Clarksburg, announces that hereafter he will limit his practice to surgery and gynecology.

Society Proceedings

(Continued from December issue.)
 "ULCERATION OF THE RECTUM IN PREGNANT WOMEN AND THE PART IT PLAYS AS A FACTOR IN ABORTIONS, WITH A REPORT OF CASES."

By LEON STRAUS, M.D., of St. Louis, Mo.
 Sixteen years devoted to diseases of the rectum exclusively has afforded the author the opportunity to see and classify a large number of cases of irritable ulcer of the rectum in pregnancy, to say nothing of a much larger number not associated with this condition. He has kept a very careful record of these most interesting cases and has classified them with reference to certain conclusions, namely, that it is a factor not infre-

quently overlooked. Then, too, many general practitioners make the contention that an operation is uncalled for and unwarranted, that is to say, an operation will certainly produce the very result which it is intended to avoid.

He dissented absolutely from this contention and for that reason reported the results of his work along this line and his final conclusions. He has operated twenty-four times for the result of irritable ulcer of the rectum in pregnant women. Not all of these operations were made to prevent abortion. In fact, only fourteen had had one or more abortions. That leaves ten for which the operation was made to relieve the distressing pain from which these patients suffer. A number of these cases are unique and teach a lesson apart from the average case. The history, symptoms and results of several such cases were reported and the following conclusions were drawn:

First—That irritable ulcer of the rectum is not an infrequent factor in abortion and miscarriage.

Second—That the local lesion is not recognized by the general practitioner as a factor in abortion and miscarriage.

Third—That you will meet strong opposition to operative interference by the general practitioner.

Fourth—That you can and should operate at any period of the pregnancy if indicated.

Fifth—That the danger and only danger is in leaving the fissure without operating.

Sixth—That you may and will often have to assume the entire responsibility for the outcome of the operative procedure.

Seventh—That we proctologists should teach on the byways and highways of surgery the invariable indication for surgical interference in these unfortunate cases.

"REMARKS UPON CECOSTOMY AND APPENDICOSTOMY."

(WITH EXHIBITION OF NEW ENTERO-COLONIC AND APPENDICULAR IRRIGATORS.)

By SAMUEL G. GANT, M.D., New York City, N. Y.

Dr. Gant called attention to the remarkable usefulness of appendicostomy and cecostomy in the direct treatment of bowel diseases and made the point that the latter was preferable in this class of cases and would sooner or later supersede appendicostomy. He also exhibited a new appendicular irrigator which could be inserted during operation and which permitted irrigation to be started immediately in aggravated cases of diarrhea and intestinal auto-intoxication.

Next he showed a new entero-colonic irrigator by means of which the large and small intestines could be irrigated separately or at the same time.

He claimed that this instrument is indicated in the treatment of all forms of enteritis, enterocolitis and the different types of ulcerative diseases of the colon and also in the treatment of typhoid fever, intussusception, peritonitis, and parietic affections of the intestine.

"A CASE OF LOCALIZED DERMATITIS FOLLOWING THE USE OF QUININE AND UREA AS A LOCAL ANESTHETIC IN A CASE OF FISSURE AND HEMORRHOIDS."

By ARTHUR HEBB, M.D., of Baltimore, Md.

Three days after the use of a 1% aqueous solution of quinine and urea, as a local anesthetic in a case of fissure and hemorrhoids, erythema over the ischio-rectal region developed followed by epidermolysis, then a profuse serous discharge which continued for four or five weeks, the wound showing little tendency to heal during this time.

"A BRIEF REVIEW OF THE HISTORY OF THE AMERICAN PROCTOLOGICAL SOCIETY FROM ITS ORGANIZATION IN 1899 TO DATE."

Read by the Secretary of the Society, LEWIS H. ADLER, JR., M.D., Philadelphia, Pa.

The author believed the presentation of this paper would help to impress the profession with what had been accomplished, not alone for the individual profit and pleasure of the members of the organization, but likewise for the benefit of the profession as well as for the advancement of the science of medicine.

Attention was called to the fact that as the surgeon had rescued surgery from the "Society of Barbers and Bathers," and the obstetrician the practice of midwifery, from the ignorant and often grossly careless midwife, so the proctologist, largely by means of this organization, has advanced diseases of the rectum and sigmoid from the domain of quackery to a recognized specialty, and has removed from the hands of the charlatan to a great extent, a fertile field for playing upon the credulity and ignorance of the populace.

The first effort to organize a National Proctologic Association was made in June, 1895, when the American Medical Association met in Baltimore. Dr. Samuel T. Earle at that time called together the following Proctologists to meet at his house: Drs. James P. Tuttle, Samuel G. Gant, T. C. Martin, Joseph M. Mathews, and Leon Straus. The subject was talked over informally, but no definite action was taken.

Including the present meeting at St. Louis, the society will have convened twelve times. The respective meeting places, starting with the first session in 1899 at Columbus, Ohio, were Washington, D. C.; St. Paul, Minnesota; Saratoga Springs, New York; New Orleans, Louisiana; Atlantic City, N. J.; Chicago, Ill.; Atlantic City, N. J.; and St. Louis, Mo.

The following presidents, in the order named, have been Drs. Joseph M. Mathews, James P. Tuttle, Thomas Chas. Martin, Samuel T. Earle, William M. Beach, J. Rawson Pennington, Lewis H. Adler, Jr., Samuel G. Gant, A. Bennett Cooke, George B. Evans, Dwight H. Murray, and George J. Cook.

Special attention was called to a paper by Dr. Wm. Bodenhamer, in 1903, upon "Atony of the Rectum," read by title, the author being ninety-four years of age.

The number of papers presented at the different meetings have varied from twelve to twenty-eight. The total number of articles read at all

meetings, exclusive of the present session, have been one hundred and eighty-seven. The first year, a small volume of Transactions was issued. This, however, was discontinued until 1908, when it was decided to issue an annual volume for three successive years. Two have already been issued and the remaining volume will be published, following the present meeting. It seems to the writer that the publication of the Transactions annually should be made a permanent feature. In this manner they become a public and permanent record of the work accomplished by the society and do more to add dignity to and further the aims of the organization than anything else. Knowing that the Transactions will be published, the members will be stimulated to present papers at each meeting, and exert their best efforts in their preparation. Furthermore, the discussion of such papers will be more energetically entered into and more carefully considered because of the knowledge that such discussion will be permanently recorded.

THE AMERICAN PROCTOLOGIC SOCIETY'S PRIZE FOR THE BEST ORIGINAL ESSAY ON ANY DISEASE OF THE COLON BY A GRADUATE OF (NOT A FELLOW OF THE SOCIETY) OR A SENIOR STUDENT IN ANY MEDICAL COLLEGE OF THE UNITED STATES OR CANADA.

The American Proctologic Society announces through its committee that the cash sum of \$100 will be awarded, as soon as possible in 1911, to the author of the best original essay on any disease of the colon in competition for the above prize.

Essays must be submitted to the secretary of the committee on or before May 10, 1911. The address of the secretary is given below, to whom all communications should be addressed.

Each essay must be typewritten, *designated by a motto or device, and without signature or any other indication of its authorship, and be accompanied by a separate sealed envelope, having on its outside only the motto or device contained on the essay, and within the name, the motto or device used on the essay, and, the address of the author.* No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays, if reclaimed by their writers within six months, provided return postage accompanies the application.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

The competition is open to graduates of medicine (not fellows of the society) and to members of the senior classes of all colleges in the United States or Canada.

The object of the prize and competition is to stimulate an increased interest in and knowledge of Proctology.

The committee shall have full control of awarding the prize and the publication of the prize essay, and it shall be the property of the American Proctologic Society. It may be published in the Transactions of the Society and also as a

separate issue if deemed expedient. The committee may increase its membership if deemed advisable.

DR. DWIGHT H. MURRAY, *Chairman*,
DR. SAMUEL T. EARLE,
DR. JEROME M. LYNCH,
DR. ALOIS B. CRAHAM,
DR. LEWIS H. ADLER, JR., *Secretary*,
1610 Rrch St., Philadelphia, Pa.

CABELL COUNTY SOCIETY.

HUNTINGTON, W. VA., Dec. 12th, 1910.

Editor W. Va. Medical Journal:

I have been failing to write you about our meetings for the past two months. There have been several reasons. The best one, however, has been that there has been nothing in the way of papers, etc., that I thought you would wish. This isn't quite true, for at the November meeting Dr. W. R. Cummings read a paper on "Pelvic Cellulitis" which the members who were present say was very good. I was kept away from that meeting, however, and must beg your pardon for not having reported it.

At the meeting this month (December) we had Dr. Edw. Ricketts of Cincinnati with us, and he gave a very interesting talk in the line of Case Reports; and as he is a very prominent abdominal surgeon in this part of the Ohio Valley, we felt very appreciative of our good fortune in having him visit us.

The officers elected for 1911 are as follows:

President, Frederick A. Fitch, Huntington.
Vice-President, Wm. C. McGuire, Huntington.
Treasurer, I. R. LeSage, Huntington.
Secretary, Jas. R. Bloss, Huntington.
Censor for three years, H. J. Campbell, Huntington.

We are hopeful that the coming year will beat the best we have ever had in the society. I shall send you our programs when we get them arranged. I see that Sec'y McBee has started the good work of having our State President visit the County Societies. I hope that it will be possible for me to arrange to get Dr. Wingerter down here to meet our fellows. Not that we would expect him to give us a set speech, but just to meet our members and help the officers draw them closer together. (Parenthetically, I'll add that we have a "dandy crowd" in the profession here and they are all good fellows, even if the Sec'y can't get them all into the Society or all that are in to go to the state meetings.) So I want our worthy President to meet them.

Fraternally yours,
JAS. R. BLOSS, *Sec'y.*

EASTERN PANHANDLE MEDICAL SOCIETY.

The Eastern Panhandle Medical Society met at noon, Dec. 7th, in the parlor of Hotel Berkeley, Martinsburg. Routine business was transacted and later elected their officers. Dr. Ranson, of Harper's Ferry, president of the society, called the meeting to order. Dr. Hawkins of Cumberland, Drs. Crum, Brunswick, and R. W. Miller of this city read papers. The other doctors who attended were Dr. Allen, Winchester; Dr. Venning, Charles Town; Dr. Brown, Shenandoah

Junction; Dr. LeFevre, Inwood; Doctors Sites, Henshaw, Eagle, Bitner, Oates, McCune, Osbourn of Martinsburg; Stigers of Hancock, Hodges and Ranson of Harper's Ferry. They were dined by the local physicians.

President, Dr. W. T. Henshaw, Martinsburg.

First Vice President, Dr. C. E. Clay, Martinsburg.

Second Vice President, Dr. J. W. Hodges, Martinsburg.

Secretary and Treasurer, Dr. A. B. Eagle, Martinsburg.

The next meeting will be held at Charles Town on the first Wednesday in March.

A. B. EAGLE, Sec'y.

FAYETTE COUNTY SOCIETY.

The December meeting was held in the parlors of the Dun Glen Hotel in Thurmond on the evening of the 6th.

The meeting was called to order by the President, Dr. J. W. Hopkins, and one of the best gatherings of the year was present to lay out the plans for the betterment of the society for the coming year.

The papers and discussions were of a high class. The papers that deserve special mention were those of Drs. Weaden and Coleman. Dr. Weaden delivered an excellent address on Bone Graft and went into detail of the work, laying special stress on the work done by Dr. Murphy of Chicago. Dr. Coleman spoke very entertainingly on the use of Beck's Paste, and the results reported speak great success of the future for this remedy in the treatment of sinuses.

Papers of the other gentlemen present were very deserving, but lack of space will prohibit any further comment.

The business session of the society was now in order, and this being the month in which the year's business of the society is considered, the Secretary's report was read and approved. After which the program for the coming year was taken up. The meetings, which have been monthly, have been cut to five per year, i. e., every two months and dispensing with the mid-summer one. The officers will constitute the Program Committee, and the schedule will shortly be arranged for the year. The dues for the County Society will be increased to two dollars, and with the elimination of the expense incurred by the monthly meetings, the society will publish a small paper after the meeting, in which will appear all the papers read before the society, and the local news of interest to the profession. The details of the management will be taken care of by an editorial board, and everything possible will be done to make this a sheet that will appeal to the laity as well as the members.

The election of officers was taken up, and Dr. Weaden of Mt. Carbon was chosen President and Drs. Elliot and Dupuy as Vice Presidents. The office of Sec'y-Treasurer remained the same as last year.

The outlook for the coming year is most encouraging, and we hope to have glowing reports to offer from time to time.

H. C. SKAGGS, Sec'y.

Kay Moor, W. Va.

OHIO COUNTY SOCIETY.

November 7th, 1910.

The society was called to order by Vice President Dr. Best, 24 members and two visitors being present. Dr. J. R. Caldwell read a short paper on "Splints and Their Uses." He described the various kinds of splints, the methods of application, and the conditions that may arise when wrongly applied. Dr. Reed opened the discussion. He said that splints are of very great value in fractures. The question often arises as to the kind of fracture in which plaster is suitable. He thinks that in all fractures below the knee the plaster dressing is appropriate. He does not use it in fractures below the elbow, preferring the splints. He exhibited an instrument devised by Dr. Megrail of this city to support the fragments of bone in wiring. He thinks that this instrument certainly has a field in surgery, and will prove a valuable addition to the surgeon's equipment. Dr. J. A. Campbell thinks that the principal thing is not so much the particular kind of splint, as it is to properly fit the splint to the fracture after the inflammatory process has subsided. He thinks that no splint should be permanently put on until after the fourteenth day. Dr. Taylor uses plaster on all fractures of the leg. Dr. Quimby says that a heavy plaster splint offers the greatest obstruction to the X-rays. Drs. L. D. Wilson, Monroe and H. B. Jones described splints which they had used with good result. Dr. Osburn uses shingles in fractures of fore-arm. Does not like plaster at all. Uses board splints as a rule. Prefers the box splint for fractures of the leg. The most important thing in treating fractures is the proper application of the bandages. They are generally applied too tightly. Adjourned.

November 14th.

Meeting called to order by Vice President Best. Dr. J. E. Burns read a paper on "The Tuberculosis Dispensary" in Wheeling. He said that 95 cases had been treated, of which 45 were known cases of tuberculosis. Of these 20 have improved, 12 remain unimproved. Some of these have advanced lesions, some have very bad home conditions and can not live properly. Twelve have died. Thirty-five suspected cases have improved. Ten left the city before a positive diagnosis was possible. Six were diagnosed as non-tubercular. Four cases have been sent to hospitals for diagnosis. Thirty-eight families receive milk from the dispensary. The dispensary nurse has visited all the homes that have been reported, and given the existing conditions to the dispensary physicians. The necessity of a sanitarium was discussed by the essayist, in which advanced and neglected cases can be properly cared for. Dr. Gillespie told some of his experiences with the dispensary cases, showing what good results may be accomplished right here at home by means of fresh air and plenty of good food. Dr. A. Wilson emphasized the importance of early diagnosis and treatment. Some cases are advanced without much or any cough. The number of arrested cases in the county is very en-

couraging. Dr. Noome emphasized the possibility of curing the disease in our own climate. The patient who is cured at home is more likely to remain cured than the one who goes away. Rest important. The education of patients in proper living was urged. Dr. Taylor feels that patients who can choose their climate and stay there are the fortunate ones. The north-west he regarded as the most favorable. A sanitarium near Wheeling should be in an elevated position. Dr. H. P. Campbell reported five cases treated with tuberculin. One died, four are improving. Dr. Wingerter read a communication from Dr. Flick showing the vicious circle of poverty and tuberculosis. Poverty predisposes to the disease and tuberculosis causes poverty. Dr. Harriet Jones rehearsed the steps that have been taken to promote the establishment of a state sanitarium, emphasizing the need of educating the people. Dr. Best called attention to the great advances that have been made in the management of this disease, and the diminished mortality in recent years. Adjourned.

R. J. HERSEY, *Secretary.*

Reviews

DIAGNOSIS AND TREATMENT OF THE DISEASES OF WOMEN.—By HARRY STURGEON CROSSEN. Second Revised Edition. Published by the C. V. Mosby Company, St. Louis, Missouri.

Gynecologic literature has been ransacked for all that is latest and best, and the results culled from that source, in addition to the author's wide experience, have given a noteworthy volume. The diagnosis of pathological conditions is stated clearly and concisely. A large part of the volume is taken up with this subject. Numerous well chosen and original illustrations enhance the value of the work. Of particular interest is the position and location of the patient's hands as applied to certain parts of the body, when suffering from the pain and tenderness incident to various types of pelvic diseases. The book is notably free from padding, and the statements made are as a rule exact rather than general. Particular attention has been paid to the anatomy of the pelvis, a subject that has been neglected by many authors. Careful attention is paid to the indications for the various gynecologic operations. The number of typographic errors is few. The author fails to mention the iodine method of sterilization, which has been so widely adopted recently. The author has but little patience with those who advocate the palliative treatment of cases of so-called benign fibroids of the uterus. He emphasizes the complications that may arise at any time. The fundamental principles of gynecology are brought out in a strong, clear light. The writer cautions about the avoidance of straining when the bowels move after the repair of a tear involving the rectal sphincter, but fails to state that the patient should be in the Sims position when the bowel movement takes place. The medico-legal aspects of foreign bodies left in the abdomen are given due con-

sideration. Dr. Crossen refers to the subject of retroperitoneal lipomata but does not mention the retroperitoneal fibroid which may appear in the pelvis. The work is one of the most practical and valuable contributions to the literature of gynecology that has been made in recent years. Many of the conclusions are based on the author's ample experience.

CANNADAY.

APPLIED ANATOMY: THE CONSTRUCTION OF THE HUMAN BODY CONSIDERED IN RELATION TO ITS FUNCTIONS, DISEASES AND INJURIES.—By GWILYM G. DAVIS, *Associate Professor of Applied Anatomy, University of Pennsylvania, &c.* With 630 illustrations, mostly from original dissections and many in color, by Erwin F. Faber. Philadelphia and London: J. B. Lippincott Company. Price, \$6.00.

Few books have appeared in recent years of more solid value to physician and surgeon alike than this well planned and well executed work of Dr. Davis. In view of the author's exceptional qualifications for the task, nothing less than a work of the first class was to be expected. The expectation has been amply fulfilled. The central idea of the work is to marshal the essential details of anatomical structure into a harmonious grouping, so that the reader can get, almost at a glance, a clear and accurate comprehension of the relations, normal and pathologic, of all the structures of any region of the human body that may be the object of investigation.

The small work of Holden, some thirty years ago, on Landmarks, Medical and Surgical, did much to supply the needs of the practitioner in this direction, but it needed elaboration and much fuller illustration. Quite recently, the beautiful work of Schultze, on Topographic and Applied Anatomy, has entered this field, and while it is thorough and comprehensive, it lacks, somewhat, the greater detail that is characteristic of this work, and there is no discussion or reference to the pathologic conditions or surgical procedures to which the various regions of the body may become liable.

Regarding the present work, the object, as the author states, "is not to teach plain anatomical facts; its aim is to show the relation of structure to function, whether it is normal function, or function disturbed by injury or disease. In considering a subject, after a few general remarks on the part involved, the skeleton and muscles are briefly described and thereby one is enabled to understand the surface anatomy which immediately follows. Then comes a consideration of the various affections of the part with such allusions to the nerves and vessels as is desirable to elucidate the subject. As the book is not intended to be a systematic treatise on anatomy, such anatomical facts as cannot be shown to be useful in practice are not mentioned." In carrying out the plan, the various regions of the body are taken up in regular order. First the head and neck, then the thorax, upper extremity, abdomen, pelvis, and lower extremity. Under each head the surface landmarks are fully set forth, and the underlying muscles, blood-vessels, nerves, lymphatics, bones and the various internal organs

clearly shown in their relations to each other in a single view. Then follow the discussion of the abnormalities following fraetures, dislocations and other pathological conditions, after which is given a brief outline of the surgical procedures necessary in the treatment of them, such as methods of reducing luxations and fraetures, ligating blood-vessels, opening the cranial, thoracic and abdominal cavities, and operating on their contained organs. The work is profusely illustrated, by far the greater part of the six hundred and thirty illustrations being from original dissections especially made for the work, a large number of them being beautifully printed in color. The paper, printing and binding are of such excellence as to raise still higher the already great reputation of the publishers.

A work of this sort ought to be the daily companion of the general practitioner as well as the surgeon, since so many of the problems with which he has to deal can only be made clear by an accurate knowledge of anatomical structure and relation. We cannot too strongly commend this work to the notice of our readers. W.

OSTEOLOGY AND SYNDESMOLOGY.—By HOWARD A. SUTTON, A.B., M.D., *Assistant in the Department of Anatomy of the University of Pennsylvania, Lecturer in Anatomy Pennsylvania Orthopedic Institute, Assistant Surgeon Methodist Episcopal Hospital, etc.*, and CECIL K. DRINKER, B.S. Philadelphia: P. Blakiston's Son & Co., 1912 Walnut Street. 1910.

This little work of Osteology and Syndesmology consists of only two hundred and twenty-five pages and the print is large, and a great deal of space is taken up between paragraphs. Osteology and Syndesmology constitute the foundation of Anatomy and without a thorough knowledge of these subjects the student cannot hope to master Anatomy.

The first few pages are given to the discussion of the structure, development, classification, and arrangement of bones. Then, after a brief classification of the joints, each individual bone is described in a very concise manner, and the muscular and ligamentous attachments, and its relation to blood-vessels and veins are also clearly defined.

After each bone entering into the formation of a joint has been described, the joint itself is taken up, instead of leaving it until all of the bones have been described. Then, too, at the close of each description the salient points are emphasized, which greatly aids in fixing the most important things in one's mind.

The last few pages of the book are taken up with a description of the fossae and foraminae formed by the bones of the skull. The name, site, communication, and structures passing through these foraminae are given in tabulated form.

It is a clear, concise and well arranged, and to my mind a very excellent work on Osteology and Syndesmology. I take great pleasure in recommending it to the student as well as the profession in general. R. U. DRINKER, M.D.

THE PRACTITIONER'S MEDICAL DICTIONARY—An illustrated dictionary of medicine and allied subjects, with their proper pronunciation, derivation and definition.—By GEORGE M. GOULD, M.D. Second Edition. P. Blakiston's Son & Co., Philadelphia. Price, \$4.00.

Dr. George M. Gould is widely known as a scholarly man and a maker of dictionaries, over 200,000 of his editorship having been sold. For many years we have possessed his largest work, "The Illustrated Dictionary of Medicine, Biology and Allied Sciences," and it has never failed to answer our inquiries. The present is a smaller book, with all unnecessary words eliminated, but containing all that the practitioner requires, which includes all the new words which in medicine multiply rapidly and can only be found in the very latest dictionaries. Clearly printed on thin but very firm paper, the size is such that it can be quickly lifted with one hand, a decided advantage. We miss the many tables of the larger book that very materially delay the finding of a word. The eponymic signs, such as Argyll Robertson pupil, von Graefe's sign, Romberg's sign, etc., are all grouped under "Signs," thus facilitating a search for any one. Accent and pronunciation are given. The type is exceptionally clear, the binding so good that the book remains open wherever its pages are turned. Morocco, gilt edges, the book is a beautiful one.

A MANUAL OF NURSING.—By MARGARET FRANCIS DONAHOE, formerly superintendent of nurses, and principal of training school, Philadelphia General Hospital. Illustrated. D. Appleton & Co., New York. Price, \$2.00.

We have read with interest a good part of this book. It is well and clearly, yet concisely, written. The nurse is taught how to care for her own health, since health in a nurse is an essential to good work. The many duties of the trained nurse, from the time she enters the hospital until she leaves it, are fully detailed. The use of the thermometer, bathing, douches, the care of the bed, its changes in special forms of treatment, ordinary care of the patient in different diseases, preparation for operations, care after operations, giving of anesthetics, diet and its preparation, all are given with sufficient detail for the nurse's guidance. Chapters are given on nursing of special forms of disease, as of the skin, nervous system, infections, eye and ear diseases, diseases of childhood, and also a valuable chapter on emergencies. Altogether the work is one worthy of hearty commendation.

Medical Outlook

ACUTE TRAUMATIC TETANUS TREATED BY MAGNESIUM SULPHATE.—A. P. Heineck, Chicago. *Surgery, Gynecology & Obstetrics*, January, 1909.

Miller reports a case of tetanus of severe type occurring in a boy seven and one-half years of age, in which eleven lumbar punctures were made in the course of thirteen days, approximately 2.5 c.c. of a 25 per cent solution of magnesium sulphate being injected into the meninges at each puncture. Extensive paralysis followed each injection and

involved usually all the muscles, except those of the head, neck and diaphragm, and lasted approximately eighteen to twenty-nine hours. Antitoxin was given daily for fourteen days, in doses varying from 1,500 to 1,700 units; copious saline enemas and infusions, and for a short time, sedatives were also used in the treatment. The patient recovered. Several times the injections were followed by respiratory collapse lasting from eleven to twenty-four hours, and the pulse dropped, though not to a dangerous level. No constant effect of the injections upon the temperature was noted, but retention of the urine was the rule, necessitating catheterization. Altogether the author is convinced that the patient received undoubted benefit from the injections, inasmuch as they prevent the rapid exhaustion due to the convulsions, and in most instances have made it possible for the patient to take nourishment. The author reviews the 14 cases that have thus far been treated with this method; of these, 55 per cent died. This result is encouraging, inasmuch as almost all of the cases in this series were of the type which usually proves fatal. The author believes that it will be possible at some future date to avoid the dangerous effects of an overdose, when the technic has been more thoroughly worked out.

Heineck reports the case of a male 17 years of age admitted to the hospital with classical signs of acute tetanus. The incubation period was 7 days. Repeated injections—intraneural and sub-arachnoid—of tetanus antitoxin were given. In addition 5 injections of 5 ccm. of a 25 per cent aqueous solution of magnesium sulphate were made into the dural spine sac. After the first injection no return of rigidity of the lower limbs was noted, and each injection was marked by distinct improvement. The magnesium sulphate produced no alarming symptoms, though a decided rise of temperature followed each injection. The cure was complete. The paper concludes with a review of the literature.

Miscellany

STATISTICS FROM WORCESTER, MASS. FOR LICENSE AND NO-LICENSE PERIODS.

The following statistics condense the results for the year period, May 1, 1906, to April 30, 1910, on matters affected by sales of liquor:

Arrests.	POLICE RECORD.			Per cent
	Two License Years 1906-8.	Two-No-License Years 1908-10.	Decrease Under No.	
Total.....	12,162	9,325	24	
For assault and battery	697	572	18	
For neglect and non-support	198	177	10	
For disturbing peace..	455	277	39	
For larceny	563	469	17	
For drunkenness—				
First offenders	4,792	3,135	35	
Total	7,971	4,641	42	
For illegal sale liquor.	46	772	Inc.	
	CITY HOSPITAL RECORD.			
Alcoholic patients....	497	327	35	

BOARD OF HEALTH RECORD.

Deaths from alcoholism. 48 16 66½
 In these records the illegal sale of liquor alone shows to the advantage of no-license, but one needs remember that of the 772 convicted in the two no-license years, the great majority operated but a short time before conviction, while under license 128 legal saloons were operating seventeen hours daily for more than three hundred days each year.

The following table sums the results for the months of May, June, July, August and September for five years:

Arrests.	License		No-License		Li- cense
	1906-1907	2,832	1,755	2,203	1910
Total	2,620	2,832	1,755	2,203	2,923
Assault and battery.	158	210	129	138	183
Neglect and non-support	55	37	30	32	55
Disturbing peace...	124	102	64	76	84
Larceny	83	132	114	104	123
Drunkenness—					
First offenders...	917	1,099	413	804	1,145
Total	1,750	1,869	714	1,215	1,899

CITY HOSPITAL:

Alcoholic patients..	91	131	50	84	161
Deaths from alcoholism	4	12	3	5	Not cured.

The comparison shows clearly that the return to license has produced the worst criminal record in the history of the city.

UNLIKE SOME PATIENTS.

An interesting story is related of a San Francisco woman and her physician. The doctor performed an operation very successfully upon this woman, who was quite wealthy. When asked for his bill, the physician presented one for fifty dollars. The good lady smiled.

"Do you consider that a sufficient charge, doctor?" she asked, "considering my circumstances?"

"That is my charge for the operation, your circumstances have nothing to do with it."

The lady drew a check for five hundred dollars, and presented it to him. He handed it back, saying: "I cannot accept this. My charge for that operation is fifty dollars."

"Very well," the lady replied, "keep the check, and put the balance to my credit."

Some months after she received a long itemized bill, upon which were entered charges for treatment of various kinds, rendered to all sorts of humanity, male and female, black and white, who had been treated at her expense. She was so delighted at it, that she immediately placed another check for five hundred dollars to his credit on the same terms, and it is now being earned in the same way.

DEATHS FROM 606.

So far there are fourteen deaths due directly to arsenobenzol (606). Of course the preparation was improperly used, i. e., used in cases in which, according to Ehrlich, it was contraindicated. But we venture to predict that it will be employed in many contraindicated cases and, unless the greatest care be used, the mortality roll will be a very long one.—*Critic & Guide.*

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Original Articles

PATHOLOGY, SYMPTOMATOLOGY AND DIAGNOSIS OF DISEASES OF THE PROSTATE GLAND.

G. Timberlake, M.D., Baltimore, Md.

(Read at Annual Meeting of W. Va. State Medical Ass'n, October, 1910.)

The subject of Diseases of the Prostate has become so important to the general practitioner, and the specialist as well, that much effort has been made by the profession to familiarize itself with the pathology, symptomatology, diagnosis and treatment of such conditions as are constantly arising, and less frequently recognized. We shall, therefore, attempt to point out some of the most important facts bearing upon the disease, with the hope of clearing up what may seem the obscure points.

The pathology of the prostate is quite interesting to the pathologist and genito-urinary specialist, but not necessarily so to the general practitioner. Conceding this to be the case, we shall not go into this part of the subject at length, but rather confine our remarks more especially to the symptomatology and diagnosis of the diseases of the gland that are most often met with in general practice.

The prostate, as is well known, is a true genito-urinary organ, of definite size,

composition and function. It surrounds the vesical orifice, and tunneling it is the prostatic urethra, upon the floor of which lie so many very important structures worthy of consideration. This gland is one of the tubular racemose type, the acini being lined with a low form of columnar epithelium. Aside from this, it is made up of its fibrous tissue stroma and well supplied with muscle. The secretion of this gland is composed of a mucilaginous fluid, lecithin globules, an occasional leucocyte, mucin globules, corpora amylacea and organic salts. The reaction of the secretion to litmus is either slightly alkaline or amphoteric.

Upon the floor of the prostatic urethra we have the veru montanum, the openings of the ejaculatory ducts, the sinus pocularis; and about these structures, lying on the floor of the urethra, from eighteen to twenty ducts leading from the prostatic acini.

It may be easily imagined how very receptive this area is to any infectious material that might find its way to this point, and what a series of complications are liable to arise, as a result. Many of the pyogenic bacteria enter into the etiology of inflammations arising about these parts, but the most important of them all is the gonococcus, which causes between 80 and 90 per cent of the infections. It must not be understood, however, that every case of gonorrhoeal urethritis causes a prostatitis, for this is not the case, but undoubtedly it is most often the case.

While infections of the urethra are

most frequently incident to infections of the prostate, we must not lose sight of the fact that there are other means by which the gland may become infected, such as diseases of the kidney, bladder, rectum, general acute infections, excessive venery, masturbation, ungratified sexual desire, all coming in for their share. Tuberculosis of the prostate or seminal vesicles is most often secondary to some tuberculous foci; so when the disease appears as primary here it is most probably metastatic, coming through the blood or lymph channels.

Inflammations of the prostate may be classified as acute, subacute, and chronic.

Acute Prostatitis.—In acute prostatitis there is most often a history of an acute urethritis, both anterior and posterior. The symptoms are usually ushered in with chills, fever and sweats. There is pain, tenderness and a sense of fullness in the rectum, this is accompanied with a frequent, and often an ungratified desire to micturate. These latter symptoms are very characteristic of obstruction in the neighborhood of the prostate, whether there be inflammation or not. The urine is almost invariably cloudy in three glasses, this due to the fact that the pus, welling up in the prostatic urethra, naturally follows the line of least resistance, which is toward and into the bladder where it becomes diffused and mixed with the urine. The fact that the pus follows this line, is because the external sphincter, is stronger, more sensitive and quick-acting than the vesical sphincter; therefore it is purely a mechanical result. Another frequent symptom is, that there is often a drop or several drops of blood exuding at the end of urination; this probably comes from the highly inflamed and congested *veru montanum* being squeezed by the concerted action of the prostatic and peri-prostatic muscles. This condition, in conjunction with the cloudy urine, frequent urinations and general symptoms, is frequently mistaken for a cystitis, and care must be exercised in making the proper differentiation. Per rectum, the prostate is usually found to be large, tender, hot and boggy. We may at times find definite depressions in the gland, which suggest a happy termination by abscess formation and rupture into the urethra, thus relieving the intramural pressure, the more acute

symptoms abating. Care should be exercised in the manipulation of the prostate during the acute stage, lest an epididymitis result.

Acute prostatitis calls for rest, diuretics, water in large quantities, hot or cold rectal douches, hot applications to the perineum, and often opium and belladonna suppositories. Should acute retention occur, the catheter or aspiration should be used in the event the simpler methods do not produce the desired results; but great care as to the strictest asepsis must be exercised.

Subacute Prostatitis.—Subacute prostatitis, as is well known, occupies a position between the acute and chronic stages, the symptoms both local and general becoming greatly attenuated, and gradually resolving itself into the chronic form.

Chronic Prostatitis.—When the inflammation of the prostate becomes chronic we have a great variety of symptoms, which may be classified clinically as urinary, sexual, referred and general.

Urinary Symptoms.—These are manifested in any number of ways, either singly or multiple. We may have an urgency, frequency, hesitancy or dribbling of urine. In urgency, the patient has to respond to the desire as soon as the desire strikes him, which may be frequent or otherwise. Having felt the urgent desire to pass his water, he finds that the stream is slow in starting, and this we characterize as hesitancy. Incontinence and dribbling of urine are sometimes symptoms of chronic prostatitis, but are most suggestive of prostatic obstruction or the presence of urethral stricture. Frequency, incontinence and dribbling are often met with in cases of contracted bladder, foreign bodies in the bladder, or in those acutely neurotic patients whom we not infrequently encounter. The objective symptoms that may first call the patient's attention to certain abnormal conditions existing in the genito-urinary tract, might be a definitely purulent, mucopurulent discharge, "morning drop," or a mere gluing of the lips of the meatus. The urine as seen in three glasses, may be perfectly clear or show shreds of pus in the first, first and third, or in all three glasses. The sizes of the shreds vary from large yellowish flocculent ones down to the small hooklets or "comma shreds." These comma shreds" come from the prostatic ducts,

and are squeezed out by the prostatic and peri prostatic muscles during the expulsive efforts at urination. In certain cases there are subjective symptoms that manifest themselves in connection with urination; such as pain or burning either at the beginning, during the act, or at the end of micturition. Blood is a very rare manifestation, as seen in chronic prostatitis.

Sexual Symptoms.—We have in these a series of unnatural manifestations, such as precocious ejaculations, delayed ejaculations, painful ejaculations, nocturnal pollutions, a diminution or loss of erections, erections unsustained, or even loss of sexual desire. The class of patients who experience these disappointments are soon relegated to the dumpheap of the neurasthenics, and we know no class who are more miserable than they, both to themselves and those by whom they are surrounded. Happily, some of these cases show very definite improvement under change of environment, exercise, diversions, and abstemiousness from "wine and women." Prostatic massages, dilatations with sounds or the Kollman dilator, applications to the veru montanum and prostatic urethra through the endoscope—of nitrate of silver in strength of from 10 to 20 per cent. Hot or cold douches per rectum are also advantageous.

General symptoms:—There is usually a general apathy, indifference, moroseness, loss of weight: frequently neurasthenia and psychasthenia. These conditions call for tonics and diversions.

Referred symptoms:—These symptoms are legion, and inasmuch as they simulate the symptoms of such a great variety of diseases, it is well for us to outline this part most carefully, so that the reasons for its importance may be clearly understood. Diseases of the kidney, bladder, ureters, pains in the penis, testicles, epididymes, in the neighborhood of the appendix, in the lumbar muscles, groins, muscles of the legs, or even the feet, have been referable to pathological conditions of the prostate, but not so recognized. It is no unusual occurrence to have a patient call upon us complaining of certain manifest urinary symptoms, and while taking his history have him mention the fact that he has been suffering intensely with what was called "lumbago" or "muscular rheumatism." He has this very pronounced pain when he appears

for consultation, and to his surprise the pain is relieved after a good prostatic massage. From the history of the case, the subjective and objective symptoms, the macroscopic and microscopic findings, we conclude that the patient has a definite chronic prostatitis, and direct our treatment to the resolution of that condition.

The physiology of these referred pains can be best understood by quoting what Head has to say on the subject of "The Pain of Visceral Disease." He says: "A painful stimulus to an internal visceral organ is conducted to that segment of the cord from which its sensory nerves are given off. There it comes into close connection with the fibers for painful sensation from the surface of the body, which arise from the same segment. But the sensory and localized power of the surface of the body is enormously in excess of that of the viscera, and thus by what might be called psychical error of judgment, the diffusion area is accepted by consciousness, and the pain is referred to the surface of the body, instead of to the viscera actually affected."

"Since the nerve supply of the prostate is extremely rich, and it receives its sensory fibers from a number of nerve segments, the wide distribution of the referred pains of prostatitis is not surprising." According to Head, fibers from the 10th, 11th and 12th dorsal, the 1st, 2nd, and 3rd sacral, and 5th lumbar segments are received by the prostate.

Young thinks that from the distribution of pain in some of his cases, it is not improbable that fibers are also furnished from the first lumbar.

Pathology of Chronic Prostatitis:—The changes occurring in the acini of the prostate are numerous, as are the changes in the musculature and fibrous tissue stroma. There is, first, an inflammation of the mucous membrane lining the acini, a thickening of the mucous membranes and periacinous infiltration of lymphoid cells. There is also a connective tissue hyperplasia which has a tendency to reduce through pressure the size of the prostatic acini. From the inflammation holding forth at this point, we most naturally have an occlusion of the prostatic ducts which empty themselves upon the floor of the prostatic urethra. It is, therefore, quite easily im-

aged how this prevailing condition will cause an intramural pressure. This variety of pathological changes is probably responsible for the symptom complex referable to the disease.

Upon examination of the prostate per rectum, we may find the gland normal in size, smooth and regular in outline, over which the rectum is freely movable. We can palpate with ease the lateral lobes, upper poles, median furrow and the membranous urethra. On the other hand, we may find that the gland is definitely larger and firmer than normal, with irregularities in general contour, adhesions about the bases of the seminal vesicles and about the lateral margins, or to the rectum. There may be a sub-urethral thickening, so that the median furrow is entirely obliterated, and the gland as a whole from side to side is rather rotund. There may be a definite tenderness to pressure, or no especial discomfort produced by the manipulation.

In conjunction with the objective and subjective symptoms, and the examination per rectum for diagnostic purposes, the examination of the prostatic secretion is most important. As previously suggested, the normal prostatic secretion contains lecithin cells, a few epithelial cells, an occasional leucocyte and corpora-amylacea. There may also be seen spermatozoa and large mucin-like globules, which come from the seminal vesicles and vasa deferentia. The lecithin bodies are small hyaline, structureless looking cells, regular in outline, and vary in size from that of a red blood cell down. They take ordinary stains with great avidity, and are best seen in the moist specimen with the 1-6 objective.

In prostatitis there is an appreciable diminution of the lecithin cells, their place being taken by pus cells. As resolution takes place in the gland, it will be noted that there is a diminution of pus cells and the reappearance of these lecithin bodies. Therefore the relative ratio of the pus to the lecithin varies inversely to the degree of prostatitis. While this means of detecting the degree of involvement is only relative, it gives us a fairly comprehensive index by which to work. When the means suggested fail us in our purpose, it then becomes necessary to resort to other measures, such as endoscopic or cystoscopic examinations of the prostatic urethra and

bladder. With the endoscope we are able to observe certain abnormal changes that may exist in the prostatic urethra, make applications to these areas, aspirate or inject therapeutic agents into the sinus pocularis, which is accomplished by the use of an instrument especially devised for this purpose by Geraghty. The cystoscope serves us for several purposes, not only for the observation of changes about the vesical orifice, which may be prostatic in origin, but we may enlighten ourselves as to any abnormal condition of the trigone, bladder, or ureters. It is quite frequently the case that there is a median bar, a transverse bar of prostatic tissue arising from the pre-spermatid group of glands, which acts as an obstruction to urination because of its position, i. e., extending between the upper poles of the prostate and lying intra-vesically. This, of course, is most easily detected with the aid of the cystoscope.

Prostatic Hypertrophy.—We most often encounter the condition of prostatic hypertrophy in men whose ages range from forty-five years and upward. This condition may exist regardless of any antecedent history of venereal disease. The subjective symptomatology of prostatic hypertrophy in certain instances is very vague; while in other cases it is more or less marked. Any patient whose age is above forty-five, giving the history of urgency, hesitancy and frequency of urination, nocturnal urinations or haematuria, incontinence and dribbling of urine, may be suspected of being a victim of this disease. Pain is a very uncommon symptom, whereas acute retention may be the first sign of the existing condition and the beginning of "catheter life."

If any of the foregoing symptoms prevail, it is well to make a very thorough and careful examination of the prostate per rectum. The patient being made to stand, bend over and place his elbows upon his knees: the finger is introduced and the examination of the gland is made as to its size, consistency and general contour. In this way any extra-prostatic conditions that might exist about these parts, such as adhesions, vesicular involvements, urethral thickenings or irregularities, may be detected. It is quite often the case that no apparent change in the size of the gland can be detected; on the other hand, we may find that the gland is definitely larger and

firmer than normal, adhesions rendering it immovable, and it might be impossible to palpate its upper limit because of its growth upward and backward behind the bladder. It is most often the case that there is found a gland which is slightly or much larger than normal, smooth and regular in outline, but much firmer than normal.

It now becomes necessary to complete our observations by making a cystoscopic examination of the vesical orifice, bladder and ureters. Before beginning this we should have the patient to pass his urine, so that we may ascertain whether there is any residual urine in the bladder. The patient is now prepared for the cystoscopy, which is done in the following way: The external genitalia are thoroughly cleansed with soap and water, followed by a solution of bichloride of mercury, a bichloride towel is placed around the penis and covering the scrotum and field of operation. The anterior urethra is irrigated with warm normal salt solution or sterile water. This is followed by a four per cent solution of cocaine injected into the urethra and held there for a few minutes, after which the urethra is again washed with the salt solution. A sterile Coude catheter having been lubricated with glycerin that is sterile, is introduced into the bladder, and the residual urine, should there be any, is withdrawn and measured. The bladder capacity is next taken by allowing the solution to flow in from the irrigator until the patient can stand no more, after which this fluid is withdrawn and measured. The bladder is now irrigated until the solution returns clear, this having been accomplished the cystoscope is introduced and an examination made of the vesical orifice, trigone, ureters and bladder. Where there is a great degree of obstruction, the bladder is found to be trabeculated, owing to the hypertrophy of the musculature to compensate for the increased resistance offered by the obstruction. Before withdrawing the cystoscope, it is well to insert the finger into the rectum, and turning the beak of the cystoscope down, note any thickness that might exist between the vesical orifice and palpating finger.

If there is a continuance of aggravating symptoms, or the existence of "catheter life," the indications point to surgical interference, which in the great majority of in-

stances is curative. The choice of operation is purely elective.

Pathology of Prostatic Hypertrophy:—The observations made by Young and Geraghty, on specimens of enucleated glands of the hypertrophic type, are as clear and concise as any report published regarding the subject. They distinguish three types:—glandular, fibromuscular, and inflammatory. They suggest that the glandular and fibromuscular types represent the true hypertrophies; and while the inflammatory form is not a true hypertrophy, it is included because it is to represent an important variety of obstructing prostate.

The gross appearance of the gland when enucleated is usually seen to be lobulated, and the consistence is soft and elastic. On cutting a gland of this nature, the tissue may be more or less spongy, owing to the dilatation of the glandular acini, while here and there are seen the gaping orifices of the small retention cysts which have been cut across, from which exudes an abundance of secretion. The cut surface usually presents the picture of numerous spheroidal tumors varying in size, each separated by encircling and interlacing bands of tissue of varying density and thickness. These small rounded lobules sometimes project beyond the surface and may be distinctly encapsulated, and can be easily enucleated. In certain cases, the tendency to spheroid formation is indistinct, and the picture presented resembles that of a diffuse glandular hypertrophy. On microscopic examination, the gland tissue most frequently occurs in lobules, and when these are not present, the acini are seen to be segregated in well-defined areas. The acini are usually dilated, elongated or ovoid, and with rather complex lumina due to infolding and often papillomatous-like proliferation of the lining wall. The epithelium lining the acini presents a variety of pictures; some lined with a double layer of cells, the internal layer being of a high cylindrical type with the nucleus near the basal end, and an external layer of cuboidal shaped cells. There may be only a single layer of high cylindrical cells, and in the culs-de-sac where proliferation is usually most active, there may be beneath the layer of cylindrical cells numerous layers of polygonal shaped cells. The interacinous stroma is composed for the most part of fibrous and muscular tissue

in varying amounts. The acini that have undergone cystic degeneration usually have a lining of flattened epithelium with no apparent tendency to proliferation. About the periphery of the spheroidal lobules, the tissue as a rule is condensed, fibrous in character, and contains acini, most of which are compressed and elongated.

Fibromuscular.—The consistence of the gland in this type of hypertrophy is much firmer than the glandular, but it never has the induration that is encountered in the carcinomatous prostate. On section it is not as soft and boggy, and is more homogeneous in appearance, though isolated spheroids are noted, which are composed for the greater part of fibrous or fibromuscular tissue. Small retention cysts are sometimes in evidence.

On microscopic examination, the acini are seen to be separated by broad bands of connective tissue stroma, and the glandular proliferation is rarely noted. There is sometimes a dilatation of the acini, but the cystic degeneration is much less than that seen in adenomatous hypertrophies. There is a definite connective tissue hyperplasia.

With regard to the inflammatory form of hypertrophy, it might be noted that there are cases presenting marked symptoms of disease of the prostate and often causing partial or complete retention of urine, the gland being very slightly enlarged. On examination of the gross specimen it is seen to contain spheroids, and the cut surface is smooth, homogeneous and fibrous. The obstruction caused by the prostate is a result of a connective tissue hyperplasia of inflammatory origin occurring at the vesical orifice, and causing a median bar or dam. Microscopic examination of these median bars has clearly demonstrated that they are inflammatory in nature, while the lateral lobes to which the bar is connected show no changes differing from those found in chronic prostatitis. Chronic prostatitis with an abundant production of fibrous tissue, is usually accompanied by atrophy of the glandular elements.

Carcinoma of the Prostate.—Albarran recognizes two important forms of carcinoma of the prostate; the circumscribed and the diffuse. In the circumscribed form, the cancerous process has not progressed beyond the limits of the prostatic capsule, and of these, he says there are three varie-

ties: (1) Those in which one or more nodules of cancer appear in an otherwise benign hypertrophy; (2) one in which the gland is not augmented in volume, although the neoplasm infiltrates the whole gland; (3) one in which the prostate is enlarged, irregular and wholly invaded. When this is the case, it is not improbable that there is an involvement of the seminal vesicles, membranous urethra and certain other of the periprostatic structures, including the bladder. These conditions are brought about by the cancerous process spreading beyond the limits of the capsule of the gland, and are characteristic of the diffuse type.

The morbid histology of carcinoma has to do particularly with the adeno-carcinomatous and scirrhus types. Those of the adeno-carcinomatous type present most varying features. The acini formed of irregular cells, small or large, sometimes with deep staining nuclei, are scattered at wide intervals, the intervening acini being more or less densely infiltrated with cancer cells, at other times the cancer acini are so numerous, that the fibrous stroma may be difficult to see.

In the scirrhus type, the fibrous overgrowth is so marked, that the epithelial elements are almost wanting; or the fibrous stroma so dense that cancer cells are difficult of recognition, small nuclear specks being alone visible. This may lead to error in diagnosis if only a small section be examined. Cancer of the prostate spreads by direct extension, through the stroma and along the ducts. As a result of this, we may see masses of cancer cells filling the acini and the intervening tissues appearing as normal.

The onset of the symptoms in carcinoma of the prostate is unusually insidious as is the case in hypertrophy; they differ in no way. In some cases, however, pain is a pronounced symptom from the beginning. There may be local pains in the gland, rectum, perineum, following the course of the sciatic nerve, in the leg, foot or even referred to other areas. In a few cases, the symptoms are not urinary, and no symptoms referable to prostate or bladder. In others, the symptoms point almost entirely to the rectum, such as painful stools, etc. In rare cases we may have haematuria, but this is not encountered as often in car-

cinoma as in hypertrophy. We not infrequently find swelling in the feet and legs, an early symptom. This is due to pressure caused by the gland when there is an involvement of the pelvic structures such as to interfere with the return circulation. In examinations per rectum, should we find a stony hardness of the gland either as a whole or in limited areas, we should at once be suspicious of carcinoma. Cystoscopic examination of the prostatic orifice and bladder, when the carcinoma is diffuse, is attended with more or less difficulty, owing to the strictured condition existing in the membranous and prostatic urethra. In certain instances, the procedure is rendered almost impossible.

The treatment that may be directed to the ultimate cure of the disease is for the most part surgical. Though claims for its cure by X-rays and certain other therapeutic agents have been made. The fact is that the condition calls for more radical measures than those resorted to in the use of other than surgical methods. In event the diagnosis is made while the process is intramural and only existing in limited areas, the ordinary conservative perineal prostatectomy may produce excellent results. On the other hand, it may become necessary to resort to the more radical operation, both of which have been devised and perfected by Young.

In conclusion, I wish to call attention to the fact that, the symptom complex of diseases of the prostate is at times so bewildering, and so simulates symptoms resulting from pathological changes in other organs, that it is well to eliminate as early as possible diseases that might exist in this area.

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Tincture all your thoughts with kindness, all your ambitions with helpfulness, all your acts with determination, if you would make a lasting impression upon your world, be it big or little; but remember that the possession of these virtues, and all others, can not save you from calumny if you insist upon doing your own thinking.—*Backbone.*

GLAUCOMA.

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(Read at Annual Meeting of State Medical Ass'n,
October, 1910.)

The term glaucoma was first used by Hippocrates and was applied to all opacities located posteriorly to the pupil. This term was later restricted to incurable opacities behind the pupil. Later still the term was used to indicate those conditions which gave rise to a greenish reflex of the dilated pupil. Brisseau in 1709 claimed the disease had its seat in the vitreous. St. Yves, 1722, maintained that the real seat of the affection was in the retina and optic nerve. At a later period it was believed that glaucoma was due to an inflammation of the choroid, especially in gouty and rheumatic individuals.

The characteristic symptoms of this affection were not recognized by the profession till the introduction of the ophthalmoscope by Helmholtz, in 1851.

MacKenzie was the first to give a good description of glaucoma, and in 1830 he first pointed out the increased intraocular tension. He also suggested puncturing the cornea and permitting the escape of the aqueous. Removal of the crystalline lens was also suggested by him. Von Graefe was the first to advance the modern theory of glaucoma. He not only gave an exceedingly accurate description of the disease, but planned an operation which rendered the cure of this dread disease possible.

Graefe pointed out the presence of arterial pulsation in the optic nerve in glaucoma. He also discovered the cause of the peculiar cupped appearance of the optic nerve, and recognized the connection between the cupping, the arterial pulsation, and the increased tension of the globe. In his endeavor to permanently lower the increased tension, he first employed mercurials, fomentation, diuretics and diaphoretics. This procedure proving of small value, he next employed myotics, as these drugs were known to decrease intraocular tension; however, the relief was only temporary. In turn paracentesis gave only partial relief. Then recourse was had to iridectomy which was first performed by

him in June, 1856, and he found that not only was the increased tension permanently reduced, but that the operation might be regarded as a true curative agent.

Glaucoma may be defined as a disease of the eye characterized essentially by abnormally increased intraocular tension, associated with other symptoms to be noted later.

Pathology and pathogenesis of glaucoma are not entirely plain. Many theories have been advanced but only two are worthy of consideration. These may be termed—1st, The theory of hypersecretion, and 2nd, Retention of intraocular fluids.

The hypersecretion of fluid is supposed to be due to irritation of the vasomotor nerve filaments. However, it is hard to believe that such irritation could only effect the vessels of the ciliary body, and the problem of how the fluid is retained becomes difficult of solution.

The aqueous is derived by transudation from the vessels of the ciliary body, and the amount and rate of its formation is dependent on arterial blood pressure. This fluid formed by the ciliary body passes forward through the suspensory ligament of the lens into the posterior chamber through the pupil, and thence by way of the ligamentum pectinatum and canal of Schlemm, where it is taken up by the superficial vessels. The spongy vascular iris also plays an active part in the absorption of this fluid. So we can readily see that any departure from the normal in these structures will interfere with this drainage system and cause retention.

Sclerosis of the pectinate ligament, which is prone to follow the traction upon it by the ciliary muscle in hyperopic eyes, and especially in those with astigmatism, is against the rule.

Narrowing or obliteration of the canal of Petit, the space between the edge of the lens and the ciliary process—this is caused by swelling of the lens which always takes place in old age. Petit's canal is the route through which the excreted fluid of the vitreous passes forward to the canal of Schlemm. If this passage be blocked, the increased pressure from behind will press the lens and iris forward and so block the canal of Schlemm.

An attack of glaucoma may be induced by dilatation of the pupil from any cause,

or conditions tending to cause a great increase of blood pressure. This is especially the case in those suffering from the so-called rheumatic diathesis. Among additional factors tending toward the production of glaucoma, may be mentioned gout, diabetes, syphilis, and malaria.

CLASSIFICATION:

- | | |
|----------------|----------------|
| 1.—Congenital, | 2nd.—Acquired. |
| Congenital |) Simple |
| |) Buphthalmos. |

Simple glaucoma of congenital origin is characterized by blindness, cupping of the disk, increased tension, shallowness of the anterior chamber and great reduction of vision, but no pain either in or about the affected eye.

Buphthalmos.—In addition to the characteristic symptoms of increased tension, cupping of the disk, etc., there is marked protrusion of the eye ball and especially of the cornea. This protrusion may be slight at birth, but gradually increases until there is enormous protrusion, and ultimate blindness is the usual result.

The pathogenesis of this affection is some congenital malformation, or lack of the drainage channels.

) Primary.

Acquired)

) Secondary.

Primary glaucoma is that form which rises without any definite cause, but there are certain factors we should look to as predisposing.

AGE.—This condition usually occurs at the extremes of life, as it is congenital or comes on with the advent of presbyopia. It may be considered extremely rare under thirty years of age. As presbyopia advances, we have an increase in the percentage of cases, and at sixty its occurrence is unfortunately common.

HEREDITY may exercise some influence, as glaucomatous families have been reported.

RACE.—Jewish, Egyptian, and Negro.

REFRACTION.—Has already been mentioned in the general considerations, but I wish to reiterate that uncorrected hyperopia, with prolonged straining of the eye in near work is responsible for about fifty per cent of all cases of glaucoma. The instillation of a cycloplegic in the eyes of

persons past forty is always fraught with danger and should as a general rule never be done.

ACUTE INFLAMMATORY GLAUCOMA is by far the most common, as well as the most painful variety; it is attended by intense inflammation of the ocular tunics.

There are some premonitory symptoms of this condition, i. e., rapid failure of accommodative power for near vision, necessitating frequent increase in the strength of lenses—fogging of vision, and of a rainbow play of colors about a light. However, if the tension be tested at this time an increase can usually be demonstrated.

Soon the cornea assumes a hazy appearance, especially in its central portion. There is some shallowing of the anterior chamber, and the pupil is sluggish and dilated. The tension now rises and there is circumcorneal injection. It is in this stage that glaucoma is most often mistaken for iritis; but the absence of synechia, the age of the patient, and the failure of accommodation will usually put us on the right track.

These symptoms are of various duration, from a few hours to a few days; usually they subside, only to occur again at increasingly frequent intervals, and of greater severity, with concomitant diminution of vision. Careful ophthalmoscopic examination at this stage will reveal the cupped disk and the arterial pulsation.

The beginning of a true glaucomatous attack is usually at night, accompanied by violent pain, supra and periorbital, and may be hemicranial, excessive lachrymation, intense injection of the vessels and anaesthesia and cloudiness of the cornea, and the iris in consequence seems much discolored. The anterior chamber is shallow and the pupil dilated—vision is poor or entirely absent—headaches, nausea, vomiting, and other functional disturbances may lead one astray, and cause both physician and patient to believe that they have a severe bilious attack with which to deal. There may be a remission of these acute symptoms, with an apparent return of normal conditions; however, there is a persistent tension and a sluggish pupil. If an ophthalmoscopic examination be made during a remission, the vitreous and cornea are found clouded, the disk is cupped, and

there is marked arterial pulsation. There is also a progressive contraction of the visual field, especially on the nasal side; the central vision is comparatively good, and the patients will tell you that it seems as though they were looking through a tube. Acute glaucoma in most cases is monocular, and at the height of the attack is attended by edema and swelling of the lids as well as the symptoms enumerated above.

The pain in glaucoma is in direct proportion to the increase of tension, being located in the eye and over the distribution of the trifacial nerve.

High tension persists after vision has been irreparably lost and may lead to ulceration of the cornea, swelling and opacity of the crystalline lens, hemorrhage into the anterior chamber may occur, and the eye may even become the seat of panophthalmitis.

Glaucoma fulminans is fortunately less frequent than acute inflammatory glaucoma, but is much more severe, the symptoms are more marked, and vision is frequently lost in a few hours.

Simple or noninflammatory glaucoma, is essentially chronic. By the older ophthalmologists it was known as amaurosis with cupping of the nerve. There is entire absence of inflammatory symptoms as well as prodromes and the entire process is extremely slow. The only complaint the patient may make is of a progressive failure of vision. The only constant symptom is the cupping of the disk; externally the eye appears normal and the media are clear.

SECONDARY GLAUCOMA is that type which is due to some other ocular disease, especially those which tend to block up the filtration angle. Among these may be mentioned iritis, traumatic and otherwise, adhesions of the iris to the cornea or lens inflammation of the ciliary body, traumatic cataract, and luxation of the lens, intraocular tumors, detachment of the retina, and hemorrhagic retinitis.

DIAGNOSIS:—The diagnosis of glaucoma is not always easy, and especially as it may be confounded with other ocular diseases. Increased tension with cupping of the disk are pathognomonic. But it is not always easy to test the tension, and the means for making an ophthalmoscopic examination are not always at hand. The age of the patient should always be taken

into consideration, remembering that glaucoma is a disease of infancy and late adult life. Glaucoma may be mistaken for iritis, particularly if there be an increase of tension, but in iritis the depth of the anterior chamber is unchanged. Synechia is usually demonstrable, the injection is more superficial and is circumcorneal. Oblique illumination will reveal the presence of dots on the posterior layer of the cornea. The history course of the disease, and age of the patient will be of great aid. Cataract, on account of the greenish reflex, may be confused with glaucoma, but recourse to the candle flame test will bring us to a correct diagnosis. Normally a lighted candle when passed in front of an eye gives rise to three distinct images—one, anterior surface of cornea; 2nd, anterior surface of lens; and 3rd, inverted image on posterior surface of lens. In cataract the inverted image is not seen and if the capsule is involved, the image on the anterior surface of the lens also disappears.

Remembrance of these cardinal points will usually render the diagnosis of glaucoma easy:

1.—*Abnormal increase in intraocular tension.*

2.—Pain, ocular, supra and peri-orbital, and hemicranial.

3.—*Dilatation and oval shape of the pupil, with a sluggish and immobile iris.*

4.—*Haziness and anaesthesia of the cornea.* This anaesthesia may be easily tested by brushing the cornea with a spill of tissue paper.

5.—*Shallowness of the anterior chamber.*

6.—*Injection of the scleral vessel of a coarse variety.*

7.—*Contraction of the visual field, especially on the nasal side.*

8.—*Cupping of the disk.*

TREATMENT.—In the treatment of glaucoma we should have in mind the pathological conditions with which we have to deal, and we may for convenience divide it into non-operative and operative.

Our aim is to reduce tension, and to this end we must apply both local and general medication. Absolute rest in bed with the diet restricted to milk, or better, buttermilk. Brisk catharsis, best by some of the salines, coupled with the administration of the salicylates and iodides. If the blood pressure is high, venesection with the re-

lease of six to eight ounces of blood is of great value.

Locally the instillation of myotics, such as eserine salicylate gr. 1 to ounce every fifteen minutes till myosis is marked, then just often enough to keep the pupil contracted. In addition, dionin in 2½% solution is of great aid and should be used every hour. The subconjunctival injection of sterile solution of sodium lactate in 15% solution is of great benefit.

In the beginning when the pain is intense, hypodermic injection of morphine sulph. gr. ¼, and repeated in an hour if necessary, is of great value, as it serves to lessen pain and promote myosis.

As soon as possible any error of refraction should be accurately corrected.

OPERATIVE TREATMENT.—This is the treatment par excellence and gives the only real hope of a permanent cure. Probably the best operation is the one first used by Graefe, and consists in a broad iridectomy, with a severance of the iris clear through its base. Paracentesis of the cornea is of value as an emergency operation, for it at least gives temporary relief of the tension. The cornea should be punctured close to its scleral border, care being taken not to injure the iris, and the aqueous allowed to drain away.

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Discussion.—*Dr. Hildreth II* remarked that early iridectomy was most important in cases of acute glaucoma. He also remarked that the value of instillation of idionin sol. 2-40-0 and of diet in those of gouty habit.

Dr. Moore regarded this as a most important subject. Most of the cases lose their vision even when treated by specialists. Atropia is very often used by the general practitioner before a correct diagnosis has been made. Of course this is the worst possible treatment, as it increases ocular tension, which is already too great. The disease is often mistaken for iritis, in which atropia is the appropriate remedy. *Dr. M.* described the method in which he makes an iridectomy. He regards the paper as most timely.

Dr. Hildreth III, closing, would enforce the remark of *Dr. Moore* as to the danger from the use of atropia. A one grain solution of dionin is the proper local application in these cases. It diminishes intra-ocular pressure. It is very important that the physician make the earliest possible diagnosis.

“Look up and not down,
Look forward and not backward,
Look out and not in, and
Lend a hand.”—*E. F. Hale.*

THE PHYSICIAN—HIS LEGAL RIGHTS AND RESPONSIBILITIES.

Attorney Taylor Morrison, Keyser,
W. Va.

(Read at Meeting of Grant-Hampshire-Hardy-Mineral Society, October, 1910.)

Mr. President and Gentlemen:—

When my good friend, Dr. Yeakley, your Secretary, asked me to prepare and read a paper to you at your meeting here, I was, of course, flattered that he should think of me, but my engagements were such that I told him I feared I would not have the time I should like to devote to the subject suggested. And my fears have proven true. He begged me to try, however, and I promised that I would, so that if you are bored rather than entertained, please blame the doctor, it's part of our bargain.

No other class, gentlemen, in any community, generally speaking, possesses greater power or influence for good or evil, than does the physician, for on his skill and judgment, honor and integrity often depends the very issue of life and death itself. No other class enjoys such close and confidential relations as those existing between the family physician and his patients, unless, indeed, it be the minister or priest and his parishioners, or the lawyer and his client. To the former men may turn for spiritual advice, aid or comfort; to the lawyer they may go with their worldly troubles; but when pain, sickness and disease come, 'tis the physician, and he alone, to whom they can turn for relief, and experience has taught that only the man who is free from bodily pain and anguish can properly direct his mental faculties to the accomplishment of his spiritual or financial salvation. Death-bed preparations are not infrequent, but the wise and prudent man does not usually put off such matters until the last moment, and certainly never upon the advice of a conscientious physician.

While the lawyer, the clergy, the statesman, the artisan and the patriot have each played important parts in the world's progress and advancement, yet the physician has undoubtedly and undeniably accomplished more good for suffering humanity and so-

ciety at large than all other classes put together. To his knowledge, labor, skill and teaching much, if not all, that we know concerning the laws of Nature, the consequence of disobedience of them, and the correct mode of living, is due, and, strange to say, the more arduous his labors in this direction, the further his science penetrates, the more he lessens his own financial rewards.

I once heard a man say that it was inconceivable to him that the physician should teach people how to keep well, and that the lawyer should teach them how to avoid trouble and litigation, since the members of both professions would starve but for sickness and law suits. Such, however, is far from the truth, for today the scientific, honest, upright men of both professions are striving and succeeding in teaching men how to avoid rather than how to be cured of sickness or to win law suits; and that physician who, by his knowledge, skill and research, teaches how to avert disease is even greater than he who can cure it. The day may never come when we shall have no such thing as sickness, but the day has already come when we have less of it, comparatively speaking, and understand infinitely more concerning it than in the days gone.

It is not the purpose of this paper to detail the brilliant and wonderful achievements of your noble profession. Neither time nor the knowledge at my disposal makes this possible. I am merely to speak to you on "*The Physician—His Legal Rights and Responsibilities.*"

I may say, however, that statistics seem to show that the science of medicine has progressed to such an extent that it has been able to prolong the life of the average adult nearly ten years within the past few decades, though the death rate among children has remained about the same, due doubtless to ignorance on the part of mothers as to proper sanitation and the care of infants.

The physician, what a magic word it is! "The Doctor will soon be here." How those words have soothed and infused new life, as it were, into many a despairing sufferer. How often has the kindly face of the family doctor brought sunshine and hope to the fast failing hearts of the sick and distressed. What an instant change his

simple appearance brings to the sick-room. What heroic deeds he has performed, in pestilential land and on battle field, none, save those alone to whom he has ministered, may ever know. There was a time when men lived that other men might die, but the physician lives and dies that other men may live. He it is who ushers us into this world; upon his skill and science may depend our future usefulness as citizens, one false step of his, and we may forever after be helpless cripples, or at least deformed and misshapen. He it is who ministers to our needs in sickness, teaches us the laws of hygiene and is with us in our last and final struggle; for life, from the cradle to the grave, is but a struggle against death, with the absolute certainty of being overcome in the end; so that even the physician, with all his skill and science, is powerless in its presence.

Shakespeare, the Master Poet, Dramatist and Scholar, has compared a human life to a candle. He makes Othello say, as he holds a lighted candle in Desdemona's room:

"Put out the light, and then—put out the light—
If I quench thee, thou flaming minister,
I can again thy former light restore,
Should I repent me; but once put out thine,
Thou cunning'st pattern of excelling nature,
I know not where is that Promethean heat,
That can thy former light relume.
When I have plucked this rose, I cannot give it
vital growth again.
It needs must wither."

The power of the physician over life and death, the knowledge and science he possesses, are so great as to put him distinctly in a class by himself, and, as I have said, to stamp him at once as the most useful or dangerous man in the community, and from the knowledge of his power, and the gains derived therefrom, his temptation to do wrong and violence to society are often almost too great for human endurance, so that the physician must be not only the most useful but the bravest man in his community. His legal rights differ but little from the legal rights of others. He has, of course, the right to just compensation for his services, commensurate with the skill and knowledge he brings to the discharge thereof. And most people, I believe, who are able and who have regard for their standing in their community, are prompt in paying their doctor's and undertaker's bills,

which not infrequently come close together. In this state he may be called as a witness and compelled to testify to facts, but cannot, without his own volition, be obliged to make an examination or perform any work, for the purpose of gaining information to give on the witness stand.

In those localities where ferries are in use, the physician, going to and returning from professional calls, has the right to be ferried, on demand, at all hours, when the river is in condition to ferry over. This is so by the statute law of this state.

He is exempt from military duty; so also are idiots, lunatics, paupers, vagabonds, habitual drunkards and persons convicted of infamous crimes. He is also exempt from jury service.

In trials before justices of the peace, a physician or surgeon is incompetent to testify, without his patient's consent, concerning any communication made to him by his patient, which was necessary to enable him to prescribe and treat the case. This is not so, however, in the Circuit Courts or other tribunals which have the right to compel the attendance of witnesses. When we consider the confidential relations that exist between the physician and his patient, the sacred character of information which it is often essential for him to possess, one cannot help but conclude that the law should be changed, so that all such communications shall be made privileged. Just why they should be made privileged before justices of the peace and not in the Circuit Courts, is hard to understand, except on the theory of oversight, inaccuracies or inconsistencies, which are liable to creep into all human formulations and rules for the administration of justice. I have no doubt the Legislature, if appealed to by you, will speedily remedy the defect.

Of your responsibilities as physicians, I have time only to name a few. You have, of course, been carefully informed of those duties and obligations which the law imposes upon you and of those things which no man, be he physician or layman, and the cause, from a social standpoint, be never so pitiful, dare with safety undertake. I shall, therefore, not allude to them.

You are also aware of the duty resting upon you to inform the clerk of the County Court in reference to births and deaths, and of the requirements to practice medicine,

and that you may not administer chloroform, ether or any anaesthetic whatsoever, whereby sleep or total loss of sensation may be produced, to any female person, unless in the presence of some third person.

None but those entitled under our statute may practice medicine in this state, and, in addition to the requirements of the statute, the law requires that, in the practice of his profession, a physician be held to the exercise of such care, skill and diligence as are ordinarily possessed by the average of the members of the profession in good standing in similar localities, regard also being had to the state of medical science at the time.

Our Court of Appeals in a recent case announced the law on this subject as follows:

Degree of Skill Required.—A physician is not to exercise the highest degree of skill and diligence possible, in the treatment of an injury or disease, unless he has by special contract agreed to do so. In the absence of such special contract, he is only required to exercise such reasonable and ordinary skill and diligence as are ordinarily exercised by the average of the members of the profession in good standing, in similar localities and in the same general line of practice, regard being had to the state of medical science at the time.

A physician does not warrant or insure that his treatment will be successful, in the absence of special contract to that effect.

Mistake in Judgment.—Where a physician exercises ordinary skill and diligence, keeping within recognized and approved methods, he is not liable for the result of a mere mistake of judgment.

A physician is liable for the result of an error of judgment, where such error is so gross as to be inconsistent with that degree of skill which it is the duty of a physician to possess.

Burden of Proof.—In an action for damages against a physician, for negligence and want of skill in the treatment of an injury or disease, the burden is on the plaintiff to prove such negligence or want of skill, resulting in injury to the plaintiff.

Presumption from Failure to Cure.—Failure on the part of a physician to effect a cure does not, alone, establish, or raise a presumption of want of skill, or negligence, on his part."

These, then, are some of the legal rights and responsibilities of the physician. But the responsibility of the physician by no means begins and ends in the sick room, for in this day and generation on his word and scientific knowledge many times depends the due and proper administration of justice. And for this reason, if for no other (though my own experience has taught me there are many others), the most

cordial and friendly relations should exist between the medical and legal fraternities. Whenever, says the Court of Appeals, a question arises outside the pale of ordinary human knowledge and experience, it cannot be otherwise determined than by the testimony of those who are learned, skilled and experienced in the matter in dispute. An illustration, of recent date, is furnished in the trial of Dr. Crippen, in London, for wife murder. But for the skill, scientific knowledge and learning of your profession, and the medical expert testimony which it enabled the crown to give to the jury, the defendant could never have been convicted. The physician must, therefore, not only be honest, but skilled and learned.

A great deal of the disfavor with which physicians, as a general rule, view the ordinary lawyer, on cross-examination, is due, I think, to two conditions: a constant fear on the part of the doctor that the lawyer is there for the express purpose of confusing and discrediting him before the jury, and by a not too careful diagnosis of the case in question. The lawyer is trained to take nothing for granted; physicians sometimes do take things for granted, and diagnose their cases partly on what the lawyer calls hearsay, and which he disregards. The doctor invariably has forgotten more on the subject upon which he is being questioned than the lawyer can ever know, and yet how often he fails merely because of pride. He does not want to appear ridiculous, and in his effort to save himself he falls, when, if he had told the exact truth, as he knew it, all would have been well. Never be ashamed to say, "I don't know," if that is the truth, for, gentlemen, you don't know it all, and perhaps never will, and it is no indication of lack of skill to make such a confession in reference to the unknown. Never, let me say as a general rule, answer a hypothetical question unless you have had it reduced in writing and submitted to you, or are convinced to a certainty that you understand each word, and that it contains every word necessary for you to give a correct opinion. Answer questions put to you freely and frankly, and the court will see that your rights are protected. And remember that others than physicians become confused on the witness stand. It is notorious among lawyers that they themselves, as a rule, are the poorest of witnesses.

They know the rules of evidence and forget they are witnesses and start to object or argue, when they have no such right.

Many a guilty man has doubtless escaped punishment on expert medical testimony, and innocent ones have been convicted. The responsibility, therefore, gentlemen, rests largely with you. Upon your answers often hangs the life or liberty of one accused of crime; upon your skill and knowledge may rest the property rights of litigants in those cases where it becomes necessary to establish the moment of death, when such question involves the course of the descent of property. Whether or not the child who perishes, along with the mother, in child birth, for example, died first, or survived the mother, is sometimes a question of grave importance; and many other questions of like import arise that only medical skill and science can solve. The sanity *vel non* of those who have made wills or contracts, or who appear in criminal cases, daily comes before the courts for decision, and you are called upon to give the light that is needed for a proper determination of the question at issue.

May your meeting here as well as others in the future, impress upon you the grave responsibility you owe to society at large, in this respect, because of the knowledge and science you possess, until at last the doctor and the lawyer, each striving for the uplift and perfection of society, may evolve some plan by which justice, unfettered by doubt, may be unerringly administered in all those cases in which your skill and assistance are invoked.

THE INTERNAL SECRETIONS.

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(Read at Annual Meeting of State Medical Ass'n,
October, 1910.)

Surgery as a science and art is based mainly upon the science of anatomy. The Mayo brothers are successful and famous surgeons mainly because their knowledge of anatomy is great.

Medicine as a science and art is based mainly upon the science of physiology. The successful general practitioner as well as the specialist must be thoroughly versed in physiology. But physiology is not as per-

fect a science as anatomy. Anatomy is largely a matter of careful dissection and observation. A perfect knowledge of physiology will probably never be attained. It depends upon something more than the mere observation of parts after the dissecting knife and the microscope have revealed them to the eye. Many and various must be the experiments before we can determine just how a part functionates.

Until recently therapeutics has been based almost solely on clinical experience, or to use, perhaps, a harsher term, on empiricism. "What," says Horatio Wood, "has clinical therapeutics established permanently and indisputably? Scarcely anything beyond the primary facts that quinine will arrest an intermittent, that salts will purge, and that opium will lull to sleep." Osler declares that "we put drugs, the nature of which we know little into bodies, the nature of which we know less." Is it any wonder we have therapeutic nihilists when an eminent physiologist characterizes his study of an important physiologic process as "consisting mostly of guesses and gaps."

Physiology may be defined as a knowledge of *functions*. Therapeutics may be defined as a knowledge of *repair of functions*. We are yet in the dark concerning many physiological processes. Anything which will throw light upon these physiological processes will throw light on the science of therapeutics.

Dr. Sajous, who is, perhaps, a little severe in his criticisms of the physiologists, nevertheless has given the subject much careful study and has advanced some theories, based upon a vast array of facts and experiments, which should deserve, at least, our careful investigation. In the brief space allowed me, I can give only a bare outline of his doctrines. My paper is nothing more nor less than an attempt at a review of his voluminous work on the Internal Secretions. No work on physiology pretends to account for the existence of certain well known organs grouped together under the name of ductless glands. A gland is supposed to be an organ which manufactures some product from the blood and throws it out into a cavity or upon the surface. The ductless glands were not supposed to secrete, or manufacture any sub-

stance, hence there was no need of a duct to convey away the secretion. It is only of late that we hear the expression, internal secretion. We do know that the removal of certain of these bodies is always attended with destructive results to some part of the body mechanism. The same is true of disease of these organs. This fact in itself is a proof that they are useful organs, but just how they act, just what part they play in the physiological processes has ever been a mystery to the physiologist.

It is claimed by Sajous that the suprarenal capsules, or adrenals, secrete or manufacture a substance which is of far reaching and vital importance in the body economy. As a proof of the existence of this secretion and that it goes to all parts of the body where blood circulates we have the phenomena of bronzing in Addison's disease, which is an affection of these organs, the brown color being due to abnormal oxidation of the hemoglobin of the blood through the perverted activity of this secretion.

The main function of the adrenal secretion is to absorb the oxygen of the air and carry it to the tissues, and as a result we have an explanation of pulmonary respiration and tissue respiration more satisfactory than that given by physiologists. The texts on physiology explain respiration by saying that there is a diffusion of gases and the hemoglobin of the red corpuscles absorbs the oxygen and it is thus carried in a solid form to the tissues, but this theory fails to account for respiration in the invertebrate animals which have no hemoglobin.

Since all physiological processes are not simply chemical, but chemico vital, they must be under control of the nervous system. There are certain parts of the brain whose functions are unknown. The pituitary body at the base of the brain is a very complex organ and has functions which are probably in immediate relation to the internal secretions. According to the new doctrine, this is a great center of centers. It controls the adrenals, the thyroid bodies and through them all oxidation processes and indirectly all metabolism. These two ductless glands, the adrenals

and the thyroids, with the pituitary body constitute the *adrenal system*, the main function of which is to protect the body from disease. This it does by producing in the blood an *auto-antitoxin*, a substance analogous to diphtheria antitoxin, which destroys or chemically neutralizes the toxins of disease. It is also the cause of the production of phagocytes, which destroy bacteria.

There are four elements which enter into this remarkable compound: (1) The internal secretion of the adrenals which Sajous calls *adrenoxidase*, same as Ehrlich's "*amboceptor*;" (2) the trypsin of the pancreas, or Ehrlich's "*complement*;" (3) the product of the spleen and leucocytes (nucleo-proteid); (4) the thyroid and parathyroid secretion (thyroidase) equivalent to Wright's opsonins.

Here seems to be the true *vis medicatrix naturae*, to increase which should be the principal aim in therapeutics. It is claimed that thyroid extract, mercury and iodine compounds, adrenal extractives and the various antitoxins provoke energetically the formation of auto-antitoxins and that this is the true explanation of their beneficial effects.

The pituitary body is claimed to be the somatic brain, or that portion of the nervous system which governs the vegetative functions, that is all activities of the body except the mental processes, which are governed by the gray matter of the cortex of the brain. This explains how a blow on the head which may not even break the skin may cause death by a shock to the pituitary body, while a considerable portion of the brain substance may be sliced off without even causing pain or unconsciousness. There are many nerve centers, as those in the spinal cord, medulla, pons, and gray matter at base of brain and in the sympathetic ganglia, but all are subordinate to the grand center of centers, the pituitary body. The ancients were not far wrong when they located the soul of man in the region of the pituitary body.

The vulnerability of the organism to infection is inversely proportional to the efficiency of the adrenal system, the relative amount of auto-antitoxin in the pul-

monary and intestinal secretions, and the bacteriolytic activity of the phagocytes.

The diseases most fatal, as cancer, tuberculosis, Asiatic cholera, pneumonia, bubonic plague are due to agencies which interfere with or paralyze the functions of the pituitary body and through it the adrenal system. That all of these diseases can be treated successfully if seen at an early enough stage, by means of remedies which excite the control center and provoke through it an accumulation of auto-antitoxin and thyroidase (opsonin) in the blood. The fresh air and proper feeding are the excitants in case of tuberculosis and pneumonia.

The convulsive diseases as tetanus, rabies, eclampsia, and epilepsy are due to toxic waste products of the blood and may be arrested by measures which prevent the accumulation of toxic waste and which increase the proportion of auto-antitoxin.

The leucocytes build tissue and nourish it and the material used consists of the carbo-hydrates and proteids derived from the ingested food altered and prepared by the digestive ferments. The erythrocytes are the carriers of adrenoxidase from the lungs to the tissues. What is this adrenoxidase? It is a term used by Sajous to indicate the oxidised adrenal secretion. It embodies four important features: (1) its origin, the adrenal secretion; (2) its general distribution, by the red cells; (3) its activity as a ferment; (4) its catalytic action by which it energizes the leucocytes and thereby repairs and builds the tissue and protects the body from disease.

Pain is believed to be due to hyperemia of nerve terminals and any agent which reduces this hyperemia will relieve pain. Opium and its class relieve pain by stimulating the sympathetic center and thus causing the dilated arterioles to resume their normal caliber. Acetanilid and its class act in the same way but are more violent and may cause hyperconstriction of the arterioles and consequent cyanosis. Drugs of the type of amyl nitrite and nitroglycerin produce dilation of arterioles by inhibiting the sympathetic center. Drugs like veratrum and the bromides, lower the vascular pressure by inhibiting the functional activity of the vaso motor center. Alcohol is a depressant because it

deoxidises the adrenoxidase of the blood.

Purgatives produce beneficial effects by causing an increase by osmosis of the bacteriolytic and antitoxic auto-antitoxin in the intestinal canal.

All the diseases grouped under gouty diathesis, as gout, rheumatism, migraine, neuralgia, are due to hypoactivity of the pituitary body and the adrenal system.

HYPEREMIA AS A CURATIVE AGENT.

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HYPEREMIA has been used as a means of treatment in both medical and surgical conditions ever since the beginning of the healing art. Hot fomentations and poultices, mustard plasters and fly blisters, counter irritants and the actual cautery all accomplish their good by bringing to the diseased part an influx of blood. It was not until our attention was brought to the subject some sixteen years ago by August Bier, of Berlin, that hyperemia has been used with any degree of precision, and with any great hope of success as a curative agent. Some of its advantages over other methods of treatment are as follows:

Pain is diminished, the infection is decreased and very probably suppressed, suppuration being avoided in many cases; small incisions other than large in conditions in which suppuration has already taken place, with decrease in the resulting scar; absorption of exudates and pathologic tissue changes is favored, and last but not least, its wide field of usefulness.

METHOD OF INDUCING HYPEREMIA. Hyperemia is either active or passive, as to whether there is an increase of arterial blood to the part or an obstruction to the venous flow from the part. The obstructive form is induced either by the use of elastic bands to the proximal side of the part, or by the use of special cups or apparatus on the part itself. The active is induced by the use of heat to the part, whether by means of hot air, the electric cabinet, the arc or leu-

codescent lamp, or the use of some counter irritant.

GENERAL RULES FOR THE APPLICATION OF HYPEREMIA. In using the elastic bandage, be careful not to use enough pressure to cause pain, but rather to relieve the same if present. Use just enough pressure to produce a pink glow to the part distal to the bandage, and not an anaemia of the part, the patient's own feelings being a good guide. At all times you must be able to feel the pulse below the place surrounded by the bandage. The same general precautions must be followed in the use of the cups, etc. Avoid pain and produce the glow, and your technique will be correct. In suppurative processes, etc., all dressings should be removed in the use of the bandage, so as to allow the needed room for the resulting oedema following. This oedema must be watched and kept within proper limits. The duration of obstructive hyperemia should vary from two to twenty-two hours per day, acute infectious processes requiring less time than the chronic. The cups should be continued from thirty to forty-five minutes, using them for five minute intervals, with periods of three minutes rest between. The physician should apply these himself unless he has a trained assistant. Much harm can be done by the method when carelessly used. In many cases, intelligent patients, whose period of treatment will extend over a long time, can be taught the method themselves. When they see the good results accomplished, they will follow it out faithfully.

I will not enter into details in the treatment of special cases, but do wish to say I have attained wonderfully good results in acute infections, as carbuncles, mastitis and acute rheumatism; as an aid in painlessly breaking up adhesions, and in correcting contractures; to rapidly fill in spaces in bone that have previously been curretted; to heal over large raw surfaces in which previously I had expected nothing short of skin grafting would do any good, etc.

CONCLUSIONS. I. In Bier's hyperemia, where applicable, we have an agent that will greatly aid us in the relief of pain; an agent, while not a panacea,

having a wonderfully wide field of application.

II. We must remember the fact that a mild hyperemia will accomplish our result, while too much will be injurious.

III. It is a splendid prophylactic measure, but even if the process of infection is already established, it will greatly aid nature in reconstruction.

IV. To attain satisfactory results, it will require the personal supervision of the physician, but the results attained will justify the time expended.

AUTHOR'S ABSTRACT.

PSYCHOPROPHYLAXIS IN CHILDHOOD.

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Prevention by psychic means not necessarily of psychic disorders is the sense given to the word psychoprophylaxis. As such it plays a large part in public measures of sanitation. Only laymen and especially ecclesiastics will exaggerate its uses. The monistic physician will not forget the physical basis of healthy mentality and will take care that his exhortations are not obstructed by neuronc intoxications and exhaustion. A psychological training will prevent physiological explanations not yet warranted; but his diagnosis is none the less exact so far as it goes.

The essence of psychoprophylaxis, as of psychotherapy and education, is to associate useful activities with agreeable feeling-tones, and to dissociate from useless or injurious acts the agreeable feeling-tones they may have acquired. The method is essentially a "conditioning" of the reflexes, as was done by Pawlaw in dogs. The emotional element of a "conditioned" reflex tends to fade as a rule; though sometimes an "affect" may persist alone.

The *interest* sentiment is a necessity, and is the secret of the method of *substitution*. Sometimes much repetition is needed to bring an idea home; but *persuasion* is often the most powerful weapon as shown by Judge Lindsay's management of incorrigible boys.

The increased *impressionability* of hyp-

nosis could not do more and has serious drawbacks, in that the patient is not aware why he accepts ideas in that state, his judgment is stunted, and his hysterisability increased. A dreamy acceptance is not our goal, but an active awareness, not control but *training* is our aim.

We must learn to obviate and out-grow the prepossessions and inertia which interfere with *judgment*. Over anxiousness, the product of excessive interference, is a form of mental prepossession; the golfer who "presses" is an example. The other extreme must be avoided however, and a sense of fitness should be encouraged.

Bad psychic habits may quickly form during physical depression; for functional perturbation tends to continue when once begun. The increased suggestibility in these states must be allowed for. The states of well-being, buoyancy, should be used to cultivate difficult acts and inhibitions, remembering that ample outlet must be afforded mental energy.

Suggestion must not be overworked; authoritative affirmation is often preferable; for the child then knows he is acting another's will, and is not cajoled into a false belief that he himself is the determinant of his action.

When duties are *real acts*, and not mere *prohibitions*, they are not apt to obsess, even though they become morally imperative and deep-rooted.

Inculcation is useless in the prevention of "fear thought;" action is necessary.

The *affections* must not be suppressed; but the craving for sympathy is easy to prevent by arousing active interest in impersonal matters such as the cultivation of order, which is the precursor of accuracy in word. In this way *mythomaniac* tendencies may be overcome.

To secure the kinetism needed for an efficient morality, boys must be trained by men, who can participate in their active games, which are the finest of all means of training *self-control* and preventing despondency, suspiciousness and such antisocial feelings. Constant reference to others breeds *self-respect*, which in turn restricts suggestibility. With such conditioning of the reflexes no man would weep all night for his mother after two months of married life.

Much suffering is caused by the failure to rationalize the management of the *sexual instinct*, the common attitude of reserve is very injurious in that respect. The mediaevalism which permitted the imprisonment of a writer on sexual hygiene could be eradicated tomorrow if the medical profession spoke frankly.

The horrors of *religious forebodings* and fears would be less numerous too were we to speak more plainly of their perniciousness to the growing psyche, and were we to substitute for it the fulfilled desires of productive activity, which will discourage both *self-distrust* and its daughter *pride*, which so often ends in ideas of reference and paranoia. Another indictment against medical men is afforded by the so-called gastric neurosis which is generally the product of a doctor's imprudent suggestion.

The neurotic states should be detected at their incipiency by *neurological inspection* of school-children in co-operation with the teachers, for whom a scientific attitude is more attainable than for the priest. They are seeking our assistance, and the duty lies at our hand.

It is by us too that *mothers must be taught* how to give their children healthy emotional habits. It is here that the neurologist joins his brethren the bacteriologist and sanitarian in sociological functions by distinguishing (both in the individual and in the mass) from the aberrations of conduct due to changes of the secretions and the nervous system those due to the aberrant actions, and by supplementing by his broader conceptions those of the pedagogue and priest. His function is to mend mal-adjustments to environment, arrest morbid trains of thought and set minds at rest. His accurate training is a much better preparation for this duty than that of the priest, however elaborate; for he will not be turned from a study of the truth by prepossessions however sacred. But to affect a knowledge he does not possess places him on the plane of the Christian Scientist, whose pretensions we all condemn. To meet the public's demand for psychic treatment, the profession requires *psycho-pathological wards* and out-patient clinics under competent teachers; and their want

is an urgent need which it is to be trusted this symposium will help to fill.

(Read by invitation before the American Therapeutic Association at Yale in the Symposium on Psychotherapy May 18th. In full Jour. Abnor. Psy. June.)

Selections

HEMORRHAGIC CONDITIONS OF THE NEW-BORN.

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pital; Asst. Visiting Physician
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Disregarding the hemorrhages resulting from traumatism during childbirth, which are only of interest under our title when occurring in infants with an inherited hemophilia, we have two abnormal conditions accompanied by bleeding in the new-born, each with distinguishing features. These are hemophilia and the condition known as melena neonatorum. Individual experience is of little value in the consideration of these rare conditions, but various contributions on the subject have established beyond doubt that melena is not attributable to an inherited hemophilia, and must be considered a separate condition. In the first place, melena practically always occurs within the first week of life, while evidences of hemophilia are revealed often by some accident later than this. Secondly, in children that have recovered from melena no evidence of hemophilia was found later. Thirdly, cases of melena occur with positive exclusion of any hemophilic family history. Hemorrhage in the newly born (melena) shows only a slight preponderance of male cases, while in hemophilia the proportion of males to females is about thirteen to one. Circumcision has been performed a few days after the cessation of the melenic attack without any unusual hemorrhage.

Hemophilia is an habitual tendency to hemorrhage, and is in nearly all cases hereditary. Although the heredity cannot invariably be established, in most cases the affection can be traced through generations. There are records of families who

have carried the taint for over a century. There are usually a number of bleeders in a family, and while the males are much more often afflicted than the females, it is an interesting fact that the females can transmit the affection to their offspring without having themselves been bleeders. Hemophilic men generally procreate healthy children through a normal mother, while as a rule hemophilic women produce children with the affection. It is a noteworthy fact that in hemophilics there is no tendency to excessive hemorrhage during menstruation or parturition.

Practically nothing is known of the etiology of hemophilia. The interesting facts established regarding its transmission give us no clue for speculation. The large number of hypotheses one can find advanced seems to prove how little is known of its cause. Immerman assumed a pathological plethora; Virchow, congenital thinness of the arterial walls; another argues an infectious cause; Sahli, a disturbed chemism of the vascular walls, which, being transmitted with the germ plasma, leads to abnormal brittleness or permeability of the vessels. The only fact demonstrated has been in a few cases the finding of fatty degeneration of the vascular intima, and enlarged endothelia with swollen nuclei (Virchow, Hooper, Linton). The blood shows on examination different degrees of lessened hemoglobin, and microscopically the picture of severe anemia, with poikilocytosis and nucleated erythrocytes. Sahli has demonstrated that the quantity of fibrin and the physical properties of the blood are normal. The fault would then seemingly lie with the intima of the vessels.

In considering the symptom that is characteristic of hemophilia, the long-continued existence and difficulty of controlling these hemorrhages, we find again evidence of the pathologic condition of the blood-vessels. The severity of the hemorrhage is frequently not very great, but it may last for days, weeks, or months. The blood does not spurt from the vessels, but slowly oozes from the capillaries. The traumatic hemorrhages may occur into interstitial tissues, skin, muscle, etc., forming large extravasations; or they may appear on mucous surfaces or skin under the slightest provocation. Circumcision or other

operations may first point to the existence of the abnormality. In some cases a tendency to spontaneous hemorrhage exists, and here occasionally prodromal symptoms evidence themselves, such as lassitude, chilly sensations, dizziness, etc. Hemorrhages of the spontaneous variety occur into the subcutaneous tissues or from mucous membranes. Petechial hemorrhages are a fairly frequent primary symptom of the condition, the lesions appearing on the extremities, and disappearing slowly by absorption. Occasionally with large extravasations suppuration results. Again, large colorless, soft, elastic swellings are wont to appear, deep extravasations, chiefly about the knees and hip-joints.

The difficulty of checking hemorrhage from "bleeders" is recognized even by the layman. Artificial aid is always necessary, as the slightest traumatism can result fatally. Occasionally the lowered blood-pressure will after a time cause spontaneous cessation of the hemorrhage. There is always danger from the ensuing anemia. It is authoritatively stated that only 13 per cent. of hemophiles attain majority, 60 per cent. dying before the eighth year of life.

The condition known as *melena neonatorum* is distinct from hemophilia, as has been shown. Little is positively asserted regarding the affection, and it might be justifiable because of the existing questions concerning it to assail the assumption that the symptom-complex should be classified as a distinct disease.

The characteristic symptom is a loss of blood, chiefly from the gastro-intestinal tract, which begins within the first few days of life. This bleeding may occur from any portion of the digestive canal, may be slight and cease after a time, or continue slight until the child is exsanguinated; or it may be appallingly severe, with vomiting and purging of pure blood, quickly terminating the existence of the little victim. Holt holds that *melena* is a phase of a general hemorrhagic tendency which he terms the hemorrhagic disease, and includes umbilical hemorrhage, hemorrhage from the nose, mucous membranes, hematuria, and those cases reported as precocious menstruation, in which blood issues from the vagina during the first days of life. The hemorrhage as a rule occurs

during the first four days after birth, most often on the first or second. Evidence of bleeding is usually first seen in the stools, sometimes merely a streaking of the meconium, a red areola on the napkin, or clots. This may appear trifling at first, but usually increases in amount with no tendency to cease, if the case be one of true *melena*. We must admit the occurrence of hemorrhage from the intestine due to trauma, prolonged labor, infection, hereditary syphilis, anomalies of the heart, liver, tumors, etc.; but these causes can be, and have been, excluded in a large majority of cases where autopsy findings have been recorded, and no assignable reason could be found. True *melena* occurs in infants otherwise perfectly healthy.

In the fatal cases autopsy has revealed no constant lesions. A fair proportion at necropsy show nothing beyond a congestion or stasis in the vessels of some portion of the intestine. In others multiple hemorrhages into the mucosa, erosions and ulcers resembling the round ulcer of adult life have been found. The theory of embolism has been advanced to explain those cases in which ulceration and stasis have occurred. The origin of the thrombus is theoretically the ductus arteriosus or the umbilical vein. But no one has as yet demonstrated the existence of thrombus. Another theory advanced is that which assumes the digestion of the mucosa by the gastric juice. This would appear rational, as one could assume a congenital lack of resistance to digestive action, and moreover, where ulceration has been found as the cause of *melena*, the ulcers were situated in the duodenum or stomach. In children apparently otherwise perfect I see no objection to assuming a structural weakness in the walls of the artery, which yields when the blood-pressure rises to a certain point.

After prolonged labor hemorrhage occasionally occurs in various parts of the infant anatomy, notably the cerebrum. Interesting experiments by Brown-Sequard, Schiff, and Epstein showed that in young animals hemorrhage into various parts of the brain produced artificially were followed by hemorrhage from the mucosa of the intestines. They explain the intestinal breaches as due to a paralysis of the vaso-

motor center, which in turn permits atony in distal vessels, stasis, and hemorrhage. Preuschen, having found cerebral hemorrhage in some cases of melena, feels justified in assuming that a number of cases are attributable to this cause. We must remember, however, that these hemorrhages might exist in the two regions coincidentally, being the product of the same factor. Gaertner in a few cases has found a bacillus in the blood resembling in some respects the colon bacillus. This bacillus when injected into the peritoneal cavity in young animals produced a disease accompanied by hemorrhages. Others have found streptococci, staphylococci, etc., at odd times, but no findings have been constant. Sepsis has been claimed as the true causative factor, but it will hardly explain the cases that occur within twelve to twenty-four hours after birth. Mere vomiting or passing of blood does not constitute true melena, as blood swallowed from a slight nose-bleed, fissured nipples, etc., might be passed; the source of bleeding should therefore be carefully sought.

The average mortality is figured by Silbermann as 44 per cent.; by others as 60 per cent.; while Townsend, from 709 collected cases, figured a mortality of 79 per cent. Prognosis depends upon the rapidity of loss of blood, since the slower the loss the more can be attempted therapeutically; also, where one can exclude any organic cause for the hemorrhage, the prognosis is slightly better.

Treatment can only avail in some of the cases, as where the loss of blood is severe death follows in a few hours, and no opportunity is given one to adopt any special measures. The best results recorded have followed the use of gelatin. The gelatin should be sterile. A 10 per cent. solution for this purpose is prepared by Merck. It is to be injected subcutaneously in doses of 2 to 6 drams, repeated two or three times a day, if possible. At the same time it is administered in a solution of the same strength by mouth and rectum. Heat applied to the extremities and cold to the trunk and stimulants are recommended. Calcium chloride and calcium lactate in doses of $\frac{1}{2}$ to 1 gr. every two hours, ergot, adrenal preparations (1 to 2 drops of the 1-1000 solution), and subcutaneous

injections of normal saline solution have all their place in treatment.

A most interesting case was recorded by Samuel Lambert in the Medical Record of May 30, 1908, which would seem to cast a light on the etiology of some cases of this affection. The hemorrhages in his case occurred from the nose, there was a febrile action followed by vomiting and purging of blood and subcutaneous hemorrhages. The loss of blood must have been gradual, as the author states that on the fifth day the case seemed hopeless. He had tried the usual remedies in vain. As a last resort he transfused from the father's left radial artery to the infant's right popliteal vein, and allowed enough blood to flow into the baby's blood to change it from a transparent whiteness to a brilliant red. The blood from the child, which had been of a pale, watery character, soon clotted firmly, and an excellent recovery followed. From such a result one must argue that the later theories regarding the etiology of the affection—namely, a defect in the blood vessel, infection, etc.—are not tenable, and that after all we must look for an abnormality in the chemical condition of the blood. It would be unscientific, however, to assert from one case that a lack of fibrin ferment is the cause of melena in all cases; but such a result as Lambert obtained should stimulate investigation for the etiology of the condition in a chemical study of the processes of osmosis in the capillaries and of the chemistry of blood coagulation. It is properly the work of the physiologist.

The treatment of hemophilia will be the same as outlined above, plus the prophylaxis necessary to avoid bleeding, the continued ingestion of gelatin, its use locally to bleeding surfaces and points, pressure, chromic acid, and silver nitrate to appropriate localities, and the other styptics that will suggest themselves.—*Merck's Archives*.

A small, hard, irregularly nodular scalp tumor is very likely an endothelioma. A little section should be removed under local anaesthesia for microscopical examination. If the diagnosis is corroborated, radical removal is necessary.—*American Journal of Surgery*.

LOCAL ANESTHESIA IN RECTAL WORK—ITS HISTORY AND ITS INDICATIONS.

Jerome M. Lynch, M.D., New York.

Much has been said on the subject of local anesthesia; but, from its importance, both to the surgeon and the patient, some further testimony may not be out of place.

While local anesthesia cannot be termed new, it is only within a few years that it has been extensively employed.

On January 10, 1904, Dr. James P. Tuttle of New York first demonstrated the possibility of painless dilation of the sphincter with a single puncture and a $\frac{1}{2}$ % solution of cocain.

At a meeting of the Proctological Society in 1905, in a private communication, Dr. Tuttle gave the members of that Society the history of these demonstrations, as follows: "In order that the members of this Society may have the advantage of trying these methods without waiting for publication, I wish here to make a preliminary and confidential communication to you of the technic used for dilatation of the sphincter by local anesthesia with one single puncture of the skin. A hypodermatic needle about two inches in length is employed; a sterile solution of $\frac{1}{2}$ % cocain or eucain is used. I prefer cocain freshly made because it is always reliable; the needle is introduced in the median line about one-half inch back of the posterior commissure of the anus; a drop or two of the solution is injected into the subcutaneous tissue; the right index finger is then introduced into the rectum and hooked around the internal sphincter, thus dragging it down into apposition with the external; the needle is then carried upward and forward into the sphincters, one after the other, depositing about five minims of the solution in each muscle at a point about one-half inch in front of the posterior commissure; the needle is then easily withdrawn and introduced in a like manner into the muscle on the opposite side of the posterior commissure; twenty or thirty minims of the solution are used. After about two or three minutes a duck bill speculum is introduced into the anterior commissure

of the rectum and with this as point of resistance the sphincters are gently massaged and stretched to any desirable extent.

"I do not claim, by this method, that the sphincter can be divulsed or the perirectal tissues torn down without pain; but I do claim that the sphincters can be stretched sufficiently for all practical purposes under local anesthesia. The points for which I claim originality are the single puncture, thus minimizing the danger of infection, and the localization of the sensitive nerves of the sphincter."

In adopting local anesthesia, many will have met with disappointment from faith in the too roseate view of some authors, and others may have been discouraged from the pessimistic reports of those who have not had the happiest of results. Between the two lies the truth.

First of all, let me say, that what the surgeon terms "painless," and what the patient terms painless, are not always identical! Practically painless is perhaps more accurate. But however slight the discomfort during the operation, post-operative pain, in rectal surgery, is unavoidable, whatever the anesthetic employed, unless prevented by opium or some other anodyne.

There is no doubt that in many cases local anesthesia is a godsend. The patient who, because of his condition or through apprehension, cannot take a general anesthetic, is delighted with it. But there are other cases where the result is most unsatisfactory and painful.

In the first place, the character of the operation must be considered. Secondly must be considered the patient's temperament, i. e., whether he is phlegmatic or nervous, and whether or not he is mentally equipped to bear *repair* while conscious. With a person who is moderately calm and courageous, I find these operations entirely feasible under local anesthesia; dilatation; operation for fissure; for external, internal, and thrombotic hemorrhoids; for polypi; and for certain types of fistulæ.

Dilatation can be performed with less pain than discomfort, if Tuttle's technic is followed. The important point to remember is that the sensitive nerves are the inferior hemorrhoidal and the lesser sphincter. The inferior hemorrhoidal is sometimes derived from the pudic, from be-

neath the sacrosciatic ligament. However, it is often derived from the sacral plexus direct. It enters the sphincter in the shape of a fan. It is not spread out, as is sometimes supposed, but enters the muscle in the long axis of the anus.

There is hardly a case of fissure that cannot be operated upon with satisfaction; the patient being relieved with a minimum of pain and detention.

On the other hand, fistulæ, except those that are of the straight, submucous type, and those opening anteriorly—which are generally free from complications—are not amenable to local anesthesia.

The writer, who has operated on fistulæ of every type, after several unsatisfactory experiences with local anesthesia in this field, unhesitatingly commends, for this class of operation, the general anesthetic, except for the types noted above.

External hemorrhoids, skin tags, and similar conditions, can be satisfactorily operated upon with injections of either sterile water, or very weak cocain solution; but these are the only conditions under which sterile water anesthesia may be properly employed. In these cases it is possible, because in loose tissue pressure on the nerve ends is lost.

I have used sterile water, magnesium sulphate, salt solution, B. eucain, and stovain, and have given each a fair and impartial trial, both in hospital work and private practice, and I am convinced that in cocain we have the only safe and reliable anesthetic. There is no question in my mind, or in the mind of Tuttle, Bodine, and other surgeons who use local anesthesia extensively, that cocain in the proportion of 1-5 to 1-10 of one per cent., as we use it in our work, is superior to all other local anesthetics.

I have had no luck to boast of with sterile water. No matter how carefully it was injected, the patient invariably suffered much pain. Even when it was injected drop by drop the result was very painful. It is not isotonic with the interstitial fluids of the body, and is therefore irritating.

Thrombotic hemorrhoids are particularly amenable to a local anesthetic. They can be incised, and the clot, or clots, turned out without undue pain. If there is a re-

dundancy of skin, however, I find it better to excise a hemorrhoid, as the inflammatory edema following may otherwise cause more discomfort than the original condition.

Internal hemorrhoids can be removed with very little inconvenience to the patient, except when they are very small and do not prolapse, and the patient has a funnel-shaped anus. In such cases it is difficult to operate under local anesthesia, and I here prefer to use ethyl chlorid, or ethyl chlorid and chloroform. I have used these anesthetics over two hundred times, and consider them, next to cocain, the most valuable for short operations.

Sometimes we are at a loss to account for the recurrence of internal hemorrhoids shortly after they have been removed under local anesthesia; but the explanation is that too much of the solution was used, and the hemorrhoidal veins were left. How does this happen? In the first place, a quantity of the solution sufficient to cause considerable distension of the hemorrhoid is injected beneath the mucous membrane; as a consequence, the mucous membrane and veins are separated, and when we come to remove what appears to be hemorrhoidal tissue, we remove only mucous membrane. To obviate this, inject the solution slowly, and only a little at a time. We must remember that it takes a little time for the cocain to act. Inject as little of the solution as is consistent with painless removal.

Polypi, if in the sensitive area, can be treated in the same manner as hemorrhoids; if beyond this zone, no anesthetic is necessary. Six polypi were removed from a boy of seven, by the writer, at one sitting, the patient suffering no pain, except from the introduction of the proctoscope, which is always disagreeable when first employed.

I have burned rectal strictures of the valvular type with my new instrument, the thyrotonic, before the class at the Polyclinic, and the patient experienced no pain. This I mention as proof that above the area mentioned local anesthesia is not required. I have also done the Whitehead operation under cocain; but I do not ad-

vocate local anesthesia for so extensive an operation.

Some authorities advise extirpation of epitheliomata and carcinomata that are low down, under local anesthesia; but at this I draw the line. I believe with Tuttle, Kelsey, Earle, and other conservative surgeons, that such conditions, no matter how circumscribed, require radical measures, and therefore belong to the domain of general anesthesia.

I appreciate that the advocacy of any particular operation is not within the scope of this paper; but I cannot refrain from a few words on my experience with the clamp and cautery. During the last three years I have operated upon over a hundred and fifty cases of hemorrhoids. In the earlier part of this period I used the ligature, thinking it the best method. But experience (and severe hemorrhages) have taught me that I can never be certain of results by this process, and I have now returned to the old time operation with the clamp and cautery. I have used this method in the last twenty cases, with gratifying results.

I have given here what I consider a conservative view of local anesthesia. With two large clinics and my private practice to draw upon, I have tested it extensively, and feel I can speak authoritatively as to its place in rectal work.

Men who promise—and try—to operate on any and all rectal conditions under local anesthesia, are either inexperienced, or indifferent as to results.

To the man who selects cases intelligently, however, local anesthesia will prove a valuable aid.

36 West 35th street.

FIFTY HOURS' DELAY BETWEEN BIRTHS OF TWINS.

Dr. C. J. Hill-Aitken publishes in the *Transvaal Medical Journal* an interesting case in which natural delivery of the second of twins occurred after a fifty-hours' delay. A native woman was delivered of a child at 12 noon on a Thursday. After the birth, labor pains ceased and did not return. The relatives waited patiently until the following afternoon, and then decided to seek European medical advice. The author was sent for, and was told that while active interference was, if possible, to be avoided, his advice would be welcomed. Reaching his patient about 7:30

p. m. the same evening, he found that while no labor pains were complained of, the uterus was active, as it could be felt alternately hardening and softening under the hand. The child was alive and active in its movements. Internal examination showed that there was no hemorrhage from the uterus or from the cord of the first child, that the lag of membranes was unbroken, and that the head of the child was lying at the pelvic brim, which was wide and unobstructed. On explaining these facts to the relatives, the author was pleased to find that they were willing to await the onset of the second labor, as he did not wish to apply high forceps or to perform version in a native hut with scanty hot-water supply and no table on which to place his patient. He also preferred not to take the risk of rupturing the membranes, although such a proceeding might have hastened matters. After putting the patient on dram doses of elixir aletris, four-hourly, and recommending the frequent cleansing of the external genitalia, he left. Labor set in the following morning at 4:30 a. m., and the second child was born at 11 p. m. There was thus an interval of fifty-one hours between the birth of the first and of the second child. The author considers that the case may be considered one of natural delivery despite the administration of aletris, for the womb was by no means inactive when examined. Both mother and children were well ten days after delivery.—*The Hospital*, London.

PUBLIC PROVISION FOR CONSUMPTIVES DOUBLED.

Sixteen state sanatoria, twenty-eight county hospitals, and twenty-one municipal hospitals for tuberculosis have been erected and provided for since January 1, 1909, says a bulletin of the National Association for the Study and Prevention of Tuberculosis, issued recently.

Within the last two years the number of state institutions for tuberculosis has doubled, and the number of county and municipal institutions has increased from about 30 to 80. The expenditure of public money for the treatment of tuberculosis also has more than doubled. Not less than \$3,000,000 of state money was appropriated for tuberculosis institutions in 1909, when 43 legislatures met, and over \$600,000 in 1910, when only eleven legislatures were in session. The appropriations of counties and cities for tuberculosis hospitals and sanatoria in the last two years will aggregate fully \$2,500,000, bringing the total of official appropriations for tuberculosis hospitals up to over \$6,000,000 in the past two years.

In spite, however, of this good showing, the National Association for the Study and Prevention of Tuberculosis states that not one-tenth of the public provision for tuberculosis that is needed has been made. More than 250,000 tuberculosis patients are constantly without proper institutional treatment.

Aspirin can replace morphine for many of the post-operative pains, particularly at night.—*American Journal of Surgery*.

The West Virginia Medical Journal

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Editorial

If your JOURNAL fails to arrive by the 10th, drop a card to us—not to the secretary.

If any of our readers contemplate visiting New York for post-graduate work, write to us and we may save you a little money.

Have you, dear reader, tried to secure any ads. for the JOURNAL in your community? It means money in your pocket. Try it. We pick up quite a number in Wheeling.

AS TO REVIEWS.

Many books come to the editorial office for review. These we distribute to our members, favoring those who contribute to the JOURNAL or give us their advertising patronage. When a book is sent out of Wheeling it costs the recipient the express-age only. We ask in return a review.

N. B.—With rare exceptions the recipient fails to respond with the review until from one to three letters have been written; and book notices have been received so entirely inadequate that the editor has had to enlarge on them. We have a number of capable reviewers in this city who are willing to render prompt service in exchange for good books. But we have thought it better to circulate these favors. But tardy results may drive the editor to "patronize home industry." Can you blame him?

TO THE SECRETARIES ONCE MORE

We again appeal to those secretaries who have not yet given us a list of members who failed to pay their dues for 1910, to do so at once. Your neglect is causing a loss of money to the State Association.

A BUGLE-CALL TO DUTY.

The lay world is philistine. It is blind to culture and light. Our profession has wielded pen and tongue in vain to impart to men the truths of medical science. They still obstinately run after the quack, hungrily swallow vile nostrums, and worship the anti-vivisectionist, the anti-vaccinationist and all the other antis.

We have labored on stony ground and have won but a barren crop, it is true; but let us not despair. There is within easy reach a fertile untried field waiting for our hands to cultivate. Let us turn to it, and we are assured in advance of an ample harvest with hardly any need of labor. Our task will be no harder than the rending of the veil of a temple. There is a rich store of wisdom that the laity would learn from us; but we have selfishly hidden it from the public gaze with well-nigh jealous care. Let us awaken to our duty and teach the laymen around us that one page of wisdom which we know best of all.

The world is full of combinations of men organized for many purposes, from the peddling of shoe-laces to the teaching of universal religion. Our own age is pre-eminently the age of combinations. If the laity will not learn from us how to preserve or regain health, then let us impart to them generously our great secret of how best to foster organization. We are past masters at that art, and the laity is strangely ignorant.

There are actually persons living in the cities and towns of our own enlightened country who are foolish enough to stay in their chosen communities after the advent of some new citizen who is uncongenial to them. Just think of such nonsense! We doctors have known better than that for a thousand years. The wise physician will not stay in his medical society a single day after a doctor whom he does not like is admitted to membership. Not he! No, sirree! He grabs up his doll rags and runs away forthwith, wise like the babes whose wisdom is proverbial. All

over this great land of ours, in countless medical societies, physicians by multitudinous example are exhibiting this high type of wisdom—the sulking wisdom, we may call it—but the poor ignorant public has not been permitted to learn it.

The crass ignorance of the lay public could be demonstrated in a myriad of instances, but we must limit ourselves to a few examples. Take our Congress, or England's Parliament, or the Reichstag of Germany. Past and current history shows us beyond peradventure of a doubt that it is the usual thing in all of these bodies for the members to continue in attendance after a fellow member has crossed them in debate or shaken his vile fist at them. We have not been actual witnesses of such infamous want of spirit, but the testimony of others will not permit us to doubt the facts. Or take a lesser instance. Men have abjectly remained members of a political party after their favorite candidate has been defeated. We have ourselves known instances of this. "It is to laugh!" Try to imagine, if you can, a truly high-minded physician doing that. Again, it has been confidently averred that many times in bankers' associations members have been so devoid of spirit and honest pride as to persist in their membership even after some fellow banker has succeeded to the loyalty of a depositor. These statements may seem incredible in the face of the glorious examples of true manly spirit shown by our profession every day, but the evidence is too convincing, and, remember, we have been hiding our light under a bushel. Thank heaven that in our profession it is hard to find a member so craven as ever to come back to his society after it has allowed the presence of a fellow practitioner who has even once "taken a case" from him.

In every large corporation in the land there are stockholders who keep on holding their stock and receiving profits after some other stockholder has called them "consummate asses" or "nincompoops." Could you believe it? Ah, let some member of a medical society, in a moment of stress, apply even a much milder epithet to his fellow-member and see with what agility the latter would sever himself from the communion and profit of membership. An instantaneous camera even would cry out for mercy if put to the task of recording such an exit.

Visit any theatre in this country and we venture to affirm that you may see in them free-born Americans who will use the tickets they had purchased, even after learning that men they are at odds with are to be sheltered under the same roof with them on the night of an instructive performance. And some wretches—not fit to be called men—have even sunk so low as to ride in the same train or trolley-car with their successful rivals in various contests. Lawyers have been seen actually speaking to their victorious rivals in a legal battle; yes actually speaking to them in a friendly tone! Think of that for a noble profession! We are not surprised to hear that prize-fighters shake hands after a bloody "slugging match," for what else could you expect? but lawyers! Yes, a noble profession, forthright! And listen, the full horror has not yet been told about the legal guild. Some men dare

to launch against the eminent lawyers who compose our Supreme Court—the most august court in all the world—the base charge that it contains men who continue on its bench after some other member has differed with them in judgment. If but one had fallen to this infamy it would be enough to make us hide our heads in mere shame, but (whisper it not in Gath) it is true of more than one. It is the proud boast of our medical profession that we guard our honor more jealousy than that. Let one physician in any of our societies dare to differ successfully in diagnosis with another of us and see with what spirit and alacrity we will "damn the society to the eternal bowwows" and shake its contemptible dust from our feet. Not a single day would our pride permit us to remain under the vile stigma of associating with men who hesitate to admit that we "know it all." Perish the thought!

Volumes could be filled with types of the ignorance and servility of the laity in this matter, but we shall limit ourselves to two additional instances from fields that are deemed wholly heroic—the fields of war and love. Many times has history recorded the fact that defeated generals have praised and even fraternized with their conquerors. Just think of that for lack of spirit! And unsuccessful rivals for the hand of a lady have been known to assist at the wedding of the happy bride-groom, and even to offer congratulations! Can man sink lower than that? Surely not! At least we can conceive of no lower depths. If the role of lover and military commander could be kept reserved for physicians alone, humanity would be spared from these abysses of ignominy. No doctor of medicine would allow his heart to soften in face of the triumph of war or love. No, he would ever hold high his noble standard of unforgiving hatred; he would bravely sulk in his tent; never would he, like Robert Lee, cravenly retain the spotless sword which a generous Grant should refuse to take. Or if he were a lover, he would be the truly noble and magnanimous lover, and would courageously stand whining and weeping at the church door, or like a whipped but spirited gutter-snipe, would make brave though hideous grimaces at the bride and groom as they passed to the wedding feast.

If the genuinely manly spirit that will not forgive nor overlook a real or fancied affront is ever to become a universal attribute of men, we physicians must teach it to the world, for at present we have the only key to the secret, we have a monopoly of the art. Some thoughtless people may protest that we are not the only possessors of this glorious privilege; they may point to the rude children in the nursery or to the soured and antiquated spinsters who flutter around the tea-table, and say that these equal us in chivalrous hairpullings and knightly tittle-tattle. But there is a difference. Our noble profession shall not be robbed thus easily of its proudest boast. A moment's thought will remind you that children who quarrel one hour will be playing a friendly game together the next hour; and old maids who have spit out epithets at each other on Monday will be paying pretty compli-

ments to one another on Saturday. The medical man alone hugs his sweet grudge for a life-time and will listen to no plea from the other side.

If a spiritual microscope could be found powerful enough to locate our tiny souls it would find them locked tight against the entrance of any atom of love or such like weakness. We stand without peers in our sub-microscopic littleness. Time was when we would have been obliged to compare ourselves, for want of a better simile, to the atom for smallness; but happily the new knowledge in chemistry has taught us the subatomicity of matter, and now we have something smaller than the atom to serve us for symbol—the ion, that goes to form the corpuscles from which atoms are made. If the ION could only be pictured, we would emblazon it on our banners.

As a profession, then, we stand unrivalled; but love of truth forces from us the statement that occasional individual laymen can be found in the world who are in every way worthy of standing alongside us on our high pinnacle of nobility.

Our profession is a sacred guild, and therefore we would naturally look for rivals on some kindred and holy ground, like that of the church. The test of medical nobility, as is well-known, consists in our hurriedly bolting, with pouting lips and whining faces, from the back door of the medical society on no provocation. Why not then spy around the rear-exit of the church in the hope of finding on the alley-path the footprints of some unknown but kindred soul. We will be rewarded with happy success. Follow the welcome trail alone the dark wall till it brings you to "the city of small sins with its backways and retreats," and there at the end you will find some noble fellow boasting to his corner-loafers that he has never darkened the door of a church in thirty years; to be exact, not since the Sunday when the Rev. Mr. Brown, who died ten years ago, preached a sermon on dishonesty in business, that he felt justified in considering a personal affront. How gladly we clasp to our bosom this soul-mate, when found, rescued from the unknown. We recognize him as a brother in spirit even if he does not bear on his arm the strawberry-mark of "subatomicity" like ourselves. Joyously we huddle together with him in some dark corner of a thieves' kitchen and pass from mouth to mouth our sweet morsels of dirty epithets for the ignoble brethren we have deserted. Can earth offer any happiness greater than this? Surely not. Here is truly the towering fulness of bliss for exalted souls.

Our duty as a profession is clear. We must not rest satisfied till every medical hall is deserted, till every skulking corner of outer darkness is crowded with malcontents. At last the world will take notice; it will be held with admiration, and without any doubt our glorious example will be followed straitway by all men of sense, to whom example speaks louder than words. Some peevish men, of course, will not join us so readily; the stupider laymen will have insidious and fallacious sophistries to offer as excuse for the cowardice that keeps them in

association with their fellows in diverse societies. We must prepare ourselves to meet the objections of these zanies. Some will say—a stupid argument, but one actually offered by men of reputed good sense—that every society is instituted for a particular purpose, and that while the members cannot tolerate the presence of a man who wars avowedly against that purpose, they can and should be tolerant of every sincere member intent on the attainment of the organization's specific end, no matter if he be personally congenial or not. They may say, for example, that directors in a steel-plant should tolerate the help and co-operation of another director who offers his clear-headed and practical suggestions in a tenor voice, whereas they prefer basso-profundo speaking; or who wears a frock-coat a little out of fashion; or who has red hair; or who expounds valuable business hints with a harsh growl; or who does not doff his hat to them on the street.

It should not be necessary to frame an answer to such an absurd argument, but the answer is at hand. Simply lay down this self-evident proposition: Every organization, no matter for what purpose instituted, is to be conducted like a social club; and every body is to be black-balled or expelled who is not our affinity or in our own little set, and even the rare one who is allowed in must be made to handle us with gossamer gloves.

Another foolishness we have heard propounded in all seriousness is that a man entered in a university class may tolerate in that class the presence of some other student who fails to show the most delicate deference to him at all times. Of course this is the very quintessence of absurdity, but to some men it seems in some strange way to be plausible. We must be especially lenient with this argument, remembering that even we, in our under-graduate days, were caught for a time by the spell of such unmanly tolerance. Happily, when we received our degree of M.D. the scales that blinded us fell from our eyes, as if by magic. And now the youngest doctor amongst us, with splendid dash and spirit, will rush out of the post-graduate school of practice—the medical society—at the faintest shadow of a suspicion that a fellow-physician has laughed or even smiled good-naturedly at his views. If it did not savor of superstition, we could almost believe that some invisible force was transmitted to us with our sheep-skin, imparting to us not only a marvellously delicate hypersensitiveness to criticism, but also a wild and daring vigor and valor of soul that enables us to resent any criticism instantly and with volcanic violence. Some of the most favored of our guild seem to possess in this matter of resentment to criticism an intuition that is almost incredible. Like the war-steed in the Scriptures, that "scented the battle from afar," they snort with tense anger at the affronts that have not yet been conceived, but would be put upon them hereafter if they did not resolve to absent themselves from medical meetings. These princes of our profession seem to have a strange, uncanny sort of clairvoyant presence in the matter of insults; we cannot but envy them.

Of course we must not hope to endow the lay public with this refinement of the weird esoteric power of our craft—a power, indeed, not given in its fulness to the lesser ones among ourselves even; but we can and should teach the public the broad lines of our exoteric wisdom. We can make plain to the common herd of phillistines that they must look to us for their highest exemplars of transfiguring and colossal noblemindedness. If we will but permit the lay world to catch a veiled glimpse of our exalted world of professional amity and comradeship, a start will have been made. Later we may admit them to the full glory and blinding light of our peculiar fellowship; and no one can doubt that a gripping admiration will force them to the high decision of emulating our splendid example, and at last, on some day in a glorious future, our present ideal will become a world-wide reality. Some day the human voice and the kindly smile of mankind will belong to a dead past; love and even benevolence will be things forgotten; men, women, and children, everywhere on earth will scowl askance at one another; parents will despise their children, and children will hate their forbears; husband and wife will resent each other's presence; every human being on the face of the globe will scorn speech with a fellow human. Ah! this will be the true millenium! This is truly the consummation devoutly to be wished! And when accomplished, it will be all our work, due to our shattering example! Fellow physicians, awake! Rise up and meet your trumpet call of duty! Hasten the advent of this ecstatic era! The secret of this hallowed social ideal is ours, and we must no longer keep it from a waiting though unsuspecting world.

CHARLES A. WINGERTER.

NATIONAL TUBERCULOSIS DAY ON APRIL 30—CHURCHES WILL FIGHT CONSUMPTION.

April 30th has been set aside this year as "Tuberculosis Day," and will be observed in 200,000 churches in the country in a manner similar to that of "Tuberculosis Sunday" in 1910, when over 40,000 sermons were preached on the prevention of consumption. In this first official announcement of the occasion made by the National Association for the Study and Prevention of Tuberculosis today, the leaders of the movement state that they hope to enlist all of the 33,000,000 church members in the country.

In one respect Tuberculosis Day will differ from Tuberculosis Sunday of 1910. Instead of requesting the churches to give to the tuberculosis cause a special Sunday service, the National Association is going to ask this year that meetings, at which the subject of tuberculosis and its prevention can be discussed, be held on Sunday, April 30th, or on any other day near that date, either in the week preceding or the week following. "What we want," says Dr. Livingston Ferland, executive secretary of the National Association for the Study and Prevention of Tuberculosis, in a report on this movement, "is to have this whole subject of tuberculosis discussed in all of the 200,000 churches of the United States at

as nearly the same time as possible. This does not mean that a stated service must be given over to this work, though that might be desirable, but that any minister, or other authority whom he may invite, can present the problem to his congregation before or after his regular service, or on any day within the week preceding or following April 30th."

The National Association is planning to gather statistics from a thousand ministers, showing how serious a problem tuberculosis is to every church. These figures will show among other things the number of deaths last year from tuberculosis in the church congregation, and the ways in which the pastors are called on to minister to sufferers from this disease. It is planned also to issue millions of circulars and pamphlets on the prevention of tuberculosis, both from the national office and from the headquarters of the 450 anti-tuberculosis associations who will co-operate in the movement.

THE AMERICAN SOCIETY OF MEDICAL SOCIOLOGY.

Recognizing the intimate relationship between disease and the social-economic system under which we live, recognizing that many diseases are caused directly by our social and economic conditions, recognizing that the efficiency or the inefficiency of our treatment often depends upon the economic condition of the patient, recognizing that there are many problems deeply and vitally affecting the welfare of mankind which are left practically untouched by any existing medical society, The American Society of Medical Sociology has been organized for the purpose of studying radically all questions of a socio-medical nature, and invites your co-operation.

Some of the questions which are under investigation by the members at the present time are:

The need of a Federal Department of Health.
Tuberculosis as an economic disease.

Is there any demonstrable relationship between the strain of our modern life and the increase of insanity?

Is cancer on the increase, and if so, what are the probable etiologic factors?

What are the best, i. e., the most humane and most effective methods of dealing with prostitution?

The best methods of preventing venereal infection?

Is complete sexual abstinence (a) likely to impair the general health? (b) likely to result in impotence?

The relative influence of heredity and environment on the physical, mental and moral characteristics of the offspring.

The question of marriage and divorce.

Is the regulation of conception morally justifiable, and if so, what are the best methods?

Abortion in its medical and ethical aspects.

Alcohol (a) as a beverage, (b) as a medicine. Its physiologic, medicinal, social and economic effects.

Infant mortality. Its principal causes and prevention.

Occupational or trade diseases.

Food adulterations and their influence on health.

The causes of quackery, Christian science and other cults, and the influence of the irregular cults of medicine on public health.

The results of these investigations will be disseminated by means of meetings, lectures, reports, pamphlets, etc.

If you are or wish to become an earnest student of socio-medical questions and wish to join the society, you will please send one dollar, annual dues, or ten dollars for life membership.

The American Society of Medical Sociology, 12 Mt. Morris Park W., New York.

It is said that "a prophet is not without honor save in his own country," or in our everyday parlance one is usually better thought of *away from home!*

Doctor Katherine L. Storm, of Philadelphia—the designer of the best abdominal supporter-bandage—is an exception! Not long since, we visited her office and saw an order list longer than your arm. In that list we happened to note a few pretty decent Philadelphia names, as for example, Beates, Deland, Deaver, Fussel, Hirst, Musser, etc. Evidently they think fairly well of Doctor Storm's bandage even in Philadelphia, or else such names wouldn't have been on that list.

What is good enough for them surely ought to be of some help to you. Why not look into this and see why the best physicians and surgeons in the country are daily prescribing the Storm supporter. — *Physiologic Therapeutics*, November, 1910.

ELIXIRS DE LUXE.

Parke, Davis & Co. announce some important improvements in their line of medicinal elixirs, a line numbering more than one hundred and twenty-five preparations and highly esteemed by physicians on the score of therapeutic excellence. The improvements cited are in manufacturing processes, in the interest of palatability, permanence and physical appearance. They are set forth at some length in the current issue of *Modern Pharmacy*, from which these interesting extracts are taken:

"Three or four years ago, in the gradual development of our scientific staff, we secured the services of Professor Wilbur L. Scoville.

"Professor Scoville at once began an exhaustive series of experiments which took him nearly three years to complete. He went over the entire line, improving here the flavor, there the color, elsewhere the odor, and in other instances the permanence of our products. How well he succeeded may be seen by comparing any of our elixirs with others on the market. It is our honest opinion that there is no other line of elixirs in the United States today possessing an equal degree of therapeutic efficiency which will stand up on the druggist's shelves and retain their physical properties and clearness so long as Parks, Davis & Co.'s."

FAKE REMEDIES.

ANTI-KAMNIA: STILL FURTHER DUPLICATION.

The *Journal A. M. A.*, February 8, gives in some detail the methods adopted by the Antikamnia Company in selling its wares in this country and in England. When the Food and Drugs Act went into effect the manufacturers of this preparation, instead of continuing to put out the same mixture as they had been doing, radically changed the composition by substituting acetphenetidin (phenacetin) for acetanilid. By doing this, the company avoided the disagreeable necessity for acknowledging on the label that the nostrum contained acetanilid, as was shown by the analysis published in the *Journal*, June 3, 1905. In addition to stating that the package of antikamnia contained acetphenetidin, the company also stated that it contained no "acetanilid, antifebrin, antipyrin, alcohol, morphin, opium, codein, heroin, cocain, strychnin, chloroform, cannabis indica, or chloral hydrate." Knowing that the nostrum is being advertised in Great Britain and Canada as well as in the United States, the *Journal* obtained some antikamnia from London, and it was analyzed in the Association's laboratory. As was suspected, the analysis showed that antikamnia as sold abroad has the same composition now as it had in the United States before the Food and Drugs Act went into force, viz.: Acetanilid, 67.75 per cent; caffeine, 4.88 per cent; and citric acid and sodium carbonate, by difference, 25.30 per cent. This corresponds with the analysis previously made and published in the *Journal*, June 3, 1905. The antikamnia on the market in this country was also analyzed and it was found to contain: Acetphenetidin (phenacetin), 72.05 per cent; caffeine, 13.95 per cent; citric acid and sodium bicarbonate, 14 per cent. The preparation sold as "Antikamnia and Quinin" was also analyzed, and it was found that starch had been substituted for the bicarbonate of sodium which is found in the antikamnia itself. The *Journal* gives the details of the analysis and adds the following comments: "The above are brief statements of bald facts. Two of these should be emphasized: (1) When the Food and Drugs Act went into force, January, 1907, the manufacturers of antikamnia, rather than acknowledge the truth of the past—we can imagine no other reason—materially and radically changed the composition of their preparation, and did this without notifying the medical profession or intimating in any way, so far as we can learn, that such a change had been made. We have no doubt they believed they had a right to do as they pleased with their own; that it was nobody's business but theirs what they did with their own preparation, or how they changed it. As they had never told physicians what it contained, there was no reason why they should do so now. This is logical, and we can not blame the manufacturers so long as the medical profession is willing to be humbugged. (2) For the same reason, we presume, they claim that they have a right to continue to use acetanilid in the product for the foreign market. The Food and Drugs Act ap-

plies only to the United States, of course, and acetanilid being cheaper, why not use it? What is the difference if one is more dangerous than the other? The fact that the antikamnia sold abroad differs from that sold in this country some may say is of no special interest to us. Still this fact is worth noting: The dose of acetphenetidid—phenacetin—(7½ grains) is nearly double that of acetanilid (4 grains); one becoming accustomed to a certain dosage of the nostrum as sold in this country might, while abroad, unwittingly be led to take a double dose of acetanilid.

OXYDONOR; OXYGENOR; OXYGENATOR.

Three mechanical frauds—the “oxydonor,” the “oxygenor” and the “oxygenator”—are discussed in *The Journal A. M. A.*, October 22, both editorially and in a contribution from the Chemical Laboratory. The oxydonor, the oldest of the three and the most widely advertised, is a modification of an earlier fake known as the electropoise. The essential parts of all these humbugs are (1) a metallic cylinder, (2) one or more flexible cords or wires and (3) disks to be attached to the ankle or wrist of the foolish individuals who use them. Some of these pieces of nickel-plated piping are filled with a mixture of sand and sulphur, others have a stick of plain carbon in them, while the electropoise was empty. Their price varies from \$10 to \$35, and they are claimed to cure every known disease. The advice given by the exploiters of the “oxygenator” is particularly vicious, as people are urged to rely on this piece of gas-pipe for the cure of diphtheria in children. *The Journal* in summing up says: “The ‘electropoise,’ the ‘oxydonor,’ the ‘oxygenor’ and the ‘oxygenator’ are utterly worthless—except as a means of enriching their exploiters. Their therapeutic value, aside from the element of suggestion that may be induced in those simpletons who are willing to pay from \$10 to \$30 for a piece of nickel-plated tubing, is absolutely *nil*. As already said, if adults wish to squander their money on such foolishness and are content to confine the ‘treatment’ to their own persons, well and good. If they have nothing much the matter with them they may believe they have received benefit; if they are dangerously ill, Nature will probably exterminate them as unfit. But let no person try to ‘cure’ the helpless child with such frauds; as soon as that is attempted, such an individual ceases to be a harmless idiot and becomes a dangerous one.”

CANCER CURES.

In its issue of January 15 the *Journal A. M. A.* gave an account of the issuance of a fraud order by the postoffice authorities against the S. R. Chamlee cancer cure, and attempt of the latter to still do business under the name of the St. Louis Sanitarium Company. As soon as the attention of the authorities was called to this the fraud order was extended to cover this also. Now it has been brought to the attention of the *Journal* that Chamlee is again soliciting business at his old address, but under the title of the United

Specialists Cancer Company, and doubtless the fraud order will be extended still further. The methods of this concern are described in detail in the *Journal* of February 5; it was the practice to send out its circulars claiming cure “absolutely guaranteed,” with other similar lies, and charging \$25 (reduced to \$15 when patients hesitated long enough) for the medicines. These, as exposed by analysis, consisted of “Dr. Chamlee’s Cancer Specific” for internal use—a mixture of alcohol and water with traces of strichnin, iron and saccharin; another bottle for external application, made up of alcohol, water and glycerin, with a little tannin, carbolic acid and opium, and five packages of a “black salve” consisting of resin, beeswax and fat. With these cancer was to be “cured” at from \$15 to \$25 a treatment.

Another alleged “infallible cure for all forms of cancer” is exposed in the *Journal A. M. A.*, February 5. It is that of W. O. Bye, of Kansas City, Mo., who is associated with one B. F. Freeman in the business under the name of Drs. Bye and Freeman. The Bye family in this cancer cure business claim to cure cancer with a “soothing balmy oil,” which chemists find to be nothing more wonderful than cottonseed oil. The medicines sent out by this Bye consisted of three bottles of liquid, a box of tablets and three boxes of ointment. These, when analyzed by the government chemists, were found to be:

No. 1. “Prescription No. 0:” Practically the same as syrup of sarsaparilla.

No. 2. “Prescription No. 4:” Almond oil mixed with cottonseed oil.

No. 3. “Prescription No. 120:” Compressed tablets of talcum and sugar.

No. 4. “Prescription No. 90:” Vaseline.

No. 5. “Prescription No. 220:” Practically the same as Cataplasma kaolini.

A fraud order was issued against Bye and Freeman, and it is to be hoped that the Missouri State Board of Health will again revoke the license and that, this time, the revocation will “stick.”

MORE MISBRANDED NOSTRUMS.

In the Pharmacology department of *The Journal A. M. A.*, March 19, brief abstracts are given of five recent judgments obtained by the government, under the Food and Drugs Act, against misbranded nostrums. “Dr. Fahrney’s Teething Powder,” a mixture of alcohol, morphin and chloroform, was deemed misbranded in that it was advertised as containing “nothing injurious” and giving no bad results from continued use. “Gowan’s Pneumonia Cure,” which has previously been exposed in *The Journal*, was advertised as being entirely different from any other remedy and with other false claims. It was analyzed and found to consist of lard, camphor, turpentine, carbolic acid, opium, stearin and quinin. “Evelin” sold at one dollar a box and was claimed to “reshape,” “rejuvenate” and “repair” the eye. It was found to be perfumed vaseline. “Bromo Febrin” was one of the “sure cures” for headache advertised as “absolutely safe.” Each powder was found to contain nearly 6 grains of acetanilid, though the presence of only 4 grains

was admitted on the label. "Radol" was a "eure" for cancer put out by a fictitious "Dr. Rupert Wells." It was said to be a "radium-impregnated fluid," but was actually a weak, acidulated solution of quinin sulphate with about 7 per cent alcohol. As has previously been shown in *The Journal*. "Dr. Rupert Wells" was put out of business by the postoffice authorities, denying him the use of the United States mails; now the nostrum itself has been declared misbranded and fines have been imposed.

State News

While cleaning his shotgun last Friday morning, Dr. Robert Shumate, of Beekley, by some means, discharged one barrel of the gun, the contents taking effect in his left leg at the ankle, and shattering the bone so terribly that the foot was left hanging only by the shreds of flesh. A peculiarity in connection with the accident is that his father, George Shumate, and half-brother, Elbert Shumate, were both killed some years ago in shotgun accidents, and both with the same gun.

* * *

Dr. O. H. Hoffman, of Thomas, has recently sold a large grazing farm at Moorefield and bought a nice farm on the Western Maryland R. R., near Baltimore, Md.

* * *

Dr. W. P. Miller, of Weaver, spent the holidays in Baltimore with his wife.

* * *

Dr. M. Gruber, of Helvetia, took a trip through the middle west during November.

* * *

Dr. C. W. Williams, of Philippi, was in Philadelphia recently on professional business.

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Dr. C. H. Fair, of Elkins, was at his home in Virginia during the holidays.

* * *

Dr. G. C. Rodgers, of Elkins, was recently called to Virginia by the death of his brother, Dr. Chas. Rodgers.

* * *

Dr. Irvin Hardy, of Davis, is at Morgantown attending the agricultural college.

* * *

Dr. T. Jud. McBee, of Elkins, was a visitor at the Industrial Home for Girls at Salem, recently.

* * *

Dr. E. R. Bucklew, of Evansville, Preston county, was at Parkersburg in December.

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Dr. Chas. A. Wingerter made the address at the annual memorial exercises of the Elks at Elkins on Dec. 4th. His address was on "The Unseen Realities," and was of a very high character. Dr. Wingerter was also guest of honor at a social session of the Barbour-Randolph-Tueker Society while in Elkins. He has also visited Monongalia, Kanawha and other societies. The

man who wants to be the next president had better be a progressive man also, or we may reelect Dr. Wingerter.

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Dr. A. P. Butt, secretary, Davis, W. Va., wants the present address of Dr. J. C. Miller, whose location has been reported as Smithville, but wrongly so.

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Dr. L. N. Harris, recently of Mill Creek, is at present in Vienna doing post-graduate work. He has been honored by election to the Vice Presidency of the American Medical Association of Vienna, a society composed of American physicians studying in that city.

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The physicians of East Liverpool and Wells-ville, Ohio, and Newell and Chester, W. Va., have established a post-graduate course, and meet weekly, Friday night, at the Ikert Hall, in East Liverpool.

* * *

Dr. and Mrs. E. S. Rogers
will give in marriage their daughter
Dannie Kate

to

Dr. Benjamin Spotswood Preston
on Wednesday evening, January the twenty-fifth
one thousand nine hundred and eleven
at eight o'clock
Centenary Church
Knoxville, Tennessee.

The honor of your presence is requested.

At home

after February the first
Charleston, West Virginia.

* * *

Dr. and Mrs. Delafield Hereford, late of St. Albans, left the first of the week for Macon, Georgia, where they will make their future home. They went south for the benefit of Mrs. Hereford's health. Their wide circle of friends here extend to them their best wishes for her speedy recovery and for doctor's unbounded success in the practice of his profession.

* * *

Dr. E. H. Morgan, who has been located at Eagle for a numbers of years, returned the latter part of last week from Baltimore, where he spent several weeks in the Johns Hopkins hospital, for the purpose of doing some special work in his profession. He returned to spend a few days before going to Gallipolis, Ohio, to spend the holidays with relatives. Dr. Morgan's intention is at an early date to leave this section and locate in the state of Ohio, near Gallipolis and later in Columbus.

* * *

Many Wheeling physicians have recently been engaged in post-graduate study, confined largely to materia medica. It is a safe bet that they now know more as to the poisonous effects of arsenic and lead acetate than ever before. Reason: They had to pass a competitive examination at the hands of more or less shrewd lawyers in the presence of a very large audience.

Society Proceedings

AMERICAN PROCTOLOGIC SOCIETY.

(Concluded from January issue.)

"A REPORT OF A CASE OF POST-OPERATIVE DELIRIUM."

By SAMUEL T. EARLE, M.D., of Baltimore, Md.

The author stated that while post-operative delirium was quite common before the days of anti-septic surgery, it was due then in the majority of cases to septic infection. The condition is rare now, except when due to shock, and then only as a result of a grave operation.

The minor character of the operation preceding the attack in the present case makes it more interesting, which is doubtless accounted for by the age of the patient.

Case:—Dr. A. T., aged 78, had suffered with hemorrhoids since before the Civil War (1861), but had persistently determined not to be operated upon. Early in May, 1910, they became thrombosed and inflamed, at which time he consented to an operation.

The usual hypodermic of 1-6 of a grain of morphine, atropine 1-120, and strychnin sulphate 1-30, was administered prior to the anesthetic. Fearing the effect of ether or chloroform, on account of his age, it was decided to administer a mixture of nitrous oxide gas and oxygen. This mixture did not keep him thoroughly anesthetized, consequently the operation was not completed as quickly as usual and as a result there was more blood lost, which did not exceed two or three ounces.

The operation was completed, he regained consciousness in a few minutes, but almost immediately became very excited and delirious. Thinking this might be due to pain, 1-4 of a grain of morphine was given at the end of two hours from the time he received the first hypodermic; a third dose was given at 8 p. m., three hours following the second dose. The patient continued very delirious during the night and for three days following. The second and third nights we were able to quiet him for a few hours by hyoscine hydrobromide grain 1-50, and morphine 1-6 administered hypodermically. For the remainder of the first week, the hyoscine hydrobromide 1-50 was sufficient to give him a quiet night, but the delirium continued for one week from the time of the operation, but not nearly so active as during the first few days and with some lucid intervals. His temperature did not exceed 99½, the first three days, but on the fourth day it reached 100.5 and again on the seventh day, for a short time without any apparent cause, otherwise the patient made an excellent recovery, and was able to be about the house in about ten days after the operation.

"A CASE OF FIBROSIS OF THE RECTUM."

By J. A. MacMILLAN, M.D., of Detroit, Mich.

The case presented an area of fibrous tissue an inch and one-half in width which encircled the rectum.

The lesion has recurred, was non-inflammatory, and caused no tendency to stricture.

Diagnosis: Possibly the result of syphilis.

"APPENDICOSTOMY" — "A CONSIDERATION OF THE PRESERVATION OF THE BLOOD-SUPPLY OF THE APPENDIX IN THE TECHNIC OF OPERATION."

By FRANK C. YOEMANS, A.B., M.D., New York City, N. Y.

Case:—Mrs. X. was operated upon March 21, 1908, for ulcerative colitis. While performing the appendicostomy, one of the cecal vessels going to the appendix was punctured and tied. Three days later the appendix sloughed and a fecal fistula formed. The colon healed with irrigations, the fistula closed and the patient is well today as regards her bowel. This experience and similar experiences of several colleagues, led the writer to a study of the circulation of the appendix from a surgical standpoint.

Embryology shows the appendix to be the vestige of the original head of the cecum which failed to participate equally in development with the rest of that organ; and at an early period of embryonic life, not possessing a mesentery, derived its sole blood-supply from the cecal vessels. The latter statement is true of the rudimentary and the fetal forms of appendix, even in adults. For all practical purposes the sole bloody-supply of the vermiform appendix is from the posterior ileo-cecal artery through (a) its cecal branch, which sends one or more twigs to the appendix, and (b) its appendicular branch, which runs in the free border of the meso-appendix, sending several (usually 3-5), branches to the appendix. The cecal branch is constant and courses along the appendix on its mesenteric side, anastomosing with branches of the appendicular. Dissections of a number of injected subjects, by the writer, demonstrated this arrangement of vessels to be practically invariable. As these vessels are by nature terminal in character, there at once became evident the importance of preserving both branches at operation, if the vitality of the appendix is to be maintained entire.

No trouble is experienced in avoiding the cecal vessels when uniting the cecum adjacent to the base of the appendix to the parietal peritoneum, as they indicate their position by visible pulsation. With the mesentric branches it is different. Most appendices are falciform and one must free the mesentery in order to straighten the lumen sufficiently. There are two ways of accomplishing this: One is to ligate and cut the mesentery, at a point far enough from the base of the appendix that the blood-vessels are preserved to that part of the appendix traversing the abdominal wall. The tip beyond the skin dies and infection is apt to extend between the appendix and abdominal wound, hence this procedure is objectionable.

The other method, here advocated and in practice found successful, preserves the arteries intact and consequently the vitality of the entire appendix. It is accomplished by separating the two layers of the mesentery at its juncture with the posterior mural peritoneum, beginning at its

free border, and carefully displacing the cellular tissue with its contained appendicular artery and branches, as far as necessary toward the appendix. The two layers of peritoneum are then divided transversely to the base of the appendix, turned in and sewed, to obliterate the raw space on the posterior abdominal wall. Experience teaches that it is unnecessary to test the patency of the appendix, until the wound has healed, i. e., in 4-5 days.

Further precautions are not to obliterate any arteries by forceps, ligatures, sutures, torsion or tension in fixing the appendix in a position where it does not rest naturally, or by closing the wound too snugly about it.

By following this technic, the operation is without mortality and post-operative leakage of feces and hernia—the two troublesome sequelae of appendicostomy, are avoided. Appendicostomy should continue to grow in favor over cecostomy in all cases where prolonged irrigation of the colon is indicated.

BARBOUR-RANDOLPH-TUCKER SOCIETY

This society met at Hotel Randolph, in Elkins, on the 5th of January. The following program had been prepared:

Afternoon Session, 2 P. M.

Annual address of the President, Dr. M. M. Hoff.

Business session.

"Traumatic Cataract," Dr. J. A. Arbuckle.

Discussion opened by Dr. E. R. McIntosh.

Reading of voluntary papers.

Evening Session, 8 P. M.

Report of Committee on President's Address. Payment of dues.

"Rupture of Uterus," Dr. C. B. Williams.

"Biography of John Hunter," Dr. T. M. Williams.

T. Jud. McBee is the active secretary of this flourishing society. He suggests to the members to "begin the New Year with new resolutions, and appoint yourself a member of the Booster Committee of the Society," and adds very wisely: "If the annual dues are paid in January, when due, it will save the society much expense and the secretary could spend his energy in other ways for the society."

MARION COUNTY SOCIETY.

Fairmont, W. Va., Jan. 5, 1911.

Editor *W. Va. Medical Journal*,

On Friday evening, December 30, 1910, we elected officers for the ensuing year as follows: President, Dr. J. W. McDonald; Vice President, Dr. H. O. Rohrbach; Secretary, Dr. H. R. Johnson; Treasurer, Dr. W. H. Sands; Board of Censors, C. O. Henry; Delegates to State Association, Drs. C. L. Holland and H. R. Johnson.

We closed the year with 35 members, a gain of six over the previous year.

Our county society dues are \$2 per annum, and we found that we could, out of that, appropriate \$1 to pay the medical defense for each paid-up member and still have sufficient funds to meet our expenses. This we did by motion, so every member of our society in good standing is a ben-

eficiary of the defense with no additional expense. It might be wise for other county societies, with a sufficient balance on the right side of the ledger, to adopt a similar method.

With best wishes for a happy and prosperous new year, I am, fraternally,

H. R. JOHNSON, *Sec'y.*

OHIO COUNTY SOCIETY.

Nov. 15th the society met with 23 members present. Board of Censors reported favorably on the application of Dr. John T. Carter, of Triadelphia, and Dr. J. P. Cole, of Wheeling.

Dr. Noome lectured on recent advances in surgery, having recently attended the Chicago clinics. The Wasserman reaction, he said, is now regarded as of little value in the diagnosis of syphilis, because it is found in too many other conditions. As to the Bismuth paste so highly lauded, it has not proven entirely satisfactory in all cases. We think this is due to the fact that bismuth is unsuitable in some pathological conditions. It is not uncommon to have to cut down and remove the paste, which has been administered in improper cases. Rectal anesthesia was discussed. The speaker regarded it as of special value in operations about the face and neck. The ether is given through a tube in the rectum, pressure being made on the abdomen to favor distribution. After two or three days an oil injection is given to relieve irritation. As to hernia the speaker stated that all hernia sacs are congenital, and if the sac is removed completely we can more or less ignore the careful apposition of the tissues which has heretofore been thought so necessary. In intestinal obstruction we have two conditions producing death, viz.: I, toxemia, II, shock. In intestinal surgery a prompt diagnosis should be made, if the best results are to be secured. The doctor said that sodium cacodylate has proved very satisfactory in treating primary syphilis, but that "606" had shown fine results in secondary and tertiary stages.

The address of Dr. Noome was discussed by a number of the members.

Nov. 25th.—The society met with 17 members present, Dr. Fulton presiding. Dr. D. H. Taylor lectured on "Obstetrics." He discussed in detail the three stages of delivery. He suggested the importance of physicians seeing their prospective labor cases often during the last three months of pregnancy. The urine should be examined at least every ten days. When first called to a patient in labor, see that the bed is in proper condition and properly placed to meet all emergencies. Avoid examinations that are unnecessary. Do not rupture the membranes until the cervix is fully dilated in primiparae, but do so in multiparae, as it hastens labor. The chin presentation he regards as the most difficult he has met with. If an arm is down, put it back and bring down a foot. Various accidents, as hemorrhage, eclampsia, uterine rupture, perineal laceration, etc., were fully discussed, suggestions for prevention and treatment being given.

Dr. Baird, in opening the discussion, stated that a torn cord will not bleed. He thinks that axis-

traction forceps are sometimes of great value. He described a way in which he gives chloroform in labor cases. A tumbler is moistened with water, in this a handkerchief is placed, which the moisture will cause to be retained. This is wet with chloroform and given to the patient, who cannot take too much of it, as before this is possible the tumbler will drop from her hands.

Dr. L. D. Wilson said that we must not look on pregnancy as pathological. It is a physiological process. The doctor does not like to have the membranes ruptured until dilatation is complete. He deprecates too frequent vaginal examinations.

Dr. Noome does not believe in the immediate repair of the lacerated perineum. He thinks this should be delayed until the edema has disappeared. Dr. Drinkard thinks that complete tears of the perineum can be prevented, and that protection of the perineum is most important. The secret of this is, to be extremely passive.

Dr. Gaydosh reported a twin pregnancy in a double uterus. A full report will be made later.

Dec. 3rd, 1910.—The society met in usual hall, with V.-P. Best in the chair. Dr. Gaydosh read a paper on "Placenta Previa." He carefully reviewed the literature of the subject, and brought out many points in the etiology and treatment of such cases. The paper was discussed by Drs. Osburn, Barnett, Hupp, Armbrrecht, Nichols, Spragg and Taylor, each detailing cases met with in practice. The favorite treatment was, to introduce the hand and turn, accomplishing speedy delivery. Most mothers can be saved in this way, but many infants are lost.

HERSEY, Sec'y.

Reviews

A TEXTBOOK OF BACTERIOLOGY—By PHILIP HARRISON HISS and HANS ZINSSER. New York and London: D. Appleton & Co. 1910. \$5.00.

Toxins, Antitoxins, Lysins, Agglutinins, Precipitins, Phagocytosis, Immunity, Oponins, Anaphylaxis and a host of other terms are the outcome of modern bacteriology and enter so largely into the domain of diagnostics and therapeutics that it is hardly possible for any one to take up the battle with those infinitesimal enemies to health and life, the pathogenic bacteria, without an accurate knowledge of their nature, habits, habits and peculiarities.

Of treatises on bacteria there is no dearth and the difficulty lies rather in the profuseness of literature, than in a lack of same. For the busy man (and nowadays everybody is busy) we want a compact, concise up-to-date treatise, where he can find necessary information without wading through a whole library, and while there are a number of such books, the one before us seems to fill the bill just a little better than the rest.

Section one takes up the general biology of bacteria and the technique of bacteriological examinations and anyone desiring to cultivate and study bacteria with the smallest possible outlay

of time and money, will find this section very useful.

Section II treats of infection and immunity, setting forth the path of infection, the mode of action of bacterial poisons, the defensive factors of the animal organism, the nature of toxins and antitoxins with a lucid description of Ehrlich's sidechain theory. There are chapters on lysins, agglutinins, precipitins, etc., and their use in the technique of the different serum reactions. These are followed by chapters on phagocytosis, oponins and their application in the vaccine therapy of Wright. The phenomena of anaphylaxis or hyper-susceptibility, as developed during the past few years, are clearly set forth and the section winds up with a chapter on the facts and problems of immunity in their bearing on the treatment of infectious diseases.

Section III takes up the various known pathogenic micro-organisms, their morphology, staining peculiarities, cultivation, their toxic products, pathogenicity, the mode of immunisation, the attempts at the results of serum therapy, etc. Eight pages are devoted to that most important and interesting organism, the spirochaeta pallida and its relations to syphilis. The "higher bacteria" (leptothrix, streptothrix, actinomyces, mycetoma), the yeasts and hyphomycetes, with the diseased conditions in which they are found, are next considered. Next follows a chapter on those diseases which are undoubtedly caused by micro-organisms but where the specific microbe has not been identified as yet.

Section V treats of bacteria in air, soil, water and milk, and the book ends with a short chapter on the use of bacteria in different industries.

The work contains 609 pages, is well written and illustrated and can be well recommended to students and practitioners. SCHWINN.

DISEASES OF THE SKIN—New (6th) Edition, Revised. A Treatise on Diseases of the Skin. For the use of Advanced Students and Practitioners. By HENRY W. STELWAGON, M.D., Ph.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Sixth edition, revised. Handsome octavo of 1195 pages, with 289 text-illustrations, and 34 full-page colored and half-tone plates. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$6.00 net; half morocco, \$7.50 net.

This work, in its sixth edition, is essentially a practical treatise—a practical presentation of its title, Diseases of the Skin. This pretentious volume contains a bewildering maze of information relative to all recognized lesions of the skin and it will prove an invaluable reference to those who encounter and deal with skin lesions. It is to be regretted that Dr. Stelwagon makes no reference to Ehrlich's "606," and it is to be wondered why when the recopyright dates only last July.

The article on Pellagra—"a disease causing some concern in our own country," has been wholly rewritten. Sporotrichosis and Grainmite dermatitis fully discussed. All the newer knowledge concerning the diseases of our tropical possessions and of other tropical countries is presented in detail. Carbon dioxide is one of the

newer remedies described. The articles on the exanthemata—smallpox, scarlet fever and measles—were written by Dr. W. H. Welch. Literature references are very complete. Illustrations inserted to aid text reading. The general press work is characteristic of Saunders—good.

Those who wish an up-to-date book on Diseases of the Skin will make no mistake when they purchase this volume by Stelwagon.

H. S. W.

A MANUAL OF DISEASES OF THE NOSE, THROAT, AND EAR—New Second Edition. By E. BALDWIN GLEASON, M.D., Professor of Otolaryngology at the Medico Chirurgical College, Philadelphia. Second revised edition, 12mo. of 563 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company, 1910. Flexible leather, \$2.50 net.

We some time ago gave a favorable notice of the first edition of this work.

The second edition of Gleason's Manual has been brought up-to-date by rewriting the sections on the tonsils and adenoid structures of the pharynx, and adding new sections on membranous rhinitis, Vincent's angina, intracranial complications of otic disease, and other less important subjects.

The book is of convenient size and is probably the best manual on the subjects we have for the undergraduate and general practitioner.

T. W. M.

INTERNATIONAL CLINICS.—A Quarterly of Clinical Lectures and Especially Prepared Articles. Edited by H. W. Cattell, M.D., Phila., assisted by Osler, Musser, Billings, Mayo and others. Vol. IV, 20th series, 1910. J. B. Lippincott Co. Price, \$2.00.

This is an octavo of 308 pages, containing contributions from Barker, Bevan, Diller, Eisen-drath, Oehsner, de Schweinitz, Remington and others of equal distinction in this country and Europe. Cattell contributes an illustrated paper on arsenobenzol ("606"), Remington one on the 9th revision of the U. S. P., Klein one on cholera which we may have the coming summer. Hypnosis, Its Psychological Interpretation and Practical Use is fully discussed in a 30 page illustrated paper by Haberman, of New York. The volume is very fully illustrated and it contains many papers of unusual interest and value, making it one of the best volumes of the series.

A COMPEND OF THE ACTIVE PRINCIPLES WITH SYMPTOMATIC INDICATIONS FOR THEIR THERAPEUTIC USE—By H. H. REDFIELD, A.B., M.D., Prof. Therapeutics Bennett Medical College. The Clinie Publishing Company, Chicago.

This is a duodecimo of 110 pages, well printed and well bound. The author gives the physiological action and therapeutic use of the various active principles of which he treats. We think he claims too much for some of them, but the little book can be read with interest and profit.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA, 1910—This is an octavo of 750 pages, contain-

ing the minutes and the papers read at the last annual session. Many of the papers are of much interest. We think the days of the annual volume of transactions are numbered, and that the monthly medical journal should take its place in all the states, as it has done in a majority of them.

Medical Outlook

A BRIEF RESUME OF THE PROGRESS OF SOME THINGS REMEDIAL DURING 1910.—President's address, Indianapolis Med. Soc., January, 1911. S. E. Earp, M.S., M.D., Ed. Indianapolis Med. Jour.

Arsenic has been at the front of remedial agents of late. There are many who believe with Sajous that it subdues the functional activity which produces sugar in diabetes mellitus. Chorea has been cured, it is claimed, by 30 drop doses of Fowler's solution 3 times a day. It still holds its own in the treatment of asthma. It is one of the most valuable agents in the tonic treatment of pellagra. "Ehrlich presented the world what now seems to be the boon for mankind in arsenobenzol for the cure of syphilis.

Many are of the opinion that a specific organism as the cause of rheumatism has been found, but many more are gravely in doubt. Salicylic acid has its adherents and by some, very large doses as 15 grains are advocated as necessary to prevent heart complications.

Physicians are now giving much larger doses of antitoxin and yet the earlier small doses reduced the death rate very much. Scarlet fever antitoxin has reduced the death rate in that disease almost as much as that of diphtheria.

"In pneumonia, perhaps, there has been some encouragement from the vaccine treatment and yet strychnia and atropia, with light nutritious food and a cot under the old apple tree in the orchard where sunlight and fresh air are in abundance, meet with favor."

A new thing in the etiology of toxemia of pregnancy has been advanced by J. R. Mitchell. He attributes the eclampsia to calcium starvation, this mineral being withdrawn by the fetus which he says is a calcium parasite. Calcium salts would then be the prevention and the remedy.

The protective value of typhoid vaccine seems to be assured. 11,338 persons in the U. S. army have been vaccinated since March, 1909, only 3 cases developing and no deaths.

Some important contributions relating to treatment of diseases of the mouth and their prevention have appeared during the year. In infectious diseases too little attention has been given to the hygiene of the mouth. Healthy children have been known to spread diphtheria and whooping cough and even physicians have conveyed the disease from house to house in their mouths. The mouth should be rinsed frequently with water and mild antiseptic and astringent solutions, as Johnson suggests.

G. D. L.

ARSENIC IN SYPHILIS—A. J. Caffrey, Milwaukee (*Journal A. M. A.*, December 24), reports a case of typical chancre of the lip, ac-

quired by kissing a month previously. A small papular eruption was already appearing on the face and the cervical and sublingual glands were swollen and nodular. There had been no treatment. The patient was treated by injections of sodium cacodylate into the pectoral muscles, one grain every twenty-four hours, which caused the secondary symptoms to disappear and the chancre to be more circumscribed. On the advice of Dr. J. B. Murphy three-grain doses were used daily for seven days, with marvelous results, the chancre healing up. No disagreeable effects were noticeable except strong arsenical breath. At one time breathing on a fresh-blown rose killed it in five minutes.

SUPRAPUBIC DRAINAGE.—A recent issue of the *American Journal of Urology* contributes a valuable suggestion to a very perplexing problem, translated from the writings of MM. Jean and Paul Fjolle of Marscilles. Fjolle and Fjolle discuss critically the various methods at present employed in suprapubic vesical drainage. They found that the reason why siphon drains were ineffective was that they did not have an attachment providing for the entry of air from above into the bladder. Thus, if a bottle be filled with water and be closed by means of a stopper through which a siphon tube fits tightly, no flow will result. If, however, the stopper be perforated with a second opening through which a straight tube is allowed to enter and to penetrate to the bottom of the fluid then the flow of water will go on without difficulty. The reason is that in the first instance air could not enter the bottle and a vacuum was produced, as the water flowed off, while in the second instance air could penetrate and a free flow resulted. This is what happens in the bladder into which we introduce a siphon, closing the walls tightly about the tube. No siphonage takes place. A second tube should be introduced four or five centimeters longer than the vesical arm of the siphon. As the bladder fills, the fluid rises in both tubes. When the fluid has reached the bend of the siphon, it begins to flow through the siphon tube, while air enters the bladder through the second tube and replaces the urine. The air can be filtered through cotton before it is allowed to enter. The authors employed this method successfully in a case of diverticulum of the bladder in which drainage was difficult. Continuous irrigation may also be practiced through the second tube, by arranging the apparatus as follows: To the top of the glass tube which enters the bladder is attached a rubber, double-current arrangement. One of the tubes in this appliance allows the entrance of irrigation liquids, the other the entrance of air. When the fluid in the bladder rises to the level of the bend of the siphon, which, of course, is in place in addition to the straight glass tube mentioned, the fluid flows out of the siphon into a suitable receptacle and air enters into the bladder through the accessory tube. Thus the bladder is frequently emptied of all septic matter. F. LEM. II.

NEPHROPEXY.—DR. OLIVER C. SMITH, in the July issue of the *American Journal of Urology*,

deals with this subject historically, and describes a technique practically the same as that detailed in the excellent monograph of the lamented Dr. Edebohls. He omits the mention of the ingenious corset devised by Dr. Ernest Gallant, which has done much toward making this operation unnecessary. Smith's conclusions are as follows:—

That the operation as now performed is established upon correct principles.

That in careful hands it is comparatively safe, with results furnished by a considerable number of operators ranging from moderately to highly successful.

That while we were at first sceptical as to the value or permanency of the operation, except in cases presenting the severest type of symptoms, we have become convinced that in the large majority of instances the results upon the general as well as the local condition of the patients are gratifying and satisfactory.

And that the American surgeon is to be felicitated for his share in the advancement and the knowledge, technique and success of this operation. F. LEM. H.

TREATMENT OF CANCER.—Wm. J. Mayo, M.D., the noted surgeon of Rochester, Minn., writes in the *Jour. Minn. State Med. Assoc.* an exceedingly interesting paper entitled "Notes on Italian Surgery." He says that the thing which impressed him more than any other one thing in Italy, was the extraordinary cancer research being conducted by Prof. Fischera. The cause of cancer seems to be proven to be the rapid production of embryonic cells. "It has been shown that an extract made from a normal organ when injected into a healthy animal, tends to cause the destruction of the same organ. Bolton made an extract from the scrapings of a normal animal's stomach, and this extract when injected into a healthy rabbit caused ulcer of the stomach. Many showed that an extract of bile pigments would cause fatty degeneration of the liver. Finally, in the contagious humors of rats it was found that an extract made from an embryonic rat would cause the tumor to disappear.

"The explanation of Fischera's experiments lies in these known facts: As cancer is due to the unlimited production of embryonic cells, an extract from embryonic cells furnishes the necessary check to the production, and the tumor is then removed through normal processes.

"Prof. Fischera took two-to-six months' human embryos, which were easily obtained in the obstetrical pavilion, crushed them up, and put them in a salt solution until they were dissolved by autolysis. This solution was then injected into patients suffering from cancer. Five patients have been cured through this procedure. I saw three of them." G. D. L.

Nearly every case of sunstroke or heat prostration is due to the mistake of taking beer and other "stimulants." A sunstroke is often a beer-stroke.

In this climate the sun rarely gets hot enough to hurt anybody provided they do not overeat or take "stimulants."

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Original Articles

A REMARKABLE

CASE OF HYSTERIA;

Characterized by Insane Conduct, Somnambulism, Disordered Personality, Dream-like States and Amnesia.

By Theodore Diller, M.D., Attending Physician to Psychopathic Department of St. Francis Hospital; George J. Wright, A.M., M.D., Assistant Physician to Psychopathic Department of St. Francis Hospital, and S. M. McLay, M.A., M.D., Interne to St. Francis Hospital, Pittsburg.

The clinical case of hysteria which we have to record would admit of much discussion and analysis; but we forbear any extended discussion of this sort for the reason that the record itself is long enough to tax the patience of the readers, and secondly, because the case is itself full of suggestions for any student of hysteria, who would not be especially helped by our comments. Suffice it to say that the case is remarkable in showing that, in its severer forms, hysteria is a grave constitutional disease which in a most marked way alters the conduct and personality of the individual and which may be thoroughly chronic in its course. The case presents practical as well as scientific problems. For example, it became a question as to whether the pa-

tient was certifiable under the insanity law of Pennsylvania. Her conduct at times was such that no doctor would have a doubt of her insanity. But on the other hand her conduct between her manifestations of insanity was so quiet and composed and apparently rational, that it took a brave and discerning physician to sign a certificate.

A young woman, aged 30, a sister in a Roman Catholic order, was admitted to the St. Francis Hospital, July 10, 1910, having been sent by her Mother Superior for treatment in the Psychopathic Department for "some nervous trouble". She came without any previous information having been furnished; and the following history and notes are the result of examination and observations made and history subsequently obtained at the hospital.

This young woman of good physique, and clear-eyed and mentally alert when not in an attack, entered the sisterhood at the age of 15. At the age of 20 she had her first "nervous spell" and has had them ever since at variable intervals. In these spells she would get noisy and violent, she says, and they usually had some relationship to her monthly periods. Each attack would last for eight or ten hours, after which she would feel dazed and confused and excited for a day or two and then be perfectly well. She had some uterine trouble, probably an anterior flexion, for which a dilatation and curetment was done in the hope of curing her. She cannot tell exactly how often she has had her attacks; but once there was an interval of five years in which she states she was free from them. Just before entering St. Francis she had had attacks of somnambulism. She believes she had had "nervous spells" because of various remarks overheard, but she disclaims any actual knowledge of them herself.

The patient came to the hospital on a Saturday, having travelled with an attendant from Cincinnati. As she appeared very quiet and orderly she was placed in a private room on the

hospital side. Sunday she had a violent spell, and Dr. Wright, who happened to be in the hospital at the time, was called to see her. The patient seemed semi-conscious. She was screaming, abusive, stubborn, and resisted all efforts to quiet her. She was ordered restrained. Once she lay quiet, and when approached by a nurse, struck her. Dr. Wright attempted to examine her, to question her, but without any result. There were many dramatic features about her actions, so marked that most of the nurses were half amused, and the resident physician, with little experience in such cases, quietly remarked, "Why, doctor, that looks like hysteria." She was ordered to the psychopathic ward where she continued in the same condition until quieted by a hypodermic of hyosine and morphine. She was perfectly orientated, but cross and a little active mentally. She abused the sisters, the doctors and the institution. She complained bitterly of being treated so roughly and of being locked up as insane. She abused Dr. Wright, who, she stated, had said she had "hysterics." All day her temper was sullen. She struck one of the sisters a severe blow without the slightest provocation. On Tuesday, two days after admission, the patient was very agreeable and obedient. She expressed a desire to get well, took her medicine, and spoke freely of her condition and past history. She stated she could remember only vaguely what had happened. She remembered striking the sister; and she seemed sorry, but maintained she could not help it. It was possible now to examine her. A complete physical examination was made with absolutely negative results. The patient is quite well built and sturdy. The color is good. There were no disturbances of reflexes; sensation everywhere seemed normal, also the visual fields.

For the next ten days the patient seemed practically well. She appeared to have some knowledge concerning the legal procedures required for a commitment and maintained she could not be lawfully confined. She was then so bright mentally that several physicians who saw her refused to sign the insanity certificate. The hospital authorities were not satisfied, however, but wrote to the Mother Superior of the Order to which the patient belonged. The patient herself had also written, begging for permission to employ a private nurse in order that she might be cared for in the general hospital. The following reply was received:

"Sister ——'s letter reached. As to a private nurse, she does not need her. You are aware that she has been trying to take her life and of late anyone who would cross her. You are not a moment safe. We had her at D—— and W—— near here. At D—— she was discharged and came home. She had more or less spells, but did not try to kill others as of late. She may try and be just so, in order to get home. I beg of you not to mind it, but keep her in place. She is begging to be given place in the medical department, which I would think risky and would not do. The papers sent on to her father have not as yet been returned. Kindly open her mail and should you judge

same not good for her, send it to me or destroy it. Please hand her these few lines after reading same."

In view of this letter, it was felt we did not know all about the patient, so she was kept under close observation. Of special interest in the letter are the facts that the patient had been twice confined in an institution for the insane; that she was cunning and could not be trusted; and that she was both suicidal and homicidal.

The patient's actions during the past six weeks were varied and extremely interesting. The following narrative is made up from facts gathered by the resident physician, interne, the nurses and staff physicians, Drs. Diller and Wright.

In general since admission the patient has had numerous spells of excitement, others of depression and others of good feeling, rationality and without any signs indicative of mental disturbance. For a night or two she would create quite a disturbance; this would be followed the succeeding days by a mental haziness and then she would clear up and be perfectly rational in all her actions and speech. This would continue for a few days when she would again have a period of excitement or a dream-like state. These attacks came on usually at night, after all other patients were in bed; in fact, only on one occasion has she had a spell during the day, and this lasted a short time. For a week she appeared clear in every respect and was allowed to attend chapel and visit about the wards of the hospital. In this state she appeared slightly anxious for attention from the nurses and doctors. She seemed to like to repeat her stories of ill-treatment by her "Community" and was somewhat braggadocia in recounting how she had outwitted them mentally. She appeared desirous of showing that all efforts of the community were without avail and that she was all right mentally, although she confessed to these spells of somnambulism and periods of excitement. These she claimed she had since a child.

She entered the order at the age of 15 years and has been an incessant worker in it ever since. She taught in their schools and did office work. She was very tired at nights and shortly after retiring would have bad dreams and walk in her sleep. These continued to increase in frequency until she had to be confined in a hospital.

She was ultimately sent to an asylum for the insane.

A short while after, she was taken out. The attacks still came on and she was again confined in another asylum. She was taken to Rochester and remained until about two months ago. It is alleged she became stubborn and irritable, had night spells, walked in her sleep, had periods of excitement, and was finally sent to Cincinnati in charge of Miss D—. She created quite a little notoriety there in a dentist's office, where she had been taken for the treatment of her teeth. The facts became newspaper talk. She was then sent here, where she has since remained. This story was all gleaned from the patient. She seemed to delight in telling it. On every occasion her story was precisely the same. It is filled with interesting episodes, but through it all there seems to run a spirit of superiority over the rest of her order and the Sisters of St. Francis. She wishes to impress one with the idea that her order wishes to disclaim her and that it is on the plea of insanity, whereas she alleges it is due to jealousy.

The patient has continued to have night spells and in her tantrums would go through some very peculiar antics. The resident physician was called to see her in one of these. She was found sitting on the floor in her kimono rocking a chair to-and-fro, the chair upside down, and making a great noise. She did not speak at all when he entered but continued to roll the chair around. She had also pulled the dresser over in front of the open doorway. When the doctor approached she did not cease her actions. He spoke to her and shook her, but with no result. Finally she ceased and sat quiet, and was then prevailed upon to go to bed. The sisters attempted to help her. The moment they touched her she fought and struggled and talked very vehemently against them. Finally she was controlled and given a hypodermic injection of hyoscine (1/150 gr.). This quieted her and she caused no further trouble the rest of the night. The next morning she was asked if she remembered her experience, to which she replied "No," except that she had dreamed that she was in a box car on her way to her father and she could not get there fast enough to deliver some important message.

She seemed once to have some great secret on her mind. It was with reference to a paper her brother sent her to have in her care for him. She feared that some one would get it and would cause trouble in her home. For several days she was on this theme, but has not mentioned it recently. That was one of the reasons she gave for not being able to sleep.

She had for a time some grudge against the sisters in charge here. She alleged they did not treat her properly, and that on the least provocation they would strike her, talk cruelly to her or strap her down at nights, just for spite; but at the same time she knew or was told it was necessary to do so to protect her from herself and for the sake of the other patients. Following this she told the doctor if they strapped her down again, she would yell at night, and she fully executed this threat, screaming at the top of her voice for several hours with only short let-ups. She was tried without restraint one night, and was promised that if she would be quiet no strap would be employed. About midnight she got up out of bed and with a shoe began pounding on her door, indenting it all over. She then fired it through the window, breaking the pane. On the entrance of the sisters she climbed up on the window sill and ran a towel through the grating as if she were about to take her life. The sisters were frightened, but the resident, who had been called, decided to let her alone to see what she would do. She tied the towel then around her neck but did not attempt to swing out. They left her alone and she finally took the towel off and got down and stared at them and then went to bed. The next morning she said she had no recollection of what had occurred, but that she remembered some frightful dream she had had about going to the Holy Land.

For some time she suffered an ulcerated tooth. Hot applications were placed on her cheek and she became quiet. One night one of the sisters heard her moaning and went to her room. She was lying in bed on her back, one hand pressed to her cheek and the other up over her head. Her eyes were wide open and she was looking up at the ceiling. On brushing a hand quickly in front of her, her eyelids did not move, but on touching a lash they winked. Placing one of her hands up high it remained

there for about two minutes, then gradually came down to her side. On putting it out again, it was dropped almost at once. Taking a pin and touching her unforeseen on the hand, she immediately withdrew it; allowing her to see the pin and then bringing it down on the cheek, not a muscle quivered. She could be pricked all over the face without showing any sensation of pain. Her conjunctival eye-reflexes in this condition were normal.

A couple of days after the tooth was extracted and for a night or two she had no further spells. She was perfectly rational, her mind was clear, she was calm and reposed—pleasant to the doctors and her attendants. A few nights later she had another violent spell. She was yelling loudly, throwing her arms about and acting very strangely. On attempting to put her into bed she struck the night sister a heavy blow on the chest.

On some occasions she would be very placid and pleasant to the visiting staff. On others she would be the reverse. She gave orders never to let Dr. ——— come into her room again, as she would not stay there. A day after she would sit and relate her story to him for almost an hour at a time. She did not like to be told to be "good." She always took it to mean as regards her moral character rather than as maintaining a quiet attitude.

One afternoon she walked out on the porch and climbed half way up the screen, a distance of several feet above the platform. When called she hung on for a little while and then descended, but would say nothing. She simply walked back to her room and lay down again.

On another occasion she left her room in the evening and walked down the corridor to the porch. She turned around and stood with her back against the iron screen and placed her hands over her face. On attempting to take her hands down she resisted a moment, then allowed them to come away. When spoken to she finally said she was "on her way to Cincinnati and was unable to get there fast enough."

One night the resident was called to see her. She was standing up in the corner of her room behind the head of the bed with her face in her hands. All the furniture was placed in different positions. When

spoken to she did not reply. The doctor went over to her and took her by the arm. She followed without any resistance and was put to bed. The following day she said she remembered nothing.

On almost all these occasions she claimed she remembered nothing, but seemed to evade the important questions asked her. It looked at times as if she did know what had transpired, but nothing definite could be learned from her. The following morning she would feel weak and would remain in bed.

She became infatuated with her day nurse and wanted to have her as a private nurse and would take no other. The nurse seemed able to control her through the day, and these attacks always came on at night when a Sister was in charge.

The patient wrote poetry and prose. The former was very good, while the latter was a mere jumble of words with no meaning at all. She showed these stanzas to all the visiting doctors as if proud of them.

NATURE AND ART.

"Man goeth forth," with reckless trust
 Upon his wealth of mind,
 As if in self a thing of dust
 Creative skill might find;
 He schemes and toils; stone, wood and ore
 Subject or weapon of his power.

By arch and spire, by tower-girt heights,
 He would his boast fulfill;
 By marble births and mimic lights —
 Yet lacks ore secret still.
 Where is the master-hand to give,
 To breathe, to move, to speak, to live?

O, take away this shade of night,
 The puny toil of man,
 And let great nature in my sight
 Unroll her gorgeous plan:
 I cannot bear those sullen walls,
 Those eyeless towers, those tongueless halls.

Art's labored toys of highest name
 Are nerveless, cold and dumb;
 And man is fitted but to frame
 A coffin or a tomb:
 Well suits when sense has passed away,
 Such lifeless work the lifeless clay.

Here let me sit where wooded plains
 Skirt yon far-reaching hills;
 And srs embrown its rip'ning grain,
 While cattle bank its winding rills.
 Such prospect is to me right dear,
 For heaven, health and joy are here.

There is a spirit ranging through
 The earth, the stream, the air;
 Ten thousand shapes, garbs ever new,
 That busy One doth wear;
 In color, scent, and taste and sound
 The energy of life is found.

The leaves are rustling in the breeze,
 The bird renews her song,
 From field to brook, o'er heath, o'er trees,
 The sunbeam glides along;
 The insect, happy in its hour,
 Flutters softly by, or sips the flower.

New dewy rain descends, and now
 Brisk showers the welkins shroud;
 I care not, though with angry brow
 Frowns the red thunder-cloud;
 Let hail-storm pelt, and lightning harm,
 'Tis Nature's work, and has its charm.

Ah! lovely Nature! others dwell
 Full favor'd in thy court;
 I of thy smiles but hear them tell,
 And feed on their report,
 Catching what glimpses an Ulcombe yields
 To strangers loitering in her fields.

I go where form has ne'er unbent
 The sameness of its sway;
 Where iron rule, stern precedent,
 Mistreat the graceful day;
 To pine as prisoner in his cell,
 And yet be thought to love it well.

Yet so His high dispose has set,
 Who binds on each his part;
 Though absent, I may cherish yet
 An Ulcombe of the heart;
 Calm verdant hope divinely given,
 And suns of peace, and scenes of heaven.

A soul prepared His will to meet,
 Full fixed His work to do;
 Not labored into sudden heat,
 But only born anew,—
 So living Nature, not dull Art,
 Shall plan my ways and rule my heart.

These verses, it must be admitted, are not at all bad. The following example of prose writing is far from clear and it speaks for itself. It was written just after one of her dreamy states and was handed to one of the doctors before she had completely cleared up.

A MONTH AT ST. FRANCIS.

"The subject of this sketch is a so-called hysterical patient who was jostled into St. Francis by the hands of a mysterious enemy; but not a clue had been given as to the author of the disaster.

"Within a month after the patient's arrival the period of test was concluded. And out of all who enter this test probably not more than one

or two have been saved, unless they had promised to add something to the beauty or utility of this famous institution.

"More than one sagely took part in this test, and all but one found themselves bereft of their usually sound judgment when the final decision was to be given.

"But if any variation should be noted in the patient after this test they are at once besieged by numerous observers, and even though the patient shows marked variations when under the tutelage of certain chosen ones, all agree that when the patient wakes up to the new influences brought to bear upon it, the road is open to needless improvement in all directions. The operators find themselves with a wealth of reports which are almost as discouraging to select from as works of art.

"Now comes the point where the skill of the operator is put to the severest test. When a wild hysterical patient has been induced to change its old habits it needs a skilled operator to guide it into a placid and even-tempered condition, which is indeed an adornment to any institution worthy of the name of our Seraph of the thirteenth century. This skilled operator is found among the many staff physicians and is known as Dr. ———, who may be seen going in and out among the sick, quiet, clear-eyed and intelligent, seeing that his orders are carried out in his so-called psychopathic department.

"Now and again in order to encourage, he speaks of hysterics as episodes and says that nine-tenths of these can be cured at St. Francis and he hopes that the other one-tenth may die a natural death.

"Many a time has the author of this been asked to recommend an institution for Rest and all that goes with it. Her advice regarding St. Francis is, go there if 'Ignorance is your only pardonable sin.' The world will never be quite the same to you and it will have sustained an irreparable loss on the day you shall say 'Farewell.'"

In her quiet moments the patient showed by her conversation that she was very intelligent and was well orientated, had a superb memory for dates, facts and small details. Her judgment was good and her perception accurate.

For the past week (about August 15) she has been very even-tempered and docile. She followed the nurse around when the latter was doing her work. She was visiting around the wards and appeared very normal in all her actions. Two nights ago she again had a slight spell. She did not become very violent, but talked loudly, and would not go to sleep until she was given a sleeping potion. She apparently has studied a lot of civil law, knowing the rules and regulations with regard to insane patients committed to an asylum, and often

speaks about making trouble if she ever gets her liberty. She does not want to leave the order and says they cannot take her habit away from her without some grave accusation. She reads considerably. She is not interested in fiction or love stories, but rather fancies the "Literary Digest," finance, government, etc.

August 17th. The patient was removed yesterday to the main building. She slept very well last night.

August 18th. Menstruation commenced yesterday. In the afternoon she became sick at her stomach and in the evening vomited twice in an hour, and also complained of headache. She complained of not getting sufficient attention from the nurses. She was at first quite surly and would not answer questions; but in a few minutes she was all right and told of her symptoms. She finally went to bed and put in a good night. To-day she was up and cheerful, although complaining of her treatment and not liking the question, "Do you like it better over here than in the other building?" asked her by the nurses. She has taken a streak of writing short sketches of her impressions of the doctors. She promised to write her biography since the age of 15.

August 19th. Last night the patient was found sitting in a rocking chair in her room. Her eyes were fixed on the wall and she kept up a continuous conversation with some unseen person. For half an hour the resident physician listened to her and had a stenographer take down her words in shorthand. At times it was a mere jumble of words with little or no coherence or sense. She was assigning missions for the Sisters of St. Francis. Many of her statements she would repeat and repeat. She kept drumming on the arms of the chair and rocking backward and forward, her eyes always fixed and staring. Finally the resident pricked her with a pin. She quickly pulled away. He talked to her for half an hour. She thought she was at the Mother House and was typewriting in the office there. She took the doctor to be a porter at one time, a negro at another. Her memory was very clear on numerous points and she answered many of his questions correctly, but when he began to quizz her closely, she either evaded the point or rambled off on something else entirely op-

posite to his question. When told she was putting up a "bluff," she said "there are no bluffs around here; this is a flat country." Her pupils were quite active; her eyelids remained open for a minute or so at a time. The resident spoke to the nurse in the hearing of the patient, saying, "Look how her eyes remain open." Immediately the eyelids dropped. When the doctor told her who he was, she said she could not tell because one of her eyes was not as good as the other. However, she recognized Sister Laurentine four feet away. She disclaimed being a Sister of St. Francis, and when called "Sister" resented it, saying she was Sarah Jane Boyle. She suddenly asked that she might have some cabbage, sausage, grapes, chocolates, etc. The stenographic report will show her answers to questions. For the most part she seemed perfectly conscious of what was asked and her answers were audible and correct, but through it all there seemed to be evasiveness, especially when she had made a mistake. Asked her name she replied "No," but quickly followed by "I don't know." The resident shook her by the shoulder. She drew back and said, "Don't touch me." In attempting to put her to bed she struggled with the nurses but was easily controlled, and she soon went to sleep after an injection of morphia. Later she became violent again and tore her pillow case into shreds. In detail the resident's account of her actions in this attack is as follows:

The patient evidently imagines herself at the Hospital in R—— operating a typewriter. She drums continually on the arm of the chair in imitation of the movements of the fingers in typewriting. She talks constantly while she writes, and her ravings indicate that she is making a list of the Sisters together with their stations for the coming year.

"Sr. Ursula, Sr. Johanna, Sr. Irene, Sr. Clementine —— Austin, Sr. Magdalen, do you know whether this is Adelaide? Sr. Angela is in Caladonia. Sr. Josephine, Sr. Vincent, Sr. Ramond and Sr. Mildred—they are going from R. D. M-i-l-d-r-e-d—that's right. Sr. Martina, Sr. Petronella, Sr. Seraphine she does not need to write the names. This old Remington; there used to be a good Remington here when I first came, but St. Francis took that. I don't want to talk to Sr. Amelia; she is so deaf I have to shout so that I can be heard in New York. Sr. Seraphina is no good; she ought to be sent sewing somewhere, for that is all she can do well, and I don't believe in putting people at work

which they can't do. There is water spilt on the floor near the Chapel door since this forenoon and no one has thought to clean it up. Sr. Coletta and Sr. De Sales are to go to the Sacred Heart Sanitarium. They sent Sr. L—— to Pittsburg. When I get home I am going to be lazy; at St. Francis everybody is lazy—don't do more than you can. They don't work like Sr. Dolores at Stratman. She never sits down; she is a bookkeeper, but never sits on a high stool behind the desk. Pittsburg is not on the map. The only people there who know the difference between daylight and dark are Miss —— and Dr. ——. Miss —— thinks she is smart because she is an ——. Says she is only 30 years, but I think she is on the shady side of 40. I am only thirty. Sr. Scholastica, Sr. Rosine and Sr. Michael.

"Do not bother me any more while I am typing. I wonder if there is any machine oil. I will never come to Pittsburg again. I have to go and fix the typewriters, and I want that Remington that was bought last spring; it looks as though all the young sisters in the Community had been practicing on it during the summer. Down in the storeroom you will find a bottle of typewriter oil. Before I went to Cincinnati I bought a new machine. You ought to use a uniform ribbon, that is—black, not colors, and not—oh, you know what I mean, copying ribbons."

At this juncture the resident, Dr. McLay, went up to the patient and spoke to her.

"Go away, you porter; go black your boots and do your dusting. Go away. You are like the man I met on the train.

Q.—Who do you think I am? A.—I don't care who you are. You are the porter, and that's all the difference it makes. Q.—How long have you been here? A.—Ever since I have been typing. Q.—Are you typing with your fingers? A.—Well, people don't do it with their nose. Q.—Have you a typewriter? A.—Yes. Q.—Where is it? A.—It is here. Tell Sr. Blanche she can take it over to the Novitiate and have the youngsters finish it up. Sr. Blanche is Mistress of Novices, and the Novices play pranks when her back is turned. There is a pool of water at the Chapel door since morning, and it is their duty to clean it up, but they haven't done it yet. Something like that happened when I was in Pittsburg at St. Francis. Some water was spilled on the floor and remained there a long time; if I could have found a cloth I would have cleaned it up myself. Q.—Do you still think I am a porter? A.—I do not care whether you are a porter or not; you look like an old bell-boy. Q.—Are you in a hotel? A.—I am at R——. Q.—And you don't know who I am? A.—Are you Mr. B—— of St. Mary's Hospital? Q.—Where in R—— are you now? A.—I am—I am—did you come down to the Convent? If so, I am at the Convent, and if you are at the Hospital I am at the Hospital."

During all this time the patient continued to drum on the arm of the chair as though she were operating a typewriter.

Q.—Do you use both hands when you type-write? A.—Sure. Q.—How far apart do you

keep your hands? A.—Like this (illustrating).

Q.—You could not typewrite with your hands like that; you must be playing a piano. A.—No, I am writing this list, and such spelling; just look how some of the names are written. Q.—You do not know for sure where you are in R——? A.—Yes, I am at the Convent. Q.—Are you sure you are not in Pittsburg? A.—I am not in Pittsburg; I would not go back there if I got all Carnegie's money. Q.—Were you in a hospital in Pittsburg? A.—I was in something, I don't know what they call it. Q.—Were you in St. Francis? A.—Yes. Q.—How long since? A.—I just got home. Q.—You are back in R—— and did not come by train? A.—Yes. Q.—How did you get away from St. Francis? A.—He told me I could go home and I went home. Q.—Do you know why you were in St. Francis? A.—I do not know yet, but I intend to ask Mother Mathilda. When I first went there I was annoyed by everybody asking me such questions; then it stopped for a while, but after a few days the stuff was repeated. Q.—Were you ever in M——? A.—Yes, I was nervous from teaching. Q.—Were you ever in Dearborn? A.—Yes, they were afraid I would be upset if I went home during the summer when there were so many Sisters there. Q.—Did they ever send you to Cincinnati? A.—Yes. Q.—You still do not know who I am? A.—You did not tell me whether you were Mr. B—— of St. Mary's. Q.—Do you remember Dr. McLay of St. Francis? A.—Yes. Q.—Do you think you would recognize him if you saw him? A.—I would not. He was about as much good as the rest of them. Q.—But you would recognize him if you wanted to? A.—That depends upon how I felt when I met him. I am blind in one eye, and if I met Dr. McLay I might not know him. Q.—Are you Sr. L——? A.—No—I don't know. Q.—Why do you hesitate? Don't you want to be Sr. L——? A.—Of course I do. Sr. L—— never did anything to be ashamed of. Q.—Then why do you say 'No—I don't know'? A.—Because sometimes I think I am Sr. ——, and again I don't know who I am."

That same night one of the other resident physicians had a conversation with the patient, which is interestingly detailed by him in the following manner:

(Sister walking down hall with wastebasket in hand.)

"Q.—Sister, where are you going, and what have you in your hand? A.—I have a tub and I am going to wash a shirt for my brother Will. He is going out to see his girl to-morrow night and the shirt that he likes best is dirty, so I will wash it for him. Q.—Where are you? A.—I am in St. Mary's Hospital, Cincinnati. Do you know that in St. Francis' Hospital in Pittsburg in the insane department they strap their patients to the bed. I was there as a patient and I know. Q.—Sister, it is midnight. Don't you think you should go to bed? A.—Don't you call me 'Sister,' I am not a Sister. My name is Miss Riley.

Q.—Yesterday you were Sister ——? A.—Well, at times I am a Sister and at times I am not.
 Q.—Don't you think that sometimes when you are not a Sister you might break some rules of the Order? A.—Well, I might. There is nothing I like more than chastity. I like men because I believe they have a place to fill. I enjoy hearing conversation between men as I often have when riding on the train, but I love God better than man. I like my father better than any man I know. I did sort of like a young man one time when I was teaching. He was taking lessons of me in shorthand. He was a telegrapher. I was afraid that I might learn to like him and I asked the Sister Superior to change me and have some one else teach him. She said as long as I felt that way about it there was no danger. I like children. I would like them better if they came direct from God. I don't like the place they come from. I love chastity. When I was in the Hospital I did not like to have the Sister even to give me a bath. I wanted to do that myself. Q.—Don't you think if it came natural for you to like a man that you should not resist that natural instinct? A.—I like chastity. I like men for I think they have a place in the world. I believe in God. I have faith in God. Don't you believe in God? Q.—People believed for ages that the world was square while it was round all the time. Therefore, believing a certain thing does not make it so. Don't you believe that some of the things you believe may not be so? A.—No, I believe in God. Well, good night."

This conversation took place in the nurses' station on the fourth floor. The doctor was sitting at the desk; the patient was kneeling on the floor with arms and head lying on the desk. She seemed to be sleepy and would talk in a dreamy manner.

August 19th. Patient remained in bed—said she had a slight headache. She told Dr. Wright she thought she was in St. Francis Hospital; but recently had been in R——; that to-day was Christmas; that 3 plus 3 equalled six and 12 plus five equalled 17 . She knew Dr. Wright and called him by name. She said she did not remember Dr. McLay was in the room last night or anything about the stenographer taking a report.

August 21st. After remaining two nights on the medical side it was found necessary to return her to the psychopathic department. She became restless and unmanageable. This morning she said she did remember several things she had done and said while in her stuporous mood the day previous. Dr. Diller had a talk with her this afternoon and a new phase of her nature was brought out. He told her that she had been acting badly over in the other

building and had been walking all over the hospital. She became vehement in her denial, indicating parts of the building where she had not been. Dr. Diller remained firm in his assertions. This provoked her until she was very nasty; ordered him out of her room; said he was not her doctor; that she would not allow him to see her again and made many sarcastic remarks. It seems she had thought all along that Dr. Diller was in sympathy with her and was trying to befriend her. Yesterday when he tried another form of attack she became very violent and said he insulted her.

August 23rd. The patient had another bad spell last night. The nurse who was giving her a hot pack went out of the room for a few minutes. In the interim, the patient got out of bed, put the hot wet blanket over her and walked into the corridor and stood at the iron door, calling, "I want to get down." She was taken back to her room; she became stubborn and resisted; but finally the nurse got her into bed and she soon went off to sleep.

August 24th. Last night she screamed and talked all the time. Neither trional (15 gr.), morphine ($\frac{1}{4}$ gr.), nor hyoscine (1-100) had any effect on her. She repeatedly called Carrie Nation. She cast reflections on two of the doctors attending her. This morning she has been very noisy, stubborn and ugly. She kicked Sister —— while she was strapping her in bed. Three of the hospital staff came up to see her in this spell. She continually repeated, "I won't stay here in 666 in prison in Cincinnati. Carrie Nation is in 675. Shoot Dr. Diller, Papa," etc. She quieted when Dr. Miller said she was listening now to us talking. She then immediately started off again.

Sept. 5th. For the past ten days the patient has been comparatively quiet. She had a few minor spells of no special importance. Believing that too much interest had been shown in her, and thinking she was taking a delight in telling her story, little attention was given her by the doctors or the nurses. Yesterday she expressed a desire to see Dr. Wright, and warned the nurses not to forget to tell him because she seemed worried and wanted to talk to him about something. Dr. Wright did not see her, which may have some bearing on what happened that afternoon.

The patient in her quiet periods was allowed much freedom and was accustomed to go about different parts of the hospital unattended. Yesterday afternoon she went to the office to see about mailing a letter, she said, and shortly afterwards was missing. Nobody had seen her go. The police and railroads were notified, but nothing was heard about her until late that evening.

It seems she quietly walked away dressed in her garb and by some means, either by walking or riding, came to the office of Dr. Wright, some two miles away. It must be remembered the patient was an absolute stranger in the city, that she had never been to Dr. Wright's office, and to all intents knew nothing of its location. The housekeeper at the doctor's home thought she heard some one enter, and later heard some distinct noises down in his office. She went down stairs and looking around saw no one. A slight sound induced her to look behind the screen; and there lying on the examining table apparently asleep was a sister dressed in full garb. Mrs. ——— aroused her and asked who she was and what was wanted. She stated she was a Sister of St. Francis, that she had walked all the way from Columbus and was very tired. She begged for some nourishment and just a little rest. She looked so weary and seemed so dreamy that she at once won some sympathy.

She was given a little nourishment and put to bed, where she slept for three hours. On awakening she felt much better and soon was talking quite freely. She spoke of being a patient at St. Francis in the care of Dr. Wright, whom she stated she was very anxious to see. Dr. Wright was not in the city at the time, and in spite of what seemed the obvious thing to do the patient was allowed to stay until about ten o'clock, in the hope that the doctor would come home and take whatever action was necessary. She seemed so rational and spoke so clearly about herself and the treatment she had received at St. Francis, that it never entered the mind of Mrs. ——— that the sister might be insane. Dr. Wright did not return until late; and finally becoming alarmed, Mrs. ——— telephoned to the hospital that Sister ——— was at the doctor's office. The ambulance came for her and without the slightest resistance the

patient was taken back to the hospital, where she spent an uneventful night.

The next morning Dr. Wright saw the patient and talked to her about her action of yesterday. She seemed well composed and good tempered, and was anxious to show that she was entirely ignorant of what had occurred. She said the only thing she could remember was that she went to see her sick brother and had started out to find him. It was hinted that she must have known where she was going and must have had some previous knowledge or information as to how she could get there. She denied it absolutely, and said, "Doctor, you don't think I would tell an untruth!" The patient was quiet all day and seemed to get some satisfaction in the renewed interest taken in her by the doctors and sisters.

Sept. 6. Patient had a good night and has been quiet to-day.

Sept. 7. Patient was sent away in the care of an attendant to an institution in Iowa. She at first refused to go and then consented willingly. She said she knew the place, that she had been there before, and that she felt sure she would be cared for kindly.

SOCIAL HYGIENE AND THE PHYSICIAN'S RELATION THERETO.

J. C. Irons, M.D., Elkins, W. Va.

(Read by title at Annual Meeting of State Medical Ass'n, October, 1910.)

If there were no stronger appeal to us, the principles of medical ethics, as enunciated by the House of Delegates of the American Medical Association at the meeting in New Orleans, May 7, 1903, would be sufficient. This is the declaration, which unchanged, is our authorized guide: "As good citizens, it is the duty of physicians to be very vigilant for the welfare of the community, and to bear their part in sustaining its laws, institutions and burdens. Especially should they be ready to co-operate with the proper authorities in the administration and observance of sanitary laws and regulations. They should be ever ready to give counsel to the public in relation to subjects especially appertaining to their profession." It is here that we learn the

fundamental principle of our great profession, namely, that we are not solely to administer to the diseased and suffering, but that the higher aim and nobler purpose, *even* if less remunerative, is to prevent the disease itself. We know that so much of the disease, suffering, deformity, and even death, is due to preventable diseases, and we firmly believe that he who would attempt to practice the healing art, and would neglect or refuse to warn those relying upon him for their physical health or safety when danger threatens, is not worthy of the name of this high and responsible calling. We believe that in all matters pertaining to health, the medical profession should take a leading part. If our position is correct, let us ascertain our present attitude toward the social evils that are so prevalent and so destructive.

Our nation is being aroused, as perhaps never before, as to the conservation of our material resources, and vast as are these and as worthy as is the cause, still all this is really insignificant when compared with the health and vitality and safety of the great mass of the people who inhabit this great country of ours, and who constitute the only real asset of any country. What would be the value of great veins of coal, powerful water falls, immense territories of timber or farming lands for homes, if we did not have vigorous people to make use of the natural resources? And yet it appears that much greater attention has been paid to the material than the physical. We have great Departments of Agriculture, Interior, Labor, War, Navy, etc., but so far only a very subsidiary department of health, and it seems that those in charge of affairs are even now hesitating to give the people what they so much need, a Department of Health.

With all this agitation there has been but little done to check the ravages of the social evil so fittingly called "The Great Black Plague," which is yearly destroying its tens of thousands, and rendering many thousands more unfit for an equal chance in life's fitful strife. It is for a change in our attitude toward this multi-headed and most pernicious evil that we plead. To aid in the care of the sick and the prevention of disease, the physician has always, and rightly, too, been instrumental in organ-

izing and erecting sanitariums, hospitals, boards of health, and assisting in having enacted such laws as are found upon our statute books. Still with all these multifarious departments, with few exceptions little or nothing is done to check the ravages of the diseases under consideration. As has been truly said: "Life is shortened by death and marred by invalidism." The ideal life would be free from illness and disability of every kind, and that we may appreciate or even approximate this ideal we lay stress upon hygiene and sanitation, realizing that usually the healthier the life, the longer it will last and the greater will be its usefulness.

Authorities tell us that for every death there is an average sickness of two years, or for each death there are two persons sick throughout the year. This would mean in the United States that as there are about 1,500,000 deaths annually, there will always be about 3,000,000 persons on the sick list, which is equivalent to about thirteen days of sickness per capita. There are constantly ill, in this country, of tuberculosis alone, about 500,000 persons, of whom about one-half are totally incapacitated, while the remainder are half so. We are further told that the diseases that cause by far the greater number of deaths, are largely preventable. Among the list of the so-called preventable diseases we might mention, typhoid fever, diphtheria, small pox, scarlet fever, diarrhoea, especially among children, tuberculosis, gonorrhoea and syphilis. We have a comparatively correct statistical report of all the deaths, from all the diseases mentioned, except the venereal, of which, except in the army and navy, we have no absolutely definite record, and therefore estimates must necessarily be largely comparative. We may here be permitted to observe, that this lack of a correct report on this condition is the cause of the dense ignorance of the general public as to the prevalence and direful consequences of this malady, and in this ignorance consists the great danger to the suffering public. It is here, we feel, the physician is not doing his whole duty, when, knowing the danger and the consequences, he fails to give the information needed to prevent the disease. Usually the physician is silent and the law is negative. We are

persuaded that possibly three-fourths of the people know but little of the prevalence of these diseases, less of their modes of communication, and practically nothing of the fearful consequences. Prof. Irvin Fisher states, "The number of syphilitics in the United States has been estimated at 2,000,000, though from the nature of the case this figure is chiefly conjecture." We may add that while this figure is startling, yet the estimate for gonorrhoea may not be far from ten times as great, or 20,000,000. We give you here some actual statistics which may enable us to arrive at some practical comparative estimates. "Among the troops in the Philippines, the venereal morbidity during the year 1904, was 297 per thousand, largely exceeding the morbidity from malarial fever and diarrhoea. Twenty-two out of every one thousand soldiers were constantly inefficient from venereal diseases—four times as many as from any other disease. In 1904, statistics show that 25.2 per cent of the total number of sick days in the hospital was due to venereal diseases. In four years, 949 men were discharged from the navy, disabled from the same cause. We may get further insight by giving similar facts as relates to the English troops. Among the troops stationed in India, 537 per thousand were admitted to the hospital for venereal diseases, and of the whole number returning home from service in India, completing their time of service, 25 per cent were found to be infected with syphilis." As we have before intimated, we have no authentic or accurate statistics as regards these diseases in civil life, but since the army and navy are under the strictest military restraint and discipline, and this inhibitive force being lacking in civil life, the opportunity for licentious relation being practically unrestrained, there is every reason to believe that the per cent in civil life is much greater than in military service. Neisser, a distinguished Germany authority, states that "fully 75 per cent of the adult male population contract gonorrhoea, and 15 per cent have syphilis."

Dr. Frederick Henry Gerrish, of Portland, Maine, whose most excellent article was printed in the Communications of the Massachusetts Medical Society, Vol. 21,

No. 3, 1910, for which I am indebted to Dr. Butt, says: "In New York City, in 1900, there were reported 41,145 cases of tuberculosis, scarlet fever, measles, diphtheria, variola and varicella; and the venereal morbidity estimated conservatively, was 225,000. If that is thought too high, quarter it, and the result gives 15,000 more than the six other diseases combined; divide it by five, and there is still a large excess of venereal." These figures are astounding, and yet bad as they appear this is only a part of the whole truth. Dr. Prince A. Morrow says: "The elimination of the social diseases would probably mean the elimination of at least one-half of our institutions for defectives;" and then add the further authoritative facts, viz: "50 per cent of all involuntary childless marriages are caused by gonorrhoea in the female, and of these 45 per cent are caused by marital infection by the husband; a large per cent of abortions and miscarriages are due to syphilis, in addition to early deaths of very many who are born alive, and disastrous effects in those who survive a longer period." In certain hospitals abroad, the morbidity, or non viability from conception has run as high as over 80 per cent; 50 per cent of all operations on pelvic organs of women are necessitated by gonorrhoea; 80 per cent of all the deaths from inflammatory diseases peculiar to women, are caused by the diseases under discussion; 20 per cent of all infantile blindness, as also of children, is due to gonorrhoea, and in one New York school for the blind, 33 per cent, or one-third of all, had lost their sight in infancy from this cause. Out of 65,000 blind persons in the United States, by the census of 1900, over 5,000 had lost their sight from this cause; 90 per cent of locomotor ataxia is said to be syphilitic."

It appears to us that the foregoing facts are sufficient reason for calling forth this article. The great and constant suffering and loss of life is abundant reason to awaken us to more definite action. But there is still another aspect that should appeal to us as a nation, that not only should the medical men, but the government as well be aroused to action. This loss of citizens to the state from the sterilizing influence of gonorrhoea upon the productive

energy of the family, and the blighting, destructive effects of syphilis upon the offspring are enormous. "In the opinion of very competent judges, social diseases constitute the most powerful of all the factors in the degeneration and depopulation of the world." We do not feel in the least competent to fully estimate the danger and injury to the individual or the country from this cause, but in view of the known facts, and approximal estimates, is there not enough to arouse us to the enormity of the danger, and call us to a more definite action. This is one of the great menaces to national efficiency. With us the wonder is, that though the suffering is great, the loss incalculable and national safety endangered, and the cause largely preventable, still no general or adequate effort seems to be exerted to stay its progress, or hinder its destructive power. These facts are so startling that it well becomes us to consider whither we are tending, and what is to be the end. Our people appear to be so commercialized that the man seems to be of less value than the dollar. We are showing greater zeal in developing and improving our horses, cattle, sheep, hogs, dogs and chickens, and caring for them and attending to the proper breeding of them than we are for men. More restraint is thrown around the animal, for man, prone to evil, and usually if left to his own will, follows his own passions and lusts, and degenerates into the forms that we so often see in our state institutions.

It is a well demonstrated fact, that man's condition of body, mind and character is largely the result of heredity and environment. Over the former he has no control and for it no responsibility, but the latter he may change if he so wills. Since many of the hereditary defects are due to social evils, it is here that the true physician's mission begins. We are not only responsible for the physical condition of the people of to-day, but for those to be born in the future ages. Hence our duty to man, to the country, and to God, should arouse us to greater effort, that this great loss and suffering may be prevented. The greater portion of the suffering is visited upon the innocent and ignorant, and therefore should appeal to the sympathy of every human being. Can any true man stand be-

side the operating table and view the conditions that are brought to pure womanhood, hear the agonizing cry of excruciating pain, or can he visit our asylums for the blind and look upon the sightless orbs of hopeless children, one-third of whom are innocent victims of the vicious or ignorant contamination of parents; or can he see the defectives on every hand, and know the unnumbered graves that dot our cemeteries and not realize that the time for action is now at hand? We cannot shift the responsibility. It is ours, and whether we will or not, the duty is laid upon us.

Now that we know that we must face the problem, what shall we do? We fully agree with Doctor Gerrish, that the first task before us is that of educating the people. Says he: "In a few years legislation would be sought and obtained. At first, it would probably be politic to ask only for the compulsory reporting of cases of syphilis and gonorrhoea in the contagious stages, thus putting them on the plane of other communicable diseases. The profession knows this is the correct course to pursue; the logic, consistency and duty as guardians of the public health demand it." We well know that most physicians shield themselves behind the Hippocratic oath which is supposed to preclude the giving of information obtained in a professional way. Granting that this supposed oath is binding, why make an invidious distinction in favor of the evils now under discussion. If the oath is binding at all, it applies to all, and yet we make no complaint when the law compels us to report all other contagious and communicable diseases. Syphilis and gonorrhoea should be reported for exactly the same reasons that other infectious diseases are reported, because society has a right to protection from them. "The fact that they are contracted so largely in the commission of acts which are not only immoral, but forbidden by law, is not only not a reason for concealing them, but an added reason for exposing them. In what other case is it ever alleged, as an extenuating condition, that infraction of law is an essential element in the offense? Syphilis and gonorrhoea are acquired either innocently or in the pursuit of vicious indulgence. If innocently, the reporting should not bring shame; if viciously, the

victim is estopped from demanding that measure of sympathy to which the burden of grave diseases ordinarily entitles him; and the community has a right—it is the duty—to protect itself against his communicating his horrible malady to others. You and I, and those whom we hold most dear, are more worthy of protection than is the sensualist, whose moral perception is so blunted that he insists that we should suffer and die, rather than that he should endure any curtailment of his iniquitous pleasure, or should incur the odium which his criminal conduct merits.”

Surely, as we have before intimated, there is greater reason to report the one infected with a communicable disease willingly contracted, than to bring to public notice one who is the unwilling victim of a disease of like nature, but far less destructive in its results. We do not hesitate—yea, the law compels us—to report all cases of diphtheria, scarlatina, variola, tuberculosis and other dangerous infectious or communicable diseases. We think the law is right in thus protecting the public against all dangers, but why the law does not include the social diseases, which are just as communicable, and far more lasting and dangerous, and which as we have before mentioned, causes greater loss than any or all the other diseases, perhaps, unless it be that of tuberculosis; and we doubt not that if a true statistical estimate could be obtained, it would be found to exceed even this dread disease, as frightful as it has proven to be. We know the law has not required, nor does custom sanction, the reporting of this infection, but should not the necessity demand that the law should require this? If not, why not? The necessity is as imperative, for the loss is beyond computation, and the very safety of the vital energy and stamina of our people are endangered. That needed legislation is not procured, is largely due to the dereliction of the medical profession. We are expected, and it is our right, to bring to public attention those things that are a menace to public health; and we should assist in formulating such laws as will best subserve the public demands, and be productive of the greatest good to the greatest number. Heretofore, we seemingly have shielded the class least worthy, and left endangered the great mass

who look to us for protection in matters pertaining to health. Can the medical profession, which should and does take a leading part in educating and guiding the public in matters relating to the prevention, as well as cure of diseases, longer repose in shameful inactivity, when such vital and economic loss is constantly going on, to say nothing of the shame and suffering that we passively permit? To us the country looks for health protection in the enacting of hygienic and sanitary measures; the formation and guidance of boards of health; the establishment of quarantine measures; the erection and management of hospitals and sanitariums, where the diseased and injured may be scientifically and humanely treated. To these demands we have nobly responded, and we cannot afford to betray the confidence heretofore reposed in us by longer withholding from the public the service that humanity and society, as well as the state, demands.

We believe the vast majority of our people do not know of the great prevalence of gonorrhoea and syphilis, nor do they have any idea of the danger to the community resulting therefrom. Few have any conception of its frequency, communicability, or consequences, and as we have suggested, that this condition exists is largely our fault. This, as we believe, being true, what means should we employ to remove the danger and prevent the loss?

In this, as in all health matters, the first, and perhaps most essential element, is the education of the people. Before legislation to control, there must be conviction in the mind as to the necessity and the equity of the cause. That the diseases under consideration have not been legislated against, is not for lack of the need but for the want of sufficient information, and this want of information is due to our lack of a proper appreciation of our responsibility. As the custodians of the information and the confidence of the public we will be responsible for withholding what is their due, and they should and doubtless will bring us to face an outraged public opinion.

The important question for us to now decide is, how shall the people be informed as to the danger before the country, and the remedy to be applied. Unquestionably the first necessity is the general information as

to the nature, character, and results of this so fittingly called Great Black Plague. We have confidence in the wisdom and patriotism of the people, in that they arise to the necessity when possessed of needed and necessary information. How shall this be given? We would suggest that to us, the duty lies first upon the medical profession. We possess most largely the information, both as to the diseases, their nature and causes, and have the best insight into the measures of prevention, and therefore should take the lead in this unremitting warfare against this evil. We should teach the people publicly and privately, and instead of treating these diseases as trivial matters, in our private practice, we should warn against them both from a moral and physical point, and let the people know what are the real dangers that result from them. After teaching in our practice, when necessary or practical, let us use the press, or the rostrum in disseminating knowledge. The press is a mighty weapon and can do much to spread the knowledge. We need not be confined to the medical journals, but the secular and religious press should be called into action, and when the general public gets but a partial insight into this evil, it will spread rapidly, and good will result. The lecture platform should be called upon to emphasize what the press may express. The pulpit may properly be requisitioned to be a large factor in this cause. We have no doubt that this will be a willing and helpful ally when called upon. Next to the medical profession, the greatest factor, we believe, should be our educational institutions. Right in our homes and schools truths about improper sexual relations and their results are not explained to the young in time to prevent their going into excesses, acquiring impure habits, or contracting frightful diseases. Boys and girls should be taught the truth before they are ruined for life. To this end, our high schools and colleges should have a series of lectures, or suitable literature, or both, so that so much that now brings disgrace and suffering may be avoided. So much of the diseased conditions that now exists is the result not so much of venality or criminality as of ignorance, and could and should be avoided if a needed educational propaganda was demanded. With these

preliminary educational needs met, in which our profession should take an active position, the way would be open for much needed legislation. The demand for notification of these diseases—venereal—should be as imperative as any other communicable disease. Such legislation would act in two ways; first, it would warn of danger, and thereby limit the spread; and secondly, the very fact that those having these diseases know that they must be exposed, would place such a restraint as to hinder or prevent the number of the diseased. Surely the innocent should be protected, and why shall we longer shield the guilty? The claim that the law cannot be enforced, that neither the diseased nor the physician could be relied upon to carry into effect this suggested law, nor could the officials be induced to enforce such a law, and therefore such an enactment, unenforced would tend to a disregard for law and result in criminality. It must be remembered that no new law is strictly enforced till the people are educated to the needs of the law, and the necessity of its strict enforcement. There need be no fear from this source, when the people are made familiar with the danger and loss that results from this cause.

Next in importance to the general law requiring notice of danger, a law should be enacted requiring persons seeking permission to enter the marriage relation to produce a "bill of health," showing that they are free from communicable or hereditary diseases that may affect their prospective offspring. Already two of our sister western states, Indiana and Washington, have such statutory requirements, and the result is proving very satisfactory to the states. In regard to the diseases under discussion, the permit is not granted unless the parties seeking the license can produce a bill of health from the family physician or a medical board, whichever may be required. Should not the medical men of West Virginia take action looking to the enactment of suitable laws on these lines? We believe that our knowledge and position makes this, our position, in relation to these matters indefensible, unless we do our duty. We should feel our responsibility in making the heredity and environment

the best possible, that all may have an equal chance in life.

Knowing the truth as the medical profession does, and being informed as to the dangers, and damages already sustained, can we longer sit in silence, or calmly look on, unconcerned, when this silent, yet direful destroyer of home, happiness and life itself, is constantly undermining the very existence of all that counts for true worth in civic virtue, moral stamina, or physical endurance? Should not these conditions call for the best service within our capabilities, and in whatever line our energies may be made effective in staying or removing this great evil, so insidious, so little taught and very much less known by the mass of the people, and therefore so much the more dangerous to the public? Our sympathy for suffering humanity should impel us to prompt action, and then the proper conservation of our physical forces demand thoughtful consideration. The damage and loss of life from these diseases is appalling, and the increase in sterility due to this cause is startling; the increased rate in the United States should appeal to our patriotism. At the beginning of the eighteenth century, the rate of sterility to the marriages was 2 per cent; while to-day it is 20 on an average, while of college graduates it is 25, while the average for the world is 11 per cent; and the significant fact is that gonorrhoea is the most potent factor in producing this result. Can we wonder that the divorce courts are so frequently sought as a release from the miseries of childless homes? Statistics tell us that the rate of divorces to marriages in the United States is 1 to 185, while in England 1 to 11,000. The greatest factor in producing this loss of vital force, dwarfed and diseased humanity, childless homes, premature deaths, suffering womanhood, crowded homes for imbeciles, and hopelessly blind, and the great pecuniary loss to the country, can be traced, directly or indirectly, to venereal diseases, can we longer treat this matter with indifference? May we not hope that the Medical Association of West Virginia will take up this serious problem, and adopt some definite, practical course, looking to the checking of this great evil! Let us begin now; sound the tocsin, warn the people, save the young, if not the old

transgressor. The duty and responsibility is our own, and we must meet the demand upon us. Past suffering and loss, present conditions, and future dangers and prospects admonish us that longer delay or indifference is impracticable and dangerous. Upon the medical profession largely depends the initiative, and we trust we shall make it like true men. Not till we shall have done our duty can we claim immunity from the obligation which our callings lays upon us. Let the educational propaganda begin now, and when public conscience shall have been aroused, we have no fear that proper and efficient legislation will soon follow. In this republic the people usually get what they really need, and the necessity is so great, the danger so apparent, that speedy action will follow information. Who will join the hosts to fight to the death this great Black Plague, that is casting its shadow over this whole land?

ETHER ANAESTHESIA.

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I believe that the sign most to be depended upon as indicating the effects of anaesthetics is found in the color of the face. The color tone quickly responds to the varying effects of the anaesthetic and is easily noticeable before the heart's action perceptibly records the change, and so by keeping careful observation, impending danger may be foreseen, and perplexing delays or even more serious consequences averted.

The slightest change in color should be noted. A dusky hue which indicates insufficient oxygen should be met by immediate removal of the mask until return of normal color tone. If this precaution be delayed, asphyxiation may soon follow.

In giving expression here to some thoughts upon the use of anaesthetics I wish to confine my remarks principally to some points of technique which may seem trivial when considered in detail, but are really quite important when results are taken into account.

Though some high authorities take the contrary view, I believe that the danger re-

sulting from the use of chloroform may be of such serious character as regards the immediate as well as remote effects, as to preclude its general use. There arise occasions when ether causes an excessive secretion which clogs the air passages and endangers the patient's welfare; a change to chloroform at such times will have a happy effect. There will also be rare instances when for other reasons chloroform will be preferred, but they need not be considered here. My remarks shall therefore refer to the use of ether.

When administered by a conscientious person, whom nature, study and experience have peculiarly fitted to do the work, I feel impressed that the dangers resulting from the use of ether are not extensive.

It seems to me that the one who is to reach the highest degree of efficiency in the work must be kind, sensitive and sympathetic, able as it were to put himself in the place of the nervous and intimidated patient.

There are few people who approach the operating room undisturbed. The dread feeling of having to be rendered unconscious, is oftentimes greater than that of the surgical operation, and the additional shock which this causes is a matter to be taken into account in the management of the case. A word from the surgeon regarding the skill of the anaesthetist will serve well in imparting that degree of confidence which is so helpful at this time, allaying fear and thus inducing more ready submission.

The results of the drop method are so satisfactory that one has but to try it to be convinced of its superiority over any other plan. It is much less objectionable to the patient, the desired effect is more quickly secured and the danger greatly reduced.

The ether may be dropped from the can through a small hole into which has been placed a pledget of gauze so adjusted as to regulate the amount dropped, a counter opening being made in the can to admit air.

The amount of anaesthetic used in a given case need not be considered. What is wanted and what must be secured is effect, whether reached by large or small amounts, the greatest care being, at all times, observed in keeping the amount at a minimum. A nicety of apportionment is re-

quired to maintain that degree of anaesthesia which is neither greater nor less than the desired surgical degree. It is the pride of the anaesthetist and the strongest evidence of his skill, to keep the subject from start to finish evenly under. Each person is a law unto himself and the rate of administration must be determined within the short period of time elapsing between commencing the anaesthetic and the beginning of the operator's work. It is very gratifying to see the patient go quietly under as though in natural slumber, and so continue throughout a tedious surgical ordeal. This ideal condition can only be secured by a minimum amount of anaesthetic, as more than this will produce the noisy breathing of more profound narcosis. Upon the acquirement of the faculty of adjustment must depend success.

It is not only upon the operating table that the ill effects of an over dose of anaesthetics are seen. The bad consequences are perhaps more often reserved for a more remote period, the serious effects being sometimes attributed to surgery.

Embarrassing though it be, I should rather have an occasional slight awakening than make such a thing impossible by using an excessive quantity of anaesthetic. It is true that we thus may call forth from the operator impatient ejaculations, but better cover all with a cloak of charity ever remembering his responsibilities and cares. Our first duty is to the charge at hand, serving which we are also serving him to best advantage.

Covering the entire face with large and heavy folds of gauze, which is practiced by some, I consider objectionable for the reason that it shuts out the air and does not permit the easy observation of the face which the lighter mask permits.

The administration of morphia and atropia a little while before beginning the anaesthetic, I have found a very important factor in the satisfactory use of ether. I would insist upon its almost invariable use. A very important effect is the control of the secretions which greatly decreases the liability to cyanosis and asphyxiation, by keeping the air passages clear and thus permitting a greater amount of air to reach the air cells. The exhilaration, as well as the general feeling of comfort which fol-

lows the taking of the drugs, tend to render the patient courageous and more indifferent to the trying situation.

In beginning ether instead of placing the mask at once upon the patient's face, it should be held well above the face, dropping sparingly at first, or until he becomes somewhat accustomed and reassured, when the mask may be gradually lowered and the amount of ether so increased as to quickly bring about the desired effect, and this will usually be accomplished without struggle or noisy demonstration, and I am convinced that the patient does better all through the period. Very seldom does it become necessary to use restraint in maintaining the proper position on the carriage, the patient continuing in good condition throughout long and trying surgical work. On the other hand, when greatly pressed I have been persuaded, in an attempt to save time, to force the anaesthetic upon the unwilling and resistant subject, only to regret it, because of apparent evil effects continuing all through the seance, and I have usually observed that time was lost rather than saved, an exemplification of the old adage, "more haste less speed." At such times I have found it hard to get and maintain that balance so easily accomplished under different management.

I want to emphasize the importance of gaining the patient's confidence, and I think I can do so forcibly, by giving a case to the point.

A woman who had been subjected to an operation at an institution outside the city, came here for a second operation. Upon approaching her with inhaler and can, she threw aloft her hands in dismay, crying "I cannot take that awful stuff again, I know I shall be killed, I can't, I can't." "Be quiet, madam, and tell me when you took an anaesthetic before." "Eight months ago, and I cannot! O, I cannot stand it again. It chokes me so I will not take it!"

All the while she was tossing about on the carriage in great mental agony and fear.

"My dear woman, you have my sympathy, now please be calm, just for a moment while I tell you something. I do not know anything about your other experience, excepting what you have told me, but I want to impress upon you this fact, your other

experience has nothing to do with this one, and though you suffered much then, I want to assure you that you will not suffer now. Pay strict attention and do just what I tell you to do. I am going to put a few drops of ether upon this mask and let you hold it in your own hands, and put yourself to sleep, surely you will not choke yourself. Hold it just as close to your face as you can comfortably, bearing in mind that the sooner you get to sleep the better. I shall watch you carefully, so be assured that no harm shall come to you." "O, how kind. How different from the other time."

After a little while, having perfectly gained her confidence, I added ether in increasing quantities and within a few minutes was pleased to see the mask fall from her hands as she, with smile still lingering, dropped into blessed unconsciousness.

This is not an isolated instance, as any one who has had much work along this line must know. In this particular case the patient graphically described her first experience and forcibly illustrated the difference between the two methods.

After partial unconsciousness, the ether may be quite freely given until the desired degree of narcosis be obtained. It may thereafter be stopped from time to time, for brief intervals. This will allow a little fresh air to enter the lungs and thus the anaesthetic may be more safely prolonged than when a perpetual dropping be practiced. The greatest care must be observed in regulating the intervals to avoid awakening.

The closest scrutiny should be kept upon the breathing. Practically every respiration should be heard by the anaesthetist. Surely with the manifold character of his duties he has not much time to devote to the work of the surgeon. Upon occasions after having a series of cases, I have been embarrassed on account of inability to immediately answer an inquiry as to what the various operations had been for, my attention having been so completely absorbed in my particular part of the work as to make me in a measure oblivious of other things. It is important, however, that the progress of the operation be watched to the extent that any condition bearing upon the anaesthesia may be noted.

As each passing year shows increasing

necessity for greater skill in the use of anaesthetics, more careful study is given the subject and a greater tendency to specialize is being manifested. Whether or not it is of equal importance with the work of the surgeon, as some have said, it is at any rate quite probable that first class anaesthetists are not more numerous than are competent surgeons. Surgeons realizing the sense of relief and security thus afforded, are demanding those specially trained to do the work.

Keeping pace with general progress, the ill effects of anaesthesia should decrease, and may we not hope for the speedy coming of the time when the mortality tables shall be void of material from the hands of the anaesthetist?

The foregoing is based on an experience of between five and six hundred cases in the practice of Dr. Frank L. Hupp, of this city, besides quite a number in the work of other surgeons.

ADENOIDS.

P. L. Gordon, M.D., Charleston, W. Va.

*(Read at Annual Meeting of State Medical Ass'n.
Parkersburg, Oct., 1910.)*

It is with no idea of offering anything new on the subject, but with the hope that I may awaken more interest in this very frequent, and ofttime uncomfortable, even serious condition, to which childhood and infancy are so frequently heir, that I have prepared this paper.

Definition.—Adenoid is a hypertrophy of the glandular tissue which normally exists in the vault of the pharynx, and which is sometimes termed "pharyngeal or third tonsil." The term adenoid vegetation was given to them by Wilhelm Meyer, a Danish surgeon, who first thoroughly studied and described them in 1868, and since his time has been recognized as being the most common cause of mouth breathing in children.

The tumors have a broad attachment, sometimes more to the post pharyngeal vault, and sometimes more to the roof. In infancy the growths are soft, vascular and spongy; in older children they become firm, dense, and more fibrous. Adenoids are as-

sociated with hypertrophy of the faucial tonsil in about one-third the cases.

Etiology.—Adenoids are frequently associated with "status lymphaticus." They are the most marked manifestation of the condition, however, as a rule. Frequently every one of a large family of children is found affected, and often the parents have suffered from the same disease. There seems to be no doubt that heredity plays an important part in the production of adenoids. In many cases they are congenital. Kyle holds that the so-called inherited tendency to adenoids is frequently found in the inherited family nose; the hypertrophy of the glands in the naso pharynx being more common in children whose nostrils have a narrow slit like orifice, than in those whose nostrils are wide. Rachitic children are somewhat more often affected than others, but no connection with syphilis has been traced. (Holt.)

In the relation of adenoid growths to tuberculosis, in a collection of 945 cases by Lewin, in which specimens of adenoids were examined, tuberculosis was present in 5 per cent. One writer says, "Although it occurs with marked frequency in children who suffer from tuberculosis or syphilitic taint, it is nevertheless seen in children of healthy parents, and it would seem more rational to consider its presence in children who had inherited syphilis or tuberculosis, as a result of the anaemia attendant upon these conditions, rather than as a manifestation of the inherited disease." Adenoids are most frequent in a damp changeable climate. Their first symptoms often follow an attack of measles, scarlet fever, or diphtheria. Repeated head colds are more often a result than a cause of adenoids.

Pathology.—Adenoid vegetation in the naso pharynx is generally composed of a mass of hypertrophied lymphoid glandular tissue, covered with epithelium. Further down in the structure, there are ramifying trabeculae of connective tissue with lymphoid cells lying between them. The proportion of lymphoid to connective tissue varies greatly in different specimens. In the very young children who have not been subjected to repeated inflammatory attacks, or congestion of the tissues, the structure is soft and the glandular lymphoid element predominates.

In older patients the vegetations have been the site of various local congestions and inflammatory changes, which have resulted in the deposit of inflammatory material with overgrowth of connective tissue, and consequent hardening of the structure. The surfaces of these growths are generally markedly lobulated or mamillated. The enlargement of the glands in the nasopharynx is frequently accompanied by hypertrophy of the glandular structures which pass down from the naso pharynx in the sides of the pharyngeal walls. These glands have the same structure as those higher up in the naso pharynx, their enlargement is a part of the same process, and they generally disappear after removal of the latter.

Symptoms.—They may be many and varied, or they may be so slight that the condition is not even anticipated. They may appear shortly after birth, but they usually come on about the eighteenth month. The symptoms usually increase in severity as age advances, being always better in the summer months, and worse in the winter, until the age of six or seven is reached or older. The following list of symptoms is taken from Samuel W. Kelley's book on Surgical Diseases in Childhood.

Symptoms and effects fairly attributable in whole or in part to post nasal vegetation, are obstructed breathing, mucous or mucopurulent discharge from the nostrils or into the pharynx, altered speech, mouth breathing, snoring, disturbed sleep, difficult suckling in infants, partial deafness, catarrh of Eustachian tube, otitis media catarrhal and suppurative, deficient oxygenation of the blood, alteration of the contour of the face, deformities of the chest, impaired cerebral circulation and consequent development, loss of memory, stunted growth, croup and laryngismus, asthma, stammering, local or general convulsions, torticollis, altered voice and articulation, deaf mutism, irritable pharynx, capricious appetite, palpitation of the heart, headache, drowsiness, sullen disposition, retarded dentition, retarded puberty, high arching of the palate with narrowing of the nostrils. Not that all these signs and symptoms are present in all cases, or in any one case. Any one or all may be absent, and yet adenoids be present.

The alterations in the facial appearance of a case of long standing, are a dull vacant look, with mouth open and eyes staring, nostrils narrow, bridge of nose wide, eyes seeming wide apart, and the jaws elongated and flattened over the malar bones. Palate high and narrow, and the dental arch too small to accommodate the teeth which crowd and overlap. The type of thorax is that commonly called "hollow chested and stooped shouldered." Its antero posterior measurement is small. The angle of the scapula points backward and the clavicle is very much S curved, thus bringing the shoulders prominently forward. The sternum is often lowered with relation to the vertebrae, and upper dorsal and cervical spine curved forward. The ribs drop suddenly from their spinal attachment obliterating the intercostal spaces posteriorly, but curving upward to the sternum, the spaces are widened in front.

Diagnosis.—The diagnosis, usually very easy, inspection often being sufficient, but if in doubt digital examination of the pharyngeal vault will clear it up.

Treatment.—The only satisfactory treatment is clean removal, preferably with an adenoid curette. In respect to the use of an anaesthetic, if the condition of the patient will admit it, and the proper assistance is at hand, it is advisable; but in the case of a very young child or a baby, where the above mentioned condition and assistance are absent, remove without anaesthetic. Very often parents object if the child is very young, thinking that an anaesthetic is too dangerous; in such an event I advise them to allow crushing with the finger, as this appeals to them as being less painful than the curette and the anaesthetic not being necessary, and in very young children where the mass has not become hardened through repeated inflammatory changes as in older children, it very often answers the purpose satisfactorily, but where the mass has become hardened through the formation of connective tissue, nothing but the sharp curette will answer the purpose. In respect to the return of the vegetations, there seems to be a greater tendency to do so if removed before the third year, men of large experience say, in this class of work. Local application of some antiseptic or astringent should be made to the denuded

surface twice a week for two or three weeks after removal.

I would like very much to see a public school health bureau established by our State. I shall not attempt to define what the duties of such a department in the State government would be, except that it should be managed by broad, fair-minded men, irrespective of any political party that happens to be in power, and that the health of the school boy and girl should be the objective point. The physician or physicians for this class of work should be well versed in all ailments peculiar to childhood. In many of the large cities of our country they have physicians for this work, and in some of the smaller ones also, but in many of them it is not up to the standard that it should be. It is not so much the city boy or girl that I have in mind, as it is the country one. In the former there are the free dispensaries in many instances where they may go and be treated when money is an object with the parents; and if not the dispensary they have easy access to men who are doing work along these lines, men whom I know do it as cheerfully as though they were getting their regular fee. But how about the ones in the country? Not that the country physician is not just as well up as his city brother, but he has not the time as a rule nor the necessary assistance to give to and correct these seemingly slight troubles as they deserve. The title of my paper would seem to imply that I would like to see the State create a department solely for the purpose of correcting the evils due to adenoids alone. I assure you, though, that such is not the case, for while adenoids, I believe, form a very large percentage of the causes that go to make the existence of so many children uncomfortable, there are of course other causes too numerous to mention. I believe that our institutions for the criminal young are inhabited by not a few who have suffered from this disease in their childhood. Take a child with this trouble; he is unable to breathe properly, his hearing becomes impaired, mouth and throat dry and irritable, his sleep is disturbed and he does not get the proper amount; he wakes tired and stupid and most assuredly not ready for the day ahead of him. Such a child is not able to concentrate his mind and ener-

gies on the subject in hand, consequently he is in a class at school the members of which are much younger than himself; and this fact he is not allowed to forget by either his classmates and ofttime his teacher and parents as well; the former taunt him with the fact that he is in a class, the members of which are much younger than himself, and the latter by their anxiety to have him succeed.

Is it any wonder that he finally becomes discouraged and decides that he is unable to learn anything; and being tired of the constant nagging, thinks he had as well get rid of some of his troubles, usually begins by playing hooky and then goes from bad to worse.

A word in closing. After having gone over your patient carefully and not having located the cause of his condition, then feel the neck at the angle of the jaw and towards the cervical spine, and if the lymphatic glands are enlarged and feel like a pea or bean beneath the skin look into the throat. You will more than likely find either adenoids, enlarged tonsils, or some catarrhal condition of the naso pharynx.

THE DIAGNOSIS AND TREATMENT OF LOCOMOTOR ATAXIA AND OTHER LATE MANIFESTATIONS OF SYPHILIS OF THE NERVOLS SYSTEM.

By Tom A. Williams, M.B., C.M., Edin.,
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(Abstract of Lecture to W. Va. State Medical Ass'n, October, 1910.)

These illustrations showed that the degeneration of the posterior columns of the spiral cord is only secondary. The initial lesion is a diffuse, low-grade meningitis, as evidenced by an exudate of small, round cells of different types. Some of these escape into the arachnoid space and pro-

duce a lymphocytosis of the cerebro-spinal fluid. This is easily detected during life by the lumbar puncture of the meninges. Where the meninges are reflected upon the outgoing spinal roots they form a canal around these; here the inflammation, perineural and endoneural, implicates the nerve fibres themselves and causes interference later with their function, and later still their alteration and destruction. Before this is complete, however, the exudate may be absorbed and the process pass elsewhere. If the fibrinous exudate is not too massive, function may be resumed unless secondary degeneration of the fibers within the spinal cord has occurred. These cannot regenerate, possessing no neurilemma.

But the anterior roots regenerate effectively, being separated from their trophic center by fibers without neurilemma. This accounts in part for the relative rarity of muscular atrophies in locomotor ataxia. The trophic symptoms are due to the involvement in the focus of radiculitis of the rami communicantes as these pass in and out by the spinal roots.

All these are now proved facts, which we owe to the researches of Nageotts. The process is historically a granuloma, indistinguishable from syphilis. The etiology of the disease corroborates this finding, as do results of the test first devised by Wasserman on the Bor-Geudegon principle of complement deviation. Indeed, a meningitis accompanied by lymphocytosis and often complicated by passing paralysis, more especially of cranial nerves, frequently occurs in secondary syphilis.

The influence of proper and antiluetic treatment upon the radiculitis now admits of no doubt; and more and more cases are being reported that remove tabes dorsalis from the realm of therapeutic pessimism, in which it was formerly placed. Before commencing specific treatment the physician's diagnosis must be accurate enough to exclude neuritis, cerebellar disease, mixed sclerosis of the spinal cord, diffuse cerebral sclerosis and alcoholic pseudo-tabes of other than peripheral type, any of which it is not hard to confuse with true tabes dorsalis.

The Diagnosis.—It is important that this

be made early, for no regeneration of destroyed spinal paths can occur. When ataxia has occurred, all that is left for the patient is to learn the co-ordination of the impulses arriving by the paths which remain. Hence, the disease *must* be diagnosed before ataxia occurs. The radiculitis of locomotor ataxia generally commences in the lower roots, and usually causes an early loss of the reflexes which pass by those roots. These are the Achilles jerk, the bulbo-cavernosus twitch and the gluteal and plantar skin reflexes, which, however, are less apt to disappear than the others. The earliest sign may be an inequality of the two sides of one of these reflex responses. The loss of the knee jerk is usually considerably later than this; and the diagnosis should be made long before it disappears.

The Sensory Symptoms are precocious. The subjective pains may precede other symptoms for years. Their tabetic nature should be suspected (1) when they intermit, (2) when they are aggravated toward night, (3) when they predominate in the lower limbs, (4) when they are accompanied by paresthesias, especially when these become more constant. Chronic rheumatism must be excluded by the presence of joint changes. The arthropathies of tabes can be distinguished from these by the absence of tenderness. The pains of neuritis are distinguished by their exacerbation by pressure on nerve trunks, and upon their end organs by squeezing the muscle. Besides, the arms seldom escape, whereas in tabes they often do so for years. On the contrary, tabes is characterized by analgesia on deep pressure. The ulnar nerve, tendo-achilles and the testicle are convenient places for this test. Cutaneous hypaesthesia with delay may occur early. It is distributed over segments corresponding with the spinal roots, by which character it can be distinguished from peripheral nerve disease. In multiple neuritis, the loss is usually distal like a glove or stocking. The sensibility to the tuning fork is usually the earliest to be lost. Lost power of appreciating the attitude of a segment of the limb may be an early sign.

Correspondence

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Notes on the 23rd Annual Session, Dec. 13th, 14th and 15th, 1910, Nashville, Tennessee.

Dr. J. E. Cannaday, Charleston, W. Va.
Surgeon to Charleston General and
McMillan Hospitals.

As a member of this organization, which always holds its meetings in some distinctively southern city, I attended the Nashville meeting. Nashville is situated in the heart of the beautiful rolling farm lands of Central Tennessee.

At this time of year the woods and fields, while having parted with their summer greenness, have not yet been overlaid with severe frosts as in more northern latitudes, and the grays and browns and reds of the landscape are particularly pleasing. As the oldest city in the state, Nashville is as southern as one could expect and possesses all the charm of that heritage of chivalry and hospitality so dear to the heart of the southerner.

As is usual the social features of this meeting were prominent. The most interesting one of these was an auto trip to the Hermitage, the home of General Andrew Jackson, about fourteen miles out of the city on one of the splendid pikes for which the state is famous.

"Old Hickory," as he is lovingly called, made a marvelous impress on the minds of the Tennesseans. The older inhabitants of the neighborhood lovingly and proudly tell you many stories of his bravery and strength of purpose. The beautiful grounds and driveways at the Hermitage are laid out in the outline of a violin, the driveways being bordered by tall cedars, all of which show their age, the trunk of the smallest of them being not less than ten inches in diameter.

The grave of General Jackson is as simple and unassuming as the man who was buried in it. It is marked by a plain monument overhung by four beautiful magnolia

trees. There is no epitaph such as one expects to see attached to the name of one of the great ones of the earth, only the name Andrew Jackson with the dates of his birth and death. The general himself wrote a beautiful epitaph to his wife. It is a tender and touching tribute which could only come from the sweet and lovable side of a strong and selfwilled nature such as his.

The Hermitage, which is cared for by an association of ladies, is preserved intact, as nearly as possible as it was during the life of its owner. General Jackson's bed-room, with its high four-poster bed and its abbreviated step ladder for getting into the same, the large open fire place, his hat, dressing-gown and slippers, look as just made ready for the occupant to retire.

The most beautiful room in the house is that of Lafayette, who spent a long time visiting the Hermitage. After the crowd had inspected this beautiful old colonial home, had drunk limestone water from the spring and punch from the kitchen, Dr. John A. Witherspoon, of Nashville, delivered an address on Andrew Jackson.

As is always the case when a man has a message and is really full of it, he rose to the heights of eloquence and held his listeners in rapt attention for nearly an hour. He sketched briefly and rapidly the most striking and dramatic incidents of the former president's career, and showed both him and the country that he loved, in the making.

While old Hickory was implacable and severe and usually stood by his guns to the end, nearly if not always it will be found that he was in the right and had excellent reasons for pursuing the course he had selected. The cottage of his body servant, Uncle Andrew, still stands just back of the colonial mansion. A story is told of Uncle Andrew which illustrates the general character of Jackson, at least in the eyes of his body servant. Some time after General Jackson's death some one said: "Uncle Andrew, do you believe General Jackson is in heaven?" "Why certainly, boss," was the reply. "Why do you think so, Uncle Andrew?" "'Cause if he wants to go there who's going to stop him?"

Among the interesting curiosities shown

is the coach in which General Jackson made not less than four trips from Nashville to Washington. The journey occupying thirty days. Nashville having been the seat of government of Tennessee since 1826, is full of places of historic interest. It is quite an educational center and contains, even in this day of consolidation, three medical schools, Vanderbilt, the Medical Department of the University of Nashville, and Meharry Medical College for the medical education of the colored race.

The name Hermitage is a most popular one in Nashville, and much of what is best or which aspires to be, is called by that name. They have the Hermitage hotel, laundry, department store and so on.

Dr. Geo. W. Hubbard has been the spirit behind the hospital and medical school of Meharry College. They now have a fine teaching hospital which measures up to the standard of the other hospitals in Nashville.

Meharry Medical College, while only about fifty years old, is said to be the leading medical college for negroes in the world.

On the return of the party from the Hermitage we were delightfully entertained at the home of Dr. M. C. McGannon, an enterprising Canadian-Scotchman, who has become one of Nashville's foremost surgeons. The last day of the meeting the association was tendered a luncheon by Dr. W. D. Haggard, who has been secretary of the association for many years. The scientific part of the program having been finished in the forenoon, the assembled guests remained in the dining room long after the luncheon was over, and there was a delightful series of spontaneous responses from different members.

There were ten vacancies in the membership caused by death or resignation, all of which were promptly filled by the council from the long waiting list. Washington, D. C., was selected as the next meeting place.

The address of the president, Dr. W. O. Roberts, was one of the most admirable efforts of its kind the writer has had the pleasure of hearing. No matter how cultured the audience, as a rule it cares but little for an address dealing with abstruse

things, but the address of the retiring president was a literary treat such as is seldom heard. He dealt with the names and deeds of many of the most famous pioneers in surgery in the south. Among them were: Brashear, McDowell, Dudley, Eve, McGuire, McCleary, Stone, Yandell, Gross, Drake, Nathan Smith, Benj. Rush and Marion Sims.

Dr. Roberts began his address by speaking of the destruction by lightning several times over of the statue of Henry Clay at Lexington, and said that neither the thunderbolts of heaven nor the shafts of Jove could ever shake, paralyze or pulverize the eternal name and fame of Henry Clay. His address was for the most part strictly confined to the subject, Southern Surgeons and Surgery before, during and after the Civil War. I quote his address in part:

I have chosen to set before you tonight the names of some of the masters in surgery, without whose work the work of most of us would not have been done. Therefore, I shall attempt in a humble way the role of historian and biographer. For what is said of men, whether it be true or false, occupies as much space in their life, and especially in their destiny, as what they do.

In the annals of the first half of the nineteenth century four great and original names appear. They stand like snow-crowned peaks among the lesser mountains and hills, resplendent in the sunset. These men all did original and some epoch-making, work. Their deeds were done chiefly in Kentucky. Their names are Brashear, McDowell, McCreary and Dudley. They hold first rank among the pioneers of American surgery.

In 1806 Walter Brashear, of Bardstown, Ky., did the first hip joint amputation performed in America. Kerr, of North Hampton, England, in 1774, did the first, and the second was done by Baron Larrey, in 1793. It is safe to say that Brashear had no knowledge of these operations.

In 1809 Ephraim McDowell, of Danville, Ky., did the first ovariectomy, writing his name so high in the temple of surgical fame that time shall not tear it down.

In 1813, Dr. Charles McCreary, of Hartford, Ohio county, Ky., did the first com-

plete extirpation of the clavicle. The disease for which the operation was done was said to have been scrofulous. Recovery was slow but complete, and the use of the arm remained good.

DR. B. W. DUDLEY.

Another pioneer in southern surgery is Dr. Benj. Winslow Dudley. He was born in Spottsylvania county, Va., April 25th, 1785. His family settled in Lexington, Ky., when the child was but one year old. He died in 1870 at the age of 85. He studied at the great schools of Paris and London, returning to Lexington in 1814, where he began a career almost unprecedented in the annals of surgery. His name and fame are the property of all, and it is not too much to say that hereafter, as up to the present time, no treatise of surgery will discuss lithotomy without mention of his name.

These illustrious men were, as I have said, the pioneers of surgery in the south, particularly in Kentucky; but their labors closed with the middle of the early years of the first half of the nineteenth century.

Succeeding them were a goodly number of young surgeons, some of whom during our Civil War pursued their calling in one or the other of the great armies engaged in that conflict. Prominent among them were Hunter McGuire, Bedford Brown, J. McFadden Gaston, Tobias G. Richardson, Paul F. Eve, W. T. Briggs, Warren Stone, John T. Hodgen, Willis F. Westmoreland, H. H. Mudd, Samuel D. Gross, W. W. Dawson, P. S. Carson, J. Marion Sims, Robert Battey, David W. Yandell, J. Billings, Claudius H. Mastin, A. W. Smyth, Josiah C. Nott and Crawford Long.

They were all accomplished physicians as well as able surgeons, and with wonderful industry, learning and art practiced successfully medicine in its three great specialties, as laid down by Hippocrates—to-wit, medicine, obstetrics and surgery.

Roberts, in his presidential address, said that Gross's famous Surgery went through six editions and was recognized the world over. He was easily the Hippocrates of modern medicine.

David Yandell had a rich and oratorical literary style. He was the first to establish clinical teaching in the West and did so in

1859. Dr. Roberts said that J. Marion Sims and Ephraim McDowell did more for the relief of suffering women than any two surgeons that ever lived.

Paul F. Eve was the first American surgeon to do the operation of hysterectomy. Dr. W. T. Briggs was one of the founders of the American Surgical Association and owed his success to a surgical failure in a case of fractured thigh. This drove him from the town of Bowling Green, Ky.

Gross' famous book on Surgery when published was the result of forty-two years of hard work and teaching. Dr. Roberts, himself, is something of a pioneer in American surgery, and was the first American surgeon to successfully treat a punctured wound of the intestine.

DR. MARION SIMS.

The greatest of all American specialists, the most original and creative, was Dr. J. Marion Sims, of Alabama. To him, our first president, the late Dr. W. D. Haggard, pays the following glowing tribute:

I know you will sustain me when I claim that gynecic surgery, with all its brilliant achievements, owes its present exalted position to the illustrious Sims, no less than abdominal surgery owes its origin to the world-renowned McDowell.

They conferred on America the honor of being the birth-place of Gynecology, and did more to alleviate the sufferings, restore the health, and prolong the lives of women than any two men living or dead.

Another great southern surgeon and pioneer specialist was Dr. Paul F. Eve, of Nashville, Tenn., whose achievements in daring and original work illustrate his inventive faculty, his knowledge of anatomy, his faith in the principles of surgery, his belief in himself, and his consummate skill. W. T. Briggs, of Nashville, Tenn., is another name of note.

FAMOUS SURGEONS.

Dr. Roberts then took up and devoted the greater part of his address to the histories of the famous surgeons. Hunter Holmes McGuire, Samuel D. Gross and David Wendell Yandell.

He concluded as follows:

Encomiums upon the lives and characters of the worthies I have here named would be superfluous, were it not that calling up

afresh from time to time the doings of such may tend to preserve their names and perpetuate their fame. Many who live to-day know personally the worth of some of them, and will leave traditions of their lives and work as a heritage to their children. But medical books and authors are short lived and doomed to oblivion. A man's name, however, may be preserved for many years through foot notes in books pertaining to his calling, or some disease or operation which he discovered or devised, and was made to stand sponsor for. But, while philosophers, poets, heroes and conquerors have place among the few, the immortal names that were not born to die, it is doubtful if even the eminent physician or surgeon will have any secure hold upon posthumous fame. His memorials may have been trusted to a book that has long since gone the way of fools to dusty death, a paper or a chapter in a tome long forgotten, or a paragraph in a cyclopedia which, in time, some too discriminating editor may deem it his duty to scratch.

"*Sic transit gloria mundi*" is true of the individual as of the world. These our noble predecessors, with perhaps two or three exceptions, will descend into the limbo of all but the elected few; but they have the *monumentum aere perennius* in their work, which is a priceless heritage to us all, and shall go down through the generations to the end of time, prolonging the life and the promoting the happiness of man.

At the luncheon given the last day, Thursday, Dr. R. M. Cunningham, ex-Governor of Alabama, who was one of the founders of the organization (there are now only eleven others alive), made an interesting address on the subject of the early history of the association. The southern surgical and gynecological association is one of the most exclusive associations of surgeons in America. Contrary to the suggestion of its name, its membership is not confined to the south, but has general representation from nearly every state in the Union. The membership is limited to two hundred, is always full and at present there is a waiting list of more than forty applicants for membership. Out of the total membership of 200 there were 86 in attend-

ance at the meeting. It was the largest meeting of the association. One of the rules of the society is that if a member is absent from three successive meetings his name will be dropped from the roll.

While the waiting list of this society is large, when a vacancy occurs new members are elected rather on their merits than by the usual method of taking them in their turn.

The elder Dr. W. D. Haggard, of Nashville, was the first president of the Southern Surgical Association, which was organized at a meeting in Birmingham, Ala., in 1888. At the next meeting he was succeeded by Dr. Hunter McGuire. The membership is now widely scattered, and while a few of the states in the Union are unrepresented, New York has nine, Illinois six, Indiana two, Florida two, and so on.

Dr. Rudolph Matas, of New Orleans, was elected president. He is an able illustration of the opportunities open to every American citizen, provided that he has that combination of intellect plus rightly applied energy which constitutes genius. Dr. Matas is of Creole descent and was born at Brownsville, Texas. For many years he has been the surgeon-in-chief to the great Charity Hospital connected with Tulane University.

USE OF ANESTHETICS IN OFFICE PRACTICE.—Dr. W. W. Vinnedge of Lafayette, Ind., has an excellent paper in *The Indianapolis Medical Journal* for September, 1910. The following is an abstract: Antiseptic surgery has during the past two or three decades increased the number of operations and consequently the number of deaths from anesthetics. In 1866 in England the coroners reported only five deaths from anesthetics, while in 1905 there were as many as 155 deaths and for 1908 there were 235 deaths.

A distinction should be made between deaths from anesthesia and deaths under anesthesia. A patient may die from the agent, from hemorrhage, from surgical shock, or a combination of these, and from other causes. There is a diversity of opinion as to choice of anesthetic, also as to the depth to which anesthesia should be carried: The person who administers the anesthetic should be well trained theoretically and practically. Since Albee McGraw has published a series of 15,000 etherizations by the drop method, without a death, this technique has come into extended use. The use of oxygen increases the value of all anesthetics, as regards life. The writer then gives in detail four cases in which patients died under anesthesia while undergoing simple operations or examinations, all of which occurred in Lafayette, Indiana. G. D. L.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor*.

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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Editorial

WANTED.

The following numbers of the Journal are missing from our files. As we have frequent calls for back numbers, we will be under obligations to any of our members who will send any or all of the above issues to us. They are especially desired for the Historical Department of the State Government at Charleston: Nos. 4, 7, and 11 of Vol. 2, No. 11 of Vol. 4, No. 4 of Vol. 5, and No. 7 of Vol. 6.

SALVARSAN-EHRLICH.

The name Salvarsan seems to be the one by which the Ehrlich-Hatta new remedy for syphilis is to be hereafter known to the profession. It is most unfortunate that the term "606" was ever used, for under this name it has been heralded to the public through lay magazines and newspapers until it is known by every reader of current literature, and is thus bound to

be abused. The quacks and impostors are already exploiting it and promising wonderful cures, with little knowledge of either the nature of the remedy or the disease which it is to cure. We have had a letter from a layman in an interior county wanting the new remedy tried on himself. Two examinations of the man, with close inquiry into his personal history, have convinced us that he has never had syphilis, but he has the phobia and wants "606," and some dishonest impostor will get his money.

What good has the new remedy done? Nearly all reports from those who have had large experience with it are most encouraging. There are few better authorities than Neisser, whose report we here give:

"Visible symptoms in practically all of the cases disappear. Primary lesions soften. Macules and papules, even the otherwise so resistant micropapular syphilides, pale and become simple spots of pigment. Plaques disappear. Spirochaetae in primary lesions and mucous patches can often no longer be found after twenty-four hours. Large hard glands become soft and small. Gummata soften and lose their painfulness. The ulcers of tertiary and malignant syphilis cleanse themselves in a few days and rapidly epithelialize. The paralytic symptoms and the pain in cerebral syphilis recede in the course of days, sometimes even hours. It seems also to be effective upon the pathologic process itself. I thought it impossible that inflammatory infiltration could be resorbed so quickly. Its action overshadows the best results that we have yet seen with mercury and iodides."

Many reports confirm this one, and the remedy seems to have caused the disappearance of symptoms in very aggravated cases that had resisted the free use of mercury and iodine. Not all reports, however, are so jubilant.

Gottheil of New York, after its use in 38 cases, 25 of which were closely observed for a considerable time, states that the remedy is especially useful in early cases with mucous lesions. In some cases he found it better and in others not so good as mercury, its action being slower and less certain, failing altogether in a few.

Bouchard is said to be "decidedly hostile" to the claims made on behalf of the new remedy. It may be safely said of this, as of most new remedies that are enthusiastically received, that the results first proclaimed, while truly remarkable, are not so uniformly favorable as at first believed,

and many disappointments are bound to be met with.

Further than this, let it be speedily impressed upon the general practitioner especially, that this new remedy is a very powerful one, and its careless and improper administration is attended with very considerable danger. In our reading of the recent literature of the subject we have collected this list of untoward symptoms following its use, even in the hands of skilled specialists: Severe pain at site of injection, nausea, vomiting sometimes bloody, fever, chill (common), skin eruptions of various kinds, profuse perspiration, collapse, intense abdominal pain, pain and swelling of joints, weakness of legs, pain in testicles, palpitation of heart, bradycardia, tachycardia, pain amounting to anguish about the heart, dyspnea, headache, vertigo, epileptiform attacks, transitory blindness, albumen in urine, sugar in urine, diminution of urine, retention of urine (in one case requiring catheterization for 11 days), vesical and rectal tenesmus, diarrhea, obstinate constipation, loss of patellar, Achilles, abdominal and cremasteric reflexes, death.

Up to the present time at least twelve deaths from this remedy have been reported. Various explanations for these deaths have been given. Some of them have been of children, others of persons in impaired health; but the fact remains that the remedy is a potent one, containing a large proportion of arsenic, and that experience has not yet exactly determined its effects, nor the dose suitable in different conditions, nor the interval of dosage that may be necessary to secure safely the best results.

Ehrlich himself has taught that the remedy is contraindicated in severe cerebral disease, with advanced degenerative processes of the central nervous system, arteriosclerosis, optic nerve changes, disease of the retina, angina or functional heart disease. Others name anemia, severe cachexia and other serious systemic derangements as contraindications.

A number of careful observers insist that every patient receiving an injection of salvarsan should be in a hospital where he may remain quiet under observation for a number of days.

Various doses have been given, but it is now supplied by pharmacists in proper

doses and ready for administration. It is thought by some that the remedy should be injected immediately after its preparation. But it is probable that it may stand for some hours after preparation without any deleterious result. If preserved in closed sterilized tubes it may doubtless be kept in suspension for an indefinite time.

As to permanency of cure or improvement after the use of salvarsan, the profession is not yet in a position to give definite answer. The remedy has been in use for less than eighteen months, and in the vast number of cases for a much shorter period than this. We have symptoms of syphilis appearing after a thorough treatment by our best known remedies; and even when patients have been under observation and proper treatment for years, tabes and other late nervous manifestations are by no means rare. Years of trial of the new remedy will be necessary in order to determine its exact status. Already observers are reporting relapses after marked improvement has been shown. One such report comes to us by private letter from a highly competent observer in the East. Others have appeared in the Journals.

Nor can we yet say that the use of this arsenical preparation is not to be followed by more or less permanent damage to the system. It is not unreasonable to suppose, or at least to fear, that a remedy so potent for good may also be potent for harm at least in exceptional cases.

Since we early called editorial attention to the wonderful results that were reported by the clinicians of Germany as following even a single injection of "606," we deem it our duty, since a much larger experience has shed greater light upon the subject, now to point out its limitations and its potency for evil, that our readers who may lack other sources of early information may know that salvarsan can not be trifled with, but must be used in proper doses properly prepared, in patients in proper physical condition with proper environment, and who must receive proper after attention.

S. L. J.

ENCOURAGING.

The following from the *N. J. Ass'n Journal* indicates what we may expect when it becomes known that the profession is a

unit in defending its members against fraudulent malpractice suits:

MEDICAL DEFENSE.

It gives us great pleasure to announce that under the system of Medical Defense of the members of the Medical Society of New Jersey, we have been successful in the first case undertaken by the society. The suit for malpractice brought against Dr. John H. Bradshaw, of Orange, and Dr. Arthur W. Bingham, of East Orange, jointly, last year, was postponed by the plaintiff from time to time, several offers of compromise having been made in the meanwhile by the plaintiff, at a very much reduced amount from that first claimed, but all compromise was declined, and recently the suit was withdrawn.

Another suit has recently been begun for malpractice against Dr. Charles W. Cropper, of Jersey City, and the society, through the councillors, the trustees co-operating, are defending Dr. Cropper. There will be no compromise entertained by our society in this case, and we confidently expect another victory.

Our readers will note, in our advertising pages, that Salvarsan (606) can now be had at Max Woche's Son & Co.'s, Cincinnati; also all the instruments needed in its use. The John Coleman Co., Wheeling, also supply the new remedy.

PATRONIZE OUR ADVERTISERS.

ON THE CARE OF THE INEBRIATE IN PRIVATE PRACTICE.

It is a mistake to call inebriety a disease. It is a state resulting from diseased conditions. It is true that these may be a psychic state; but they may occur also as a physical state due to metabolic disturbance or disorder of endocrinian glands or from some deeper physical dynamic cause.

As physicians, we must point out, and at least try to remove the *cause* of the inebriety. Only in that way shall we reach the right treatment. By proper sanitarium treatment, craving can be removed in a week; but that does not cure the man. The man must be corrected so that the physical or mental life will cease to functionate wrongly. That can be done by the general practitioner after the patient leaves a sanitarium, recovered. It is dangerous to leave him free entirely; for he requires the supervision of the physician for some months at least. The general practitioner in consultation with the neurological specialist is quite capable of efficiently advising inebriates convalescing after removal of their craving. A man can

not be easily changed in a day; and a change of heart, of viewpoint or of metabolic habit, one or more, is needed in every case. (See Psychological Bases of Inebriety, *N. Y. Med. Jour.*, 1909, April, etc.)

TOM A. WILLIAMS.

TO THE MEMBERS.

I receive many letters asking why certificates of membership are not sent. They are not sent because I have not received the county secretaries' reports. Just as soon as your name is reported you will receive your certificate. The county secretary does not report every name as it is sent in to him. It would make him a great deal of trouble and enormously increase my work. The constitution does not require him to report until April first. If for particular reason you can not wait for your certificate, take it up with your county secretary. A. P. BUTT, *Sec'y.*

AN INQUIRY AS TO "A BUGLE CALL TO DUTY."

I read in the editorial columns of the JOURNAL of the present month (February) with a great deal of perplexity, "A Bugle Call to Duty." I am not sure that I would have recognized it as "A Bugle Call" except for the heading. I read the article before the title had been impressed upon my mind, and I found myself in the predicament of Polonius in the colloquy between himself and Hamlet, wherein Hamlet inquires of him:

"*Ham.* Do you see yonder cloud that's almost in shape like a camel?"

"*Pol.* By the mass, and 't is like a camel indeed.

"*Ham.* Methinks it is like a weasel.

"*Pol.* It is backed like a weasel.

"*Ham.* Or like a whale?"

"*Pol.* Very like a whale."

I have not been able to classify this production at all to my own satisfaction. The scientific mind can take, you know, a simple demonstrated fact as a premise, and by correct reasoning and analogy build up a complete theory. A naturalist may take, for instance, a single prehistoric or fossil bone and by the same process build up a whole skeleton, and to this add, even, all the other parts of the organism.

I have given this communication the most careful investigation and study without avail. I have dissected this "Rara Avis," as I will designate it for the present, hide, entrails and bone, but have not been able to decide whether it is an ebullition of transcendentalism or a huge joke, or whether either. It is never pretended that the "Transcendental Ethics" of Kant can be understood, and the essential feature of a joke is, that its point, when reached, be instantly apparent.

In the olden time, it is said that the mountain went into labor, and after much travail and groaning, brought forth a mouse. Can it be that in this newer time the mountain has gone into labor again, and, after much travail, brought forth only a groan? There are still cases occasionally, it seems, of "phantom pregnancy."

I do not wish to be understood that I am treating this matter facetiously, nor do I presume to assume the role of critic. I only want to be enlightened. The spirit that inspires me is interrogative, that of an earnest inquirer after truth. I can not promise to write of this communication in the spirit in which it was conceived, for it is as impossible for me to imagine the circumstances of its conception as it is for me to excogitate the entity, the real ego, of the production.

"The King of France, with forty thousand men, Went up a hill, and so came down again."

Is the tendency of this paper to promote con-
 lination or disintegration? Is not the logical
 conclusion, of what seems to be the contention,
 medical disorganization and ethical nihilism?

When we are not able to make out what a
 man means by what he says, we are certainly at
 liberty to conjecture. Can it be that the article
 is intended to be an argument for the abolition
 of all ethical considerations in the profession?
 Or, if not so intended, can or will such a con-
 struction be put upon it by the average reader?

I will not quote the arguments, as that would
 occupy too much space in the writing and too
 much valuable time in the reading. I will only
 say this upon the subject of the arguments, that
 is, that I fail to see the force of the comparison,
 as drawn between the medical profession as or-
 ganized and as existing today and the Congress
 of the United States, the Parliament of England,
 the Reichstag of Germany, or the numerous profes-
 sions and businesses therein adressed, or even a
 "bloody slugging match."

I have regarded the code of ethics of the med-
 ical profession as having been founded upon justice
 and common sense. Has it not stood the test of
 years, as a rule of action, with the best and
 noblest men in the profession? Does it not
 stand today as the Aegis under which all physi-
 cians alike can stand, honored and protected?
 Does a single one of its rules require, in its ob-
 servance, anything that is not fair, and just, and
 noble, and charitable, and honorable, as between
 physician and physician, or as between physician
 and "Philistine?"

FLEMING HOWELL.

Clarksburg, W. Va.

("A Bugle Call to Duty" was intended as a
 satire. In it the writer intended by the *reductio
 ad absurdum* to pillory the attitude of mind of a
 number of physicians in our medical societies;
 and he regrets exceedingly that he failed to so
 express himself as to make clear the point of the
 joke. That he has been taken seriously by Dr.
 Howell is sufficient demonstration that satire is
 not the writer's calling, and he promises to strive
 against the temptation to indulge in it in the
 future.—C. A. W.)

FREE MEDICAL LECTURES.

At the N. Y. Skin and Cancer Hospital, 2d
 Ave. and 19th St., on Wednesdays at 4 o'clock,
 will be delivered lectures as follows: March 1st
 and 8th on Eczema; 15th and 22d, Acne; March
 29th, Psoriasis; April 5th and 12th, Syphilis, by
 Dr. Bulkley. On April 19th and 26th on Cancer
 by Dr. Bainbridge. The lectures will be abun-
 dantly illustrated by means of cases, models, col-
 ored plates, etc., and will aim at presenting the
 subjects in a practical and instructive manner.
 These lectures are free to the profession on pre-
 sentation of card.

PAUL EHRLICH.

On account of the world-wide interest taken
 in "606," our readers will naturally be glad to
 know some facts concerning its discoverer, Pro-
 fessor Paul Ehrlich. He was born on March 14,
 1854, at Strehlen, Prussian Silesia, and studied
 medicine at Breslau, Freiburg, Strassburg, and
 Leipsic, from which latter university he was
 graduated in 1878. He then became assistant at
 the university clinics in Berlin. In 1888 he was
 recognized as a Privatdozent, became, in 1890,
 assistant to Koch at the Institution for Infectious
 Diseases, and a year later, in 1891, was
 appointed assistant professor. In 1896 he became
 director of the Laboratory for Serum Examination
 connected with this institution. When, in
 1899, the Institute for Experimental Therapeu-
 tics was opened at Frankfort on the Main,
 Ehrlich became its director. In 1908 he received
 the Nobel prize.

Ehrlich represents the results of modern Ger-
 man medical education. The ideas promulgated
 by a Virchow have produced a Koch, a von
 Behring, and an Ehrlich. But while Koch and
 von Behring have used the products of living or
 dead microorganisms to form a serum for inocu-
 lation, made artificially outside the body, that it
 may be used when injected as a weapon against
 the attacks of the bacteria or bacilli in the body,
 Ehrlich has produced a drug the composition of
 which he arrived at by logical experiments so
 that he might reach the same result. As a medi-
 cal student in his second year (so he tells us in
 his latest book) he became interested in the
 question of the distribution of a given drug in
 the body. He has followed up this thought, and
 searched for a drug which would destroy only
 the attacking parasites, not the host and the
 parasite together, that is, to use his own words,
 "to find a remedy which would be *parasitotropic*
 without being *organotropic*." Such a preparation
 would have to combine with the attacking germ,
 that is, the cells constituting the preparation
 would have to swallow the germ and thus de-
 stroy it. He thus formulated his chain theory,
 which is beautifully described by Adams in the
 first volume of his "Principles of Pathology."
 Ehrlich's experiments were started with the
 study of drugs against trying panosomes, and he
 concluded that there must be special affinities in
 the cells for certain chemical groups, and these
 he called *chemoceptors*, and as he used arsenical
 preparations, he called them *arsenoceptors*. He
 thus became the founder of chemotherapeutics.

While formerly the chemist prepared drugs to be experimented with by the clinician, the chemotherapist now formulates compounds which the chemist constructs. In this way Ehrlich followed up the arsenic compounds, and after many, many trials, changes, and improvements, placed, carefully and well prepared dioxydiamidoarsenobenzol or "salvarsan," to give it its trade name, before the profession. May his hopes be fulfilled and may suffering mankind be correspondingly relieved.—*N. Y. Medical Journal.*

State News

DAVIS, W. VA., Feb. 6, 1911.

Hurrah for Dr. Smoot, and Boone County Medical Society! First County Society whose members have all paid their 1911 dues.

A. P. B.

A banner should be sent to Boone.—EDITOR.

* * *

Dr. Ballinger of Fayette County was seriously burned about the face recently by applying kerosene to hot coals in the grate. The doctor is not a member of the County Medical Society, or he would have known that injuries from this cause are to be expected. They are about as certain as death from a pistol, that is "not loaded."

* * *

Dr. H. H. Veon of Richwood, a member of the County and State Societies, was recently elected mayor of that city after a closely fought contest.

* * *

Dr. C. J. Scott was recently elected president, Dr. M. O. Stone secretary and Dr. W. H. Sharp treasurer of the Little Kanawha and Ohio Valley Society.

* * *

Dr. H. D. Hatfield of Eckman, W. Va., a member of McDowell County Medical Society, was recently elected president of the W. Va. State Senate of which he has been a member for several years, and he has honored the position.

* * *

Dr. D. D. Hatfield of English, W. Va., a member of McDowell County Medical Society, is at present pursuing a post-graduate course of study in New York City. His brother, Dr. S. D. Hatfield, is looking after his work during his absence.

* * *

Dr. H. R. Farley, formerly of Elkhorn, W. Va., and during his residence there a member of McDowell County Medical Society, is doing post-graduate work in New York City.

* * *

Dr. Irvine of Coopers, W. Va., has recently resumed his work after undergoing an operation for appendicitis.

* * *

Dr. J. L. Sameth, a member of McDowell County Medical Society, was one of the sufferers during the recent fire which destroyed two of the business blocks of Welch, W. Va.

Dr. R. H. Wilson of St. Albans is taking a post-graduate course at the N. Y. Polyclinic and Hospital.

* * *

Dr. C. T. Taylor of Huntington has the sympathy of the profession in the loss of his wife, who died, after a short illness, on January 27.

* * *

Dr. T. W. Moore of Huntington expects to leave March 9th for several months' study in Vienna. In addition to his family he will be accompanied by Doctors Ballenger of Chicago, Halstead of Syracuse, N. Y., and Murphy of Cincinnati, all eminent men in ear, nose and throat work. The party will go by the southern route on the new Cunarder, *Franconia*, landing at Naples. *Bon Voyage.*

Society Proceedings

THE CABELL COUNTY SOCIETY.

HUNTINGTON, W. VA., Jan. 28, 1911.

A meeting of this society was held at the Hotel Frederick on the evening of January 12th.

Dr. Lester Keller of Ironton, Ohio, gave us a very interesting and instructive paper on "Suggestion."

There was a good attendance and the applications of three new physicians, who desire to join the society, were presented.

JAS. R. BLOSS, Sec'y.

MERCER COUNTY SOCIETY.

The Mercer Medical Society met on February 2nd in Bluefield and elected officers for the year as follows:

President, Dr. O. S. Hare; Vice-President, Dr. J. H. Craft of McComas; Treasurer, Dr. E. H. Thompson; Censor, Dr. F. W. Smith; Secretary, Dr. B. F. Cornett, Bluefield.

We hope to have an increase in our membership this year.

B. F. CORNETT, Sec'y.

OHIO COUNTY SOCIETY.

December 12, 1910.

The society met with President Fulton in the chair. Forty members and six visitors present. Dr. Spragg presented a case of a recent dislocation of elbow joint, with partial ankylosis, in which he had used a liniment containing tincture of arnica, which resulted in a marked dermatitis. Dr. Hersey presented a case of Dupuytren's contraction. Man, aged 54 years, a nail-maker by trade. Began 15 years ago in little finger of left hand. Now both hands involved. Dr. Glass said he had operated on a similar case with good result thus far. Dr. Fulton had operated in three cases, but thinks a permanent result is to be had in but one of these. He thinks a relapse will result in a majority of cases, regardless of the kind of operation that is done. Dr. Jepson regards these cases as generally dependent on a traumatism, or a continuous pressure on the palms of the hands in work. Reported a case in a cigar roller, operated but relapsed. He

stated that fibrolysin had been credited with quite a number of cures, administered hypodermically. Had not himself used it, but thought it worthy of a trial. Dr. Gaydosh had operated in one case with some recurrence, but with forced extension he had secured a fair result. Dr. Hupp had been associated in a case in which a flap from the thigh had been used with good result. Does not have faith in the fibrolysin treatment, but had not used it.

Dr. Glass read an exhaustive paper on "Vaccine and Serum Therapy." The paper was prepared with the object of stimulating the members to consider well before rejecting this modern mode of treatment. It was well received, and was very instructive.

Dr. O. D. McCoy reported having used the anti-gonococcal serum in 68 cases since 1906. He used the serum in chronic cases only, and considered the results as fairly good. In three cases acute infection of the gums developed and he was able to demonstrate the presence of the gonococci in the pus. He had not limited his treatment to the serum, but used other remedies. Dr. Burns had never seen any good results from the serum in acute conditions, but it had brought good results in gonorrhoeal arthritis. Dr. Fuiton said he doubted if the Coley serum was of any benefit in sarcoma. Dr. Bryan, a visitor (of the Parke, Davis & Co. Experimental Dept.), reviewed in a general way the various vaccines and serums, and the possibilities to be expected from their use.

January 30th.

Regular meeting called to order by the president. Thirty-eight present. Mr. W. W. Rogers addressed the meeting on certain amendments to the Code of West Virginia, proposing changes in the exemption laws, to benefit the profession as well as business men. Drs. Taylor, Jepson and Baird were appointed a committee to aid in the matter.

Dr. Thomas Downing read a short but pointed paper on "The Eye as an Aid in Diagnosis of Disease." He pointed out many conditions in which some change in the eyes is associated with systemic states. Emphasized the connection between caries of the teeth and eye diseases, the cure of the former affecting improvement in the eyes. The pupil phenomena in various diseases were also pointed out. The paper was very suggestive.

Dr. Aschman, in opening the discussion, agreed with the writer as to the connection between the condition of the teeth and eye lesions. Also said that often the eye changes of Bright's disease are observed as the earliest symptom. The Argyll-Robertson pupil in tabes was also a valuable sign and is sometimes seen very early.

Dr. Tener (dentist) in discussing the effect of caries of the teeth, said that we may often have caries without any effect on the eyes. He thought the eyes became affected only when the pulp is involved. When the latter condition exists, the periodontal membrane becomes involved, then we get an alveolar abscess. This may spread to the antrum of Highmore, and the eye may suffer. Dr. Hildreth II. emphasized the importance of the eye ground in uremic intoxication.

There is generally more or less "cloudy swelling" present. He referred to the eye conditions that may result from gout and rheumatism, as iritis and conjunctivitis.

February 6, 1911.

Society called to order with the president in the chair. Dr. Wingenter presented a case of a man of 23, artist, who at 11 years had a fall, fracturing two ribs on the right side. Back has been weak for some time. Ten years after the fall weakness increased gradually. Had pneumonia two years after the fall; confined two months. Present condition as follows: General condition good. Left pupil larger than right. On stooping low is unable to arise promptly, but "climbs himself," using hands on legs from ankles up. Calves of legs are enlarged. Conclusion reached by examination is that the man has pseudo-muscular hypertrophy. The fall probably had nothing to do with the origin of this condition, the cause of which is unknown. The prognosis is unfavorable. The case is considered incurable.

Dr. H. H. Harrison, dentist, read a most interesting paper entitled "The Missing Link." He enumerated the various links that exist between the physician and dentist, and plead for a more intimate union of the two professions. The subject was fully discussed, the speakers being Drs. Burdatts, Archer, Bullard, McClure and Caldwell (dentists), and Dr. A. Wilson (physician).

HERSEY, Sec'y.

TAYLOR COUNTY SOCIETY.

IN MEMORIAM.

DR. R. D. MACKIN.

It is with feelings of profound sorrow that the Taylor County Medical Society is called upon to record the death of one of its most esteemed members, Dr. R. D. Mackin, who died at his home in Grafton, January 21st, 1911, from Bright's disease, at the age of 49 years.

Dr. Mackin was born and raised in the town of Grafton; he graduated from the Starling Medical College of Columbus with high honors in the year of 1886; after his graduation he returned to his old home and began the practice of his chosen profession, which he continued to the time of his death.

As a man, Dr. Mackin was possessed with a sunny disposition, with a big brain and a big heart, fearless as a lion, yet gentle as a child, with a high sense of honor and an unswerving fidelity to duty, always ready to lend a helping hand to those in distress, and with a "cheerful hand gave alms."

As a citizen, he was one of Taylor County's most representative men, taking a great interest in the welfare and upbuilding of his town and county. He found time to devote to any just cause that would benefit mankind. He served his town as councilman, and through his keen forethought and excellent judgment did much to improve and beautify our city. In the year 1907 he represented Taylor County in the Legislature.

As a physician, he was one of the most prominent in this section of the State. Being a close student and a man of extraordinary skill and

judgment, his counsel was sought by fellow practitioners as well as suffering humanity. It was indeed a heavy blow the Death Angel struck when he took from our midst our loyal friend and brother, ere he had reached the meridian of his useful life. He was ever ready to go to the relief of the distressed, rendering his services and giving of his means to the poor with unselfish hands. His life's work was well done and worthy of example and emulation.

The large concourse of sorrowing friends who followed him remains to their last resting place in Bluemont Cemetery, overlooking the rugged city in which he spent his useful career, but mutely attest the love and esteem in which he was held by those who knew him, and while his body is laid in its last resting place, with his grave banked with beautiful flowers, awaiting the Judgment Day, yet he still lives in the hearts of a sorrowing people who shall ever cherish his memory.

D. C. PECK,

Sec'y Taylor County Med. Society.

Reviews

PRACTICAL TREATMENT (Volume 1).—

A Handbook of Practical Treatment. In three volumes. By 79 eminent specialists. Edited by JOHN H. MUSSER, M.D., *Professor of Clinical Medicine, University of Pennsylvania*, and A. O. J. KELLY, M.D., *Assistant Professor of Medicine, University of Pennsylvania*. Volume 1: Octavo of 909 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Per volume: Cloth, \$6.00 net; Half morocco, \$7.50 net.

The first volume of this work, for which the profession has been waiting with interest, is before us. It is a handsome octavo of over 900 pages, printed and bound in Saunders' excellent style. The authors, in the preface, set forth that the complete work is to be "a repository of the best, most modern and advanced views in regard to the management of diseased states"; and that "prophylaxis, diet, drugs, rest, exercise, massage, mechanotherapy, psychotherapy, electrotherapy, radiotherapy and other well-known and justly prized therapeutic measures" will be discussed, and emphasis will be placed on "organotherapy, serum therapy, bacteriotherapy, vaccine therapy and chemotherapy." The surgical aspects of the treatment of certain borderland and other diseases is also introduced, a new feature in books on medical therapeutics. It will be thus seen that no methods of treatment are to be neglected.

The first chapter is by Prof. Musser on "The Fundamental Principles of Therapeutics," and it is filled with valuable suggestions and facts. "Preventive Treatment" is given 44 pages by Profs. Harrington (decd) and A. C. Abbott, the highest authorities. Edsall gives "The General Principles of Dietetics" in 70 pages, including tables as to the value of different articles of food. This is a most valuable chapter that should be carefully studied. Ladd of Harvard gives 50 pages to "The Dietetics of Infancy." One of the most valuable chapters is that (50

pages) by Sir Lauder Brunton on "The General Principles of Drug Treatment." Dr. Brunton is a charming writer and one of the world's greatest therapeutists. We have read this whole chapter and find in it many wise and helpful suggestions in the management of disease. The physician who studies Brunton carefully will become a better therapeutist. Every paragraph contains valuable hints. Hektoen discusses Serum Therapy, and Coleman of N. Y. Organotherapy very fully. Thus the reader can learn all he needs of these later methods of treatment. Seventy pages are given to Electrotherapy by Mosher and Radiotherapy by Pancoast. Space is not available for specific mention of each chapter, which in this first volume deals rather with general principles than individual diseases. Suffice it to name, as some of the additional writers, Fussell, H. C. Wood, Jr., Tyson, Dock and Bloodgood. These certainly guarantee work of the highest order.

We await with interest the appearance of the other two volumes of this work, which is certain to mark a decided advance in medical book-making. Every progressive physician will want these most valuable volumes. S. L. J.

THE PREVENTION OF SEXUAL DISEASES.—By VICTOR G. VECKI, M.D., with introduction by W. J. ROBINSON, M.D. The Critic Guide Co., 12 Mt. Morris Park, N. Y. Price, \$1.50.

This is one of the latest of the many recent publications imparting information as to the evil results of sexual diseases. It is presumably intended for lay readers. The diseases treated of and their dread results are fully and plainly described, with the various methods of propagation. For example, "They (the syphilitic) shuffle and play cards, sometimes moistening their fingers with the saliva from mouths full of mucous patches. They roll cigarettes for others, drink from the same loving or communion cup, kiss friends and even little children, etc." The author believes in educating the public in these matters. We agree with him. Ignorance is the reverse of bliss when applied to these diseases.

As to prevention, he believes in regulating prostitution, segregating the prostitutes and periodically inspecting them, sending the diseased to hospitals. He also believes in giving to men instruction as to means of prevention: in short, in encouraging young men to frequent houses of prostitution by rendering illicit intercourse as free from danger as possible. We prefer to educate the young and let them bear the consequences of their violation of the moral and statute law, if they still persist in running into danger.

The physician who writes the Introduction says: "We know absolute continence is neither feasible nor, from a hygienic point of view, desirable," and he ridicules the prevailing idea that sexual indulgence in the unmarried is wrong. In another place he has said, in bold capitals, that he "would not put an end to prostitution if he could." We suggest if another edition be called for, that the author of this book select a man to

write the introduction whose views are in accord with American rather than Parisian ideas.

Dr. Veeki says that the International Congress for the Prevention of Venereal Diseases, the German Society for the Prevention of Venereal Diseases, the American Society of Sanitary and Moral Prophylaxis, and a number of State Medical Societies have "passed resolutions declaring *absolute sexual continence to be not injurious.*" We may add the emphatic opinion of England's renowned neurologist, Sir Wm. Gowers, who says: "With all the force that any knowledge I possess can give, and with any authority I may have, I assert, as the result of long observation, and consideration of facts of every kind—that no man was ever yet in the slightest degree or way the better for incontinence; and I am sure further, that no man was ever yet anything *but* the better for perfect continence." Forty years of general practice leads us to prefer the opinion of Gowers to that of Robinson, a specialist in sexual diseases and hence familiar with moral and physical degenerates. S. L. J.

PRINCIPLES OF PUBLIC HEALTH—A simple text-book on hygiene. By T. D. TUTTLE, B.S., M.D., Sec'y State Board of Health of Montana.

PRIMER OF HYGIENE—By PROF. J. W. RITCHIE and JOS. S. CALDWELL.

These are little works from the press of The World Book Co., Yonkers, N. Y. In our judgment all books on Physiology should be dropped from the school course, and these books substituted. One deals more particularly with personal and family, the other with public hygiene or sanitation. They contain enough of physiology, and much more of practical suggestions as to the care of the body, proper food, manner of living, the spread of disease, etc., than do the large and very dull books on physiology. S. L. J.

THE PRACTICE OF SURGERY.—By JAMES G. MUMFORD, M.D., *Instructor in Surgery in the Harvard Medical School*. Octavo of 1015 pages, with 682 illustrations. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$7.00 net; half morocco, \$8.50 net.

The author states in his preface that it has been his purpose to take up surgical diseases in their order of interest, importance, and frequency, and lays stress on those diseases which nature herself has accentuated.

Since the adoption of aseptic methods in surgery and the further development of bacteriology and surgical pathology, it has become more and more difficult to give a synopsis of the science of surgery in a single volume.

The general surgeon and student will find this work a carefully prepared and satisfactory text-book. It is profusely and well illustrated, and most of the plates show what they were designed to show.

In the chapter on cancer of the stomach the author goes fully into the various operative procedures, but says very little about the symptoms leading up to an early diagnosis. This is of so great importance and interest to the surgeon as

well as the internist that I think more space could well be devoted to its consideration.

The chapters on fractures and dislocations are full, and the subject is dealt with in a practical manner.

This book, written by a teacher of large experience, is a distinct contribution to the literature of surgery and will be welcomed by the general practitioner as well as the surgeon.—R. E. V.

"INTERNAL SECRETIONS FROM A PHYSIOLOGICAL AND THERAPEUTICAL STANDPOINT," by DR. ISAAC OTT, *Professor of Physiology at the Medico-Chirurgical College, Philadelphia* (E. D. Voge, Pub., Easton, Pa., \$1.00), consists of three lectures:

One on the Parathyroids, one on the Pituitary, and one on the Correlation of Glands with an Internal Secretion. The author details the important laboratory findings from the various centers of research, including his own most valuable contributions on the subjects of the respective chapters. The wealth of therapeutical suggestions with which the last chapter especially abounds are all the more stimulating mentally because they are merely hinted at, leaving to the reader to follow out in the path upon which a guide-post is placed. The routinist and the traditionalist will pass this little volume by without interest, but it will prove invaluable to the therapist who realizes that therapy has opened a new door in the last few years.—C. A. W.

Medical Outlook

TUBERCULOSIS PREVENTION.—A. W. Jones, M.D., of Red Wing, Minn., in a lengthy article in *Jour. Minn. State Med. Assoc.* concludes: That childhood is the period of life in which the greatest susceptibility to infection occurs; that adult tuberculosis is generally an after result of childhood infection; that, if the infection occurs before two years of age, the patient promptly dies; if after two years old the disease is more liable to become latent, and from this age up to puberty the liability to become latent increases with each year of age; that what today is called early tuberculosis in adults, is generally the second stage or beginning of the third, and at best can only be legitimately spoken of as the early stage of pulmonary tuberculosis; that it should be the business of preventive medicine to prevent the arrival of this stage of the disease, for, if allowed to occur, the menace to the patient and to the public increases, and, as we have seen, nature has to go through the whole protective process anew, and the patient's chances of ultimately regaining his condition of latency or of recovery are continually growing less.

He thinks that the greatest results from preventive measures result when the work is begun in childhood. The public schools he regards as a great unworked field. Medical inspection of schools, sanitary school houses, instruction in preventive medicine a part of curricula and possible legislation to furnish school boards with additional powers will be a part of the demands of the future, before we can successfully combat this malady. G. D. L.

TREATMENT OF STRICTURE OF THE URETHRA.—Francis S. Watson, Boston, in *Boston Med. and Surg. Jour.*, Oct. 24, 1907, thus summarizes an interesting and practical paper:

(1) Electrolysis and division are methods of treatment which should both be abandoned.

(2) Internal urethrotomy is the only method of treatment by which an important number of cures can be obtained. It is an operation involving but little danger. Its application should be restricted to strictures within the first five inches of the canal unless external perineal urethrotomy is done in combination with it.

(3) For strictures of the deeper part of the canal gradual dilatation is the best form of treatment if constitutional disturbance does not arise in connection with its employment, and if the urethra for a reasonable length of time maintains the caliber to which it has been expanded by the instruments.

(4) For the cases in which the stricture of the deep urethra recontract rapidly after dilatation, or those in which constitutional disturbances arise in the course of its employment, also for the resistant or impassable strictures of the deep urethra, in all of which conditions gradual dilatation is useless, external perineal urethrotomy, or internal urethrotomy combined with the external incision in the perineum is the safest and most efficient method of treatment.

(5) External perineal urethrotomy is the only operation that should be applied in cases of stricture accompanied by urinary extravasation.

(6) Resection of the strictured part of the canal should be selected in cases of intractable, very dense strictures of the perineal part of the canal.

Internal urethrotomy done under the conditions and in accordance with the rules I have stated above will yield from 50 per cent to 60 per cent of radical cures, and at operative risk of death of about 1.5 per cent.

"CASEIN MILK" IN INFANT FEEDING.—Dr. J. S. Leopold discusses the Finkelstein-Meyer method of treating intestinal disturbances in children with "casein milk" (*Arch. of Pediatrics*, August, 1910). The milk is prepared as follows:

Heat 1 quart of full milk to 100° F. Add four teaspoonsful of the essence of pepsin and stir. Let this mixture stand at 100° F. until the curd has formed (this usually takes about half an hour). Filter off the whey from the curd by means of a linen cloth and hang up the cloth containing the curd for one-half hour in order to be rid of the whey. Then the curd is removed from the linen cloth and is pressed through a rather fine sieve two or three times by means of a wooden mallet or spoon. One pint of water is added to the curd during this process. The mixture should now look like milk and the precipitate must be *very finely divided*. To this mixture 1 pint of buttermilk is added.

The milk should be given in very small amounts in cases of enteritis, and in larger amounts in cases of atrophy, every 2, 3 or 4 hours. There is usually a loss of weight during the first few days that this food is given. The stools become homogeneous, however, and the temperature, if

it has been elevated, drops to normal. After the stools have become homogeneous a small amount of sugar is added to each feeding—at the beginning not more than $\frac{1}{2}$ to 1 ounce for the entire day's feeding. In most cases a gain in weight results after the sugar has been added. Then very gradually the amount of each feeding is increased and more sugar is added.

ARTHRITIS DEFORMANS.—Clarence Edward Skinner, in the *American Journal of the Medical Sciences* for November, considers the treatment of arthritis deformans, believing that whatever theory as to its causation be accepted, the therapeutic indications are essentially the same. These are: (1) To close possible avenues of infection, such as local suppurative, ulcerative, and catarrhal processes, carious teeth, etc. (2) To improve the general and local nutritional processes, whereby the physiological resistance of the various tissues and the efficiency of the vital activities in general, will be augmented. (3) To accelerate the elimination of katabolic products and toxins which depress the vital activities. (4) To limit the formation of autotoxins. The treatment of the disease, then, resolves itself into applying those measures which will satisfy the above mentioned indications in the most effective manner, the relief of pain, and the management of the affected joints. He considers the use of dry hot air, electricity, hydrotherapy, etc., and believes that drug medication is unsatisfactory as regards the securing of curative results. No substance has yet been discovered which exhibits a specific curative action as far as the disease, per se, is concerned, but there are a few medicines which appear in some cases at least to exhibit considerable influence over the condition. The iodid of iron has given him the best results. It should be given for periods of six weeks, with an intermission of two or three weeks. Cod-liver oil does good service in cases characterized by emaciation, if well borne by the stomach. Arsenic and strychnin are fairly useful in many instances as general tonics. Chlorid of gold and sodium, and sodium or potassium iodid, or hydriodic acid sometimes seem to render considerable service, but they fail to influence the disease in such a large proportion of cases that their importance is not nearly so great as is generally supposed. The beneficial influence which thyroid extract exhibits in some cases of this disease is particularly interesting, because of the possibility that aberrant function of ductless glands may be concerned, to some extent at least, in its etiology. He has given it to a few patients and feels that they have derived considerable benefit therefrom, and the remarkable results which have followed its administration in some cases demand that it be thoroughly investigated. The relation of the salicylates to this disease deserves special mention, as they sometimes render excellent service in relieving pain and swelling, although it is improbable that rheumatism is an etiological factor in any great number of cases; whatever the explanation, the fact remains that the salicyl compounds are sometimes very helpful in relieving the painful joint condition pre-ent.—*Cleveland Medical Journal*.

ERRORS IN DIAGNOSIS.—R. C. Cabott, Boston (*Journal A. M. A.*, October 15'h), summarizes the results of a large series of comparisons between the judgments arrived at by careful study of clinical data and the anatomic conditions revealed by necropsy. In the tables he gives, he divides the mistakes into errors of omission and commission. By the former, meaning failure to find some lesion contributing to the disease, and by the latter diagnosing something which is not found. He draws certain conclusions from his investigation which are summed up in substance as follows: 1. Never make a diagnosis of uremia in a patient seen for the first time in an acute illness characterized by coma or convulsions. Such diagnoses rarely turn out right. 2. Never diagnose ptomain poisoning without definite chemical evidence. General peritonitis or a tabetic crisis is usually the correct diagnosis. 3. Make no diagnosis of hysteria, neurasthenia or psychoneurosis in a patient whose symptoms begin after the forty-fifth year. The actual diagnosis is liable to be arteriosclerosis, hyperthyroidism, dementia paralytica or pernicious anemia. 4. Diagnoses of tertian malaria in patients resisting quinin more than three days are almost invariably wrong. 5. Bronchial asthma beginning after 40 usually means heart or kidney disease. 6. Epilepsy beginning after 40 usually means demential paralytica or cerebral arteriosclerosis. 7. Typical migraine is often a symptom of unrecognized brain tumor or chronic nephritis. 8. Most cases of "bronchitis" mean tuberculosis, bronchial pneumonia or multiple bronchiectasis cavities. 9. Aside from the immediate results of acute infections, "acute" nephritis usually turns out to be chronic. 10. Acute gastritis and gastralgia usually mean appendicitis, gall-stones or peptic ulcer. 11. Pus in or near the liver is often mistaken for serous or purulent pleurisy, as it produces identical signs in the posterior right chest. 12. An x-ray examination of the shin bones may give the first hint of active syphilis in the joints or internal viscera. 13. Systolic or presystolic murmurs heard at the apex of a markedly enlarged heart seldom mean valve lesions. 14. Diastolic murmurs at the base of the heart are very meertain evidence of aortic disease without characteristic jerkings in the peripheral arteries. 15. Myocarditis is a diagnosis that should never be made. 16. Besides the direct evidence afforded by history and physical and chemical examination, diagnosis profits much by taking account of certain familiar pathologic changes or groups of them. Given one or two members of the group it is often wise to act as if the others were present, provided that the direct evidence is in no way contradictory. 17. Brain localization of tumors, hemorrhages, etc., is still in its infancy. 18. The clinical diagnosis of the so-called blood diseases is the easiest and safest in medicine.

TYPHOID APPENDICITIS.—Dr. Grant, in *Colorado Medicine*, thus gives the views of Howard Kelly, as given in his book on appendicitis:

There is no more interesting chapter than that on appendicitis in the course of typhoid fever.

The organ is involved in about one-third of all cases of typhoid fever, but usually in a mild catarrhal form. In about five per cent of the typhoid cases there is perforation of the appendix. In the operated cases the typhoid bacillus has generally been found and is believed to be the cause of the mild appendicitis—true typhoid appendicitis—so commonly found; a congestion of the mucosa chiefly. As a matter of diagnostic interest this form of appendicitis is not manifested in the early period of the fever, and when perforation occurs in this condition, it is in the latter part of the second, or in the third week. Appendicitis may exist independently and complicate the fever. If so it is more apt to be severe, and if perforation occurs it will be early as usual in this disease. At this juncture the symptoms will be the same as perforation of the ileum, and both, promptly require the same remedy. A matter of distinct interest is the unfavorable prognosis from surgical intervention, early and late, in disease of the appendix during the course of typhoid fever. The opinion of other surgeons is in keeping with his own, that under these conditions the operation should not be performed, except in case of perforation. The mortality has been high in all appendectomies in this condition.

The disease may occur as a sequel to the fever and the appendix be affected, the same as Peyr's glands.

In the differential diagnosis the Widal test is too late to be of value. The leucocyte count is low in typhoid fever. The ordinary symptoms and history of appendicitis must chiefly determine the matter.

STIMULANTS IN SHOCK OF ANESTHESIA.—Dr. O. H. Plant of Galveston, after a careful study of the question and experimentation, concludes as follows: Of the remedies used in these experiments, the combination of cocaine and strychnine is by far the best stimulant in both ether and chloroform anesthesia. None of the other remedies gave the same prompt and sure return of respiratory movements together with a marked and lasting improvement in the circulation, and I believe these are the remedies upon which we can place reliance in those cases of anesthesia where stimulants are indicated.—*Texas Medical Journal*.

EHRICH-HATA REMEDY—"606".—B. C. Corbus, Chicago (*Journal A. M. A.*, October 22), makes a preliminary report from personal observation of the use of this preparation in Wechselmann's clinic in Berlin. He states that he can testify that spirochetes begin to disappear in from eighteen to twenty-four hours after injection of the remedy. Corbus states that the number of different technics is surprising and confusing, as each clinician has his own. Corbus pre-

The treatment should be kept up until a good gain in weight occurs. Then the ordinary milk mixture may be resumed.—*Therapeutic Medicine*.

Miscellany

OSTEOPATHIC WISDOM.

The profession's idea that contagion and infection pass from one human being to another—from a sick man to a healthy man—is an old superstition unworthy of this age, and it prevents the mental world from getting right on the subject of disease and its cause.

We are in sympathy with "clean milk" and cleanliness in general, but we draw the line when it comes to cleansing the blood of children with vaccine, tuberculin and antitoxin.—From "A Stuffed Club," *Osteopathic Journal*.

SOME DON'TS FOR THE DOCTOR.

Don't be slow in your attention to your patients.
Don't spend too much time with your patients.
Get your case history, make your diagnosis and institute treatment, and leave, if on a call, or invite your next patient, if in the office.

Don't visit with your patients when calling on them in a professional way, as you may innocently drop some remark which may mean a loss to you in the future.

Don't make your office the resort for all of the town loafers, either during, or after, office hours.

Don't put off getting married until you have passed the thirty-year mark, as you are liable to be "sot in your ways."

Don't tell your wife all about your cases, as she may not understand all the particulars and may tell the neighbors things which will act to embarrass you.

Don't treat patients on the street or in public places.

Don't give learned lectures in public places.

Don't tell your patients what medicines you are giving, as the effect is all that they need know anything about.

Don't talk about your cases to disinterested persons. If asked about a patient, simply say that he is sick and either better or worse, but without particulars.

Don't come in close association with those of the underworld. Some of the swudge may ru' off and your reputation will suffer.

Don't make the saloon your loafing place, for if you do not imbibe you may be accused of so doing if you hang about such places.

Don't try to be too dignified, as false dignity is worse than none.

Don't antagonize the children. They are the doctor's best friends.

Don't try not to get ahead in a money way, but always look before you leap.

Don't do anything which any other decent man would not do and you will meet with success.—G. L. S. in *Physicians' Business Journal*.

PRECOCIOUS PARENTAGE.

The *London Lancet* of October 1, 1, 1910, presents a picture of a father, mother and infant, of the Province of Shansi, China. The mother is 7 years old and the father 8 years. This is the world's limit, so far as has been reported.

PREGNANCY AND LABOR OF ONE OF THE BLAZEK TWINS.

There live in Prague twin sisters, known as the "Siamese twins," who are united to each other by a solid bridge of tissue, with some cartilage and bone enclosed, in the region of the hip-joint and the brim of the iliac bone. Several attempts at separation have been suggested, but refused by the twins because they desired to exhibit themselves for money. One of the twins suffered a few years ago from cholelithiasis, and had to be operated on in the surgical clinic of Prague, where examination revealed that apart from the malformation of the connecting iliac bone, the two persons have separate and independent bodies and independent bodily functions. Some time ago the twins, now 36 years of age, again came to the clinic, as the former patient again suffered from colicky pains. The surgeon made a diagnosis of advanced pregnancy or rather incipient labor. Although that possibility was absolutely denied by the girls, the patient soon gave birth to a healthy boy, and later, after repeated questioning, confessed. The other sister felt nothing at all of the pain of the mother so closely united to her, and when the next day the temperature of the mother went up two degrees the temperature of the other twin remained normal, showing the absolute separation of the two organisms as regards function and metabolism.

MAN'S DAYS.

Neither Greek nor Latin, nor even ancient Hebrew, has written a more poignant summary of the allotted three-score-and-ten than is contained in the little poem "Man Days" by Eden Phillpots:

A sudden wakin', a sudden weepin';
A li'l suckin', a li'l sleepin';
A cheel's full joys an' a cheel's full sorrows,
Wi' a power o' faith in gert to-morrows.

Young blood red hot an' the love of a maid;
Wan glorious hour as'll never fade;
Some shadows, some sunshine, some triumphs,
some tears;
An' a gatherin' weight o' the flyin' years.

Then auld man's talk o' the days behind 'e;
Your darter's youngest darter to mind 'e;
A li'l dreamin', a li'l dyin',
A li'l lew corner o' airth to lie in.

HYSTERIA.

The manifestations of hysteria are so infinite in number that Tamer has well said, "Hysteria stimulates almost every known disease." It so often exists without any pathological lesion and persists after cure of the lesion that the practitioner has no resource but the well-known anti-spasmodics, anodyne and nerve tonics which should only be taken at his direction and which alone in many cases intervene to save the sufferer from too common resort to opiates. Here NEUROSINE, which contains no opium, chloral morphine or other habit-forming drugs, gives prompt relief.

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THE MODERN SURGERY OF THE KIDNEY.

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of Surgery, University of Cincinnati.

*(Read by invitation before Kanawha County
Medical Society, November, 1910.)*

In response to the kind invitation of your society, I shall ask your indulgence tonight to the subject of "The Modern Surgery of the Kidney." In compliance with the request of your secretary, I shall consider the subject in a general way rather than follow my inclination to consider any special branch of this vast field.

Although the entire subject of renal surgery has a history of a little more than three decades, our knowledge of it has grown fast and progressively. Our knowledge of the functions of the kidneys together, and of their separate functional capacity, has grown with the betterments in the modes of examination. It goes almost without saying that accuracy of diagnosis, depending altogether on the advanced and scientific methods now in vogue, is largely responsible for the comparative safety of operations on the kidneys and the ureters.

Renal surgery has, of course, shared in the benefits which improved technique and precautions against sepsis have given to all operative measures. It is certain that the mortality following the removal of the kidney has been reduced from nearly 40 per cent to less than 16 per cent. Indeed, for one specific condition, namely, tuberculosis, the separation of the urines for diagnostic purposes has in the hands of

Kuemmel reduced the mortality to 5 per cent. In Casper's report of 129 nephrectomies there was a mortality of 21 per cent before catheterization was practiced, and in 130 cases where catheterization was done, there was a mortality of 10 per cent. There can be no question that the relative greater accuracy in our diagnoses and the comparative safety of the explorations of the kidney have furthered conservatism in this domain of surgery. Indiscriminate operations and particularly the removal of the kidney as, for example, for stone, have given way in properly selected cases to sparing measures, much as amputations have been supplanted by the many less mutilating operations on the extremities.

The methods which permit the making of a very accurate diagnosis unfortunately are, and from the very nature of their technical difficulties always will be, the work of a trained specialist. Cystoscopic examination, the segregation of the urines and ureteral catheterization can never become the property of the general practitioner, or even of the general surgeon who sees little kidney work. Likewise, the taking of a valuable radiogram with its correct interpretation will remain the domain of the specialist. But it must be borne in mind that fairly accurate diagnoses of surgical lesions of the kidney, bladder and prostate were made and treated with a modicum of success before the modern scientific aids to diagnosis were known.

The most brilliant surgical diagnosis I have ever seen made was by Billroth, long before the cystoscope was used. I saw the patient with his assistant one Saturday

afternoon in the ward of the Vienna Hospital. A middle aged man had been perfectly well until a week before his admission. A severe rigor and high temperature were the initial symptoms, followed at once by a complete suppression of urine. The examination in the ward on the day of his admission, six days after the inception of the symptoms, showed an empty bladder. The assistants could make nothing of the case. Billroth first saw the man in the amphitheater; obtained a clinical history; by palpation thought he recognized a swelling the size of a fist low down in the abdomen. A catheter which he introduced into the bladder could be passed to one side and to the other, but in the middle line it was impossible to depress the handle. The finger was next introduced into the rectum and by bimanual examination Billroth thought he felt a fluctuating tumor which he believed to be a suppurating loose kidney that had in some manner compressed the ureter of the other side. A large trocar introduced into the swelling through the rectum evacuated a half pint or more of pus; and while the pus was still running, the urine began to flow through the catheter which had been left in the bladder.

Nephrectomy was then not so common an operation as now. His patient succumbed and the autopsy revealed the correctness of the diagnosis, which could not have been made more accurately with our most approved modern methods.

A careful study of the clinical history and proper application of the older clinical methods of examination, and particularly of the combined urines, together with a careful study of such symptoms as pain, fever and renal crises, will almost always permit the making of a diagnosis, which can and should be verified by the surgeon who has at his command the most modern appliances for examination and knows how to use them without inflicting harm. Indeed, it is my belief that except in emergency cases, special examination like the x-ray, ureteral catheterization, and even cystoscopy should not be used until a tentative diagnosis has been made by the clinical methods within the reach of every physician. As I have said elsewhere, we must not allow ourselves to deteriorate as thinking machines by reason of the ease

with which we can obtain the presentment of a kidney stone, thanks to Roentgen.

Personally, I shall never again feel the thrill of triumph in the first touch of a kidney stone that I felt in my operations before the x-ray was discovered. Then the elation of the surgeon was a just reward of sound reasoning. Now the operation is simply a nice piece of technical work, the outcome of which as to the finding of a stone is practically certain. Twenty years ago I made the diagnosis of kidney stone in a woman of 39 and advised operation. After 18 years of more or less suffering and after the kidney became sacculated and its fellow involved, I removed nearly a handful of stones at the Good Samaritan Hospital. With the x-ray plate before me, the operation in point of suspense to the operator was something like fishing for trout with a dip-net in an aquarium.

Let it be borne in mind that there are diseased conditions in which for some reason or other it is impossible to resort to the most scientific methods of investigation. Take for example rupture of the kidney occurring in a locality where it is not feasible to obtain a cystoscopic examination, or even if it occur where this can be made, the bleeding into the bladder is so profuse that a clear medium cannot be obtained. I saw such a case a few years ago in Kentucky miles away from any railway station; removed the kidney with success after assuring myself by an exploratory median incision that there was a second and sound kidney. In infants and young subjects with sarcoma, the size of the urethra precludes the use of even the smallest cystoscope. I have a patient now living five years after a nephrectomy for a small sarcoma, which without causing much enlargement of the kidney had projected into the pelvis and caused profuse hemorrhage. In the pyelitis of pregnancy, which so often is an unilateral affection and only one of the many possible manifestations of the colibacillosis of pregnancy, there could be no justification for intravesical examinations, save when life is threatened. I have recently seen an infant of 18 months with profuse pyuria of a colonic infection, in which such diagnosis as could be made was made only by the

older clinical methods with the addition of the bacteriological examination.

Let us not, therefore, neglect the older methods of examination, nor underrate the diagnostic value of symptoms. Thus palpation alone will enable us to recognize an enlargement or dislocation of the kidney and its sensitiveness. While the normal gland at times responds to pressure with a peculiar feeling akin to testicular sense, palpation causes exquisite pain when the kidney harbors a stone, less pain when there is tuberculosis, and often little or no pain when there is a neoplasm. Pressure just below or over the last ribs made simultaneously on the two sides with the thumbs of the examiner, is likely to be equal on the two sides and thus pain elicited on one side or a tenderness detected will indicate an underlying lesion.

There are few surgical conditions of the kidney in which oft-repeated examination of the urine will not fail to show abnormal constituents. This does not include albumin or casts indicative of interstitial changes in the kidney, which often follow in the wake of primary surgical affections often of the pelvis and ureter. Nor will it more than allude to the various crystals, amorphous salts, cellular elements and microscopic organisms that must be searched for in every urinalysis. To the ordinary clinician blood and pus are the constituents of the urine of greatest interest in the surgical diseases of the kidney and the ureter. To examine the urine again and again is of prime importance in helping us to locate a kidney lesion and to determine its nature. The painless hematuria which is very profuse and comes on without exertion, and often even at night, to the initiated at once speaks for a neoplasm or for the rarer condition of essential hematuria. Occurring in children without pain it is almost pathognomonic of tumor of the kidney. Occurring after an access of pain, it speaks strongly for the bleeding from a dislocated kidney with torsion of the ureter. Stone in the kidney or in the ureter is probably always associated with blood in the urine at some time of its clinical history. I have never seen it profuse enough for any length of time, and indeed have rarely found it make the urine light pink, except after an access of colic. Indeed, in the great majority of instances which have

come under my observation, the urine is for the most part normal to the naked eye until infection occurs. But I have seen no case in which a stone did not cause the presence of a few red blood cells in practically every specimen of urine examined. A persistent, I would almost say unfailing microscopic hematuria should be considered almost pathognomonic of stone.

Pyuria is altogether of less value as a symptom than hematuria, since it is dependent upon so many factors. Bacteriuria must not be mistaken for pyuria, although the appearance of the urine in the two conditions is very much alike. The view formerly entertained that acid urine containing pus is of renal origin is no longer tenable. Pus of vesical origin leaves the urine acid until retention causes its decomposition within the bladder. Staining the specimen is always essential in the clinical examination of infected urine. Since we know, for example, that tuberculosis of the genito-urinary tract always begins either in the kidney or in the testicle, and by continuity of the excretory ducts is conveyed to the bladder, seminal vesicles or prostate, an elimination of the disease from testicle and prostate places the ability to recognize tuberculosis of the kidney within the reach of every one, even without the more modern accurate methods of examination.

Among the subjective symptoms well worth careful analysis are pain and frequency of urination. Vesical tenesmus is one of the commonest symptoms of disease in the pelvis of the kidney. *Thamuria*, chiefly nocturnal, and polyuria are, for example, among the earliest symptoms of kidney tuberculosis, and, indeed, are often present before symptoms on the part of the kidney manifest themselves. Kidney pain cannot occur while a lesion is limited to the cortex. Whether it be a tuberculous nodule or a stone, unless the kidney capsule is distended, there will be no pain. In fact it is well to bear in mind that the mere presence of a stone within the ureter is as little accompanied by pain as the passage of a stone through the biliary ways. In both instances it is only when the reservoir confined within a tight fibrous capsule is distended by the defective drainage, that the pain ensues. The patient is unconscious of the introduction of the

catheter into the ureters just as he is unconscious of the probing of the biliary passages with a sound. The renal colic held to be so characteristic of kidney stone, I have found absent in fully one-half of the cases which have come under my observation. Yet without such a history the diagnosis is practically always correctly made.

As already indicated, some surgical affections of the kidney are for a long time symptomless. One of the largest stones in my collection I removed from a lad of 15, who had never been in bed from illness for a day in his life, except when he had been struck in the loin with a bat. A painless swelling appeared in the costo-iliac interval, approached the skin and broke. The patient consulted a physician on account of the inconvenience from the profuse discharge. The kidney discharged both ways. The urine was like milk, but the patient was not aware that it was abnormal. The Germans have an adage, "Where there is no plaintiff there can be no judge." Where there are no symptoms there can be no diagnosis. So, too, tumors of the kidney may for a long time follow a symptomless course. A remarkable incident occurred to me in a smoking car. A fellow passenger with whom I had been in conversation went to the closet where he remained for some time. On his return he looked ghastly. I informed him that I was a physician and asked whether I could be of service. He told me that for the first time and without known cause or pain he had voided a large quantity of nearly pure blood. I composed him as well as I could until our ways parted. Four months later I was asked to see this patient for a recurrence of the hematuria. He weighed 240 pounds and was of rather short build. We mapped out a tumor of the right kidney, which we believed to be sarcoma. The diagnosis was confirmed by the now Regius Professor of Medicine at Oxford, who advised an operation. The exploratory incision, which was one of the longest I have ever had to make, revealed a sarcoma adherent to and involving the renal vein, with an ingrowth. The operation was not completed. When the patient recovered from the anesthetic, he said to me, "Doctor, how is it?" I said, "Fine." He said, "Is the tumor out?" With a straight face I answered, "It is."

He grasped my hand and said, "Doctor, I am proud of you." Your humble servant never felt more sheepish in his life, but hopes that if there is to be a meeting between him and this patient in the hereafter the latter will express his gratitude for the nearly one year of hopeful life which he vouchsafed him by a so-called white lie.

In the x-ray and in the separation of the urines our methods of determining surgical lesions of the kidneys and ureters have reached a development which seems impossible of improvement. With the x-ray we are enabled not only to show the presence of concretion, but the picture almost invariably corresponds to the size of the stone. It is practically always possible to make a negative diagnosis as to the existence of stone. Yet in one of my cases the symptoms were so persistent that, notwithstanding a number of negative plates made by an expert, I determined to explore the kidney and removed therefrom ten small stones, none of which weighed more than a grain or two. A plate to be of value should show the detailed structure of the transverse processes and last ribs; the outline of the psoas muscle and the shadow of the stone should always present well defined edges. The depth of the shadow is of no less significance than sharp definition. In one of the lightest phosphatic stones which I removed, a positive diagnosis could not be made until the kidney was explored through an appendectomy wound made during an acute attack of appendicitis. But a perfect plate, even when showing a positive shadow in the kidney or ureter, may be incorrectly interpreted. For example, patients passing stones which are expelled almost as soon as they are formed, are no subjects for operation. A few years ago a patient presented himself with a homeopathic vial filled with small stones which he had passed from time to time. Three separate x-ray plates showed four stones, too large to be passed, occupying the pelvis. The operation revealed about thirty small stones so closely packed together as to give the impression of four stones in the picture. All but two of the stones could have passed in the course of time. A shadow in the pelvis or in the tract of the ureter can be positively looked upon as a stone only when it is associated

with some of the common clinical signs. Misinterpretation of shadows have been sufficiently common to warrant this dictum. Although x-raying with a leaded ureteral catheter or a mandrin may seem to show the shadow to be in relation with the ureter or kidney, a mistake is still possible; and I do not believe an operation justifiable unless there are symptoms. Calcified lymph nodes phleboliths, or the thickened tip of an appendix or an appendiceal stone have been mistaken for renal and particularly for ureteral concretions. If a laparotomy has been performed before, particular care is necessary. Buried sutures in hard scar tissues, or if infiltrated with lime salts, have been mistaken for ureteral stones. In a patient of neurotic temperament recently seen, I saw the presentment of 7 or 8 small stone-like shadows on one side and two on the other in the tract of the pelvic portions of the ureters after the removal of the appendages. A point of great importance is the necessity of taking a picture as short a time before the operation as is feasible. Quite recently there came under my care a patient with ureteral stone. Two x-ray plates showed a small olive-shaped stone in the pelvic portion of the ureter. Without really knowing why, a third picture was taken the evening before the operation. The shadow was now in the middle line proving the descent into the bladder. This descent, by the way, was absolutely painless. Had the plate not been made just before the operation, the search for the stone would doubtless have been long, of course fruitless, and perhaps for that reason dangerous to life. Of course, large kidney stones cannot easily shift their positions, but in ureteral stones hereafter I shall always have a radiogram made within twenty-four hours before the anesthetic is administered.

With our improved x-ray technique, shadows of the kidneys as a whole can be obtained and may prove of value. I have seen enlargements and displacements correctly portrayed as shown by subsequent operation. In most instances, however, especially in obese subjects, it requires some imagination to recognize the outline of the kidney in the radiogram.

In all surgical conditions of the kidney cystoscopy is used by me in a routine man-

ner. It is not dangerous, and with a competent bladder it gives valuable information as to the condition of the kidneys. It permits the study of the ureteral orifices, the rythmical outflow from each, and to a certain extent the character of urine excreted from each kidney. It is not uncommon to see a little plug of thickened pus or blood coagulum projecting from a ureteral orifice, from which it may be washed out with the very next swirl of urine. Great redness or erosion of the mucosa below one orifice, to the experienced cystoscopist, spells lesion of the kidney. The golf-hole orifice or one with edematous or projecting margins makes it almost certain that there is a surgical lesion in the corresponding kidney. The golf-hole orifice is most often seen in tuberculosis. When there is a distinct pouting or eversion of the ureteral meatus, one can be almost certain of a stone or stricture not far removed. Of course, the presence of two ureteral orifices must always be verified, since in the vast majority of cases, they speak for the presence of two kidneys that are distinct, although either the horseshoe-shaped or placental kidney is likewise furnished with two ureters.

While with a fairly distendable bladder cystoscopy is easy, it often is when secondarily involved, especially by tuberculosis, so contracted and its *bas fond* so deformed that a cystoscopic examination may be of little value or utterly impossible. In this condition cystoscopy may be positively harmful. Some years ago I was present at such an attempted examination of a bladder with less than 50 c.c. capacity. It was made by an expert of international authority. It was followed by a severe rigor and the development of a pyonephrosis which later eventuated in death.

In the separation of the urines and cryoscopy the acme in the diagnosis of surgical diseases of the kidney has been reached. Whether a segregator or ureteral catheterization is to be employed depends largely upon the skill and experience of the individual specialist with one or the other method. My personal belief is, and it is coming to be more and more shared, that segregation within the bladder has great limitations. It cannot be used when the

bladder is contracted or when its mucosa is involved, it being almost certain to cause a bleeding which vitiates the result. When the trigonum is distorted by ulceration or by prostatic enlargement, the establishment of a medium septum by a segregator requires less experience and can do less harm, but the information obtained is surely less accurate. Ureteral catheterization should, where it is feasible, be a *sine qua non* before a nephrectomy is contemplated. As has already been indicated, there are cases far from few where it is impracticable. Where it is feasible, it gives us unquestioned status of the potential functional capacity of the one kidney after its fellow has been removed. I say potential advisedly, because in very exceptional instances anuria may develop after nephrectomy where the most careful microscopic examination shows the other kidney to be normal in every regard. Just as a stone impacted in one ureter will occasionally inhibit secretion in the contralateral gland, so at times the removal of a kidney will inhibit the function of its remaining fellow. Quite recently a case of this kind was reported by Jemckel in which ureteral catheterization and cryoscopy demonstrated a normal functioning kidney. The patient died after a nephrectomy and the autopsy revealed a gland normal in every way. One such case throws a doubt upon the infallibility of the modern methods of functional diagnosis. It disproves the dictum of Albarran, that one operated on for the removal of a kidney ought not to die of renal insufficiency. It is certain, however, that the one kidney which a man has need never again be removed. In cases of great emergency or in cases where cystoscopy is not feasible, a short exploratory median incision through which either kidney can be located and palpated by bimanual touch, will relieve the patient of the fatal mistake of having his one kidney removed and the surgeon of the intense anxiety after the operation until the first urine is voided. Disappointments, of course, are possible, but it is a fair assumption that a kidney which is found on exploration to be normal in size, place and consistency has a normal functional capacity which will justify removing the diseased gland.

(To be Continued.)

ECTOPIC GESTATION—CASES.

O. F. Covert, M.D., Moundsville, W. Va.

Ectopic pregnancy is usually considered as being of rather rare occurrence, and this I think is true. A number of men of much experience have never seen a case, at least so recognized. Yet within a space of fifteen months I have treated five cases at Reynolds Memorial hospital, which is the more remarkable when one considers that the hospital draws its patronage almost entirely from local territory. In fact four of the cases came from Moundsville and one from McMechen, in our immediate neighborhood.

It may be of interest to report the cases somewhat in detail. I did not see any of the cases primarily, one being referred by Dr. C. G. Morgan of McMechen, one by Dr. J. W. Rickey of Moundsville, and three by Dr. L. S. Hennen of Moundsville. I have seen but two cases primarily, both some ten years ago. One was diagnosed as ectopic pregnancy and sent to a surgeon in Wheeling for treatment. He diagnosed it as pelvic inflammation and treated it expectantly for a month, then operated and found a case of tubal pregnancy with ruptured tube. The other one I did not recognize, but diagnosed as a probable abortion. The patient went to the same surgeon who promptly made a correct diagnosis and operated.

The diagnosis, if learned from the text book, seems easy, but my little series proves that when practically applied it is not so easy. In only one case did the first physician on the case make even a probable diagnosis of ectopic pregnancy, and in that case, when I was called in consultation, I thought he was mistaken but subsequent developments proved that he was correct. In three of the cases I was the third physician called. The first physician had treated the patients for several weeks without making a correct diagnosis. In one of the cases the second physician had made a probable diagnosis of ectopic pregnancy, in the other he recognized it as an operative case but did not attempt an exact diagnosis.

In four of the cases the diagnosis was proven by operation, the fifth was not operated on, and the diagnosis made from

clinical signs only. The operated cases all recovered without complications, the one not operated is still under observation.

A detailed account of each case follows:

No. 1.—Was a young woman of 23 years, unmarried. She gave a history of having had an abortion about two years before, but no history pointing to pelvic inflammation. She was first seen by Dr. J. W. Rickey May 3d, 1909. Her complaint was severe abdominal pain. She had a moderate uterine hemorrhage and some elevation of temperature. I saw her two days later. The history was that her menstruation was due April 10, but failed to appear. Later she had a slight discharge of blood, and, as before mentioned, severe pain on May 3d. We decided it was a case of incomplete abortion and curetted May 6, and obtained some debris that bore some resemblance to placental debris. There was no other symptoms until May 12, when the pain and temperature recurred. She was removed to Reynolds Memorial Hospital May 13th. I copy from my record made at that time: "Mass to right and posterior to uterus. Indefinite mass blocking entire pelvis. Uterus cannot be differentiated."

"*Diagnosis*:—Salpingitis, pelvic inflammation."

Shortly afterward I went to New York to be gone a month, and this patient along with the balance of my practice was turned over to Dr. Thurman Gillespy. She remained under his care until my return, June 13. She suffered considerable pain and carried some temperature during that entire time. During that time the temperature ranged from normal to 101. The pulse from 70 to 114.

On June 16th, 1909, with Dr. W. P. Bonar as anesthetist and Drs. P. D. Barlow and Thurman Gillespy as assistants, I operated on the patient. That morning the pulse was 98, the temperature 98.8. On her return from the operating room the pulse was 168. Her highest temperature was 102.2 on June 21st. The findings were: Tubal pregnancy of right tube, the tube ruptured, and very extensive adhesions. The fetus was found within the adhesions. The mass was removed, plain cat-gut used for ligation. The wound was drained. Patient left the hospital July 8th, 23 days after operation.

No. 2.—Was a married woman 26 years old. I first saw her in consultation with Dr. C. G. Morgan, of McMechen, January 26th, 1910. He asked me to come prepared to do a curettage, but also said it might be something else. Another physician had seen the patient a few times during the previous two weeks, but I think made no diagnosis. The history was as follows: The last menstruation was November 25th, 1909. Had violent abdominal pain about January 12th, 1910, but saw no blood until about one week later, and the blood had been coming in small quantities until the time I saw her. There was marked abdominal tenderness. She was removed to the hospital. I copy from my record: "Uterus in normal position and appar-

ently normal size. Rather soft mass filling cul-de-sac of Douglass, very tender.

"*Diagnosis*:—Probably ruptured tubal pregnancy."

She was operated on February 2d, 1910. Dr. Bonar was anesthetist and Dr. Morgan assistant. The findings: Considerable free blood within the pelvis, ruptured right tube and left tube bound in inflammatory mass. The adnexae were removed, the clotted blood removed as far as possible. Cat-gut for ligation and closure used, the wound drained. The pulse when patient returned from the operating room was 93, the highest temperature following the operation was 100°. She left the hospital in four weeks.

No. 3.—Was a young woman 23 years old, married eleven months. There was no history of a previous pregnancy or previous pelvic inflammation, but she had had pain in the right side that had been diagnosed as "diseased ovary." Dr. L. S. Hennen saw her July 28th, 1910, and I saw her in consultation July 29th.

The history was that she had menstruated regularly until May 30th, 1910, when she "missed." A week later she had severe abdominal pain and a bloody discharge which had continued. Another physician saw her at this time, and I was told made a probable diagnosis of appendicitis. She had another severe attack of pain in about three weeks, another in a week, and it then continued. She was in bed most of the time, but not continuously, during this period. She said she had fever at least part of the time. As stated above, I saw her in consultation with Dr. L. S. Hennen July 29th, 1910. We curetted her with the thought that possibly an incomplete abortion was at the beginning of her trouble, but found the uterus empty. She was removed to Reynolds Memorial Hospital that evening, and the next morning, with Dr. L. S. Hennen as anesthetist and Dr. W. P. Bonar as assistant, I opened the abdomen. There was found a considerable amount of clotted blood in the abdominal cavity and a ruptured right tube. The right tube and ovary were removed, cat-gut used for ligation and closure and a small drain carried into the abdominal cavity. The pulse when she left the operating room was 92, the highest temperature following the operation was 100.2°. She left the hospital in nineteen days.

No. 4.—Was a young woman age 24, unmarried. This is an unproved case, as she has not as yet come to operation. She entered the hospital August 28th, 1910, referred by Dr. L. S. Hennen. He had first seen her the previous day. As I have said, the diagnosis stands unproved, but I have classified it as ectopic pregnancy, although two other diagnoses have been made by other physicians. The history is as follows: She had an abortion at three months three years before. She was in another hospital at the time. She had an infection following, with pain on the left side.

As having direct bearing on present trouble, the history is that she had sexual intercourse about June 1st, 1910, and again about July 3d, 1910. Her last normal menstruation was May 20th, 1910. She began menstruating slightly June 30th. It stopped to recur July 4th. This lasted three weeks, since when there had been no dis-

charge. On July 7 she had a severe attack of abdominal pain, accompanied with dizziness and vomiting, followed by soreness on the right side. Following this she had several similar attacks. The trouble, she says, was diagnosed by another physician as appendicitis. She was very anemic when she entered the hospital, carried some temperature, up to 101° occasionally, and a pulse rate ranging from 110 to 140. My first examination was made August 29th, and the record reads as follows: "Cervix uteri softened and patulous. Uterus enlarged apparently to about three months' pregnancy. Apparently a fluctuating mass back of the uterus; abdomen distended. *Diagnosis*:—Pregnancy."

On September 3d, 1910, I re-examined her and my record reads as follows: "Uterus ante-flexed, somewhat enlarged, mass outside the uterus larger, more apparent on left side. *Diagnosis*:—Probable ectopic pregnancy."

The mass increased in size until it blocked the pelvis and rose as high as the umbilicus. After from ten to fifteen days it began to grow smaller. As it grew smaller it had a peculiar nodular feel, and as it became still smaller it was apparently movable; the nodules became more marked, suggesting strongly a fibroid, but after the second examination I was and remained certain that the mass was extra-uterine. September 21st I did a curettage but found an empty uterus. She left the hospital September 25th. Her temperature and pulse had been normal for some time.

About the middle of October, this patient consulted a surgeon of Wheeling. He made a diagnosis of uterine fibroid, but added that she was or had been pregnant. Later, another physician out in the state also made a diagnosis of uterine fibroid. At present the patient says she is, and she looks perfectly well. The mass now about the size of a medium size orange is to the left of the uterus slightly movable, still a little nodular, not tender. I still adhere to my diagnosis of ruptured ectopic pregnancy, and I shall be glad to report the case if she ever comes to operation in my service.

No. 5.—Was a young woman, married, 28 years of age. She had two children aged 4 and 2, respectively. There was no history of abortion or infection following labor.

I first saw her in consultation with Dr. L. S. Hennen, September 6th, 1910. She had passed her menstrual period a few days. The flow had then started, accompanied with considerable pain. Dr. Hennen suspected ectopic pregnancy, but I thought the symptoms did not warrant the diagnosis, so she was curetted, but there was no evidence of uterine pregnancy. She then went about her duties until October 15th, when she had an attack of abdominal pain accompanied by marked shock. She was removed to the hospital. She entered with a temperature of 99.2 and a pulse of 116. The following morning with Dr. Hennen as anesthetist and Drs. Bonar and Mor-

gan as assistants, I made an abdominal section. There was a large amount of blood present, extending upward to the liver. The pregnancy had taken place in the right tube and had aborted through the distal end of the tube. The placenta was attached to the peritoneal surface, posterior to the uterus. The right tube and ovary were removed, the blood cleaned out as well as possible, no irrigation, the placenta detached and removed, cat-gut ligation, the wound closed with drainage.

Her pulse at the close of the operation was 124. Proctoclysis was immediately started and the patient put in a sitting posture. Her highest temperature following the operation was 100.4. She left the hospital in 20 days.

In all the cases there was elevation of temperature before the operation, as high or higher than after the operation. In all the cases operated on the right tube was involved, and in all three instances it was ruptured.

The patients were all comparatively young, the youngest being 21, the oldest being 27. Two of the cases had borne children, two each, two had had an abortion, and one had never been pregnant previously.

Only one gave a history of an antecedent pelvic inflammation. Each case was drained, each was put in the sitting posture as soon as she recovered from the anaesthetic, and all recovered without complication of any sort.

ASEPSIS IN TONSORIAL PARLORS.

T. Jud. McBee, M.D., Elkins, W. Va.

(Read at annual meeting of State Medical Ass'n, Parkersburg, Oct., 1910.)

Not many years ago asepsis in technique was more of a stranger to the medical profession than it is to the public today. Public opinion gives us credit for making more progress in the past two decades than any other scientific body.

Although the medical profession has made great advances in recent times and thereby has contributed largely to the health and comfort of humanity, yet there remain many opportunities for further advances and for alleviating the sufferings of man. The specific thing we are concerned about in this paper is bettering the sanitary conditions in barber shops. The "cupping basin" still rattles outside the shop of the hairdresses as does the "leech" with the surgeon barber. Every trade finds its followers as does the "counter pre-

scribing druggist" and the "doctor barber," both coming by natural inheritance into practice upon a willing public always ready to be imposed upon.

One of the greatest sins of our profession is our apathy.

We have for years watched the druggist practice medicine, and have given him our custom and influence. In the same way we have encouraged the "doctor barber" in his advance on our profession and the willing public, until now he is very much elated over his ability as a dermatologist, chiropodist, inventor, discoverer and in many cases classes himself as a specialist in some one or more ailments of the scalp and face.

1. He has a supreme remedy for all alterations of the hair, and if it fails he has another, and bows you out of the door with a suggestion in the way of toilet articles.

2. The barber is a self-constituted custodian and an expert on all diseases of the scalp, and through their unions the barbers have styled themselves as the Tonsorial Profession.

Many barbers have their windows decorated as the aseptic, antiseptic or sanitary tonsorial parlor. No doubt many of them are sincere in this, thinking their shop is all the name implies.

How well do we know how untrue these aseptic, antiseptic, and sanitary conditions are, and how well we know that such barber shops as we have in our cities and towns today are the incubators and mediums for contagious and infectious diseases to spread. Worse in many instances than the shop itself is the barber. Many of our barbers are at the age of their first dissipation, and are the infectious host themselves. I have known one shop of four chairs to have three barbers working in it who had syphilis in the infectious stages, and other shops who had one barber who had gonorrhoeal ophthalmia. I have traced directly three cases of lues to barber shops, and I know I am safe in saying that every member of the West Virginia State Medical Association has traced cases to the same origin. Syphilis is innocently contracted in this way and innocently given to the families. In a city near here a man walking along the street received a scalp wound by the falling of an icicle.

No physician being available, he walked into a barber shop. The barber in licking a piece of adhesive plaster to a mucous patch on his tongue inoculated the man with syphilis. This unfortunate man, before knowing the true nature of his trouble, gave it to his wife.

Fortunately many of our barbers do not belong to this class, and many of them are among our best citizens, but I know you will all agree that the barber who scouts from town to town seeking employment, is very much predisposed to specific diseases and, therefore, is an undesirable citizen. Just last April small pox was spread through Morgantown by a barber shaving a man in his shop who had small pox.

Fully 90 per cent of all baldness owes its origin to barber shops. Twenty per cent of all skin affections in the hands of specialists come from the same source. Among them may be mentioned the pediculi, ring worm of the body, face and scalp, impetigo, cellulitis and the exanthematous diseases.

Premature baldness for years was held as a sign of early senility or it was deemed to be hereditary. But today bald heads are so common that they attract but little attention, the average man seldom giving it any consideration.

Let us study the natural conditions which exist:

A virgin scalp is brushed with the common brush carrying the infection of dandruff. In the thousands who visit the barber shop, many get infection from the common brush; then they go home and use the brush of some other member of the family, when theirs is not convenient; or the brush is employed on the children; even the wife may find the husband's brush better, and it is quite common for the mother or nurse to brush the head of all the children with the common brush. Then we can mention the comb and brush of the public toilet room, etc. Once established in a home it remains. We then have the disease at each end of the road, at home and at the shop, and in most cases the father is the common carrier. Cure the malady at home, but with no regulation of the barber shop it is carried right back again. Dandruff or seborrheic dermatitis will develop in 72 hours. You can readily see what this means in a man who visits the

barber shop every day. Dandruff does not stop by simply destroying a part of the hair on the scalp. Infection may gather on the eye lashes, and in trying to rub it off we produce inflammation of the lids themselves. The eyebrows are often affected and the infection spreads to the nose and face. Ears may derive infection and serious complications follow by invasion of the canal. The entire body is often infected and in some subjects it is very severe, causing first an inflammation in the gland which acts as a center of explosion and true eczema may follow.

In the middle-aged and elderly persons the dandruff is firmly planted in the glands in small patches. These accumulate scars, provoking excoriations, warts and superficial ulcers. When this happens in one predisposed, a true cancer may develop from a single deposit of dandruff. Acting as a foreign body there is first an interference with the functions of the skin. The epithelial cells revert to the normal embryonic type, and under this stimulus they assume their primitive energy which is always much in excess of that of the normal cell. As a result there is a local congestion of active epithelial cells of the original type. Combustion results in the presence of excess of energy, and the result is destruction which may remove most of the victim's face.

Taking them in all their varieties there are some 1500 skin diseases, and nearly all of these can be communicated through the barber shop as a medium.

Some years ago in New York City nearly 4,000 children were refused admission to the public schools on account of parasitic affections of the head. Out of this number 25 per cent were suffering from ringworm of the scalp. Considering the mixed classes in our State, I am sure the above findings have a parallel in our own State, and this fact would be clearly revealed if investigations were made.

It is a fact that whenever a sane movement is started among the American people directed at correcting the evils of society, the very public itself has entered opposition under the apprehension that such a movement contemplates a curtailment of their individual privileges and rights. Very many movements of enlightenment

have passed over modern society, and the public has grudgingly permitted legislative action effecting the control of conditions concerning the public health, and even then they openly encourage the violations of the same law by patronizing any and all fraudulent institutions which exist solely upon their pretensions.

This subject, however, in response to public demand, has of late received consideration through the mediums of the press, Medical Journals, Boards of Health and State Legislatures. Laws have been passed and enforced; progress has been slow but satisfactory to those interested in preventive medicine. But what has West Virginia done? What better agency is there for starting the movement than the State Medical Association?

Many of our citizens refuse to go to barber shops because they are unsanitary. No barber can well afford to invite public comment, and when he is shown that the public demands it, he will gladly assist the Board of Health in placing his business on a sanitary basis.

Under the present conditions one would not be safe from the diseases mentioned if he furnished his own mug, soap, brush, hair brush, comb and razor. But personally I would feel very safe if the following rules were carried out. One city Board of Health has the following rules placed in barber shops and enforced:

1. This place of business together with all furniture is kept at all times in a clean condition.
2. The shop is scrubbed with hot water and lye every night.
3. Mugs, brushes, clippers and scissors must be sterilized by immersion in boiling water after every use thereof, or they may be dipped in 10 per cent solution of formaldehyde.
4. Alum, styptic pencil or other material used to stop the flow of blood shall be used only in powdered form and applied on a towel.
5. Use of powder puffs and sponges is prohibited and separate clean towel must be used on each person.
6. Barbers must thoroughly wash their hands after serving each customer.

7. No person allowed to use any barber shop as a dormitory.

8. Every barber shop shall be provided with running hot and cold water.

9. Tools that are used to shave the sick and dead bodies are not to be used in this shop.

Many antiseptics injure the cutting edge of instruments. Soap added to boiling water increases the germicidal effect and is harmless to instruments. As this is due to the alkalinity, a one per cent solution of carbonate of potash answers the same purpose.

Some one has said, what is the use of enforcing such rules, as many barbers would go out of business and the busy man already has to wait too long to get shaved. Let that be the case; busy men and others would be better off under the present conditions if they did their own shaving. Others may say the barber would raise his prices and many poor people could not afford to continue patronizing the shop. It is a question whether the wage earner can afford to get shaved at the barber shop. Then already in most towns of 5,000 and over and at hotel shops in smaller towns they have raised the price to 15 cents without any advance in their equipment.

A prosperous barber has invented and is now manufacturing a neat cabinet properly named "Antiseptic." The cabinet is made of solid oak, contains three drawers, one for combs, brushes, soaps and mugs; another for scissors, razors and clippers. The other drawer is in the rear for formaldehyde. The cabinet is so arranged that when it is opened the fumes are shut off. This is a true antiseptic sign in a shop.

There are manufactured today many sterilizers suitable for barber shops at the small cost of \$30.00. They are arranged with compartments for towels, brushes, mugs and all articles used by the barber.

It is not the purpose of this paper to make any personal attack on the barber or to hurt his business in any way, for, as was said in the beginning, many of them are among our best citizens. But the purpose is to help him, and this can be done without any embarrassment to him or his business.

I could quote many state laws, but it is not necessary, as time will not permit and reformation can be brought about without

legislative enactment. The evil can be corrected by rules made by city Boards of Health backed up by State Boards of Health.

In conclusion, it is our duty to humanity as well as our professional duty to bring about a change in conditions as they exist today. Our medical journals should discuss the qualifications of the barber, and the equipment of his shop so far as proper sanitation is concerned. In turn, the public press should continue the work as they have so willingly done in our fight against tuberculosis and the social evil. Being a step in the right direction, the public would soon be aroused, when our battle is half won. Our various medical societies throughout the State should continue the work, invite the barber to the meetings, who would readily see that the movement was not only for the safety and protection of their customers, but for the good of the barber himself. This would result in hearty co-operation of barbers, doctors and customers. But one thing remains: That is for the Boards of Health to get together and draft a liberal, thorough set of rules and have them enforced.

DISCUSSION.

Dr. Harris expressed himself as much interested in the paper, because of a somewhat recent personal experience. He had been shaved in a barber shop a year ago, and the next day discovered a tender spot on his neck. This soon developed into a malignant carbuncle, and he lay in bed for many weeks never expecting to recover. "But here I am at 80 years of age," he added, "and good for ten more. I am completely reconstructed, and hence am only a year old."

Dr. Grimm thinks that the association should go on record in regard to venereal diseases, which may easily be contracted in the barber shop. *Morrow* says that at least 60% of all young men will at some time contract some form of venereal disease. Physicians neglect the study of these diseases. The people should be educated to the dangers resulting from venereal infection. He offered a resolution which met with no second, because the state has already an association, as stated by

Dr. Golden, devoted to the education of the people by sending out circulars of information. Several members of this association are officers of that organization, whose headquarters are at Elkins.

Dr. Jepson had seen four cases of tinea sycosis contracted at one barber shop. Two were his own cases. Had also had cases of variola distinctly traceable to a barber shop, a barber himself having the disease, and continuing at his work. The suggestions of the paper are valuable but will

be exceedingly hard to have put into operation. As to educating the people in the dangers from the venereal diseases, he had addressed at least 2,500 people on this subject, and had found them eager to learn the facts. Whether young men and older men will mend their ways after getting this information is a question upon which many have doubts. It is still our duty to give the information.

Dr. McBee, in closing, criticised the Board of Health for not informing the people on this and other health subjects.

DISEASES OF THE ACCESSORY SINUSES WITH REFERENCE TO THE EYE, EAR, NOSE AND THROAT.

J. McKee Sites, M.D., Martinsburg,
W. Va.

(Read at Annual Meeting of State Medical Association, October, 1910.)

The important part played by the accessory sinuses in pathological conditions of the eye, ear, nose and throat, received but little notice in the clinical observations of the earlier specialists of these organs, notwithstanding the fact that the early anatomists, by accurate anatomical study, had prepared the way for practical research.

In 1875 Spencer Watson, an English rhinologist and ophthalmic surgeon, wrote a very clear paper on the diagnosis and treatment of disease of the maxillary antrum, which acted as a stimulus to further study and research, not only in diseases of the antrum of Highmore, but of the other accessory sinuses.

In 1879 Lennox Browne, of London, reported three cases to the Harveian Society, and it was from this date that diseases of the other accessory sinuses had been fully and differentially studied. When we consider the very close relationship, and intercommunication by canals and openings between the sinuses and the eye, ear, nose and throat, lined by a common mucous membrane, we can readily understand how an infection or disease may easily extend from one to the other.

The accessory sinuses have their openings in one or other of the upper nasal passages.

Under the anterior extremity of the middle turbinate is a deep half moon gap, or hiatus semilunaris, which leads up to the infundibulum, and through this into the frontal sinus, and in the bottom of the hiatus similunaris, is the opening of the anter-

ior ethmoidal cells, and by the same aperture or an opening a little further back, above the bulla, is the orifice of the middle ethmoidal cells.

The posterior ethmoidal cells open by one or two apertures into the forepart of the superior meatus, and the sphenoidal antrum communicates with the sphenoidal recesses, an angular opening above the superior turbinate, and between it and the sphenoid.

On account of the openings and very thin bony walls between the sinuses and some of the neighboring cavities, infection and disease processes may pass from one to the other.

The inner and upper walls of the maxillary sinuses are very thin, and form part of the outer walls of the nasal fossa and floor of the orbit.

The walls of the ethmoidal cells are extremely thin and give an almost direct communication with the orbit, and frequently the posterior cells extend into the small wing of the sphenoid, bordering on the optic canal, and in close relation to the optic nerve. The sphenoidal sinus, in part, forms the wall of the optic canal, and the roof of each sinus, at that point, is separated from the anterior cerebral fossa and brain by only a thin lamina of bone, one or two millimeters in thickness.

Diseases of the ethmoid cells and the sphenoid sinuses, may implicate the orbit and optic nerve.

The frontal sinus extends into the inner and upper wall of the orbit, and posteriorly is divided from the brain by a very thin plate of bone, which may be easily perforated during a surgical operation or as a result of morbid process in sinus, which happened recently in a case of mine, resulting in meningitis and death. It was formerly thought that a purulent discharge from the nose was a symptom of rhinitis, and the spray or douche was ordered, usually with only temporary benefit, but we now know that the discharge rarely comes from the nose itself, but as a rule it is a symptom of disease of one or more of the accessory sinuses, and the careful observer will not fail to inquire into the condition of these cavities, in any case of prolonged discharge from the nostril.

The sinuses may be affected by specific inflammation, syphilis, tuberculosis, new

growths, injuries, and catarrhal suppurative inflammation, usually associated with acute rhinitis and influenza, as complications.

The diagnosis of sinus disease can generally be made without very great trouble, by the well known means at our disposal, and if we will take into consideration the seat and character of pain and point of discharge.

In searching out the cause of obscure brain and nerve symptoms, the accessory sinuses should always be kept in mind.

Doctor Thigpen of Alabama, read a paper before the Section on Ophthalmology, of the American Medical Association, at the St. Louis meeting, in June 1910, in which he reported two cases of choked disc with blindness, one due to empyema of the sphenoid sinus, with bone necrosis and papilloedema, and the other to disease of the posterior ethmoid cells. Operation and treatment of the sinus disease cured both patients.

My friend and old room mate, Doctor John F. Shoemaker, of St. Louis, read a paper before the Ophthalmic Section of the St. Louis Medical Society, which was published in *The American Journal of Ophthalmology*, December, 1909, in which he reported the case of a young lady twenty-three years old, totally blind from complete atrophy of both optic nerves, due to a cystic tumor in the pituitary gland, pressing on the optic tracts and chiasm, and later eroding the thin plate of bone in the bottom of the sella turcica, with rupture of the cyst and discharge of its contents into the sphenoidal sinus, and from this into the pharynx.

The symptoms of brain disturbance and loss of vision, being first noticed by bitemporal hemianopsia and progressing to the complete loss of vision.

She began to have severe headaches, delirium and other symptoms of brain pressure and irritation, which lasted about a week, but after a profuse discharge from the naso-pharynx, the patient became quiet and the mind cleared up, and her condition improved.

After a short time the discharge ceased and the patient again grew worse with all the symptoms of brain involvement.

LOCAL USE OF MAGNESII SULPHAS.

B. B. Wheeler, M.D., McKendree, W. Va.,
Surgeon-in-charge Miners'
Hospital No. 2.

(Read before Fayette County Medical Society,
December 6, 1910.)

For the past four years we have used as a local dressing, sulphate of magnesia. We have used it on contused and lacerated wounds, incised wounds, on inflamed and swollen joints; in orchitis, on infected wounds with foul discharge, and in moist gangrene, following injuries of the extremities.

In all of the above enumerated conditions in which we have used magnesia sulphate, the results have been uniformly good. We have not used it to the exclusion of other local dressings, but have made a careful clinical study of the uses of sulphate of magnesia, and have used all the other commonly used local dressings side by side with the magnesia sulphate. And our observation, extending over a period of four years, has been, as the records of the hospital will show, that in all cases in which the salts have been used, good results have followed. Take for example, a case of extensive laceration and contusion of the soft tissues, what do we expect from the usual moist dressing which most of us use, namely 1 to 1000 bichloride solution. We get, in the greatest number of cases, extensive sloughing and infection. What do we expect when we properly use sulphate of magnesia? We have a separation of the tissues that are contused and crushed, until they have no blood supply. They separate, we get no infection, and in a few days, as soon as the tissues that are not nourished can separate, granulation begins, and the wound fills in by granulation. Take a case of inflamed and swollen joints from any cause. First put the joint at rest, relieve the pressure; if that is due to an extravasation, aspirate, and apply sulphate of magnesia, and the pain is relieved, inflammation subsides, and your patient has recovered from the attack. In infected wounds, from any source, where you can apply sulphate of magnesia to the infection, you will find in a few days that odor disappears, and

both local and general symptoms clear up rapidly.

We have seen, in moist gangrene of the leg following crushing injury, when you could trace the lymphatic system up the leg by the red lines, could get the emphysematous condition of the tissues, and could note all the symptoms, both local and general, of acute moist gangrene, the symptoms clear up, and the line of demarcation form. We have seen this in a number of cases when sulphate of magnesia was properly used; we have never seen this under the use of any other local dressing, and have tried bichloride, normal salt, boric and carbolic acid, permanganate, chloral hydrate, and in fact could exhaust the list of local dressings, without enumerating one where we could definitely say that a good result was due to the local dressing. It is the rule and not the exception that we have infection in compound comminuted fractures. You who are present tonight know the kind and the character of cases we receive in hospitals. You know it is the rule in most of these compound fractures that they are infected, but nine out of ten of the cases we treat by application of magnesia sulphate heal without any infection.

Since I have mentioned compound fractures I hope you all will pardon a digression, and I shall give the usual method of treating a compound fracture of the leg. We will say the patient is received into the hospital with a compound fracture with extensive laceration and contusion of soft tissues. The first thing is to give the patient a bath, thoroughly scrubbing the leg, and shaving about the site of injury. Use soap and water, followed by bichloride, 1 in 1000. Suture the muscles and skin, appose bone, put on 1 to 1000 moist bichloride gauze.

That is the usual dressing, with the application of splints. It is also the wrong way. Take the same case admitted under the same conditions, we would now give a bath, cleanse the best we could without scrubbing or in any way introducing any more infection into the wound. We paint the leg with tincture of iodine, suture muscles and skin, appose bone, put on plenty of sterile gauze, two lateral and posterior splints, apply a saturated solution of magnesia sulphate and keep the dressing moist, changing it every twenty-four hours, for two or

three days, and we expect and have no infection. Why we say the first way is wrong is, that one will wash more infection into the wound than can possibly be washed out. Again, every time you touch the lacerated and torn tissues you are "adding insult to injury," it being absolutely impossible to remove infection if it has already been introduced into the wound. In the last instance you apply bichloride in such strength that if applied to the normal skin it will kill the epidermis.

Now as to the proper way to apply magnesia sulphate. It is not any trouble at all. Simply make a saturated solution, apply plenty of gauze to the wound or joint, and keep the gauze moist with your saturated solution.

It has its objectionable features, in that it keeps the nurse busy to keep bed clothing dry and the patient from being wet. Also there is some pain to the patient. As to how it acts, I do not know nor do I attempt to tell you; in fact do not know whether or not it has any antiseptic value at all. So far as I know personally, it may be as good a culture medium as bouillon, but I do know it will produce most excellent and encouraging results.

It will also appear from the records of the hospital, that it is the local dressing *par excellence*. I hope the impression has not been made on each of you that I am "a crank" on the use of sulphate of magnesia, as I have the records of the hospital for the past four years to bear out each statement made in this paper. In fact I have made a list of cases by numbers, giving the conditions for which the sulphate was used and also the results. But this has been omitted from this paper as it would take up too much time. Try this treatment and you will be convinced and your patients will be benefited.

Ketch yer grip an' hang a-hold! Don't you stop to grumble.

Be a man an' hold yer head right up in the air. You ain't never down, you know, until you take a tumble.

Even then there's no excuse for you're lyin' there. Bounce right on your feet again with determination.

Never be disheartened if you take some little falls;

'Tisn't time just yet, you know, fer your extermination—

Don't be a dead one till the undertaker calls.

Correspondence

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION—NOTES ON 23d ANNUAL SESSION.

J. E. Cannaday, M.D., Charleston, W. Va.,
Surgeon to Charleston and McMillen
Hospitals.

(Continued from March Issue.)

The meeting of the Association was called to order by Dr. R. E. Fort of Nashville. The doctor used a gavel made from the leg of an operating table of Dr. J. Marion Sims and presented to the Association in 1895.

Dr. Long, of Greensboro, N. C., in the course of a paper on the subject of the preservation of the gall bladder based on eighty-six cases, says that the gall bladder should be removed in the presence of malignant disease and in gangrene where the entire thickness of the bladder wall is involved. He holds that infection and empyema are but relative indications for the removal of the gall bladder. Most such cases will be entirely relieved and happy results be obtained by simple drainage. Impacted stones in the cystic duct is not an indication for cholecystectomy. The gall bladder is not intended by nature for the storage of bile, but is rather an expansion tank. Removal of the gall bladder is always followed by dilatation of ducts. Fresh bile from the liver injected into the pancreatic duct will cause inflammation. Bile which has been standing in the gall bladder has not this effect. He calls attention to the fact that the only way to successfully treat chronic pancreatitis is by drainage of the bile tract preferably through the gall bladder.

The general tenor of the discussion following the paper was, that few gall bladders other than those the seat of malignant disease should be removed. Dr. Kelly said he would, under no circumstances, remove a gall bladder that might easily recover with the aid of drainage. The writer has recently had a case in a woman sixty-eight years of age in which the gall bladder was filled with solid, cheesy contents, evidently pus with all its watery elements removed.

The patient had been suffering from severe pain and gastric disturbances for a long time. The incision was made and the gall bladder removed mainly under novocaine anesthetic, with the result of a rapid recovery.

Dr. Hunner of Baltimore read a paper concerning tonsillitis as a causative factor of urethritis and ureteritis. He admits, of course, that a great many of these cases of infection are specific in their origin, but says that some cases can be traced to the infected tonsil. He says that these are undoubtedly the cause of so-called rheumatic urethritis of the older text books. Certain cases, particularly in the newly married, have a urethral infection which is non-specific. In the female there are also cases of auto infection. He thinks there may be an infection from the tonsil or that the urethral condition may be due to the absorption and effect of toxins generated by the inflamed tonsil.

Dr. Kelly in discussing this paper mentioned a case of supposed chronic rheumatism that was cured by the removal of a diseased kidney. Some of the members of the society thought the teaching of Dr. Hunner might lead to too much operative work on the tonsil.

Dr. Howard Kelly described his method of exposing the bladder for suprapubic work. Says he makes a low transverse crescentic incision after the method of Pfannenstiel. He says it gives a very broad exposure of Retzius space. He inflates the bladder with air and makes his incision transversely. He advocates this method for dealing with large ulcers, papillomata, malignant diseases and certain cases of cystitis. Two fingers in vagina will also help greatly in lifting the bladder upward and forward. Dr. Horsley said that he used the transverse incision as a routine in all suprapubic cystotomies, as it leaves the abdominal wall in a better condition afterwards. Kelly in describing his transverse bladder incision told us that the main point in exposing the bladder is to dissect the fascia from the recti muscles and turn it upward. After this is done the muscles are easily drawn apart by the aid of retractors.

Dr. Bryan of Richmond, Va., discussed the subject of stone in the ureter, and advised attempting to dislodge small stones by injecting through the ureteral catheter.

If this method fails or the stone is large, he advises an extra-peritoneal operation.

Dr. Mason, of Birmingham, Ala., called attention to the fact that tuberculosis of the kidney may be limited to one kidney for a long time. Most of the early symptoms are vesical. The treatment he advised was prompt removal of the kidney.

Dr. Burch of Nashville says that many of the accidents following operations are easily preventable. He advises more careful examination of the patient and consideration from various points of view before operation.

Dr. Ferguson described an operation for the production of an artificial vagina. He dissects large flaps, three from about the entrance to the vagina, and after separating the bladder from the rectum without opening the peritoneal cavity he inverts the flaps into this new made canal and fixes them there with cat-gut. They are held in place by a vaseline-covered roll of gauze. Another method has been described which I believe gives better results and a much more normal canal. It consists of the fixation of a portion of the small intestine secured by resection, along with its blood supply, into the artificial opening made by separating bladder and rectum in cases of congenital absence of the vaginal canal.

Dr. Winslow reported a case of complete severance of the spinal cord by a bullet without this projectile having entered into the canal. He exhibited a specimen, and it was evident that the trauma was the result of the explosive force generated by the projectile about the zone of impact. It is, of course, a well known physiological fact that it is utterly impossible for any regeneration of the cord to take place above the origin of the cauda equina.

Winslow cited the cases of Stewart and Fowler. He said that it is not necessary to cut the cord in order to get paralysis. He made the suggestion of cystotomy in order to treat cystitis in the management of cord cases complicated by retention of urine. I have had two cases in my experience in which there was complete transverse destruction of the cord although the cord had not actually been touched by the bullet.

Dr. Horsley reported the removal of an ovarian cyst weighing 116½ lbs. Dr. Cullen reported the successful removal of an 89 lb. fibroid from a 174 lb. woman who

weighed 85 lbs. after the operation.

Dr. Ferguson said that he removed a large ovarian cyst, amputated a carcinomatous breast and removed twelve hundred and fifty gall stones all from one patient at one sitting, with recovery.

Dr. Cullen reported the removal of the uterus, appendix, tubes, ovaries, three feet of small and almost a foot of the large bowel for malignant disease, with satisfactory results.

Dr. John Wathen of Louisville described his technique in goitre operations, and illustrated it with magic lantern views. He leaves sufficient glandular tissue for the protection of the recurrent laryngeal nerve and the parathyroid glands. He continues to drain his cases with a large rubber tube inserted through a stab wound just below the line of the incision. In the large exophthalmic goitres he sometimes makes additional drainage through the operation wound and in a few cases uses gauze packing. The main features emphasized by Wathen in describing his goitre technique are the use of the scissors instead of the knife, and the making of upward and outward traction continuously during the dissection. This traction enables the operator to do his work much more rapidly and safely. It lessens the hemorrhage and brings the parts in plain view of the surgeon.

Dr. Witherspoon of Montana called attention to the danger of tracheal collapse during the operation of thyroidectomy. Lifting the gland out of the wound as much as possible during the operation may protect this.

Dr. Morris advised in some cases intratracheal anesthesia. It is not by any means always necessary to cut the muscles when operating for goitre as they can often be retracted well out of the way. In case of collapse of the trachea it will be necessary to open this tube promptly.

Dr. Matas of New Orleans said a great many things in favor of catheterization of the cystic and common bile ducts in toxic biliary cases. He advocates enteroclysis by this method. He also advises that it has a beneficial effect in the treatment of biliary fistula. I advised the use of the rubber ureteral catheter for this work, as it will follow easily around angles and make acute bends when other instruments fail. This use of the ureteral catheter was sug-

gested to me by the ease with which it can oftentimes be passed through strictures into the bladder when unsuccessful attempts have been made with filiform bougies. There was considerable discussion relative to the value of enteroclysis of normal salt solution through the common bile duct for the relief of cases of anuria, particularly in the patients who vomited everything and were unable to retain saline solution by the rectum.

Dr. J. Y. Brown of St. Louis read a careful study on the treatment of intestinal obstruction. He called attention to the fact that intestinal block is one of the most dangerous emergencies. Resection of the bowel or the formation of an artificial opening is generally necessary. He reported fifty-nine cases with a total mortality of a little over 20%. He emphasized the fact that the outcome depends principally upon the time the surgeon is called and gets to work. As regards the post-operative treatment he earnestly advocates gastric lavage and rectal enemata by drop method.

Dr. Brown severely blames the text books of surgery for advising taxis and inflation in the treatment of strangulated hernia. If the patient cannot reduce his hernia the surgeon cannot reduce it for him. He reported a large number of cases briefly to show the disastrous results of tinkering and waiting. He says that if a plumber should presume to treat water pipes as the doctors do hernia he would very promptly be sent to the psychopathic ward of some hospital. He says wash the stomach frequently to prevent fecal drowning in all emergency cases. He says that frequently a supplementary abdominal incision for the resection of bowel will be of great advantage in the treatment of strangulated hernia. Always inject the passive bowel frequently to prevent obliteration of its lumen. He again called attention to the very great danger in attempting to use purgatives in bowel block.

Watts and others particularly decry the use of purgatives in cases of beginning obstruction of the bowel. They say give nothing by the mouth, not even food. Cecal and colonic invaginations are due to excessive mobility of the bowel and to increased peristalsis of a given section. The longitudinal muscular fibres draw the bowel up

over the preceding section. These invaginations are more common in children. In extensive polyposis extensive resections of gut will be the only efficient remedy. Watts reported two cases. Royster reported two cases of non-malignant polypoid tumors of the bowel.

A case was reported of intussusception of the colon due to horse back riding. A man of heavy weight unaccustomed to horse back and fifty-eight years of age had a sudden intussusception, which, on operation, was found to be three feet in extent. It is not always possible to determine the cause of an intussusception of the bowel. It may come on during the course of typhoid fever. It is probably due to many different things.

Dr. Thompson of Texas reported a case of hypernephroma of the testicle apparently originating there. This is quite an anomaly for a tumor of suprarenal tissue to originate in the testicle. Adrenal rests, so-called, from which these tumors start, are usually found between the kidney and the genital organs in the fetus.

Dr. Coley, as is usual, had a good deal to say on the subject of cancer. He attempted to show a direct relationship between trauma and malignancy. He believes that all types of malignant tumors are extrinsic or parasitic. He calls attention to the very large number of sarcomas following trauma. He says that the Germans have recognized this factor and allow damages in internal and external sarcoma following trauma. He thinks it is particularly prevalent after the x-ray and fractures. He thinks that the cancer cells come from outside the body.

Some members of the Association, notably Dr. Cunningham of Birmingham, who has had a very large experience with traumatic cases, took a decided stand against Dr. Coley's theory, and held that trauma had but little or naught to do with the production of malignant growth.

Roswell Park spoke most entertainingly on the etiology of cancer. He spoke of the prevalence of cancer in the thyroid glands of dogs and fish, and while he gave nothing new he advanced a number of theories and exploded others. He noted that five members of the staff of one small cancer hospital had died of cancer in the space of a few years. He had found cancer of the thyroid

to be very frequent in rats kept in cages. In speaking of trauma as a causative factor he notes ulcer of the stomach, gall stones, mouth disease, x-rays, burns of various sorts, ulcers, aniline and arsenic poisoning, locally, betel nut scars, moles and warts. He remarked that the galls on trees are very near of kin to cancer or other tumors. He spoke of the contradictory results of serums, enzymes, etc. Some cases were apparently cured by them while others seem to be made much worse. So far these methods are on the border line and every remedy save surgery in time, is disappointing. Dr. Park spoke of the lawlessness of cancer cells, of the effects of heredity. He said that it is as difficult to reconcile the conflicting views about cancer as the different views in religion or politics. He thinks the parasitic theory untenable. He believes that cancer is more prone to attack those having weakened powers of resistance.

A bladder diverticulum extending nearly to the umbilicus was described by Mixer. This was probably a case of patent urachus. I have recently operated on a child for this trouble, and had a good result.

Dr. Whitacre reported four cases of volvulus of the cecum. Owing to the usual fixed position of the cecum this is one of the rarest causes of acute intestinal obstruction.

Cullen reported a case of extra-abdominal intra-mural tumor of the ovary into a hernial opening above the anterior superior spine.

Bovee puts a suture around the ureter and makes traction on it in order to locate it throughout its length in cases of intrapelvic work in which he fears that the ureter may be injured. Bovee has had a few cases of gangrene of the bladder wall following the ligation of the internal iliacs previous to doing the radical hysterectomy for cancer.

When a foreign body in the nose is not easily removable with forceps, remember Felizet's simple method—the injection of water into the opposite nostril. Use a syringe or douche nozzle that snugly fits the naris. Begin gently and slowly, then increase the force. As the resistance suddenly ceases, the foreign body is shot out (or at least is dislodged), by the pressure of the fluid reflected from the posterior wall of the pharynx.—*American Journal of Surgery.*

Selections

BREWER'S YEAST IN THE TREATMENT OF ULCERS, NECROTIC AND TUBERCULAR CONDITIONS.

Roswell Park, M.D., LL.D., Buffalo, N.Y.

My acquaintance with the value of yeast began during my first year as hospital interne when one of my chiefs directed me to apply to a most foul and sloughing cancerous ulcer, a so-called charcoal and yeast poultice. This appeared to have been a remedy long in vogue,—by whom originated I know not, and in possession of the people generally who seemed more or less familiar with its property. It had the desired effect in clearing the sloughing tissue and overcoming the bad odor, and so successful was it that the result of this, my first experience with it, deeply impressed me. Further use of the mixture made me inquire into the usefulness of the charcoal portion of it, since, if this could be shown to be unnecessary, it would make the compound much more desirable for general use. Of course, the purpose of the charcoal is self-evident, since it, like spongy platinum, has the property of absorbing relatively large amounts of gas and in this way the suppression of the odor may be explained. When, therefore, bad odor becomes an unbearable feature of a given case, charcoal may be of great service used with yeast, though not necessarily mixed with it, since it may be dusted over the surface.

All this is simply an introduction to some brief remarks on the value of yeast in the treatment of necrotic and ulcerating surfaces. It is an old-fashioned remedy, whose value has been too long forgotten or neglected, and one which requires but a trial in order to convince one of its usefulness. The yeast alluded to is the ordinary brewer's yeast, which may be usually secured at any time from any brewery, but, inasmuch as breweries are not always at hand, it is a part of my object in this note to call attention to the equal value of the ordinary compressed yeast as it comes in the shape of so-called yeast-cakes.

The fluid and frothing brewer's yeast may be kept in a cool place for at least two or three days before spoiling. The yeast-cakes are procurable at all times, and when

kept cool are also good for several days' use. When using the former, absorbent cotton or gauze may be sopped in it, while the latter may be mixed with water into a paste of requisite fluidity and be used in the same way.

What, then, does yeast accomplish? It is the most effective and speediest agent for the removal by a sort of digestion, of all dead and dying tissue, that I know of. Applied to the foulest surfaces, it proves itself to best advantage. Even on a large offensive bed-sore or ulcer, covered as we usually see them in chronic cases with a membrane almost like that of diphtheria, the yeast will cause a separation of all necrotic tissue, and is a restorative to a healthy granular condition in a shorter and more satisfactory time than any other agent known to me. It seems to digest such tissue much as would carica papaya. It does this painlessly and effectually. I care not what the underlying nature of the necrosis, since all yield in the same way.

What, now, is the explanation of the peculiar effect of yeast? Is it due to nuclein or to one or more enzymes? Clearly, to the latter. In the effort to secure a more satisfactory explanation of the action of yeast, I requested a brief statement on enzymes from Dr. Clowes, the biological chemist of our New York State Cancer Laboratory. The following epitome was kindly furnished by him, and it seems to me to sum up the necessary knowledge in the most concise possible form:

"Yeast contains a large variety of those little understood ferments known as enzymes which, whilst they are produced by the cell and intimately associated with the latter in its functions, may nevertheless, frequently be removed from the cell and exert an active chemical effect in the absence or after the death of the latter.

The enzymes of normal healthy yeast, are capable of splitting up complex sugars, fats and proteids into their simpler components, or fermenting sugar with the production of alcohol and carbonic acid and of exerting either an oxidizing or reduction action.

The therapeutic benefit derived from the application of living yeast may conceivably be due at least in part, to the presence of one or more of these ferment bodies.

This question may best be solved by employing the living yeast which has been so treated as to retain the enzymes in question

in an active state, rather than nuclein preparations which are chemical bodies deprived of any special biological function of the type indicated above."

It would appear then, that it is a digestion of the tissue by which the desired effect is produced and it remains only to insist upon the great value attached to this most simple domestic remedy.

I would thus put it again briefly: an ulcerating surface of any character whatsoever, which has become sluggish and more or less covered with membrane, exudate or shreds of dead or dying tissue, can be disposed of more rapidly by the constant application for a few days of yeast in one of the forms mentioned above, than by any other material. This I have demonstrated many times to visitors in my clinic, and in many places in my text book I have advised its use; while in my own clinic its use has become an ordinary routine. Moreover, it can be used not only on surfaces, but also within cavities, carious and the like, either by packing them with gauze saturated in yeast or by injecting with a syringe. Many times after curetting a sloughing bubo or dealing with a foul cavity, either in bone or soft tissue, I have promptly packed it with this material, usually leaving it under these circumstances for twenty-four hours. Never have I been disappointed in nor regretted its use. If upon a given surface, for instance, it has been thought necessary to use the actual cautery, or some caustic agent whose use would naturally cause a slough, this event may be satisfactorily hastened by the immediate use of yeast. In fact, I think the situation may be summed up in this statement: that yeast is one of the most desirable substances that can be mentioned in surgical therapeutics.

Digressing from the purely surgical aspect of its use, I cannot refrain from lauding it as an agent of the greatest value in the treatment of tubercular conditions, especially in pulmonary tuberculosis. Here it is given internally, as it may be with the utmost freedom and with nothing but beneficial results.

Many years ago my attention was called to the case of a young lady who had been practically abandoned by the family physician and whose death was shortly expected as the natural outcome of rapidly advancing consumption. Something induced her father to begin the use of brewer's yeast, of which she took a considerable quantity daily with

the result that—instead of being a helpless invalid and confined to the sofa, with death shortly expected,—she was in a few months able to ride horse-back, and resume her place in society. Her ultimate fate is unknown to me, but even this accomplishment is quite marvelous.

Numerous recent cases, however, are known to me, of patients suffering not only from pulmonary lesions, but also with other complications, such as colitis, rectal ulceration, etc., which have been wonderfully benefited by the internal administration of yeast. I have also found it of great value in certain cases of toxæmia, especially when of intestinal origin. It thus appears to me to have as great a value for internal use as it has for external. Administered in this way, brewer's yeast may be taken in doses of one to two tablespoonfuls every two or three hours. It is not unpleasant to take, having the taste and odor of ale, and it produces no disquieting symptoms. Of equal value of internal use is the ordinary yeast-cake, of which at least one should be taken every twenty-four hours.

I would like to urge, in view of what has been said about the use of yeast in the treatment of pulmonary tuberculosis, that such use is at least rational. Its benefit is explainable by what has been said above, and it has this added value that it can in no wise interfere with any other remedy which may be considered desirable.—*American Journal Dermatology*.

WHY SHOULD YOU BELONG TO THE COUNTY MEDICAL SOCIETY?

(This editorial from the Kentucky Medical Journal is commended to the careful attention of our readers, whether members or not of the State Association. We do not yet offer quite all that our neighbor gives in exchange for membership in our Association, but if we grow a little stronger, all will come.)

Because by becoming a member of the county medical society, you also become a member of the state association and through this association may share in the advantages of the American Medical Association.

What benefit may you expect from these organizations?

1. If you are unjustly sued for malpractice, the state association will defend you through the necessary courts. Commer-

cial insurance companies charge fifteen dollars annually for this service alone.

2. Members of the state society, only, are eligible for appointment as examiners of reputable insurance companies and to membership on local boards of health, positions in asylums, and other state official positions.

3. Through relations established with other state associations the members may secure the benefits of reciprocity in medical licensure. No physician coming to Kentucky is eligible for reciprocity unless a member of the state association of the school of medicine he professes to practice, and of course no Kentucky licentiate can secure reciprocity in other states except upon the same conditions.

4. Arrangements with the State Bacteriologist exist that permit members to have made examinations of specimens of urine, feces, blood and sputum, free of charge. If you wish to confirm a diagnosis of malaria, typhoid, tuberculosis, diphtheria, gonorrhœa, or hookworm disease, write the State Bacteriologist, Bowling Green, Kentucky, for instructions and the necessary mailing cases.

5. The state association, with the cooperation of the State Board of Health, is elevating the standard for entrance and graduation requirements in the medical schools. In the future, the average graduate will be better prepared when he leaves college than was the average man when you graduated. The practitioner must keep ahead. These societies will enable you to do this, for the members are studying medicine, reviewing the valuable old methods and discussing the new ones under the stimulus of professional and social intercourse.

6. Through the courtesy of the Council on Pharmacy and Chemistry of the American Medical Association, the members of the state association may obtain knowledge with regard to nearly all medicinal preparations now offered to the physician. A letter to this Council, 535 Dearborn Avenue, Chicago, will bring the information you may desire upon these subjects.

7. Social and economic problems of interest to you and to the people you serve as a physician are being considered in these societies and efforts are being made to correct whatever evil exists for which our profession is responsible or in which it has an

interest. Improvements of the social and financial condition of the physician, preventive medicine, maintaining just insurance examination fees, the secret division of fees, expert testimony, and contract practice, are among the subjects that are being studied. You will have a part in the work of the state association in offering a reward of one hundred dollars for a conviction of the physician under the criminal abortion law, and when, in connection with the State Board of Health, it pays a reward of twenty-five dollars for every conviction for violation of the medical practice act.

8. Twice a month, you may receive the *Kentucky Medical Journal*, the journal of the doctors of Kentucky, which your subscription will help improve; for all moneys received from subscriptions and advertisements are spent in making this larger and better. The *Journal* records what the profession is doing in your own and every other county, gives the news about doctors, tells of the scientific advances in medicine, and through its advertising pages which can only be used by reputable concerns, shows you where to get much of what you need in your professional work.

9. Finally, the American Medical Association represents the profession of medicine in this country; and its relationship to the public; it is, as it were, a composite photograph of American medical men. You are responsible for this Association's work just as much if you are not a member as if you are. You should receive the *Journal* of the American Medical Association as its other publications, and members receive these on the best possible terms.

10. We need your help. You need ours. Remember this is in no sense a trust, but rather a trustee for public health and the resultant happiness and economic gain. More than two thousand of the twenty-six hundred physicians in Kentucky who are eligible to join, belong to the county societies and the state association. Do you? If you have neglected your share in this altruistic work for the good of the public and of the medical profession, see the secretary of your county medical society today and apply for membership. Pay to him the dues of the county society and \$2.50 for your state assessment and you will be enrolled.

—Editorial in *Kentucky Medical Journal*.

MINING INVESTMENTS FOR THE MEDICAL MAN.

Chas. S. Moody, M.D., Sandpoint, Idaho.

October. This is one of the peculiarly dangerous months to speculate in stocks in. The others are July, January, September, April, November, May, March, June, December, August, and February.

Peddinhead Wilson's Calendar.

My dear doctor, do you ever feel the almost irresistible desire arising within you to get suddenly and fabulously wealthy by investing in mining stocks? If you ever do, take my advice and get a strangle hold on that desire.

I don't want you to think, because I am giving you the above bit of counsel, that I am some "tenderfoot" writing just to hear his typewriter rattle or for the pleasure of seeing his name in print. My typewriter is not in the least musical, and I don't care if my name never gets in print. I am giving you a straight tip right from the factory where they are manufactured.

The physician is easy picking for the mining shark. If I were promoting mines I should make it my especial business to solicit investments only from the doctors. I'm going to tell you how I discovered the fact that many of the medical profession are "rubes" when it comes to separating them from their silver. At one time I chanced to be located in a mining country. Like everybody else, I became interested in mines. I want to pause right here however, and assure you that all my interests never cost me one cent. I *might* buck the shell game, but never yet have I let myself in for mines.

I was made president of a mining corporation. My name appeared in letters something less in height than those that go to spell the name of the newest high kicker in vaudeville, but sufficiently lengthy to attract the attention of some shark back in Brooklyn, who supplies the names of suckers who bite. He wrote me and proposed, for the modest sum of \$10, to send me the names and addresses of one thousand physicians who had bought mining stocks. In order to develop the thought I wrote him and during the course of our correspondence I learned that physicians were considered the most amenable to argument of all the classes, and that when once one of them got the "bug" he never quit until

he was broke. Flattering recommendation for the intelligence of our profession, now isn't it?

I seem to hear some investment mad brother say: "Other men have made fortunes in mines, why not us?" Simply because, my dear innocent, the men who manage those things do not intend that you shall. That is the answer boiled down. A few men have made fortunes in mines, yes, that is true, but how many have gone down to irretrievable financial shipwreck after foundering upon the same rock? You hear of the fortunate ones; you see W. A. Clark's copperbottomed brown stone residence in New York, all built out of the profits from his mining ventures, and you wonder why you cannot do as well. You cannot because you cannot get his opportunity. Besides, Clark, or any other great mining man, never made all his money out of his investments,—a part of it he made out of just such fellows as you, who are always ready to nab at every glittering spoon that is dangled before your eyes.

Clark, Guggenheim, Heinze, are most potent names to conjure with. Their names at the head of a mining prospectus are good for thousands of dollars in the sale of stock. So it is with every prominent or semi-prominent man. If the eastern speculator sees the name of Senator So-and-So or Judge So-and-So as president of a mining company, the said eastern speculator takes it for granted that the scheme is all right or men of such prominence would not be associated with it. That is the way it should be, but alas, that is not the way it is.

Mining is one of the most problematical things on earth. Every mining region has hundreds of prospect holes, each representing a defunct mining company, and into which thousands of dollars of investors' money has been poured, only to be abandoned as worthless. To each paying mine in any given mining district there are five hundred prospect holes. Therefore, your chances are in the neighborhood of one to five hundred that you will strike it, and that too, assuming that the people who get your money make legitimate use of it for development purposes. In far too many instances, the money so trustingly advanced finds its way into the pockets of the promoters, and not one dollar of it goes toward finding out whether or not there is any ore in the rock.

Suppose, for instance, that you have an opportunity to buy stock in a mine that is actually paying dividends. "That," you say, "ought to be a safe investment."

Yes, if the mine should continue to pay dividends it would be. But will it? You must bear this fact in mind,—a mine may be today a Bonanza and tomorrow a hole in the ground. Let me illustrate. A certain mine in this country was dumping out ore that ran up into the thousands per ton. They were hauling it several miles to be milled and had cleaned up over \$200,000 in less than six months. An eastern syndicate bought the mine for something like a quarter of a million. Instead of going on with the mining work, they stopped and built a mill at a cost of sixty thousand dollars. When the mill was all ready to run they resumed mining. The very first round of holes shot through the vein and to this day they have never been able to locate it. It simply "pinched out."

My sincere advice to my professional brethren who may feel tempted to invest their earnings in mines is—Don't. You may strike it, but there are some hundreds of chances against it. If you do, it is like the money won at a lottery, you "blow" it all in trying to make a bigger killing.—*Physicians' Business Journal.*

AEROGRAMS.

Fresh air is the best life assurance agency.
Foul air befouls the body—be dirty and you'll be sickly.

Pure air makes pure blood—pure blood makes you disease-resisting.

Colds are "catching"—easy to catch but hard to lose.

To arrest a cold, liberate the foul air in your room.

"Dope" for colds is "meat" for the doctor.

Pneumonia is the child of faulty pneumatics.

The man with a chest protector can shy no stones at the woman with the lace hose and peek-a-boo waist.

Get the fresh-air habit.

Ventilate.

—From Bull, Chicago Department of Health.

Learn to laugh. A good laugh is better than medicine. Learn to tell a story. A well-told story is as welcome as a sunbeam in a sick room. Learn to keep your own troubles to yourself. Learn to do something for others. Even if you are a bedridden invalid there is always something that you can do to make others happier, and that is the surest way to attain happiness for yourself.—*The Beacon.*

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the 20th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

THE STATE ASSOCIATION.

There are in the state of West Virginia approximately 1,700 practitioners of medicine. Of these we have in our State Association almost exactly one-half. This is not so bad a showing when the older state society of our neighbor, Pennsylvania, with its denser population and much better facilities for travel, can claim but 52% of her physicians in the state society membership. But the American Medical Association, after its reorganization a few years ago, set the high aim of bringing into the membership of the organized profession every honorable, well-qualified physician in the land. We should not be satisfied with any result short of this. For many years the state society, although meeting annually and publishing a volume of Transactions, lived "at a poor dying rate." On two occasions it convened with but thirteen members present, fifteen constituting a quorum;

and those present were compelled either to return to their homes, or do violence to the Constitution by illegally electing two new members. They chose the latter alternative, and no one has questioned the legality of the election. Fortunately we have passed the critical period, but only because "the old guard" stuck to their guns until the enemy of indifference was conquered, and with this foe vanquished our forces were reorganized, recruiting went on rapidly, until we now expect from 150 to 200 members in attendance at our annual meetings.

But unfortunately our membership has ceased to grow as rapidly as formerly. A number of good new members come into our ranks every year, but almost as many become luke warm in the cause and permit their membership to lapse. We have a list of over thirty who failed to pay their dues for 1910. We can not but think that the cause for this lies with the local societies, and chiefly with the officers. The president, secretary and treasurer should be able successfully to combat this tendency.

There are two essentials to the continued prosperity of these societies. One is regularity of meetings, with assurance of a good program; the other is prompt collection of dues. The members of the country societies always attend the meetings at some little sacrifice. If they can not have assurance of an interesting and profitable meeting, indifference is bound to result. Some remain at home after a poor meeting. Then it may happen that no quorum is present. The members soon lose interest and become irregular or cease their attendance, because they do not care to lose time and risk the loss of some patronage when they have no assurance of a *quid pro quo*. When several poor meetings succeed each other the society is well on the way to disintegration. And is it to be wondered at that the members postpone the payment of dues, when they have no assurance of receiving compensation in the way of interesting and profitable meetings?

As before expressed in these columns, we can not but think that, if the dues are paid in January (as now required if we are to receive the benefits of malpractice defense) the members will retain greater interest in the organization, hoping to get the benefits that must come from a year of successful meetings. And in order to in-

sure such a year, preparation must be made in advance by the program committee. In the larger centers of population more frequent meetings can be had and thus a continued interest can be more easily maintained. But for years the Barbour-Randolph-Tucker Society has maintained its place as one of the most active and flourishing of our constituent societies, although its members are scattered over a very large territory. The continued success of this society is largely due to the persistent activity of the officers, and especially of the secretaries. A most important duty of the secretary is the collection of dues. He should not neglect this most important function; and in its performance it is not necessary to give offense. From years of experience as a secretary we long ago learned that few men are free from the dilatory habit; but nearly all will pay if personally appealed to in the proper way. Telephone and written messages will fall short of accomplishing the desired result. One Pennsylvania secretary writes, that he "has collected the dues so well that in the past five years not a single member has been dropped for non-payment." This is certainly a remarkable record, but it is one that may be reached by any persevering, tactful secretary.

Our laws make the secretary the chairman of the Committee on Scientific Work. He thus becomes the most important member of the society, and should have his committee prepare its work months in advance. The Ohio County Society has recently so amended its Constitution as to have its officers, who are elected in September, begin their term of office in January following. Thus they have nearly four months in which to arrange plans and perfect programs for the year. We commend this arrangement to the various societies. The members, having the programs some time in advance of the meetings, can prepare themselves for discussion by reading and reflection, and thus the meetings can be made more interesting. We suggest also that programs be sent to worthy men who are not members of the societies, and that all such be invited to the meetings at times. An interest may be thus excited, and if a personal invitation to join the organization be extended, some valuable new members may be secured. A personal invitation will

secure results that can not be had from printed ones.

Now we are aware that in these remarks there is nothing very new; but as "continual dropping wears the stone," so repeated urging may bring the desired result, which in this case is, a determined and persistent effort for the increase in the growth and influence of our state medical organization. We earnestly appeal to those who have been honored with office in our constituent societies, to put forth effort to gather into our organization all worthy members of the profession. Do this *now*; see that the dues of the present members are collected *now*, so that, when we meet at *The White Sulphur* in the autumn we shall report a membership largely increased, and the old members all paid up to date. This will be novel in the association's history, but it is just as easy to pay now as in September, and the duties of the state association secretary and editor will be greatly lightened thereby, and the association will save considerable money now expended in sending Journals to many whose dues are never paid. Stir yourselves, brethren, and may you, Mr. President, and you, Mr. Secretary, be abundantly rewarded by a consciousness of duty well done, in addition to the joy that will result from a large increase in membership, the result of your labors.

Read the selection in this issue from the *Ky. State Journal* and then go to work after new members, and the collection of dues from the old. A pull all together for 1,000 members before our annual meeting

S. L. J.

A NOVEL USE OF THE INDIAN.

The National Magazine for April has a very interesting article on early medicine, from which we extract this story of a novel diagnosis and treatment. "De Urtre, a Spanish Conquistador, wounded by a lance, had no surgeon in his party, but an ingenious comrade, procuring 'an old Indian' presumably of small value, endued him with De Urtre's coat of mail, seated him in the war saddle and thrust the lance into his side at same aperture, and as nearly as possible at the same angle as it had entered the body of the Spanish cavalier. Then slaying the Indian, he opened the body and traced the path of the lance head, and find-

ing that no important organ was wounded, treated the injury of the cavalier simply and saved his life." We suggest that tramps might be used for a somewhat similar purpose. Thus they might be of some use. No other has thus far been discovered to which they might be appropriated.

THE FAYETTE COUNTY MEDICAL JOURNAL.

The first issue of this new venture was received too late for mention in our last issue. It is a very creditable effort, and contains several good papers by the local members, and one by Dr. Hunter of Hansford. The Journal indicates that Fayette is alive and "going some." We fear, however, that the Journal is really too good to be a permanent success. To conduct a journal of this size is rather expensive, and can not be made to pay unless a large number of subscriptions can be secured, and advertising in addition. In Pennsylvania a number of the societies issue a monthly bulletin, containing society news, programs, and various stimulating items. The cost is small, and these bulletins keep up an active interest in the local organization, and let all the members know what is doing. We congratulate our Fayette brethren on their active interest in medical organization. Their example might be emulated by some of the older societies.

The 42nd Annual Meeting of the American Medical Editors Association will be held at the Alexandria Hotel, Los Angeles, Cal., June 26th and 27th, under the Presidency of Dr. J. MacDonald, Jr.

Unusual efforts are being made for this annual convention, and members are urgently solicited to be present. Plans already matured enables the Executive Committee to assure those who will attend, a most interesting session, both from a literary as well as a social viewpoint.

A TRIUMPH FOR MEDICAL DEFENSE.

Dr. Rea Smith, a prominent Los Angeles surgeon, has been undergoing a \$50,000 suit for alleged damages. The prosecuting witness was operated on in August, 1909, for complete obstruction of the bowels, caused by carcinoma of the sigmoid, and the operation done at the time was for the establishment of an artificial anus. At the end of two weeks the man left the hospital and discharged the surgeon and from that time

on was under the influence of a Christian Science Healer. Dr. Smith heard no more from the patient until a few weeks ago, when the prosecution for damages began, with the claim that there was no cancerous mass, and to prove their claim, after the trial had gone on for a week, asked for a vacation in the trial that a laparotomy might be performed on the prosecuting witness. This was granted by the judge. The operation was performed and a carcinomatous mass was found and the diagnosis and opinion of Dr. Smith were demonstrated. The jury, after being out ten minutes, brought in a unanimous verdict for Doctor Smith.

The attorney for the defense was Gurney Newlin, Esq., who ably represented the California State Medical Society.

Dr. Smith and Mr. Newlin established a precedent in this case that will prove a forceful warning to future would-be prosecutors. This case also shows the efficiency of the defense work of the California State Medical Society. Still the great wrong of it.

* * * * *

The prompt and unanimous verdict of the jury in the doctor's favor shows that the twelve men readily perceived the shallowness and injustice of the prosecution.—*Southern Cal. Practitioner.*

WHY THE MEDICAL PROFESSION OPPOSES "PATENT" MEDICINES.

(Every paper in the State should print the following, but they will not. Why? They lack the courage.)

The medical profession is committed to the prevention of disease. Witnessed by the magnificent results obtained by sanitation.

To anything tending to impair the health of the people we are opposed.

So-called patent medicines do, as is witnessed by their classification:

1. The "Bracers": Those that contain variable quantities of alcohol, e. g., peruna, wine of cardui, the various bitters and sarsaparillas. Taken according to the directions accompanying the bottles, a person soon forgets his or her troubles just as the person under the influence of whisky straight. They are liable to create, and do create, the whisky habit, which is a disease.

2. The narcotics: Those that contain morphin, chloral, cocain and the like, as seen in the various soothing syrups, cough syrups, catarrh snuffs and diarrhea mixtures. In the last five weeks we have had in Lafayette two cases of poisoning due to patent cough syrups. Such preparations are liable to create, and do create, drug habits, which are diseases to be afterward cured, maybe. In this class may be put the headache remedies.

3. The patents used to prevent conception and to produce abortion. Many of the numerous complaints that women suffer with in these days are due to efforts made by use of these medicines to thwart the true course of Nature. To do either is to commit race murder. Life is destroyed in the latter instance. A crime is committed against the state and the expressed law of God: "Thou shalt not kill."

4. The drug habit "cures." The scavengers.

They presume to cure the morphin habit, for example, by morphin. The last state of the victim is worse than the first. The habit is more firmly fixed.

5. The class embracing medicines advertised for the cure of constipation, for example. Troubles of such kind are better benefited otherwise.

6. The sure cures for incurable diseases like advanced consumption and advanced cancer. The vampires: because their proprietors wax rich off the very blood of their victims. The money spent in the false hope of getting cures could be better spent in developing rich blood to prolong the life of the victim instead.

7. The "easy cures" for private diseases. There is no royal road to the cure of gonorrhoea and syphilis.

The patent medicine business is intended to make money and nothing else. Against it is the medical profession, altruistic, which if it discovers a remedy for disease or invents an appliance, gives it to the world without a hope of reward, that disease may be cured or ameliorated. To do otherwise by patent or proprietorship, is to violate the honor of the profession. In the patent medicine business are those who have made their millions, literally. In the medical profession there is not a single millionaire.

When a physician is sick he calls another to treat him. The profession is twitted about that. But you never saw a barber cut his own hair. He gets another to cut it for him. A lawyer, administrator of a large estate, for example, calls another to advise him. What about the layman possessed of no skill to diagnose and treat disease? To paraphrase the expression of the lawyer: "He has a fool for a patient" who attempts to treat himself.

EARL VAN REED, President.

W. M. RESER, Secretary.

Statement endorsed by the Tippecanoe County Medical Association, Dec. 12, 1910.—*Indiana Medical Journal*.

FAKE REMEDIES.

A FRAUDULENT DRUG HABIT CURE.

The Journal of the American Medical Association, in its December 10 issue, gives an account of the government's investigation of the Compound Oxygen Association of Dr. J. W. Coblentz, of Fort Wayne, Ind., which resulted in the issuance of a fraud order against this concern. Coblentz has for years operated a mail-order drug habit "cure" by the use of circular letters sent through the mails, and formerly also by advertising. A decoy letter sent by a post-office inspector called out some of the leaflets sent out by Coblentz, which promised a permanent and positive cure of the morphin habit for the sum of \$11, and by implication at least were intended to convey the idea that the "treatment" used contained no morphin. The \$11 was sent and seven packages of medicine received, which were analyzed by the chemists of the Department of Agriculture. Three of the packages were solutions of morphin varying in strength, the others were

stomachics (one with morphin derivatives) and tonic and laxative tablets. It was shown in the trial that the twenty-four-hour dose of the "cure" for a patient taking habitually 15 grains daily, would contain 20 grains of morphin. The postoffice inspector also testified that he had interviewed Dr. Coblentz, who told him he was treating about twenty-five patients for the morphin habit who had been under his treatment for from five to twenty years. He also admitted that the medicine he sold contained morphin in about the same amount as the patient was accustomed to use, and that this quantity was continued throughout. Coblentz was said further to have admitted that he never really cured a case of morphin habit, but that they reached a point where he called it cured, but they had to keep using the medicines. Correspondence was submitted at the trial showing that one of his patients had been taking the "cure" for fifteen years and was still taking it. In view of all the evidence, the acting assistant attorney general recommended that a fraud-order be issued against Dr. J. W. Coblentz, under his own name and the name of the Compound Oxygen Association, Ft. Wayne, Ind.

MICAJAH'S MEDICATED UTERINE WAFERS.

W. A. Puckner and W. S. Hilpert, of the Chemical Laboratory of the American Medical Association, publish in *The Journal A. M. A.*, March 26, the results of their examination of this product. Trade packages, purchased in the open market, state on the labels that the nostrum is a "disinfectant, astringent and local alterative of the greatest virtue. A remedy for the local treatment of the diseases of women. Inflammation, engorgement and prolapse of the womb, vaginitis, leucorrhoea, menstrual derangements and the disturbances incidental to the menopause. Also highly recommended for affections of the mucous membranes in general, particularly those of the nose, the throat, the rectum, and for gonorrhoea, cystitis, etc." The box contained 25 white hexagonal tablets ("for three months' treatment; price per box \$1.00"), which, on analysis, were found to consist of alum, borax and boric acid in proportions, so that, allowing for the fact that the quantity of water in commercial exsiccated alum varies, each tablet would contain approximately 7.8 grains burnt alum; 3.6 grains crystallized borax, and 0.7 grains boric acid. The accompanying literature might lead to the belief that it was put up absolutely for the laity, but it is not directly advertised to the public, but only in medical journals. It is the physician who prescribes it, that advertises it to the public by the matter he puts in their hands with the package. As a result it is bought by the laity; to what extent is unknown, but the physician is responsible. The serious aspect of the matter is that such simple astringents and feeble antiseptics as alum, borax and boric acid are advertised as curative, and thus lead women to neglect needed medical or surgical attention, to say nothing of trifling with such serious conditions as the genito-urinary and venereal disorders mentioned. Consider-

ing the vital social importance of gonorrhoea, this is serious enough matter. There is not enough condemnation of such nostrums by physicians; if they "realized that the same interests that control Piso's Consumption Cure also control Micajah's Medicated Wafers they would not be so ready to act as unpaid agents for this concern."

MANOLA.

In response to inquiries the *Journal A. M. A.*, April 2, publishes an analysis of an original bottle of Manola in the Association laboratory. The preparation is manufactured by the Manola Company, said to be a subsidiary concern of the Luyties Homeopathic Pharmacy Company, St. Louis, and the report shows how homeopathic quantities of medicinal substance are in its composition. Besides the 18 per cent of alcohol and 15.93 grams of nonvolatile matter, nearly all sugar, glycerin or similar substances, and less than a gram of ash in each 100 c.c. together with .0668 gram of phosphoric pentoxid and .0047 gram total alkaloids, it contained traces of calcium, magnesium, iron, sodium, and arsenic. The analysis indicates that it is nothing more than wine fortified with alcohol and a slight amount of medicinal substances added. Some interesting points regarding the methods of the exploiters of Manola have already appeared in earlier numbers of the *Journal* and been reprinted in the "Propaganda for Reform."

DRS. MIXER CANCER CURE.

The *Journal A. M. A.*, May 21, in its pharmacologic department exposes another cancer cure against which the postal authorities have issued a fraud-order—that sent out by "Drs. Mixer," the name under which the proprietor carried on his mail order business. There were no "Drs. Mixer." C. W. Mixer, the proprietor, being neither a graduate in medicine or a licensee. The methods varied little from those of other like concerns, the only difference being that the cure was announced as the discovery of C. W. Mixer's deceased father who cured himself by it, of a cancer where "the best physician in America" had failed. The claims were equally extravagant, eighty-six per cent of cures being announced, and the usual symptom-blank to be filled by the victims was employed. Seven medicines were sent out for which \$11.80 was charged. These nostrums were analyzed in the government laboratories and found to be of the usual type. An assiduous attempt was made to lead the public to believe that the concern was conducted by physicians and part of the literature contained a reprint of an article from the *American Journal of Health* which was represented as one of the leading journals of the country while really it is only a medium for selling laudatory notices to mail-order concerns. The usual defense was offered—testimonials—but there was no evidence deduced to prove that the testimonial writers ever really had cancer. Extracts are given showing the false claims made and the evidence on which the postoffice authorities issued the fraud-order against the concern. Quotations are given from the opinion of the assistant attorney general to

the postmaster general and the advertisement of "Drs. Mixer" is produced. The exposure was made by the sending of an answer to the advertisement by Dr. F. P. Morgan of the Department of Agriculture who received under an assumed name the samples that were analyzed.

YONKERMAN'S "TUBERCULOZYNE."

The *Journal A. M. A.*, October 8, makes a striking comparison between the Food and Drugs Act of the United States and that of Great Britain, using as an illustration the preparation named above, which originates in Kalamazoo, Mich., and is now being extensively advertised in the British isles. Formerly, we had in this country no protection against British quacks and quack medicines, and were more or less overrun with them. Now, however, the reverse is the case, and the reason lies in the fact that the activity of the federal, and to a certain extent of the state authorities, has resulted in a steadily narrowing field of operation for the quack and nostrum vender in the United States. Great Britain, on the other hand, has a Food and Drugs Act that is much less broad and specific than our own, and the British courts, too, have shown a decided tendency to treat the "patent-medicines" "faker" with a leniency incompatible with good sense or public policy. As an interesting example of the greater laxity in Great Britain, this Yonkerman's "Tuberculozyne," consisting of a weak solution of potassium bromid in water with a little alcohol and glycerin and minute quantities of aromatics, is advertised abroad as "the only known remedy of all forms of consumption," "an antitoxin acting agent of the greatest therapeutic value," while in this country, after the name appears only "the new remedy for consumption, not a patent medicine." In the booklet, also, similar differences are observed in those used in the two countries. It is called in the one circulated abroad "the most marvellous medical discovery of the age, cures consumption" and "the copper cure for consumption." Many other interesting differences could be named. The estimated cost of the ingredients of the two solutions is given by the analyst of the British Medical Association as 5 cents, but it is sold abroad for \$12 and in this country for \$10. In spite of the claim that it "is sold at a very moderate advance above actual cost," those who invest in it are paying \$10 or \$12 for 5 cents' worth of material. That is Yonkerman's idea of a moderate profit.

PASSIFLORA.

The Council on Pharmacy and Chemistry having rejected the drug, passiflora (passion flower), from New and Nonofficial Remedies, its report is published by W. A. Puckner, secretary, in the (*Journal A. M. A.*, March 19). Though it was introduced into medicine nearly seventy years ago, passiflora has but little literature and there appears to be no experimental research, except an article by I. Ott, who used "Daniel's Concentrated Tincture." He claimed it lessened reflex irritability of the cord and paralyzed motion by acting on the motor centers in the cord, and that it increased the respiration rate. He also stated that,

by its action on the vasomotor centers, it reduced the pulse and lowered arterial tension, but these effects were only temporary. Clinical reports are not numerous and call but for slight consideration, as they do not seem based on extensive trials or observations that would be conclusive. Extravagant and inconsistent claims are made for Daniel's Concentrated Tincture in the advertising literature, but none of the evidence is sufficient to show that *passiflora* has therapeutic value. Hence it was deemed inadvisable to include it in the list of non-official remedies.

State News

The Barbour-Randolph-Tucker Society is, as usual in fine shape. Of a total membership of about sixty, fifty-four have paid their annual dues. How many societies have done as well?

* * *

Dr. L. C. Covington, who recently finished a year's work in Eye, Ear, Nose and Throat at Baltimore, expects to locate in Charleston for the practice of his specialty. We hope to hear of him as a member of the Kanawha Society.

* * *

We are glad to have a paper from an old member of the State Association, namely, Dr. John N. Alley, formerly of Benwood. He is now Superintendent of the Government Sanatorium for Tuberculosis at Fort Lapwai, Idaho, and his paper, which will appear in the Journal soon, is on Tuberculosis Among the Nez Perces Indians. The doctor writes that he has about sixty patients in the sanatorium to look after, besides a general practice that extends over a large territory.

* * *

We congratulate our former Wheeling physician, Dr. A. Judson Quimby, on his improved prospects. About a year ago he was induced to go to New York City by interested friends who knew of his good work in x-ray diagnosis and electro-therapeutics here. He now holds a position as instructor in these branches in the Post-Graduate Medical School, and is Radiographer and Electro-Therapist to the Throat, Nose and Lung Hospital.

Dr. Quimby was Radiographer to the City Hospital in Wheeling and was pioneer in Wheeling x-ray work. The physicians here recognize that he was chief agent in the development of x-ray diagnosis and treatment. His skiagraphs are recognized as being very superior. He now occupies a fine suite of office rooms in the New Physicians and Dentists Building, 40 East 41st Street.

* * *

As will be seen from our advertising pages, Dr. G. H. Benton of Chester is about to embark in a new enterprise in Pennsylvania. His company has purchased a valuable property and will soon open a large sanitarium in a very desirable region. We wish him great success, but hope that we will not lose him altogether from this state. We understand his present purpose is to continue the sanitarium at Chester also.

Dr. J. R. Hughart was recently tendered the position of First Assistant in the Second Hospital for the Insane at Spencer, to fill the vacancy occasioned by the death of Dr. E. H. Dodson. The Doctor was informed that the salary, hereafter, for the place was to be seventy-five dollars per month, and of course he declined the position. When the State is paying five thousand dollar a year for second-class lawyers, it is rather an insult to offer a competent physician nine hundred dollar a year.

* * *

Pennsylvania is just now waging a state-wide war on tuberculosis. Dr. Jepson was invited to aid in the cause, and on Friday evening, March 10th, delivered a lecture on the subject at Taylorstown, Washington county. The audience was large and attentive.

* * *

Dr. F. L. Hupp has recently made a short visit to Atlantic City to recuperate from an attack of the grip.

* * *

Dr. R. J. Reed is again in the active work of the profession after weeks of illness, part of which was spent in the Battle Creek Sanitarium, which he found a very pleasant place in which to recuperate.

Society Proceedings

THE CABELL COUNTY SOCIETY.

Huntington, W. Va., Feb. 26th, 1911.

At the regular meeting of this society for February Dr. G. Timberlake of Baltimore, delivered an address upon the "Early Diagnosis of Syphilis," with the demonstration of the motile *Spirochaeta Pallida* from an active case of lues. The attendance was good and the address very interesting and profitable, as was only to be expected of Dr. Timberlake, with his pleasing manner of speaking and most excellent qualifications for dealing with the subject under discussion.

Three new members were elected to membership.

Fraternally yours,

JAS. R. BLOSS, Secretary.

OHIO COUNTY SOCIETY.

February 13th. After the reading of the minutes of last meeting, a paper by Dr. R. H. Bullard was in his absence read by Dr. Jepson. The title was "Ether Anesthesia," and was based on an experience of about 600 cases in the practice of Dr. Hupp and others, the author being the etherizer. He considers ether the safest anesthetic and the danger practically nil when used by the drop method. Absolute quiet should be observed, and the confidence of the patient must be secured before beginning the ether. No attention should be paid to the operation, but the whole attention be given to the patient's condition. Dr. R. J. Hersey read a paper on Anesthesia, reviewing briefly the history of anesthesia, preparations used, their physiological action, and the phenomena of anesthesia. He stated that he did not believe in the use of morphia before the

operation. Dr. Noome stated that he regrets the absence of enthusiasm on this subject among the young physicians of this city. He thinks an injection of morphia very useful in quieting the patient and that it sometimes prevents shock. The anesthetist should not don the white gown and cap while the patient is awake. These are too suggestive of surgery. Ten minutes is long enough to secure complete anesthesia, provided the anesthetist knows his business. He thinks that in experienced hands the tongue forceps are never needed.

Dr. Nicholls stated that with morphia and atropia given before a patient can be anesthetized with one-half the amount of ether. He does not like chloroform but has never seen any bad results from its use in obstetrics. He thinks that hyoscine is being used with even better results than morphia. Dr. Osburn thinks that ten minutes is not generally long enough to etherize a patient in a majority of cases. Perfect quiet is an essential to speedy success. Thinks morphia very useful; it helps to reduce the secretions in passages, and thus reduce danger.

Dr. Fulton regards a cold in the head or a coryza as a contraindication to the use of ether or chloroform, and if this condition exists the operation should, when possible, be postponed.

Dr. Kelly regards the vapor method as the most successful in all head work.

February 27th. The society met with President Fulton in the chair.

A paper was read by Dr. J. A. Campbell on "Diabetes Mellitus." The main points of interest were clearly given. Dr. L. D. Wilson said that the theories of causation are various, but as yet none are verified. As to treatment, the only certain piece of knowledge is the value of a restricted diet, with the avoidance of the carbohydrates. Medicine, he regarded as of very limited use. He does not give any as a rule, and only to meet special indications. If a strict diet shows early good results, the case will probably be manageable and without medicine. After the absence of sugar for a time, we may safely allow a limited amount of carbohydrates. He has no faith in the so-called diabetic foods of gluten, etc. They generally contain both starch and sugar. He commented on the large number of cases among the Jews, as pointed out by the essayist. He knew of one family of this race in which seven cases had occurred. Told of one case he had watched for many years, and who died at the age of 85 years.

Dr. Baird desired to warn the members against having faith in gluten breads. Knew of one case where they contained starch and molasses.

Dr. Hupp spoke of the danger of a long-continued diet of proteids. There is the danger of causing acetoneuria with resulting diabetic coma. He regarded restlessness and headache as danger signals, indicating the need of returning to the use of carbohydrates carefully. As to surgery in diabetes, there had been much discussion as to the propriety of operating in gangrene which sometimes occurs. He thought the operation can be safely done under local anesthesia. He noted that blistering by applications not very hot is apt to occur in diabetic patients and would

caution physicians to be careful in applying heat in such cases.

Dr. Wingerter said that there is yet much to learn as to the treatment of diabetics. We may hope for some advance from a study of the internal secretions. An Edinburgh professor, name forgotten, reports having secured fine results from insisting on an eight hour interval between meals in case of diabetics.

Dr. Barnett reported a case of a man with diabetes who served in the army three years during the civil war, and is living yet.

Dr. Osburn suggested that hard tack and bacon is perhaps a pretty good diabetic diet. He had a patient who took toast with cod fish or bacon alternating with full meals. Too strict a diet is harmful.

Dr. Taylor has had good results from trypso-gen. Thinks it helpful in some cases.

Dr. Fulton expressed surprise that no one had spoken of the oatmeal cure.

Dr. Hupp told of a case that improved on yeast. He took several cakes per day.

Dr. Jepson said that he did not regard diabetes in the old as a very serious disease. Told of two brothers, Jews, who came under his care at 50 or 55 years of age. One was the case of Dr. Wilson's who died at 85, and the other died at about 65 from another disease. The cases that occur in the young are the serious. He agreed as to the danger of causing coma by a too rigid proteid diet, a condition very hard to remedy after it has once developed. Reported a case of a man who came to him after being ill four months and losing 40 pounds. He was put on a restricted diet and given Fowler's solution only. In one week he gained 10 pounds, in a second week he gained 7 pounds more. Died from cholera morbus some months later.

Dr. Campbell, in closing, said he placed considerable confidence in a neurotic origin in some cases. Told of a hysterical girl with glycosuria. She was a great candy eater. He stopped the candy, but the sugar continued. He then gave bromides and tonics and the sugar disappeared. He has found many references to the neurotic theory in the literature of the disease, and thinks certain cases should be so classed.

R. J. HERSEY, Secretary.

Reviews

BISMUTH PASTE IN CHRONIC SUPPURATION

By Emil G. Peck, M.D., C. V. Mosby Company,
St. Louis, Mo.

Of the several monographs published by the C. V. Mosby Company I believe this one to be the most interesting as far as the general practitioner is concerned. After several years of active propaganda to call the attention of the medical profession to his new treatment through medical journals, Dr. Beck seeks to further disseminate information about it in an elaborate discussion of all its phases in a book of 225 pages, printed on heavy enameled paper and cla-

borately illustrated. One can hardly read through this book without sharing the author's conviction that in bismuth paste, used after his method, we have additional means at our command in the treatment of chronic suppurations. This conviction arises in part from the fact that the number of cases described in which the method proved successful is large and among those whose favorable experience is recorded are surgeons of the highest standing in this country and abroad, and in part from the fact that the author is very frank and describes failures as well successes. Dr. Beck also wishes it understood that he is "not using this method to the exclusion of all other scientific therapeutic methods which are universally recognized in the treatment of chronic suppuration." In most cases he uses the paste made after his formula No. 1.

Bismuth subnitrate, arsenic free 33%
Vaseline 67%

The vaseline is boiled and the bismuth stirred into it before it cools. When needed for use, it is liquidified by heating over a water bath. The injections are made with a glass syringe, the tip of which is similar to that of the ordinary urethral syringe. Special syringes are used for rectal sinuses and empyema. Sinuses and fistulae to be treated need no special preparation beforehand. In injecting the paste the operator aims to fill up all the tracts and their branchings. If this is not done, cure can not be expected. Force must not be used. If within a few days after the injection the discharge changes and becomes watery, a cure may be expected. If no such change occurs at the end of a week, the injection is repeated. One or two injections will suffice in some cases, while in others several must be made. The paste can be used in any part of the body except in sinuses leading into the cranium or to the pancreas, and in fistula of the gall-bladder. It has been used extensively in chronic bone suppurations. In sinuses resulting from Potts' disease of the spine it has yielded remarkable results. In sinuses about the rectum it seems that this method is destined to supplant all other methods. The results in old cavities of the chest from empyema are brilliant. Striking results were also obtained by this method in post-operative sinuses of the abdominal cavity, even in the presence of fecal fistulae. In this connection the writer of this review wishes to record a disagreeable experience with this method when he first used it in a sinus of several weeks standing following an operation for appendiceal abscess. Within a few days after the injection intestinal obstruction took place. The paste broke through the wall of the sinus, entered peritoneal cavity and set up a localized adhesive peritonitis. Indirectly he learns of a similar experience by another surgeon. The force used at the time of the injection seemed to be just enough to fill up the sinus, but very evidently it was too great for the strength of the sinus wall at some point. This, of course, in no way argues against the method, but it helps to emphasize Dr. Beck's statement to be cautious in the use of force.

Only once did the symptoms of bismuth poisoning appear in Dr. Beck's cases, and in that case prompt removal of the paste was followed by complete recovery. Fatalities from bismuth

intoxication, however, occurred in the hands of others, but only after large quantities of bismuth. It seems that there need be no worry about poisoning with quantities of the paste not greater than one hundred grammes. The removal of the paste, if necessary, is easily accomplished by injecting warm olive oil and then aspirating.

While the object of Dr. Beck's monograph is to set forth the therapeutic value of his bismuth paste in sinuses and fistulae, it also incidentally contains a considerable amount of very interesting information about the use of this paste for diagnostic purposes. After injecting sinuses with the paste, a skiagram is taken and the shadow made by the paste is studied. The revelations thus made, as illustrated by a number of skiagrams in the book, are sometimes amazing. From an introduction to the book written by Dr. Carl Beck, Chicago, we learn that the first use of bismuth was for diagnostic purposes in an attempt to get a definite outline of a bone sinus. On observing the unexpected rapid healing of the sinus after thus having been treated, Dr. Emil Beck devoted his attention to its therapeutic possibilities.

Just how bismuth paste accomplishes its cures is not clearly understood and several theories have been advanced. Dr. Beck believes that bismuth has a chemotactic action, attracting the leukocytes and bringing about a local leukocytosis with all its beneficial physiological results. By the use of the bismuth paste hundreds of persons have already been spared extensive surgical procedures. Should the use of it prove of no greater efficacy than even the author modestly claims for it, it is destined to relieve surgeons from performing a number of operations which they always wish they did not have to perform. With his bismuth paste Dr. Beck may have added another step in the movement of "back-to-nature" in surgical therapeutics of the present day, or, as the epigrammatic Morris has it, "in the fourth era of surgery." W. W. GOLDEN.

PRINCIPLES OF THERAPEUTICS—By M. MANQUAT, *National Correspondent to the Académie de Médecine*. Translated by M. Simbad Gabriel, M.D., New York and London. D. Appleton and Co., 1910. Price \$2.00.

The author in his preface says: "I dedicate this book to young physicians; they will work for a renaissance in Therapeutics which will be the great achievement of twentieth century medicine." And it is to the young physician that we would especially commend it. Carefully studied at the outset of his career, it will give him at the beginning of his professional life a grasp of the philosophy of therapeutic action and application that otherwise could come only by years of careful observation in the work of actual practice. It is a book calculated to stimulate a spirit of inquiry and investigation, and cause us to scrutinize critically our procedures to the end that we may know what, and how much, we accomplish by our therapeutic efforts, and by so doing to help us place therapeutics where it should be, well within the domain conquered by scientific rationalism. Empiricism has too long swayed the thought and clogged the footsteps of the healing art and kept it from its rightful trans-

formation into a healing *science*. The book, in addition to the introduction, contains twelve chapters under the following headings. Views of the various manners of conceiving therapeutics; the forms of therapeutic action of the action of medicines; doses; medicinal opportunity; *primum non nocere*; the elements of therapeutic individualization; influence of environment on therapeutic results; variations of therapeutic activity inherent in medicines; non-medicinal therapeutic actions; method in therapeutics; division of therapeutic agents. The reader will find entertaining and instructively discussed, the dangers of symptomatic treatment; the harm that may be done by adding medicinal to morbid toxicity; the difference between physiologic and therapeutic action of remedies; the causes of variation in activity and action of medicines; the influence of constitution, temperament, cachexia, etc., in short, the fundamentals of therapeutics, whether they relate to the action of medicines themselves, to the effects which we aim to produce by their administration, or to the principles which determine the selection of the kinds and which decide the quantities that will best produce the intended results. We cannot rid ourselves of the impression that the translator's vernacular is not ours. Much oftener than occasionally, the author's language would seem to have been rendered obscure or ambiguous by reason of unfamiliarity with our idiom. The text is marred somewhat by typographical errors. But all in all this is a most helpful book, and all practitioners would do well to study it, and the nearer to the beginning of one's professional career the opportunity to do so comes, the better.

L. D. W.

GOLDEN RULES OF DIAGNOSIS AND TREATMENT OF DISEASE.—Edited by HENRY A. CABLES, B.S., M.D., *Professor of Medicine and Clinical Medicine of the College of Physicians and Surgeons, St. Louis.* Published by C. V. Mosby Co., St. Louis, Mo. 1911. Price \$2.50.

This small volume is very useful for the busy in obtaining much needed information along the line of Diagnosis and Treatment of Diseases when looking for something concise and to the point without going into long detailed explanation of cases that are most frequently found in works on general practice. The arrangement of the contents in the front are so neatly gotten up that at almost a moment's glance one may be able to find what he is looking for, making the work a valuable volume of ready reference for the busy physician.

B. F. M.

HYDROTHERAPY. A Work on Hydrotherapy in General, Its Application to Special Affections, the Technique or Processes Employed, and the Use of Waters Internally. By GUY HINSDALE, A.M., M.D., *Lecturer on Climatology in the Medico-Chirurgical College of Philadelphia; Corresponding Fellow of the Royal Society of Medicine of Great Britain, etc.* Illustrated. Philadelphia and London; W. B. Saunders Company. 1910.

This is a work which the profession has been expecting for some time. Its author is well qualified to undertake a work of this kind, and the

reader will not be disappointed in the results of his efforts. The book has the merit of conciseness, which cannot be said of several other books on the same topic now before the profession. Nor does the author write as a bigoted partisan, claiming that hydrotherapy can cure all the ills to which human flesh is heir. His claims are conservative and hence will receive the consideration they deserve.

The author gives very fully and clearly the technique of the various hydrotherapeutic measures recommended so that the practitioner, tho not a specialist will be enabled to carry out the treatment advised, as suitable cases arise in his practice. Easy reference is facilitated by an alphabetical arrangement of the diseases in which hydrotherapy is deemed of value, and the best method of application is clearly set forth.

Altogether the book is a safe and intelligent guide, and on account of its clearness, conciseness and conservatism, we feel like recommending it as the best guide now before the profession for the general practitioner.

Medical Outlook

SALVARSAN TECHNIC.—A long list of "don'ts" in the use of salvarsan are given by J. F. SCHAMBERG and N. GINSBURG, Philadelphia (*Journal A. M. A.*, February 4). These, slightly abbreviated as follows: 1. Don't use salvarsan in mild carditis, advanced tabes and paresis, syphilis of nervous centers, in grave kidney disease, in cachexia or marked debility, unless due to syphilis, aneurism, optic neuritis or in persons with lesions (such as gastric ulcer) where increased blood pressure may produce hemorrhage. 2. Don't use intravenous injections of salvarsan until you have fully qualified yourself to do so. 3. In the preparation for the intravenous injections do not use common salt solution or undistilled water, but have all materials chemically pure and sterile; otherwise you may not have a clear solution. 4. Don't, under any circumstances inject a solution which is not perfectly clear. 5. Don't use a solution any more alkaline than is absolutely necessary to secure a clear solution. 6. Don't inject salvarsan into the vein without previously running in physiologic salt solution. If the needle is not in the vein you will infiltrate the surrounding tissues and cause unnecessary pain and inflammation. 7. Don't infuse the solution into the vein too rapidly. It is best to have a needle of such capacity as will take eight minutes to introduce 200 c.c. of fluid. With the gravity apparatus the rapidity of the inflow can be readily governed. 8. Don't infuse a cold solution, but use one about blood-heat. 9. Don't use glass pearls in the mixing jar, as small parts may chip off and cause embolism. 10. Don't use a routine dosage of the drug, but gauge it according to the weight of the patient and the condition of to be treated. 11. Don't employ intravenous injection in your office or in dispensary. The patient should be in bed in the hospital and be carefully observed for not less than three days. 12. Don't persist in intravenous injection if the patient shows signs of collapse during administration, but stop at once.

ATROPINE IN TREATMENT OF DYSMENORRHEA.—DR. R. DRENKHAHN reports (*Zentralb. of Gynack, No. 47, J. A. M. A.,* December 24) a number of cases of dysmenorrhea in which injection to the cervical canal of 1 mg. (1-65 grn.) atropine dissolved in 1 c.c. water arrested at once the colic spasms in the uterus or prevented their development. If there is no speculum or syringe at hand, the same effect can be realized by introducing a small cotton wad, moistened with a 1 per cent. solution of atropine [a rather uncertain and perhaps dangerous procedure.—W. J. R.] and pressed far back against the posterior vault of the vagina. This simple measure has proved effectual in his experience of fifteen years. Its efficacy is explained by Schindler's experimental research on ninety-three animals, showing how atropine paralyzes the automatic action of the uterus and its mechanical excitability. Drenkahn's experience has shown that even a single application of the atropine may cure a chronic tendency to dysmenorrhea when there are no morbid changes in the genital organs. He adds that mild acute and chronic inflammatory conditions in the uterus may yield promptly to sitz baths or other measures when the uterus is under the influence of atropine, when otherwise the affections are refractory to all treatment. He wonders that more attention is not paid to atropine as a means of enforcing rest for the uterus in morbid conditions, and states that his communication is for the purpose of resuing atropine from the neglect into which it seems to have fallen, especially in the treatment of painful affections of the uterus.—*Therapeutic Medicine.*

DIAGNOSIS OF ACUTE POLIOMYELITIS

There are certain symptoms which occur often enough to be regarded as cardinal. The typical case has a sudden onset with the appearance of a severe gastro-intestinal infection. The tongue is heavily coated and the breath very foul and there is an immediate paresis of the intestines. At times there is a slightly inflamed condition of the throat exhibiting small circumscribed red spots like Koplik's spots, on the palate, tonsils or pharynx. Pain in the occipital region extending down the spine, tenderness over the spinous processes, especially in the cervical and lumbar regions, with difficulty in producing flexion of the neck and back are always present in some degree. The facial expression, the so-called "stare," is very prominent. Vertigo and marked prostration; delirium, especially at night, and in the absence of fever; intention tremor; fibrillary twitching and spasticity of the muscles; knee jerk at first exaggerated and later lost; and in most cases a marked Kernig's sign, all combine to form a symptom complex which should be easily recognized during the first two days even in the absence of an epidemic. During the presence of poliomyelitis in a community the fact should be recognized that there are cases having only a few of these symptoms present and yet so clearly defined as to be unmistakable. During an epidemic a patient presenting a persistent pain in the occiput with or without backache and spinal tenderness, but with a marked debility and the characteristic facial expression should be regarded with great suspicion. It may be that

improved methods of examination of the spinal fluid will give us a certain test for this condition but until this is done it seems safer to regard these mild cases as variations of the epidemic type and treat them accordingly.—DR. C. E. DAKIN in *Iowa Medical Journal.*

AN UNUSUAL ACTION OF ACETYL-SALICYLIC ACID.—WALTER H. BUHLIC, M.D.—At the end of Oct. 1908, I had the first experience. I was troubled at that time with a "cold," and, having experimented with many remedies for relief, I decided to try some aspirin, which word I shall use hereafter for the sake of brevity. The pharmacist at the Medical School jokingly told me that he could "cure my cold" and I responded that I would take anything he would suggest. The dose finally decided upon was one dram of syrup of hydriodic acid and 10 grains of aspirin. These were taken about 9:30 a. m. at one dose. At 12:30 I partook of a very heavy meal, which was a very abrupt change from my usual light lunch at noon. At 1:30 that afternoon my face, particularly the lips and around the eyes, began to redden somewhat and swell, and by two o'clock was so edematous and stiff that it was an effort to move the lips or eyelids. The bloating was extreme as to give the impression of a local action of some poison. All over the body there was an urticarial eruption and a hoarseness developed, which a laryngologist asserted was due to edema, and he urged me to stay close to the hospital in case the edema of the larynx should become dangerous. The maximum effect was reached soon after three o'clock, after which the edema and eruption gradually receded. At the dinner table that night my family considered the appearance of my face ludicrous, if not alarming. At bedtime, the edema was practically gone, but on the body the urticaria, which was composed of very large wheals, was troublesome for several days. There was no pain or sensation of any kind other than the stiffness of the whole face and the subsequent itching.

At that time, I as well as all who saw me, ascribed the phenomena to the iodide, even though it appeared almost impossible to believe that such a small amount of iodide as would be contained in the syrup could produce the symptoms. On the other hand, though I did not remember having taken any aspirin before that time, I had many times used sodium salicylate and on occasions salicylic acid. Therefore no suspicion attached to the aspirin.

The true solution came later. About a month after these occurrences, I had another cold and took 10 grains of aspirin about 7 p. m. and retired to bed. I awoke about midnight and from the sensation of stiffness around the lips and eyes, general itching, and from hoarseness when I tried my voice, I suspected that my face was bloated again and that I had an urticaria, which I verified by looking into a mirror and by examining my body. This second set of symptoms receded as did the other, and the next forenoon there was no trace left except the eruption on the body, which continued diminishing for several days.

I am confident from this second experience that the first phenomena were occasioned by aspirin and it is needless to add that for my own

use I have not since required that drug.—*Bulc-tin N. W. University Medical School.*

THE VALUE OF NITROGLYCERIN AS A PREVENTIVE OF HEMOPTYSIS IN PULMONARY TUBERCULOSIS.—MINNS (*Canada Pract.*, March, 1910) reaches the following conclusions:

1. While there may be other elements in the production of hemoptysis, it is evident that blood-pressure in the pulmonary area plays an important part.

2. Estimation of blood-pressure in the pulmonary area cannot ordinarily be made experimentally.

3. Clinical observation, however, goes to show that there is a relation between pulmonary pressure and systemic pressure.

4. Such preparations as nitroglycerin are capable of reducing blood-pressure in the circulatory system; and by their use it would seem to be possible to keep the pressure in the pulmonary area in any particular case reasonably below the danger point.

5. The drug should be administered in small doses, and may be continued over long periods.

6. The results reported have been the result of the study of over six hundred cases of pulmonary tuberculosis in residence, and the treatment as carried out for nearly two years has given time to prove the efficiency of the same.

7. It would seem to be indicated that this drug should be administered in the morning some time before the hour of rising, and subsequently at, say 7:30 a.m., 11:30 a.m., 4:30 p.m. and 7:30 p.m., in order to have the result produced before the blood-pressure is raised by the exertion incident to toilet, meals, etc.

8. When 1/100 grain of nitroglycerin will reduce the blood-pressure 15 millimeters in less than ten minutes, the same dose, given four times a day for say two weeks, should be sufficient to maintain a lower pressure than the individual's normal.

9. While the administration of nitroglycerin has not proved to be an absolute preventive, still in the large majority of cases, with a previous history of hemoptysis, or the occurrence of the same, it has been clearly proved to be efficacious in reducing the frequency of the complication, and in lessening the amount of blood lost when it does occur.—*Med. R. of Reviews.*

TREATMENT OF BUBO.—DR. N. P. RATHBURN, of Brooklyn thus concludes a paper on this subject:

The conservative line of treatment which I advocate in these cases is the extremely simple one of poulticing until fairly free fluctuation takes place, evacuation of pus through a small puncture made with a bistoury, distension of the cavity with a 10% iodoform emulsion in glycerine, application of an absorbent dressing and a firm spica bandage.

The technique is simple. The groin is shaved, if the patient can remain quiet at home for two or three days he is instructed to keep hot poultices (I prefer ground flax seed, covered with oiled silk), constantly applied to the affected part. If the patient insists upon being about, one of the various clay poultices may be applied and changed once in twenty-four hours, binding

a hot water bag on the poultice during the sleeping hours. The poulticing not only hastens the breaking down process but almost entirely relieves the pain. This part of the treatment requires from 24 to 72 hours, rarely longer. As soon as superficial fluctuation occurs, a point where the skin is thinnest is anesthetized with a chloride of ethyl spray and punctured, not incised, with a small sharp-pointed bistoury; the pus is evacuated, using a little gentle pressure on the fluctuating area, and the cavity left is distended with the iodoform and glycerine emulsion. This part of the operation is repeated three times. All that will of the injection is allowed to remain, and a spica bandage is applied fairly freely over an absorbent dressing. The patient is told to go about his business in the usual way, and report in three or four days. Not infrequently he will return completely cured except for a small granulating area at the puncture point which requires no special treatment.

Occasionally it will be necessary to repeat the injection, rarely another puncture may be required. In a few cases it may be necessary to supplement this treatment and follow it by the application of the resolvent salve previously referred to in order to hasten the resolution of a few isolated glands which, while showing no tendency to break down, remain swollen and sensitive.—*Am. Jour. of Dermatology.*

Miscellany

THE NEW LOCAL ANESTHETIC IN AMPOULE FORM.

In consideration of the growing demand for Quinine and Urea Hydrochloride for local anesthesia, Parke, Davis & Co., are now marketing this valuable combination in convenient ampoule form, and the physician can procure it in one-per-cent. solution, absolutely sterile and ready for use. The ampoules contain 5 c.c. of the solution each and are supplied to the trade in boxes of six.

Quinine and Urea Hydrochloride is being used in a great variety of operative procedures with pronounced success. As a local anesthetic it is held by many physicians to be superior to cocaine, a contention which would seem to have warrant in view of the fact that the preparation is not toxic even in large doses, that it tends to restrain or prevent hemorrhage, and that the anesthesia produced by it is persistent. The latter point is worthy of especial emphasis. The anesthetic effect lasts for hours, sometimes for days, an important factor in connection with rectal and other operations that may be classed as painful.

Parke, Davis & Co., by the way, issue a sixteen-page brochure on "Local Anesthesia with Quinine and Urea Hydrochloride" which should be in the hands of every physician and surgeon. The pamphlet details fully the uses of the new anesthetic, explains the technique of administration, and contains some valuable case reports. A copy may be obtained by writing the company at its home offices in Detroit.

DON'T, DON'T, DON'T! FOR YOUR BABY'S SAKE.

- Don't forget baby needs water to drink.
 - Don't give baby ice water.
 - Don't feed irregularly.
 - Don't give baby a "soother."
 - Don't feed too often.
 - Don't feed meat to baby.
 - Don't feed between meals.
 - Don't keep baby too warm.
 - Don't pin diapers too tight.
 - Don't chew baby's food for it.
 - Don't teach it to suck its thumb.
 - Don't make a plaything of the baby.
 - Don't try to amuse a young baby.
 - Don't use the remains of last feeding.
 - Don't play with a young baby.
 - Don't punish while angry—wait.
 - Don't kiss baby's mouth and hands.
 - Don't forget the baby's bowels.
 - Don't worry—worry wears worse than work. It affects baby.
 - Don't think baby is hungry every time it cries. Try water to drink.
 - Don't feed baby indigestibles and wonder why it is sick.
 - Don't give baby pain when you might give it happiness.
 - Don't put baby to sleep in a closed room
 - Don't teach baby something you will punish it for later.
 - Don't forget that the baby knows more than you think it does.
 - Don't think a baby has worms every time it has fever. Worms come from dirty, unwholesome food.
 - Don't spoil a good disposition by teasing.
 - Don't try to develop a baby's will. It has all the will it will ever have. Develop its judgment.
 - Don't delay baby's training until you think it knows better. Deferred training is never begun.
 - Don't give the baby beer.
 - Don't give the baby candy.
- Dr. Frank W. Allin, an expert on baby care and treatment, furnishes the above words of advice to mothers for publication in *The Bulletin* on request of this Department.—*From Bulletin Chicago Department of Health.*

PROSTATE SWAPPING—A NEW STUNT.

He who has come into intimate contact for a number of years with doctors in a large city, cannot but know that among them will be found some unusual types. Most doctors are pretty decent fellows—men well worth knowing—but now and then the cloven hoof will show. Filching patients, speaking in derogatory language of a brother practitioner, resorting to petty devices to get a bit cheaper advertising, relieving women of live burdens—these are charges that may be brought against a host of doctors and are so common that to mention them is to bring but a yawn and a lifting of the eye-brows. Presumably reputable surgeons have even been charged with making a shallow incision in the neighborhood of the inguinal canal and for it charging \$500.00 describing such an operation as a herniotomy.

But, there is one man in this town who, according to stories coming from reliable sources, having graduated from the domain of little tricks, works a new stunt. He swaps prostates. No one but a deeply dyed villain would ever think of such practice, yet we are told that one of the local surgeons actually showed a patient an abnormal prostate, *taken from another case*, palming it off on the unsuspecting second patient as having been removed from him. For down-right surgical reseality, a man guilty of such foul work has no equal. Conscience—he can have none. Possibly at one time he did have a conscience located in that part of the integument frequently removed ceremonially. We frankly confess if it were possible to get unimpeachable proof of this prostate-swapping story, it would give us the most exquisite joy to furnish the profession with its every detail, for if we are to maintain the profession in its high plane, we must slough off from the medical body these purescent excrescences, now posing as reputable and ethical practitioners, and the only way open is to use the pages of medical magazines. Any man supplying us with unassailable proof of this man's crookedness will be protected.—*Am. Jour. of Dermatology.*

THE SCHOOL NURSE.

The school nurse is now almost universally considered one of the most necessary adjuncts of the better American systems of medical inspection of schools.

The nurses are especially valuable in reducing the number of exclusions of children from school on account of minor illness. Many of these, when properly treated by the nurse in school, do not prevent the regular attendance of the child as they otherwise would. The trained nurse greatly enhances the success of the work of the school physician in improving the health of school children. She aids the room teacher in detecting the first signs of approaching illness. She sees to it that all excluded cases are placed under treatment as soon as may be, so there is the least possible loss of time from school and education. She treats those cases which would for various reasons receive no attention at their homes. She assists the school physician in the clerical work of recording the results of the physical examinations which he conducts.

In many cases it is also found feasible to use the nurses during the summer months, when there is no school, in the lessening of the great mortality rate among infants from summer diarrhea, due mainly to improper care and feeding. Again she aids materially in the campaign to lessen the number of cases and spread of tuberculosis. About a quarter of the cities having any sort of medical inspection employ school nurses and the number of localities doing so is increasing rapidly.

To sum up the case for the school nurse, she is the teacher of the parents, pupils, the teachers and the family in applied practical hygiene. She is the most efficient possible link between the school and the home.—*Medical Brief.*

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Original Articles

THE MODERN SURGERY OF THE KIDNEY

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Surgery University of Cincinnati.

(Concluded from April Issue.)

With these considerations of the ordinary and more difficult means of diagnosis of surgical affections of the kidney, I may be permitted briefly to speak of our modern views concerning the more common ones. The commonest of them all is doubtless mobility of the kidney. In a little over five per cent of women who come for an examination of the abdomen, particularly if they are of the spare kind, a right nephroptosis may be recognized. As a rule there are no symptoms. The old adage as to the relation of ignorance to bliss can have no more apt application than to these cases of accidentally discovered movable kidney. Never tell a woman who has no symptoms directly referable to the kidney that hers is movable, unless it should be your aim to produce symptoms and a cause for operation. A rest cure with hyperfeeding, and above all things a properly constructed abdominal support will aid very much. While it is now the consensus of opinion that the nervous symptoms associated with nephroptosis are rarely cured by operation, it is strange that Suckling has recently reported on the association of insanity with loose kidney. In 21 cases, according to this writer, both conditions were relieved by operation. In my opinion operation should be reserved for those

cases in which great mobility is associated with positive symptoms depending on a twist of the ureter or from pressure or traction on the duodenum with distinct gastric crises. If an intermittent hydro-nephrosis exists or a permanent one is demonstrable by catheterization, and pyelo distension through the ureteral catheter, an operation is not only justifiable but clearly indicated. It is interesting that in quite a number of cases of this kind an accessory renal artery running to the lower pole has been found to cause the hydro-nephrosis and the displacement. While it is true that the displacement ordinarily rights itself when the patient is in a recumbent posture and the violent symptoms quickly subside, their recurrence is a positive indication for kidney fixation. With gastroptosis as a complication, I am firmly convinced from x-ray plates taken before and after operation that positive and permanent good can be obtained when both kidney and stomach are anchored.

In other cases operation ought not be done. The most experienced, and perhaps I may be permitted to say the most honest, operators are doing fewer and fewer kidney fixations. Tuffer operated on 64 wandering kidneys between 1888 and 1894. In the following three years he operated on only 8. Larrabee has come to the same conclusions from a study of 112 cases. The slight mortality of the operation, a little less than 2 per cent, should not justify extending it beyond positive indication. In about 70 per cent of the cases operated on a cure has been effected. But it is more difficult here than in most other conditions to de-

termine what is a positive cure. If the renal crises and the gastric symptoms directly referable to the kidney displacement are permanently relieved by operation, a cure can be claimed. If, however, the nervous symptoms were predominant and these fail to disappear after operation, a cure must not be considered as having been effected, even though the anchoring of the kidney has been achieved. While I have seen, in quite a number of cases, nervous symptoms disappear after operation as well as by hyperfeeding and the use of a proper corset, surgical measures in these instances have probably been only of suggestive value.

In regard to the operation, I still strip the kidney of its capsule and fasten it around the last rib. Interstitial changes I am sure do not result. Although there is probably no danger to the functional activity of a kidney in transfixing its upper pole by a suture or two, I have given this up as unnecessary. Albarran, who places the suture through the kidney, reports a cure of 78 per cent. The use of the nephrocolic ligament as a sling or hammock around the lower pole and fastening it into the wound high up, is a decided improvement which I have used for a long time. There are so many ways of fixing the kidney, that every operator follows the method more or less his own. I do not know of any operator who does not seek primary union after nephropexy, and I am quite sure that all methods which strive for secondary union, and therefore firmer scar tissue, have been given up. I do not think that anyone now follows the best of them, namely, the surgical vagary of no less great a surgeon than Nicholas Senn.

Stone in the Kidney. As the operation of stone in the bladder was the ultimate accomplishment of the Hippocratic age, the operation for stone in the kidney was the great triumph of kidney surgery in the close of the last century. While the experience of Henry Morris, who originated the operation in 1882, has probably never been equalled, every surgeon who has been especially interested in renal work will see a number of cases annually. It is difficult to conceive that the present method of recognizing a stone can be im-

proved upon. That the diagnosis is sometimes long delayed is because the history is defective in the one supposedly most constant symptom, namely, the renal colic. The chronic symptoms of stone in the kidney and in the ureter are to my mind more important than the acute accesses of pain. Even if the stone is fixed and perhaps only its nose, if I may be permitted so to speak, projects into the pelvis, the chronic symptoms produced by it can be recognized.

Although a kidney stone may be quiescent for many years, it is always a menace to life, either by causing anuria or by producing grave changes in the pelvis or parenchyma of the kidney. With infection and retention well established, recovery cannot ensue. Especially is there danger from a stone blocking the ureter. Although even here it may remain for a very long time without hurting the kidney. It is remarkable how a ureteral stone like a salivary stone will often become grooved in a way not to interfere with the outflow of the urine from above. I had such a stone, which I judged from the history must have been in the ureter for at least two years. In very rare instances stones may break up spontaneously in the kidney, although they do so oftener in the bladder. The causes of such disintegration are conjectural. I am glad to be enabled to show you specimens thus passed. Aside from infection, which is certain sooner or later to occur, degenerative changes in the parenchyma with casts and albuminuria are equally certain to follow in time. In two specimens, one obtained by autopsy, the other by operation, the stone had caused a fatty degeneration of the kidney ending in complete lipomatosis. Within the capsule of these specimens there was nothing but a fat mass surrounding a secondary suppurating cavity, the last vestige of a renal pelvis. Although stone in the kidney causes less suffering, as a rule, than bladder stone, it is fraught with infinitely greater danger to life. The time to operate is when the diagnosis is made and the radiogram shows a stone which cannot be passed. In one case I have seen malignant disease follow the long carrying of a primary stone. So far as I know, it is the only recorded case.

Once I have seen, and that within two years, a tuberculosis complicate a primary stone. It was the case of a man 30 years of age, who for ten weeks before I saw him had suffered from severe attacks of pain in the right side with fever and rigors which at first were supposed to be of a malarial character. During the ten weeks he lost 35 lbs. When the man was brought to the city for examination, Dr. Greive found an anemic bruit at the base and slight involvement of the right apex. The blood count 12500 leucocytes, 4,500,000 red cells, hemoglobin 50 per cent. The urinalysis showed pus, albumen, tubercle bacilli and red cells in every field. Cystoscopic examination showed ureteritis on right side, catheterization of left ureter brought clear urine but containing a trace of albumen. The x-ray disclosed a small shadow in the region of the pelvis of the kidney. The operation revealed extensive inflammatory edema about the kidney, with small collections of firm cheesy matter about the kidney. The kidney was firmly bound down so that it could not be delivered into the wound in the usual way. The capsule was 1-1½ of an inch thick. The incision into the cortex permitted the discovery of the stone and its removal with a scoop. The patient recovered and seems now in perfect health, although at the site of the drainage there was a fistula which for a long time before healing presented the characteristic appearance of a tuberculous sinus.

Nephrolithotomy in a kidney that requires no drainage is one of the safest of major operations. Morris himself operated 34 cases with only one death. I have had 26 cases with two deaths, one early in my work from intestinal obstruction from tight packing of the wound and pressure paralysis on the colonic nerves. A second case I lost from shock and hemorrhage after a prolonged negative exploration. Not a few fatal hemorrhages have been recorded, and nephrectomy has been necessitated in every case to save life. Most of these are cases in which the stones were very large. In large stones the kidney tissue has often to be forcibly removed from about the stone and laceration necessarily takes place. When the pedicle is well com-

pressed and there is no accessory artery, a small incision in the non vascular zone of Hyrtl, which is much like the one more recently described by Boeckel, will not be attended by serious bleeding. I usually make the incision just large enough to admit the finger for exploration. In a good x-ray plate the location of the stone can be pretty accurately determined and the incision can, therefore, be made nearly over it. A short cut through the upper pole and another through the lower will permit an examination of both the upper, the lower and the common pelvis. Since the x-ray is used, the so-called *post mortem* section of the kidney is rarely necessary and must be reserved for cases in which the finding of a stone is very difficult. For stones that are found in the pelvis, the incision should be made through the pelvis directly over the stone. No operation should be considered complete without ureteral catheterization from above.

Even in suppurative cases, where the drainage through the open ureter is efficient, an attempt may be made to close the kidney wound with sutures. Otherwise drainage is necessary even at the risk of protracted fistula formation. Bilateral operations for stones have not been very common, although according to Kuester there have been 20 cases. I have had one. The interesting feature of this case was the development of the first severe kidney symptoms after the ingestion of balsamic oils for gonorrhoea. He had repeated sharp attacks of pain in the back and left groin, but had never required treatment for them.

The most difficult condition connected with stone is calculous anuria. The suppression of urine may be complete from the beginning of the renal attack, or the quantity excreted may rapidly be reduced until secretion ceases entirely. While there are other surgical causes for anuria, stone is by far the most common. As is well known, life may be prolonged for 28 days, although death usually results in from 5 to 7 days. An unique case was reported a year ago by Minningham in which Dr. Hill of Newark, N. J., successfully operated for complete anuria of 23 days standing. He found a calculous pyelitis probably of a horse-shoe or a

single kidney. Operation, if necessary, on both sides alone can bring relief. It should always be performed on the side in which the last renal colic was felt, or on which, if a colic has not existed, tenderness is most marked. If performed early, 66 per cent of cases recover. Even if a stone is not found, decapsulation and nephrectomy offer the only chances for recovery.

As with gall stones, recurrences of kidney stone take place after operation. But in most instances, I believe they are the result of leaving either a small stone or a fragment. I have one such case now. The patient from whom I removed some very small calculi, weighing altogether only 9 grains, and so small as not to show a shadow on the x-ray.

Tuberculosis In probably no other part of the general subject of tuberculosis have such additions to our knowledge been made as in that of the genito-urinary tract. I did my first nephrectomy for tuberculosis nearly twenty years ago. Before that time, the tuberculous kidney was permitted to go on to suppuration from secondary infection, to pyonephrosis and was treated by incision and drainage. Practically no cases recover permanently from this treatment. While nephrectomy at that time was already known to be the proper procedure, it was difficult to get the consent of the patient for the major operation, in view of the general belief that patients could not survive a nephrectomy for more than two years. Incidentally I may be permitted to state that I have three patients now living with one kidney, respectively 17, 13 and 12 years after nephrectomy. The greatest advance in renal surgery followed the discovery by Steintal in 1885, that in 50 per cent of the cases the tuberculosis of the urinary tract began in the kidney. Until then renal tuberculosis was considered a sequel to disease of the testicle, the vas, the prostate or the bladder. We now know the necessity of distinguishing between genital and urinary tuberculosis. The latter always begins in the kidney and involves the bladder secondarily. Genital tuberculosis begins in the epididymus or its analogue, the Fallopian tube. It is strange that the distinction of these two

forms was so long delayed, since tuberculosis of the kidneys was much oftener found in females than in males. Of 17 of my own cases, 9 occurred in women. In both genital and urinary tuberculosis the disease is carried by the stream of excretion or secretion. It is possible that through the periureteral lymphatics the disease may spread from the bladder upwards, but this surely cannot occur often.

The salient feature of renal tuberculosis is, that the condition is at first limited to one kidney and that the findings of the clinician and of the surgeon are of more value than are the observations of the pathologist. When the subject comes to him the bladder, both ureters, and kidneys are riddled with tuberculous foci. The kidney is often found distended with caseous material and with the products of secondary pus infection, so that it may be difficult even to recognize the disease as of tuberculous nature. In the specimens obtained by operation, however, especially if performed early, the disease appears in the caseating form not too large and with a good deal of the normal kidney structure competent. In rare specimens, of which I have one, the kidney may often be reduced in size and present between nodules firm bands of fibrous tissue, a condition similar perhaps to fibro phthisis of the lung. Indeed early operations relatively often show the process limited to one pole, for which recent partial resections have been advised. In a specimen which I recently removed, the upper pole alone seemed involved. An examination of the kidney after operation showed the lower pole to contain three nodules potential of late trouble, if a resection had been made.

How long tuberculosis may remain latent in the kidney cannot be determined. Until a caseating focus breaks into the pelvis or tension in the capsule gives rise to pain, there may be nothing to indicate its presence. It must not be forgotten that the earlier symptoms are, as a rule, referred to the bladder. The minority of the cases referred to the surgeon, at least in the beginning, come with the diagnosis of kidney disease. It is almost always cystitis. The diagnosis is relatively easy, of course, when the kid-

ney is more or less enlarged by pus within the capsule, or when the pus has broken through and formed a perinephritic abscess. When pain in the kidney is present and more or less constant, it usually means extensive involvement. The earlier symptoms all point to the bladder. Painless frequent micturition is especially suspicious, for until the vesical floor has been seriously affected micturition is not painful.

Every cystitis that is not gonorrhoeal, or the result of instrumentation, trauma, or stone or enlarged prostate, must be looked upon with suspicion of tuberculosis of the kidney, especially in the young. An early examination is of more importance here than in stone, for it should be made while the bladder is still in fairly good condition and will permit the separation of the urines. It is interesting to know that the bladder symptoms disappear almost altogether with the removal of the kidney, provided that contraction has not proceeded too far. It may take some time to restore the full capacity to the bladder. Local treatment with a view to treating ulcerations and particularly to train the bladder to greater capacity, I have found necessary in a number of cases long after the nephrectomy wound was closed. Just two days ago I saw a girl of 19, on whom I had performed a nephro-ureterectomy in November, 1908. The capacity of the bladder does not exceed 75 c.c. and she urinates three or four times at night, although the urine is normal. When both kidneys are known to be involved, surgical intervention is, as a rule, out of the question save in a case of emergency such as septic infection from retention or abscess formation in or about the kidney. Recent experiences seem to show that climatic changes are of very great value in genito-urinary tuberculosis. I have little experience with them. I believe that in the strictly unilateral cases, it is not wise to protract this treatment. The routine treatment for tuberculosis is nephrectomy and that primary. Nothing can be gained by nephrotomy and drainage. The patients do not recover strength as a rule, after this temporizing measure, and I have found it difficult in former years to obtain the consent for a

secondary nephrectomy. Wherever possible the ureter should be removed with the kidney; the more recent the case the more easily is this accomplished. It is only in old standing cases where peri-ureteral and perirenal adhesions have developed that ureterectomy becomes difficult and even dangerous. In some of my earlier, old standing cases I have found it impossible often to recognize the ureter, let alone to remove it. In not a few instances a secondary operation for the removal of the ureter became necessary although in the majority of instances it became converted in the course of time into an innocuous fibrous cord.

In a number of my cases I have found nephrectomy to be followed for some reason unknown to me, by obesity.

Injuries of the Kidney. Having consumed so much of my allotted time with the pathologic conditions that are most often encountered in the kidney, it is difficult to select among the less common lesions any special ones for your consideration. I believe, however, that injuries of the kidney are worthy of being singled out among the rarer conditions because, being emergency cases, they demand quick recognition and often quick intervention. Of course these injuries are often complicated, notably by fracture of the ribs, sometimes by fracture of the spine or rupture of other abdominal viscera. In the rapidly fatal cases such additional injuries will almost always be found. In 84 complicated cases collected by Kuester, the mortality was 92 per cent, while of 222 uncomplicated cases the mortality was only 31 per cent. From my own experience the rupture of the kidney is, as a rule, the result of direct violence, a blow delivered over the kidney or a fall. Proportionate to the damage to the kidney are the symptoms of shock and of hemorrhage. These symptoms may be long delayed, even in complete transverse ruptures. I saw one case of this kind in which the man worked for 5 hours after the injury had been sustained. The operation revealed a kidney nearly torn across and divided into two. Not long ago I saw a woman of seventy-five with an injury of the kidney. Although profuse bleeding was present for a week before there was any accelera-

tion of the pulse rate from the loss of blood, the injury to the kidney must have been rather extensive. She recovered without operation. The cardinal primary symptoms of injury to the kidney are hematuria and the presence of a rapidly developing and painful swelling in the region of the kidney easily elicited by bimanual palpation. Both of these symptoms, however, may be absent, as when the tear passes through the pelvis or as seen usually in gun-shot wounds for example, the hemorrhage is intraperitoneal. Some years ago I saw a suicidal case in which the bullet wound was over the pericardium quite near the apex beat. Four hours after the injury was inflicted there was profuse hematuria with rapid distension of the abdomen. I believed, of course, from the site of entrance, that the injury involved the left kidney. This was rapidly exposed by laparotomy, but found intact. The bullet had passed from left to right, and without inflicting other injury had penetrated the right kidney near the hilum. The bleeding was altogether intraperitoneal. When the pelvis and ureter are not injured, the hemorrhage may be so profuse as to cause clotting in the bladder and give rise to the most distressing symptoms. In conditions of milder degree on the other hand, or in lacerations which involve only the cortex, the urine may only be smoky, and the hematuria last for a day or two.

In not a few of the milder cases the patient does not come under observation until inflammatory changes have gone on about and particularly behind the kidney through the infection of the blood-infiltrated tissue. Not a few perinephric abscesses have their origin in unsuspected contusion or laceration of the kidney. The recognition of these secondary changes are of course easy, when they are once suspected.

It is needless to say that the severer the symptoms the more urgent is the necessity for intervention. Milder cases of contusion doubtless recover even without operation, and temporizing is not out of place since these cases recover, if the operation be not too long delayed after infection has taken place. Incision and drainage will often succeed in effecting a cure without nephrectomy.

When the symptoms are very marked, however, procrastination is dangerous. In the cases of subparietal injury the lumbar incision commonly used for kidney operations is the one to be chosen; and if the damage to the kidney be extensive, a primary nephrectomy alone can save life. Not a few instances have been recorded, however, in which the margins of the tear could be approximated and maintained by sutures, and others have been reported in which a partial nephrectomy was followed by recovery. It would be of interest to note whether in these cases tying the blood vessels of the injured kidney might not be attempted with the view to saving the kidney. In the lower animals in some experiments which I have recently conducted, the tying of the blood vessels does not necessarily cause necrosis of the gland. But these experiments have been made on healthy kidneys, and it is very doubtful whether a kidney torn and bruised would react in the same way. It would more likely be followed by necrosis.

In penetrating wounds, notably gun-shot, it is better, I think, to explore the kidney through a laparotomy wound. Altogether collective statistics show that early exploration gives the best results. Delbet collected 319 cases of which 225 were treated expectantly, with 103 deaths. In many of the fatal cases the condition of the patient precludes operation. In 50 cases the kidney was treated by suture, packing or partial resection, with only two deaths. In 54 cases nephrectomy was followed by 25 per cent mortality. Altogether it can be safely stated that the life-saving influences of early operation for severer ruptures of the kidney has been firmly established.

It would be manifestly unjust if I were much to extend this paper, but it seems to me improper to close without at least a reference to operative intervention in involvements of the kidney, which, until in recent times, have seemed to offer no field for surgical intervention. That some of these chronic affections are unilateral and that they may produce kidney colics closely simulating those of stone, and that diseases chronic in character

may exist without albumen or casts in the urine, and that profuse hematuria with or without colic may occur in chronic nephritis—these things may be considered firmly established. It is likewise certain that acute hematogenous infections of the kidney may occur on one side and produce multiple abscesses, the other kidney remaining intact. These unilateral cases are clearly subjects for surgical intervention. When, however, both kidneys are involved as in Bright's disease, the question assumes a different aspect. The enthusiasm which followed the early reports of success from decapsulation of the kidney quickly dwindled. As is well known, the operation found its chief advocate in Edebohls, who a few years ago had operated on 72 cases of which it was claimed that 17 were cured. Nothing like these results have been achieved by other operators. While my own experience has been limited, it has not filled me with pride. Not one of my three cases was improved. I think it may be safely said that in chronic Bright's disease, if operation is ever indicated it should be limited to cases in which pain is a marked symptom or in which profuse hematuria or anuria threatens life. On the other hand, in the acute renal conditions which produce anuria, such as eclampsia, scarlet fever, or perhaps some cases complicating burns, capsule splitting as a life saving measure may be resorted to. It is here, possibly, that our greatest advances in the surgery of the kidney in the near future must be looked for.

In conclusion I would state, that most of the conditions of the kidney which may become subject to surgical relief, belong to that territory which the Germans so well designate as "grenzgebiet," the borderland, which both physician and surgeon must cultivate. These borderlands, for the welfare of humankind as well as for our profession, are being recognized more and more. If properly cultivated their recognition can only make the surgeons better doctors and the doctors more cognizant of surgical possibilities. No other field more than that of surgery of the kidney can illustrate better the wisdom of the doctor and of the surgeon living together in harmony.

IS ANYTHING THE MATTER WITH THE DOCTORS?*

William J. Robinson, M.D., New York,
President of the American Society
of Medical Sociology.

Is anything the matter with the doctors? The original title of tonight's discussion was: "What is the matter with the doctors?" But as that title contained the definite assumption that something *was* the matter with the doctors, it has been modified to a milder form. But even in this form, it assumes that something is the matter with them. Otherwise the question would not be asked. We do not ask: "Is anything the matter with the chemists?" "Is anything the matter with the physicists?" "Is anything the matter with the astronomers?" "Is anything the matter with the electrical engineers?" And the reason we do not ask this question in reference to them, is because we know or assume that they are all right. We assume that they know as much as can be known at the present time, with the accumulated facts and the instruments of precision in their possession. And by asking the question: "Is anything the matter with the doctors," you at once betray that you have a lurking suspicion or the positive certainty that something *is* the matter with us. And there is no use denying that such a suspicion or certainty is harbored by a large number of people, particularly of the cultured, or perhaps more correctly, the quasi-cultured classes.

The so-called health journals, practically all of which are edited by men who have axes to grind, and who are perfectly innocent of any knowledge of medicine, are doing their utmost to foster suspicion and fan distrust in the medical profession. A sensational book, which claims to depict the chaos and crime in the medical profession has recently been published and is exerting a pernicious influence on the public, because the focus through which it presents the facts or the alleged facts is false and the picture

*Delivered before The Liberal Club of New York, March 15, 1911, at a discussion participated in by the following: Up ton Sinclair, Samuel Hopkins Adams, Norman Harwood, Dr Robert T. Morris, Dr. Woods Hutchinson and Dr. William J. Robinson.

is therefore false and distorted. The quack journals, sensational and untruthful books, and a few ignorant laymen who pretend to assume the role of physicians, have been inciting the public against the medical profession, and by bringing false charges against us have partially succeeded in creating a feeling of animosity and distrust. You know how critical and analytical our dear public is. You can make it believe anything if you have only enough assurance and impudence; the more stupid, the more sensational the accusations, the more readily will they be believed.

Let us see what the charges against the medical profession are, what indictments a biased, inimical and ignorant jury has drawn up against us.

The Terrible Crime of Using Drugs.

The first and the most universally heard charge against us is that we are drug dopers. That is, that we do not treat people rationally, hygienically, by the aid of diet, fresh air, sunlight, etc., but that for every condition we give drugs, that we fill the people's bodies with poisons and that by our drugging we often create worse diseases than those we intended to cure. This charge is repeated day in and day out by the quack health journals, which I referred to above. To speak of the utility, of the indispensableness, of the life-saving properties of a large number of drugs is not the place here. I will merely repeat what I have said elsewhere, that he who has seen the lesions of syphilis melt away under the administration of mercury, iodine or 606; he who has seen the chills and fever of malaria disappear as if by magic under a properly administered dose of quinine or arsenic; he who has seen a miserably dwarfed, imbecile little cretin grow in stature and gain intelligence from day to day under the use of thyroid; he who has seen the pale cheeks of the chlorotic or anemic girls change into red roses under the administration of iron and arsenic; he who has seen a waterlogged old man or woman, unable to take a step without getting out of breath, take on new lease of life under digitalis; he who has seen a nasty diphtheritic membrane roll away as if

by the touch of a magic wand after a dose of antitoxin; he who has seen the fearful torturing pain in a case of renal or gallstone colic cease instantly after an injection of morphine; he who has seen the life-saving effect of a few drops of amyl nitrite in a case of angina pectoris; he, I say, who has seen all these things will not agree to cure the sick without the use of drugs. And I will say, that if you will show me a man who absolutely denies the utility of drugs, I will show you a man who has never used drugs or who is ignorant as to their proper use.

But as to the charge that drugs constitute the principal factor in our treatment, I can only say that such a charge is maliciously false. Drug-treatment constitutes only a small—a very small—part of the modern practice of medicine. There is not an agent or method, material or immaterial, that we, members of the regular medical profession, do not employ in the treatment of disease. Regulated diet, exercise, water internally and externally in its numerous hydrotherapeutic methods, mineral waters, baths, direct sunlight, fresh air, heat in its multitudinous forms, massage, electricity, roentgenotherapy, Finsen light, radium, antitoxic sera, vaccines, suggestion (psychotherapy,) hypnotism, all of these agencies we, regular scientific physicians, make use of freely in our endeavor to cure and to prevent disease. We many use only one of these agencies in the treatment of many of the diseases, but we do not hesitate to use all of them whenever they seem indicated.

A Handbook of Practical Treatment has just come off the press. It is authoritative and presents the latest developments in the treatment of disease as it is practiced by the regular medical profession. The first 16 chapters deal with the general treatment of disease, and of these 16, only one is devoted to drug therapy!

Take Osler's Practice of Medicine, and you will see that drug treatment is playing a very secondary role, one might say an insignificant role, in the entire book. Inquire at, or study the reports of our foremost hospitals and you will see that drugs play a very secondary role. Nursing, hygiene, proper feeding, cleanliness, are our chief agents in fighting disease.

But, contrary to the quacks, we know the indications for drugs, we know the proper use of drugs, we know where they are invaluable; and when we do need them, we can use them fearlessly and unhesitatingly.

Surgical operations.

Another serious charge refers to surgical operations. By one part of the people we are attacked for performing any kind of surgical operations, by another part we are accused of performing surgical operations too frequently, in many cases where they are not at all indicated. To the first charge it is not necessary to reply. He who denies the necessity of any surgical operations, he who denies that very often a surgical operation offers the only chance of saving a life, as is done by many of our "No Knife" quacks in the quack journals, puts himself outside the pale of rational thinking beings, and no discussion is possible with such a person.

As to the second charge, I must confess that it is true of a small number of our profession. It is true that operations are sometimes performed on people who would be much better off without them. But this is not due so much to greed and moral perversion as to certain bias, of which none but the broadest-minded of specialists can be free. A man who is working in one line often becomes narrow, and seeing many brilliant successes from his operations, he becomes unconsciously biased in favor of operations. And as it is true that in many cases an operation will do in two weeks what medicinal and hygienic treatment will not accomplish in years, it is not surprising that some surgeons are inclined to give the patient the benefit of the operation, where perhaps an internal physician would consider the operation contraindicated or not at all indicated.

It is true, however, that there is a small percentage of physicians who are devoid of conscience and who will do almost anything for the money. But this is not anything special and unique, it isn't something peculiar to the medical profession. Rascals and brutes are found in every profession, in every trade, and will be found in every profession and every trade as long as we live under our pres-

ent beautiful competitive system. And the entire profession should not be held responsible for the misdeeds of a few.

Practice of Abortion.

Another charge against the medical profession is that it is guilty of the practice of abortion. That the entire profession is guilty of this practice is of course false. That a large number of physicians—the percentage is of course impossible to state with definiteness, but I would say anywhere from 10 to 25 per cent—are practicing it habitually is true.* But I would not blame the profession very strongly for it. It is the State that is to blame for this condition of affairs. Wherever there is a demand there will be a supply and the demand for abortions is tremendous. The layman has no idea of the frequency of the demand and of the tremendous pressure that is brought to bear upon the medical profession. I venture to say that for every abortion performed by a physician, at least one hundred demands, requests and pleading supplications are refused. If this were not so we would not have the thousands and thousands of non-medical, male and female abortionists, who thrive throughout the country. A million abortions, at a very conservative estimate, are performed annually in the United States; and I am sure that 75 to 90 per cent of them are performed by non-medical and professional abortionists, who are outside the pale of the medical profession.

Are We Attempting to Form a Monopoly?

Another charge that has been heard a good deal of late is, that we wish to form a trust, a monopoly, and that we intend to compel everybody to treat patients according to our own methods. How absurd this charge is will be seen at once if I mention that in the New York State examinations, for instance, no questions are asked on therapeutics or the treatment of disease. We do not wish to interfere with anybody's methods of treating disease. We leave that to the conscience and good judgment of the individual physician. And our only demand

*We believe this number is grossly exaggerated. In our opinion 5 per cent is a very liberal estimate.—Editor

is that they who undertake to treat human diseases show that they have spent some time on the study of the anatomy and physiology of the human body and on the pathology and symptomatology of its diseases.

Our examination questions are only on subjects which admit of no discussion, which are accepted by everybody, the same as problems in chemistry or physics are universally accepted. All uncertain or debatable points are entirely left out from our examinations.

We Make Mistakes.

Another charge against us is that we make mistakes, that we do not always diagnose the diseases correctly, and that we do not always treat properly. That is true. We do not claim to be infallible, we do not claim to be omniscient. Medicine has not yet reached finality; medicine as a science is, as I have explained many times before, but half a century old, and some diseases are so obscure, so complex, that with the present state of our knowledge a mistake is occasionally unavoidable. But we are fighting hard to remove the veil from Nature's secrets and every year we know more and more, and our mistakes are becoming fewer and fewer.

Please remember that it is but yesterday that we began to use the same methods in investigating medical problems that are used by other exact sciences. And our reward has been rich indeed. To mention but one of the scourges of humanity, namely, syphilis. We have learned more about that disease in the last five years than in the preceding 500 years. The cause of the disease—the *spirochaeta pallida*: the best means of diagnosing the presence or absence of the disease in the system—the Wasserman test, and one of the most powerful remedies in the treatment of the disease—606 or Salvarsan—have all come to us within the last five (to be more exact, five and a half) years. The same may be said about cerebro-spinal meningitis. Three years ago we stood before that monster humble and helpless; now, thanks to Flexner we have a powerful weapon, and we wrest many victims from the monster's clutches. And I venture to say that

if in five years from tonight you arrange a similar dinner I shall be able to tell you of some very remarkable discoveries made between March 15, 1911 and March 15, 1916.

But do the quacks, the irregulars, and those who believe with them, appreciate the fact that when they announce with glee that physicians make mistakes, they thereby pronounce their own doom? For, if physicians who have spent several years in preparatory studies, who have had years of practice, who have every possible diagnostic instrument, who call to aid the chemical, pathological, bacteriological and biological laboratory, make mistakes, how can the quacks and faddists expect rational, sane people to believe that they, who have not any of these advantages, can diagnose correctly and treat properly?

Personal Experience Shapes our Opinions.

We are no more responsible for our honest opinions than we are for the color of our hair, the length of our faces, the girth of our chest. Our opinions are the conglomerate result of heredity, environment, our bringing up, our companions and friends, the school we attended, the lectures we have heard, the books we have read. Our personal experiences have a tremendous influence on the shaping of our opinions. And it is possible that the unfavorable opinion which some laymen have of the medical profession is due to some unpleasant personal experience which they have had with some member. And it is possible that the favorable opinion I have of the medical profession is due to my exceptionally favorable experience with my colleagues. God gives us our relatives, our friends we choose ourselves. But I can truthfully say that the physicians whom I call friends are not guilty of the things with which our opponents are fond of charging the medical profession. I can sincerely say, that the noble-minded and sincere, are always studying and investigating, are sympathetic with the suffering, are up to the minute with all the latest advances in medicine, are careful and conscientious in diagnosis, are rational in their treatment, using drugs

only where distinctly indicated, employing every hygienic measure, relying to a great extent on good nursing and dieting, and upon the *vis medicatrix naturae*, never prolonging a disease, never making an unnecessary visit, never operating or advising an operation unless positively indicated—in short, they are honest, capable men to whom the public can entrust their bodies with implicit confidence. Of course there are incompetents, and there are dishonest men in the medical profession, as there are in every profession, in every trade, in every line of human activity. But when we judge of a profession, we judge it by its highest representatives, or at least by the rank and file, but certainly not by its worst specimens. And the rank and file of the medical profession is sound to the core. It is sincerely desirous of learning and advancing, it is sincerely desirous of doing its best for humanity. It reads, studies and investigates, and is earnestly doing the best that can be done.

The Specter of the 17th Century.

The trouble with our friends is that they set up a man of straw and then proceed to demolish him. They see a medical spectre of the 17th or 18th century and imagine that that is the physician of today.

Just as some of our free-thinking friends see a Torquemada in every priest or minister—they will not admit that there are quite a few decent people among the clergy of today, people with broad minds and big hearts, intensely interested in the welfare of humanity; just as our anarchistic friends still see a Phillip the Second or an Ivan the Terrible in every ruler—you cannot make them believe, for instance, that George the Fifth and William H. Taft are quite human, and, while certainly no geniuses, are at least as intelligent as the average Englishman or American—so our anti-medical friends see with their mental eye an old, bewhiskered gent (Elbert Hubbard, who has become one of the most obnoxious of quacks, always pictures the doctor as a man with whiskers) with a big syringe, with a blood-letting lancet, with chisel and saw, with powerful emetics and cathartics, with balls of opium and pocketfuls

of calomel; a gent without any culture, narrow-minded and hide-bound by tradition, without any knowledge of hygiene or sanitary measures, having no idea of ventilation, fresh air, dietetics, the power of suggestion and the other immaterial agencies. Such is the picture some of our friends have of the modern medical man, or at least that is the picture they try to show to a gullible public—and they proceed to hammer it, stab it, tear it to shreds and tatters and to show to the same gullible public their own superiority. No wonder they succeed.

That the picture is false and distorted—maliciously or ignorantly—goes without saying. The physician of today is a cultured man with a good preliminary education—and the entrance requirements are getting higher and higher—a good medical education, and he is a critic, a skeptic and quite often he is a true scientist.

That we do not yet know everything, that some diseases, cancer for instance, still baffles us, is true. But there is a great difference between not knowing everything and knowing nothing, and as said before, every year we learn a little more. But one thing is sure; what WE can't do, the quacks and irregulars surely cannot.

What We Have Accomplished.

I have touched upon and answered the charges which our enemies are making against us. Let me now devote two or three minutes to a consideration of the benefits which we have conferred upon humanity, but which our enemies forget to credit us with. To state that medicine is advancing from year to year, and that from year to year we are improving in our diagnosis and treatment of individual patients, must be in the nature of a mere assertion, for our enemies deny it. There are two things, however, which they cannot deny—for the *world* has them on record.

One is, that wherever medical science is in an advanced state the mortality rate has been enormously reduced. The second is, that by having conquered the mysteries of the transmission of malaria and yellow fever, and by applying rigid sani-

tary measures, we have rendered many tropical and subtropical places habitable which were uninhabitable before, and have converted many pest-holes into the healthiest spots on the globe.

Let us see what the reduction of the mortality rate means. I shall not go very far back, though the figures would prove more striking and more startling. But right here in New York City we have within the last fifteen years reduced the death rate per 1000 inhabitants from 25 to 16. In other words, instead of 25 people dying every year per each 1000 inhabitants, only 16 die—a saving of nine per thousand—or 9000 per million, or 36,000 per four million—the population of New York City. What an annual saving of human lives it makes throughout the country or throughout the civilized world you can calculate for yourselves. For everywhere is the same story. In Berlin, for instance, the mortality rate fell in 25 years from 33 to 16—a saving of more than 50 per cent; in Munich from 41 to 18 and so forth. Our statisticians are in the habit of estimating the value of human lives in dollars—at such an age we are worth so much, at such an age so much. To me this method is rather revolting—revolting in itself, and because in my opinion many lives are worth nothing, others are worth less than nothing, in other words, have a negative value, while others are worth not four thousand dollars—which is the highest value put on a human being by the political economists—but forty millions. But if you are fond of estimating the value of human lives in dollars, you can readily see how many billions we save to the world every year.

As to the places which have been converted from pest-holes into summer resorts, with summer resort mortalities, need only to point to Panama. And it is not the quacks and the detractors of scientific medicine who have done it, but the regular physicians and the sanitarians who work hand in hand with us.

Conclusions.

1. The medical profession of the present day is fully alive to its duties and its responsibilities.

2. Medicine of today is thoroughly scientific in its methods, employing the same means of experimental investigation and demonstration as are employed by the other exact sciences.

3. Medicine of today is not shackled by the chains of authority and tradition. On the contrary, every dictum of any so-called authority, any statement regarding any drug or method of treatment, which has been handed down for ages from text-book to text-book, is called into question, is carefully analyzed and dissected, and if found wanting, discarded. Many drugs which were considered standbys by our forefathers have been thrown out from the Pharmacopeia, though they may still be used by old grannies.

4. The profession of today is broad-minded and is willing to investigate any remedy or method of treatment, no matter from what source it may come; it is willing to give a trial to any suggestion if it has a grain of common sense to it; even if the suggestion comes from a quack.

5. The evils which the medical profession is guilty of are not inherent in the medical profession as such; they are the result of our social conditions, of our immoral competitive system, which makes men fight and cut each other's throats in order to make a living, and these evils are much more in evidence in other trades and professions; the legal profession for instance.

6. The medical profession not only does its duty by the public, alleviating suffering, restoring hundreds of thousands of men and women to health and active useful lives, but we are making progress from year to year, we are making new discoveries, dealing with the larger problems, increasing the average duration of life, improving sanitation, etc. In short, we deal now not only with individual, but with national problems.

7. In judging of the life of any man, of the activity of any party, of the value of any movement, of the achievements of any profession, we do not take any single acts or incidents, but we take the sum

total. If we take the sum total of the activities of the medical profession, if we subtract all its shortcomings, if we admit even everything our enemies say about us, the balance of good is overwhelmingly in its favor, and it can truthfully be said to be the most beneficent, the most progressive, the most humane and the most altruistic of all professions.

And therefore, to the question: "What is the matter with the doctors? I must answer:

There is nothing the matter with the doctors. They are all right.

ECTOPIC GESTATION

As It Concerns the General Practitioner.

A. Judson Kemper, M.D., West Milford,
W. Va.

(Read at Annual Meeting State Med. Ass'n,
Oct., 1910.)

In the consideration of this subject, we feel that there may be some who may have the opinion that it is one of those rare conditions for the physician to encounter, and that our time could have been spent in a more practical way by discussing a subject that is more frequently met by the general practitioner.

The fact is that the rarity and fatality of this condition are what have prompted me chiefly to select this subject. Not that we hope to bring anything new along this line to the minds of this body of physicians, but that we may all rehearse and refresh our memory, so that we may be qualified to recognize and be amply able to handle this fatal, yet rare condition, a condition the recognition of which may mean the difference between life and death of our patient and success and failure of the physician.

The recent graduate, in entering upon the duties of his profession, is perfectly familiar with the symptoms of this malady, but years may pass and possibly a life time, without having to deal with such a condition as ectopic pregnancy. If we will interrogate our older practitioners, we will find that many of them have allowed their memories to fade on this as well as many other of the more rare diseases and conditions that we may encounter. Therefore, if I am only able in

this paper to impress the medical fraternity with the importance of keeping in touch with this as well as other rare yet fatal conditions, I will feel that I am amply repaid for my labor.

In order to reach the uterine cavity, an ovum must pass through the Fallopian tube. When a fertilized ovum is retained in the Fallopian tube, it develops and gives rise to what is known as tubal pregnancy. This terrible condition rarely exists as an accompaniment of uterine gestation, though such a complication has been known.

As to the cause or causes of tubal pregnancy, nothing definitely is known, and such uncertainties will continue to exist till it is known where in the genital passages the ovum and spermatozoon normally meet. It is probable that when an ovum is fertilized, it engrafts itself on the adjacent membrane, whether it be in the tube or uterus. Tubal pregnancy may happen as a first pregnancy in women who have been married eight, ten or even twenty years. A Fallopian tube may become gravid in the newly married or in the mother of a large family. Both tubes may, in exceptional cases, be gravid concurrently, or one tube may become pregnant years after its fellow. But it is very rare to have double pregnancy in the same tube. During the first five or six weeks following the lodgment of the oosperm, the tissues of the tube become swollen, and at the point where the attachment is made the tubal wall becomes very thin. When the oosperm is lodged near or in the ampulla of the tube, the abdominal ostium will, by a very gradual process, close. This closing is very slow and requires from six to eight weeks for its completion.

When the oosperm is lodged in the middle or uterine section of the tube, the abdominal ostium is closed. So long as this orifice remains unclosed, there is great danger of the fertilized ovum being ejected into the peritoneal cavity, producing what is called tubal abortion. With this accident there is frequently connected a copious hemorrhage accompanied by the usual sign of internal bleeding, and death may quickly occur from anaemia and shock thus induced. Tubal

abortion may be complete or incomplete; complete when the ovum is discharged into the peritoneal cavity, and incomplete when it is retained in the tube.

The ectopic-gestation sac usually ruptures from the sixth to the tenth week, and it is almost an impossibility for ectopic gestation to occur after uterine gestation has been established. If, therefore, the two conditions do co-exist, the ectopic must precede the utero-gestation or be coincident with it.

The rupture of the gestation sac may be either primary or secondary; primary when the embryo with its surrounding sac escapes from the tube, and secondary when the true gestation sac is burst. Primary rupture may be either intra or extra-peritoneal. If the mole escapes into the peritoneal cavity it is intra-peritoneal, and if it is lodged between the folds of the broad ligament it is extra-peritoneal. If the rupture occurs very early, the ectopic foetus may die and be absorbed with the effused blood, or it is possible to have a rupture of the tube, and the embryo with its membranes remain uninjured, and pregnancy continue in the folds of the mesometrium.

There are three points at which the tube may rupture, namely, at or near the abdominal ostium, or somewhere between this point and the uterine section of the tube, or in the uterine section of the tube. The most dangerous of these is at the abdominal ostium, as at this point there are no resisting tissues to check the hemorrhage.

In the tubal pregnancy the placenta is liable to many changes which influence very seriously the life of the foetus, and these are such grave sources of danger to the mother that they demand our careful consideration. A uterine placenta consists of both foetal and maternal elements, but a tubal placenta consists of foetal elements only; for in tubal uterine pregnancy a decidual membrane forms in the uterus as it would in true uterine pregnancy, but does not form in the tube. It is this decidual membrane that is sometimes responsible for misleading the physician and causing him to conclude that he has met with an early uterine abortion. The patient may have a history of having

missed a menstrual period, but has recently been menstruating for several days; finally she has symptoms of a uterine abortion with the final result of an expulsion of what may seem to the physician to be an obscure miscarriage. We leave our patient feeling that we have fully completed our work, and can see no reason why recovery will not be inevitable. But possibly in the usual time that we may be expecting our patient to have fully recovered, we are informed that she is not gaining strength as she should, and that there are slight spasms of uterine hemorrhage.

This condition, with tenderness over the region of the ovaries and Fallopian tubes, continues to exist until suddenly and ununexpectedly the patient is seized with violent pain in the lower abdominal region, followed by pronounced anaemia, prostration and accelerated and weakened pulse.

The above is not a typical case of ectopic pregnancy but rather one of the exceptional cases that may cause us to lose both patient and reputation, and give us nothing in return but a "black eye" and a lack of confidence of the laity, if we should fail to recognize conditions and meet them as necessity demands.

Again the woman may have noticed nothing out of the ordinary, except a missing of one or possibly two menstrual periods. Her health and general condition have all the appearance of being all that they should be. Suddenly she is seized with severe pain in the lower abdominal region and may fall where she is standing. As time advances, she shows the signs of internal bleeding characterized by prostration, accelerated and thready pulse, rapid breathing, pale lips and whitish appearance of the gums and mucous membranes. In other words, when any woman who has been in the habit of menstruating regularly and who has passed her period from four to ten weeks, is suddenly seized with pain in either iliac region, becomes faint, dizzy, nauseated, pale, and is generally unable to sit up, with tenderness of lower portion of the abdomen, has frequent desire to go to stool without relief, and upon vaginal examination a boggy mass is felt to one

side and posterior to the uterus, and a slightly bloody, shreddy mucous discharge occurs, we have the classical symptoms of ectopic pregnancy.

Pain alone, when not accompanied by a clear history of menstrual irregularity, symptoms of pregnancy and the presence of a tumor of recent development at the side of the uterus or in Douglass' pouch, is pathognomonic of ectopic gestation only under certain conditions, viz: the pain is sharp and colicky, distinctly localized on one side, attended with faintness and usually followed by intervals of hours or days complete remission. The pulse is accelerated but there is practically no rise in temperature. The latter is very important in distinguishing ectopic pregnancy from inflammatory conditions. The prognosis depends largely, first, upon the amount of blood lost, secondly upon the profundity of the shock. Death due to the loss of blood alone is rare. For some reasons, the shock produced by the rupture of a foetal sac is out of all proportion to the amount of blood lost. In such instances, the patient suffers not only from the loss of blood, but also from an extensive wounding of the peritoneum—the so-called peritoneal shock. In fatal cases of this kind death takes place in a few hours.

The mortality in deliberate and well prepared patients, in the hands of an experienced operator, is very small.

Treatment—This depends very much on how conveniently the patient is situated to a hospital. If in a town or city where the advantages of a hospital are at hand, an early operation is best; but if in a country district, the patient must be sustained by hypodermics of strychnine, saline solution either subcutaneously or by enema, or some other method of stimulation until the patient at least partly rallies from the shock in order that she may endure transportation. Quietude and the avoidance of all excitement is, of course, indispensable.

The only remedy for a complication of this nature is a complete removal of the offending mass at the earliest possible opportunity after it has been recognized. This may sometimes be done without interruption of utero-gestation if this co-ex-

ist, especially if the ovary and tube on the uninvolved side are healthy and do not require removal. If the appendages on both sides must be removed, the destruction of so large a portion of the blood supply will almost invariably result in the termination of the utero-gestation.

So far as the exact surgical procedure in these cases is concerned, I shall not attempt to give it. This, in a strict sense only, is important to the surgeon, but the diagnosis and early advice concern every physician, be he a surgeon or general practitioner.

And in closing let me say, that the difficulties and grave dangers that surround surgical intervention in the late stages of tubal pregnancy, make it clear that the interests of our patient are best served if we early and clearly recognize this condition and recommend the removal of the gravid tube.

(The following clipped from *Medical Review of Reviews*, is interesting in connection with above paper. EDITOR.)

REPEATED ECTOPIC PREGNANCY

Gerschun (*Zentr. f. Gynak.* Dec. 17, 1910) shows from his discussion of these conditions that this is not an infrequent condition. In 1904, Vassmer collected 132 cases of repeated ectopic pregnancy and Gerschun has added 55 cases from the literature as well as reporting in detail 2 cases of his own. In one case, there was an interval of 3 years and, in the other, there was an interval of 1 year.

The frequency of repeated ectopic pregnancy has much interest for the gynecologist in its bearing upon treatment; for, if there is a marked tendency toward repetition of the disease, it would be well to obviate this possibility by removing the uninvolved tube as well as the one concerned in the pregnancy at the time of the first operation. The only way to estimate the frequency is to consider the percentage of recurrences in series of considerable numbers. The reviewer has collected 743 cases in which there were 43 repetitions.

Thus, in these 743 cases of consecutive series, there was recurrence of the ectopic pregnancy in the other tube in 5.8 per cent., and it is probable that some were overlooked, as every case of recurrence would not return to the same surgeon.

If a patient persists in running evening temperatures which cannot be accounted for after a thorough physical examination and blood examination, one should place the patient on increasing doses of the iodids, for the fever may be due to an old syphilitic infection.—*American Journal of Surgery*.

A NEW SIGN OF TUBAL PREGNANCY

Wm. W. Golden, M.D., Elkins, W. Va.

(Read at Annual Meeting of State Med. Ass'n,
Oct., 1910.)

I hesitated for some time before I decided to present this paper with this title for the reason that my conclusion is based upon the observation of a very small number of cases. However, I finally decided that I had no right to keep from publishing an observation which, if verified by others, may prove of substantial aid in the early diagnosis of a disease so serious as tubal gestation. Furthermore, if you will follow the evolution of my experience with this sign, you will readily see that I have some good reason for believing that I have discovered something new, provided, that it is not already a matter of record in literature inaccessible to me. After the clinicians of the audience have passed upon the correctness of the observation, I will ask the bibliophilic members to pass upon the claim of priority.

To come to the point, the sign is this: A more or less striking paleness of the cervix. The absence of this paleness does not exclude tubal pregnancy, but its presence, when not due to obvious other causes, is almost pathognomonic. It is only present, however, in those cases of tubal gestation in which there is bleeding from the uterus, and only while this bleeding is actively going on. This sign, therefore, is of value principally in the differential diagnosis from threatened or incomplete uterine abortion, but it is right here where the practitioner is in the greatest need of help.

Now as to the history of my discovery: I first observed it in a case of tubal gestation in the practice of Dr. O. L. Perry, of Elkins, while the patient was in a state of profound collapse, caused by rupture of the tube. The paleness of the cervix in that case was very striking, the appearance of the tissue being as if it was dead and for a time kept in alcohol. I attributed this at the time to the general condition of that patient and attached no significance to it. Not long after that I

examined a patient referred to me by Dr. C. L. Moore, of Hardin, from whom, on account of her foreign tongue, I could learn nothing whatever of the history of the case outside of the fact that she had been having a bloody discharge from the uterus for some time. There was nothing in her general appearance to suggest illness of any kind, and she had walked a considerable distance to the Davis Memorial Hospital where I saw her. An examination showed a mass of considerable size behind the uterus and to the right side of it. There was a considerable flow of blood from the uterus and the cervix was strikingly pale. Operation showed a right tubal pregnancy which had been ruptured some time before, a large adherent sac outside the tube, and a considerable amount of old clotted blood. The paleness of the cervix observed in this case began to obtrude itself upon my mind as something that might possibly have some definite relation to tubal pregnancy.

In a few months I was favored with a case of tubal pregnancy by Dr. C. H. Hall of Elkins. In this case, a full history of which I will append, it was quite difficult to exclude an incomplete intrauterine abortion. There was a history pointing to rupture of the tube, at least it was definitely learned that following a severe pain the patient fainted and remained unconscious for a time. But examination showed an abnormal mass not larger than a walnut, pointing to the absence of much bleeding and suggesting an independent cause for the syncope. This and other considerations made a clear diagnosis difficult. An inspection of the cervix showed it to be pale, and strikingly so. I could not help attaching diagnostic importance to this sign by this time. Operation showed a right tubal pregnancy about the size of a walnut. The tube was intact, but its contents were clotted blood and organized tissue, and there were about two ounces of clotted blood scattered through the pelvis which evidently had come through the patulous fimbriated end of the tube. Shortly afterwards, in discussing this class of cases with Dr. C. B. Williams of Philippi, I pointed out to him the possibility of find-

ing some aid in the diagnosis by noting a more or less striking paleness of the cervix. Within a few days after that discussion, Dr. Williams, in association with his colleague, Dr. M. M. Hoff, discovered a case of tubal pregnancy in which the observation of paleness proved of much aid in the diagnosis. I operated on that case and found a right tubal gestation. For details of this case see below. By this time I felt reasonably assured that I had discovered something of diagnostic value. The question in my mind then was, why this paleness of the cervix in these cases? That it is not present in all the clinical types of ectopic gestation, I was satisfied from the fact that all text-books at hand contain a statement to the contrary, namely, that the cervix in these cases presents the same appearance as in uterine pregnancy, and, also because I had never noticed it in the few cases that I had seen before, although this might have been due to carelessness or lack of more than ordinary interest in this class of cases at that time. I finally worked out the following theory: The paleness is due to local depletion caused by the hemorrhage from the uterine mucosa, and the reason why such paleness is not to be observed during menstruation, or in cases of abortion, or in endometritis or in sub-mucous myomata and similar conditions, is because the active hyperemia maintained by these physiologic or pathologic conditions directly in the uterus either balances or even exceeds the effects of the local bleeding. In tubal pregnancy the uterine vascular disturbance is moderate, caused as it is reflexly by conditions on the outside. If this be correct, I reasoned that in cases of extrauterine pregnancy in which there is not any or much bleeding from the uterus, this sign would be absent. Fortune soon favored me with a case of this kind through the courtesy of Dr. W. D. Miller of Weaver. In this case there had been no discharge from the uterus for three weeks prior to the examination. Paleness of the cervix, therefore, was not expected and none was found. Other symptoms, however, made the diagnosis clear and operation proved its correctness. It is needless to say that one should not

depend upon any one symptom for diagnosis, and our present-day text-books contain very clear accounts of the clinical course of this disease. There are two symptoms, however, which to my mind do not receive sufficient emphasis in our text-books, namely, painful defecation and painful urination. These are certainly very frequently present, if not always.

The following are the histories of five cases which form the basis of this paper:

Case 1.—Age 35. Two children, youngest nine years old. Two or three miscarriages since. Menstruation very irregular. On this account the disease was not suspected until the attacks of pain in the left pelvis became very severe. Painful defecation was a marked feature in this case. Rupture followed by profound collapse occurred during an exploration of the uterus for diagnosis. The patient rallied and was operated on a month afterwards. Good recovery.

Case II.—Age 24. No evidence of any full-term pregnancy in the past. No history except metrorrhagia of several weeks' duration. A large mass behind and to the right of the uterus. Diagnosis correctly made before operation, partly on account of paleness of the cervix. Operation showed a large sac, extensively adherent, filled with old clotted blood, right tube enlarged and ruptured. Good recovery.

Case III.—Age 21. No illness since childhood. Married five years. Gave birth to a full-term child two and a half years ago. Labor and puerperal state normal. Baby died of intestinal trouble when six months old. Until the birth of her child she had always been perfectly regular in her menstruation, but since it had been occurring every three weeks and occasionally only two weeks apart. Present illness began June 24, 1910. At 7:00 a. m., on lifting a heavy weight, she was taken with a severe pain in the hypogastrium, and a gush of blood from the uterus followed. The bleeding continued to the time of the operation, but the pain ceased in about an hour and she traveled that afternoon a distance of twenty-two miles on a visit to her parents, partly by rail and partly on horse-back. Between that date and July 1st, the pain re-

curred a number of times, but at one time only was it severe enough to compel her to lie down. Defecation and urination became painful whenever the hypogastric pain was present. On the morning of July 1st, on rising she felt pain. A bowel movement aggravated it and compelled her to lie down for awhile. On attempting to rise again she became nauseated and fainted. All that day the pain in the hypogastrium was quite severe. In addition she also suffered much pain under her ribs which made respiration painful. Her right shoulder was so painful that she could not raise her arm. All that day she could not void her urine, and when she did at night it was very painful. The flow of blood from the uterus became quite free, worse than in an ordinary menstruation. She had no acute pain the next day, but was sore all over the abdomen. On the following day she got up but had to lie down part of the time, as being on her feet aggravated the pain in the hypogastrium. On July 6th she returned to her home, covering the distance partly by buggy and partly by rail. On July 11th, the hypogastric pain became worse. A visit from her physician gave her relief and she remained fairly comfortable until the 17th, not having to stay in bed. On that date the pain became much worse. In addition to the severe pain, her abdomen was much distended and her bowels would not respond to cathartics or enemata. She had some fever. By perfect rest in bed and other measures she became comfortable and remained so until July 24th, when she was operated on. The ampullar part of the tube was found enlarged to the size of a walnut and intact. There was bleeding from its fimbriated end. The contents were a mass of organized tissue and clotted blood. The foetus very evidently died early and became absorbed. The ovary on that side was cystic. The amount of blood in the pelvis was about two ounces and nearly all clotted. Her recovery was complete.

Case IV.—Age 36. Three children, youngest five years old. No pregnancy since last child-birth. Menstruation regular. Had her last regular menstruation the first week in July 1910. The 30th,

at night, she was taken with severe colic-like pains all over the abdomen. Pains passed off that night and she was able to be up the next day. The following night, pains returned and were so severe that she had to call her physician, who relieved her with a hyperdermic of morphia. A flow of blood from the uterus appeared that night but did not continue. She remained in bed until August 6th, when she got up feeling well except for soreness over the abdomen which was aggravated by walking. August 9th the uterine bleeding reappeared without severe pain. On the 11th she passed many clots on which account she took to her bed again. By the 13th the flow diminished and she got up. On the night of the 14th she had another very severe attack of pain, requiring morphia for its relief, and from that date to August 28th she had seven or eight such attacks. The bleeding from the uterus never ceased. During most of this period the pain, as stated, was over most of her abdomen. But during the last week it was more limited to its lower part and more to the right. Examination showed apparently two fairly distinct sausage-shaped masses of considerable size on the right side of the uterus. The paleness of the cervix in this case was not as striking as in the other cases, but when compared with the color of the surrounding vaginal mucosa it was marked. Operation revealed about three ounces of clotted blood in the pelvis, considerable adhesions and right tube very greatly enlarged through its entire length, but partially divided about its middle by a constriction. The distal or ampullar portion contained a mixture of organized tissue and firmly clotted blood, and the proximal or isthmician portion contained clotted blood only. The former portion also presented a linear rupture on its posterior surface and a circular perforation on its anterior surface. The fimbriated end was everted and ornamented the end of the tube collar-fashion. Complete recovery.

Case V.—Age 24. Married six years. Had one full-term child five years ago. Labor and puerperal states were normal. Had always been regular with her menstruation. Had last menstruation June

28, 1910. She felt perfectly well until August 9th. At five o'clock in the morning of that day she was awakened by an attack of severe cramps in the left side of the pelvis, and nausea. The acuteness of the pain lasted only about fifteen minutes, but she remained sore that day and the next one. On the evening of the next day she was taken with another serious attack of pain, but this time it extended over all of the lower half of the abdomen. She became nauseated and vomited. She was relieved by the administration of morphia. She continued to have repeated attacks of pain in the lower abdomen every three or four days until the day of operation. During these attacks she also had severe pain in the rectum, and urination also became very painful, but she was never free from some pain on urination ever since she had the first attack of pain. A bloody discharge from the uterus first appeared on August 10th, but amounted only to a stain. It reappeared on the 12th and lasted for a week, causing the patient to mistake it for menstruation. There was no further sign of blood until September 8th, when a very moderate flow began and continued four days. There was a slight reappearance of it the night of September 13th and it ceased the next morning. She was operated on the afternoon of September 14th. A large sac very extensively adherent was found on the left side, filled with clotted blood. There was a large amount of clotted blood outside of it, and there was a large mass of the same protruding through a rent in the sac. The left tube contained a considerable mass of organized tissue and clotted blood. The right tube was very considerably enlarged and I and my assistants believed that it was the seat of a very early pregnancy. The patient is still in the hospital and making a very uneventful recovery. In this case, as already stated, paleness of the cervix was absent.

DISCUSSION.

Dr. Gardner (Baltimore) said that it is an error to regard this condition as rare. It is comparatively frequent. More than one-half the cases are not recognized. Hence the prevailing opinion that it is infrequent. Many of the patients are not very sick. Three of such patients had called at his office within the past several months.

The diagnosis is comparatively simple. A very careful history of each case is a great aid to diagnosis. Patient has usually gone a few days over time, two to eight days. The period comes with rather more than usual pain. After continuing the usual time, it does not stop in the normal way, but a dribble continues for some time after pain occurs which is recurrent. A mass is not always found in iliac region, but this is present after rupture has occurred. This region is excessively tender, more so than in inflammation. The rupture occurs at the weakest point, due to erosion of the tube from formation of the chorionic villi. He has not information as to the sign suggested by *Dr. Golden*, but shall look for it hereafter. As a rule he does not use the speculum in these cases, the finger being better for diagnostic purposes.

Dr. Bonar had seen three cases at the Glendale Hospital. No mass was present in these. Shock was present in one case. Hemorrhage had occurred, but not to a large amount. What becomes of cases that are not operated on? He presumed that absorption takes place. There are no doubt many such cases.

Dr. McNeilan said that few cases presented classical symptoms. Those that do are easily diagnosed. He congratulated *Dr. Golden* on the discovery of a new sign that may be of diagnostic aid. Every good new thing was welcome.

Dr. Kemper, closing, said that he had seen one case that came near having a sorrowful ending. A mass was prominent to right of uterus. This came on three weeks after a supposed miscarriage. There was sudden pain, after which the mass appeared. Many operated die, in others the mass becomes absorbed.

Dr. Golden, closing, said that shock is due to rupture and pain rather than to loss of blood. If a mass is not found in these cases the physician is apt to conclude that there is no rupture. If collapse is present due to a hemorrhage that is continuing, operation is imperative. In cases with no or but little bleeding, immediate operation is not required. It may be well to watch for some reaction to set in. There may be rupture without clinical evidence. The pain was not localized, but was present over the pelvic region, chiefly median.

AN UNUSUAL CASE Was This Superfetation?

Francis T. Ridley, M.D., Bluefield, W. Va.

(Read before the Mercer Co. Medical, April 15, 1911.)

On Thursday, March 9th, at about 12:30 a. m., I was called to attend Mrs. W. P. who was then in labor.

The patient, white, American, aged 28, is a woman about 5 feet 2 inches in height, and weighs about 110 pounds; has been married nine years, and has two other children. She had a miscarriage in the latter part of 1909, and was curetted by *Dr.*

Scott on January 12, 1910. Personal and family history negative.

When I saw her, I noticed that she was badly jaundiced, and inquired as to her condition during the few weeks preceding. She said she had been feeling very well, with the exception of a decided feeling of lassitude, which she had never experienced before. Shortly before 5 a. m. I delivered her of a fine seven pound girl baby, the placenta and membranes coming away in their entirety about half an hour later. I left the patient fairly comfortable, and when I saw her again about eleven o'clock, I directed treatment to relieve the jaundice. On Friday and Saturday, March 10th and 11th, she complained of a bad odor about the bed, and also said she had not "felt her womb slip back into its proper place." On Sunday evening, about eight o'clock she was taken with severe labor pains, and passed a fetus and a placenta of about three months' development, in a fearful state of decomposition. After that, with appropriate treatment, she made an uneventful recovery.

I have never been able to find any evidence of a double uterus and Dr. Scott said that when he curetted her he noticed nothing of the kind. Consequently, all I can make out of it is a probable case of superfetation.

Correspondence

The Southern Surgical and Gynecological Association—Notes on 23d Annual Session.

J. E. Cannaday, M.D., Charleston, W. Va., Surgeon to Charleston and McMillen Hospitals.

Dr. McGuire spoke briefly on the subject of pylorospasm. He called attention to what Moynihan has so aptly said about appendix and gall bladder dyspepsia. He said that one of the causes of spasm of the pylorus was neurasthenia, but that it is most frequently the expression of some remote diseases occurring in the abdominal cavity. He thinks that sympathetic irritation causes an excess of acid, that this causes spasm, then comes stagnation, dilatation and toxemia. Pain in the pit of the

stomach is the frequent symptom. The attacks are often periodic. He does not, as a rule, advocate gastro-enterostomy for the relief of this condition.

McGuire says that neurosis is often a cause of pylorospasm. He says that the pain caused by it may be brief or again it may last for hours. It is often followed by gastric dilation. Rapid eating and indigestible food are too common causes of this trouble. Digestion plays an important part. One has to differentiate between pain originating in the stomach and reflex pain of the stomach caused by trouble elsewhere.

Dr. Westmorland of Atlanta reported some rare tumors of the jaw of a fibro-cystic nature. Probably the odontomata described by Bland Sutton. He calls attention to the fact that these tumors seem to have almost disappeared in recent years. He said that his father operated on thirty-eight cases and that of all these patients but one was white.

Dr. Cole of Mobile, Ala., reported a number of cases of pellagra in which he had performed transfusion of blood for the relief of this disease. His results had been remarkably good, and the general consensus of opinion was that this would be the most successful treatment of the future for this condition, certainly until some better method is discovered. Dr. Cole's paper attracted the attention of the newspaper men who are constantly on the alert for something new, especially about such subjects of importance to the South as pellagra and hook worm disease, and they besought Dr. Cole to give them some interview or statement in regard to his discovery, but for fear some of his professional neighbors in Mobile might deem him an advertiser he remained silent.

Cole has seen much benefit in pellagra from the transfusion of blood, and has had 60% of cures and 40% were unimproved. There was one relapse due to reinfection. In six cases there was no improvement. There were complications in some cases. Out of forty-eight cases excluding two which were moribund at time of treatment, there was a mortality of 25%. Neither hemolysis or other bad symptoms were observed. These were all grave cases of pellagra. In some of his

cases the mental symptoms were quite severe. He did transfusion in 35% of the cases that had been referred to him. The others had not needed it. He tried to get donors who might be immune to pellagra or who had recovered from attacks of pellagra.

Dr. J. W. Long says that there are from 500 to 1,000 deaths per year from pellagra in North Carolina. He has had thirty cases himself. There are chronic and acute types of the disease. He lets the blood run slowly in transfusion. In one of his cases he took fifty-five minutes. The principle dangers are dilatation on the right side of the heart. This can be controlled by placing the patient in the upright position and stopping the flow of blood. This treatment was first suggested by the famous Italian criminologist, Cesare Lombroso, and I believe a few cases were treated in Italy with indifferent success by this means.

Dr. Maurice Richardson of Boston made some most interesting remarks on omentopexy for relief of abdominal ascites caused by liver cirrhosis. He has done this operation a number of times. In practically no case has the abdominal fluid persisted to any considerable extent after this operation. The original operation as designed and performed by Talma he considered unnecessarily severe. All that is really necessary is to suture the omentum to the parietal peritoneum at a number of points, also to attach the latter to the capsule of the liver. The doctor is most enthusiastic about the future of this operation. He said that omentopexy was one of the greatest things in therapeutic surgery. He has had six cases in which the results have been most successful. He made a frank confession of several mistakes he had made in diagnosing ovarian cysts for ascites and vice versa. Omentopexy is a rather serious operation and is attended with some mortality, but the after results are never serious. He advised in weak cases the use of local anesthesia and the fixation of omentum between the muscles and the skin. It should be sutured in three or more places. This operation cures the ascites, not the cirrhosis.

Mixer thought that the fat omentum and the parietal peritoneum should be rubbed with gauze. He said that these cases

should always be tapped prior to the operation.

A few months ago I had an experience with this operation that so far has given most pleasing results.

A young woman who was barely able to walk was brought into the hospital suffering from ascites of some months standing. Upon inquiry I decided that the liver was at fault, and as the patient was in a very weak condition I did my operation under local anesthesia, 1% novocaine being used. I was fortunate in having present a surgeon, Dr. Lester Keller, of Ironton, Ohio, who is a firm believer in the control of mind over matter. He took upon himself the task of amusing the patient and keeping her mind in just the right channel during this operation, and notwithstanding the considerable time taken and the amount of visceral handling that was required, the patient was hardly conscious that anything was being done to her. The liver was typically hob-nailed and nature had attempted a cure by forming a number of adhesions between Glisson's capsule and the parietal peritoneum. I fastened the omentum to the abdominal wall at a number of places, but did not bring it through and attach it to the abdominal muscles as has been suggested by some operators. In addition to this I sutured the liver capsule to the peritoneum at several points. The ascites has at no time returned and the patient is greatly improved in health.

Dr. Richardson in a private conversation told the writer some interesting reminiscences about the discovery of appendicitis as we know it. He did a number of the first operations for that trouble. He was closely associated with Fitz who was the first in this country to recognize appendicitis as a distinct pathological entity and to give it the name it now bears. He spoke of the time appendicitis was called typhloenteritis.

Dr. Reuben Peterson of Ann Arbor said that the operation of Wertheim for cancer of the uterus was undeservedly unpopular. When he began to do this operation several years ago he had an operative mortality of 30%, but that he had been able to gradually reduce it until now under the best conditions his mortality was only 10%.

He showed his technique by means of lantern slides. He cures and cauterizes the cervix, uses great care that the least possible amount of blood shall be lost, locates the ureters before attempting to dissect out uterus and pelvic glands, and lastly cuts the vagina in two below transverse clamp forceps.

Dr. C. F. Noble of Philadelphia, who is so well and favorably known as an author, particularly by reason of his having collaborated with Howard A. Kelly in a fine work on abdominal surgery, presented a scheme of degeneracy. Dr. Noble has been greatly interested in this subject for the last few years, and says that he may some day write a book on the subject. He has lately written for the New York Medical Journal an essay entitled *The Law Of Degeneracy in Its Relations to Medicine*. He says that degeneracy and its manifestations have, as a rule, been considered with reference only to criminals and perverts. He applies it to medicine in this way. Suppose you have two patients, A. and B., both suffering from, say retroflexion of the uterus. They present themselves for physical examination. In A's case you find the result of several generations of degeneracy. Her ancestors have been intellectual and society people, mostly the latter. She is thin, has flabby, weak muscles, a very frail nervous system, is hysterical, has frequent headaches, is prone to all sorts of neuroses, is easily upset. As I have said, her muscles are thin and flabby. She has a general enteroptosis, her stomach and all her other abdominal organs tend to sag and prolapse out of their proper location. Her transverse colon is in her pelvis, her kidneys are floating, she is below normal weight, does not sleep well, and is constipated. She is forgetful, inaccurate in her work and her habits of thought, could hardly, if she were turned loose on the world, make a living for herself. You are perfectly honest and a little brutal with her when you tell her "you will never be a well woman. I can patch you up and tide you over the crises of your life, but you will always have to be on your guard. You cannot bear much strain either physical or mental. You must be very careful and be satisfied to go through life a half invalid."

You examine B. and find a strong,

healthy, intellectual woman. Her parents have cultivated both mind and body. Instead of degenerating they have evolved upward. She is athletic, can take long walks, play tennis or ride horse back and feel all the better for it. She has a firm grasp on what she has learned and can do what she sets about well. As I have said before, she has a uterus that is bent backward. This has been causing her backache and some other minor disturbances. You will say to her, "I will correct the uterine trouble and you will be a well woman." Most physicians, I think, apply degeneracy to medicine. They may not always tell their patients about it, however, but they will think it in their hearts.

We have both mental and physical degeneracy. All people who are not vigorous physically and mentally and normal, to a certain degree are degenerate. The nervous, chronic invalid has a degenerate nervous organization; much of this degeneracy is due to environment. You all know that a plant growing in the sunlight with sufficient moisture and nutriment in the soil will be green and healthy looking. Put this plant in a dark cellar, give it air, warmth, moisture and the proper soil, it will still grow but will be pale and spindling.

Take a strong, healthy baby, feed it on cow's milk and artificial foods, give it soothing syrup when it cries, keep it in doors as it gets older, take it to all kinds of shows, keep it awake most of the night, let it sleep in the day time, give it large quantities of meat and rich food, plenty of alcohol in the various forms of beer and whiskey, large quantities of tea and coffee, and you will probably raise a physical as well as a mental degenerate. About four or five generations of improper living and wrong environment are usually sufficient to produce typical degenerates. Many of the physical and mental troubles with which we have to contend are undoubtedly the results of degeneracy produced by environment.

The full-blooded African negro seldom has uterine cancer while it is quite prevalent in the degenerate mulatto. In the southern states during the slave-holding period the number of insane among the negro population was exceedingly few. Now our asylums are filled with them. Syphilization

has kept pace with a so-called civilization, and so has tuberculosis.

One of the most common manifestations of degeneracy that we see frequently in women has these manifestations, nervous instability, slender figure, undeveloped cervix dysmenorrhoea of the so-called nervous or ovarian type. These women are relatively sterile. If they marry and do not become pregnant they worry greatly over this, or if they do become pregnant all of the nervous symptoms of pregnancy are greatly exaggerated, they suffer inordinately in labor and forceps have to be used in their delivery. They have perineal tears and bad results usually.

Capital City Bank Building.

Selections

JOINT DISEASES *VERSUS* RHEUMATISM

By DeForest Willard*, M.D.,
Philadelphia.

(Read in the Section on Surgery, Medical Society of the State of Pennsylvania, Philadelphia Session, September 28, 1909.)

This article is written in the hope of arousing the profession to the direful results that constantly occur from the negligent and unpardonable habit of calling local joint pains, rheumatism, since the failure to properly diagnose and examine such cases of joint disease frequently results in cripplehood for life, long suffering and even death. It is an undoubted fact that more than ninety-five per cent. of joint diseases pass on to most serious consequences as the result of this careless lack of diagnosis and of subsequent treatment.

The sooner physicians fix it positively in their minds that rheumatism of a single joint in a child practically never occurs, the sooner will joint disease be prevented and lessened. When true rheumatism, which is an entity of itself and due to a specific cause, is present, it will always define itself by well-known and positive symptoms; namely, pain, swelling, heat, temperature, sweatings, etc. Such a picture differs entirely from

*Dr. Willard has since died.

the beginning of a tuberculous joint infection. To diagnose as rheumatism and to pass over without examination a limp or a pain in any joint is absolutely unjustifiable.

The pain of tuberculous joint infection at the beginning is usually worse after exercise and is not accompanied by any local evidences of inflammation. To dismiss such a case without a thorough examination, simply prescribing some liniment, or giving a prescription for salicylates, etc., probably means a lifelong mistake. Such a child when carefully stripped and examined will evidence none of the signs of rheumatism. The affected joint, if the spine, will rarely present either local tenderness or pain on motion; if the hip, it may not even be tender, lying, as this joint does, deeply covered with muscles, fat and skin; if the knee, there will probably be only a localized area of tenderness; if at the wrist or ankle, the sensitive point will probably be over the epiphysis where a focus of disease is already located. If the child complains of pain at the knee, it by no means indicates that the focus is located at that point. If the child is of sufficient age to explain its condition, it will be noted that the pain is not in the knee joint, but that the indicating hand of the patient will pass upward along the inner side of the thigh perhaps almost to the perineum, with the explanation that the aching in this area at night is perhaps only enough to make the limb restless.

In hip infection this reflected pain is readily explained by the distribution of the obturator nerve which transmits the irritation from the hip joint to the filaments along the inside of the thigh and knee. Pains from a beginning spondylitis will be reflected along the nerves from that area and will be noted in chest, abdomen or legs. To wait for diagnosis of spinal caries until the kyphotic projection of the spinous processes of the vertebrae is evident even to the mother, shows most faulty observation and examination and is too late to receive the proper benefit from treatment. The physician who depends upon the existence of local pain to diagnose a case of spinal caries will be sadly at fault.

The symptom to be far more reliably depended upon in either spine, hip or

knee tuberculosis, will be rigidity, Nature's method of fixation of the infected area. This muscular tension shows that the brain of the patient is already cognizant of the approaching danger, even before positive pain is recognized as an entity.

When the focus is situated in the spine, all the muscles are speedily on guard to prevent motion or irritation of the diseased vertebrae.

At the hip or knee the periarticular muscles rigidly guard the joint, flexion with lordosis follows and limp increases as the patient endeavors to shorten the time of contact between the two sensitive joint surfaces.

It can be positively stated that practically every case of tuberculous disease of the joints can be aborted or arrested and a cure secured without deformity, if diagnosis and proper treatment are instituted early. The mistake in this lack of diagnosis and miscalling it rheumatism means that the golden moments have been lost and can never be retrieved. Unfortunately the majority of these cases come to the orthopedic surgeon too late. They have been maltreated weeks, months, sometimes years, for rheumatism, and very little opportunity is afforded for securing more than a very imperfect result. One of the most discouraging experiences in the practice of such a surgeon is to find, as so frequently occurs, that a case presenting from the beginning every evidence of tuberculous joint disease, that is, persistent limp after exercise, rigidity (muscular fixation), has been permitted to go practically untreated for months. After a slight injury of the joint and even after unrecognized injury, the above symptoms often present themselves within a month or more.

A case of acute trauma with fracture or dislocation is less liable to be followed by tuberculous disease than is the slighter accident: probably because the severer injury arouses the resistive cell agencies of the region to action. Unfortunately, tuberculosis of the joints is so insidious in its inception and early progress that it does not arouse the brain of the ordinary practitioner until after irreparable damage has been done.

In acute osteomyelitis, acute epiphysitis, sarcoma, etc., the evidences present themselves much more rapidly, but strange to say even these well-marked symptoms are frequently treated for rheumatism, until great bone destruction has taken place. A few examples at random from hundreds of similar instances in the author's practice may illustrate more forcibly the purpose of this paper:

Girl, five years of age, was treated for one year by a most excellent physician for a pain at the left hip, with limp, steadily increasing, marked pain at night and progressive disability. She never had been stripped for examination. When seen at the end of the year, the limb was rigidly fixed, with flexion, marked thickening of neck and head of femur, and all the symptoms of advanced hip disease, which required three years of treatment and ended in complete ankylosis in bad position.

Boy, eight years old, complained of slight pain in the knee, with increasing limp and disability. Pains were worse at night; tenderness over internal condyle, flexion. He was treated for eight months by physician for rheumatism. Symptoms steadily increased and all the evidences of white swelling became positively marked; antirheumatic remedies were still employed until the disease progressed to suppuration and until then, little or no examination was made of the knee.

Boy, aged seven years, after a fall of eight feet upon his back, had pain and stiffness of back appearing two months later. He was treated for four months for rheumatism until the mother detected the kyphosis in the lower dorsal region. Without stripping or examination of the child a liniment was ordered for pain and salicylates were given. The destruction of vertebrae steadily progressed, with rigidity of back and psoas contraction. When seen at the end of a year, pus was already making its way down the psoas muscle. The result was life-long hump back, with two years of suppuration from psoas abscess.

Boy, aged fourteen years, was treated for two months by an excellent physician for rheumatism of the knee. When first seen, the lower thigh was fluctuating with a large abscess, visible even to the eye without palpation. Total destruction of lower epiphysis of femur. Final result was ankylosis of knee and shortening of leg, two inches.

Boy, aged twelve years, was treated for rheumatism in knee while entire upper epiphysis of tibia was rapidly destroyed by acute osteomyelitis.

Boy, fifteen years old, two months after injury of the knee, developed pain at the lower end of the femur; the disease steadily progressed with increasing pain and swelling until diagnosis of sarcoma was perfectly evident and amputation required, with the result that death occurred six months later from disseminated sarcoma in the spinal column, with complete paraplegia.

Finally in closing, let me again urge upon your attention the necessity for

clearing your minds absolutely from the idea that rheumatism of a single joint is to be expected in a child. The term rheumatism is but a delusion and a snare, a will-o'-the-wisp that has been blindly followed for centuries to conceal ignorance, carelessness or stupidity. The same is true of that much abused term "growing pains." A child does not have pain from growing, but from an indefinite and often undiagnosed lesion. Every patient with persistent limp and pain (aside from acute trauma) should be examined naked and with the utmost care for the symptoms already mentioned.

As for treatment, no possible harm could result even were the case one of rheumatism or trauma since rest of joint, fixation and general hygienic treatment for tuberculosis is the proper one. On the other hand, such treatment resorted to in the first two weeks of even a tuberculous joint infection will abort the process and save the patient from terrible results.

Why take such risks of deformity, death or lifelong crippling when treatment on lines of tuberculosis is sure to be helpful in any case? Borderline and doubtful cases will never be injured by such treatment. Can there be any question as to the wiser course to be pursued?—*Penna. Medical Journal*.

SOME OBSTETRICAL CUSTOMS IN THE PHILIPPINES.

Rebecca Parish, M.D., Mary Johnston Hospital, Manila.

The never-ending procession of women suffering from misplacements, prolapses of all degrees, lacerations of every conceivable class and severity, endometritis, fistulas, chronic congestions and inflammations, vesical troubles and general debilities, is a common sight to the clinician, and no doubt a large percentage of these conditions could have been prevented by efficient obstetrics.

A brief description of some of the prevalent customs of the people will explain the etiology of these conditions.

During the months of gestation, the woman's peace of mind is constantly disturbed by the many superstitious beliefs that are recounted from generation to

generation, and are steadfastly adhered to, and heeded; the younger women especially are in continual mental terror, lest some of these things be violated, and the consequences are dreadful to contemplate.

If any one stands in the door in the presence of a pregnant woman, it is a sign that at the time of her labor, the child will also stop in the door of the uterus.

The prospective mother must not step over the tether of a pony while out walking, as a difficult labor will surely result.

Very tight belts and strings worn about the waist during pregnancy, will insure an easy delivery, and also will prevent the child growing too large.

Many times the woman is forced to engage in the most arduous exercise, a favorite one being grinding rice; this causes an easy delivery, and is certainly effectual as the babe is sometimes born at the mill.

During the course of even a normal pregnancy it is necessary for the midwife to make frequent examinations and, if she sees proper, to "change the position;" this she calls "placing the baby" and she receives 10 centavos for each such service.

Perhaps the most prevalent and terrifying of all the superstitions is concerning the "Aswang," an imaginary being, half-man and half-beast; indeed there are many "Aswangs" and it is said that in Tayabas Province there was an entire family of beautiful girls all of whom became "Aswangs" suddenly, one night. This creature prowls around at night, and it is the terror of the patient and all her relatives, because he watches to get the blood of the patient, and to steal the child; and as he lives both in the air and upon the land, and is guided in his night depredations by a bat, it is next to impossible to feel free from him at any time. During the latter months of pregnancy, it is necessary for the woman to sleep under a black cover so that the "Aswang" can not see her; and frequently there is a fire kept burning under the house so that the smoke may keep him away. It is exceedingly dangerous to be out after dark, and if the woman does go out at this time it is necessary to wear the hair loose down the back which is

her protection against the "Aswang's" influencing her child and causing him also to be an "Aswang."

As a rule the Filipino woman is very indefinite as to the time when her pregnancy will terminate, and consequently rarely she is prepared for this event. However, very little preparation is required except the midwife who is considered quite sufficient for her needs, and in many instances she cannot afford this luxury. In some provinces it is said that men act as assistants and are better for this purpose as they are stronger and can apply more force in kneading, pressing, squeezing, pulling and pushing, as all of these operations are considered essential. Short stout clubs, made of wood, stone or burned clay, sold in the public markets, are used a great deal for pressing, pushing and kneading, and are considered much more effectual for the purpose than is the hand.

To ease the labor pains, bagabaga leaves are burned near the patient that she may get the odor. The waist is tied about tightly during labor, to make sure that the child passes downward instead of upward.

In some cases the delivery of the placenta is awaited before the cord is cut; but if the placenta is not expelled within an hour at least, it is pulled away by traction on the cord, and if this proves too difficult the cord is severed and the placenta is left in the uterus. Guava leaves, soaked in warm oil and placed on the abdomen, are said to aid in the expulsion of the retained placenta. I was called to see a patient in Tondo in whom a physician had left the placenta because it was difficult to remove.

The placenta with a paper and pen, buried under the house, will insure a bright and intelligent child.

It is said that soup made from small pieces of the placenta, and given to the mother as her first post partum nourishment, prevents fever, weakness and other forms of illness.

The mother is given large quantities of rice and urged to eat, so that the abdomen will be filled, as it was so large before. The waist is tied after labor to prevent the abdomen filling full of wind when the patient breathes deeply and also to prevent the blood from coming up and

out of the mouth. The bones of the sacro-iliac joint are separated during labor; therefore a strong band is placed about the hips, and tied tightly by two men, one bracing himself on either side with his feet against the patient's body. Sutures will not be required because an external douche of infusion of bayabas leaves will heal lacerations in three days. The patient's abdomen is rubbed with oil for 25 days so the uterus will become soft and send out the blood, thereby becoming small. Hemorrhage is encouraged by propping the patient up with pillows (sometimes as many as seven); this also prevents the uterus going high in the abdomen, and causes the bad blood which must be gotten rid of to drain better. Frequently the patient is almost exsanguinated, and death from hemorrhage may occur without any effort being made to check the bleeding.

Sleep is not allowed because it produces a tendency to insanity; frequently the patients are allowed to sit up and even to stand within a day or two after delivery. After pains are greatly helped by the patients getting the odor of burning deer-skin.

After three days, the procedure of "replacing the uterus" takes place. For 9 days, it is thought bad to eat salt or drink cold water. About the tenth day, the woman is bathed with a little warm water, and smoked by having a mat enclosing her and a jar of burning leaves; following this, as there is a suspicion that the uterus is still raw, a fire is made of charcoal in a large earthen pot, and the patient stands astride this surrounded by blankets and supported by her friends. It requires an hour of this treatment to cause the uterus to "dry up."

For three months, the woman should not put her hands in cold water, drink cold water, nor take a cold bath: this rule evidently does not apply to the laundresses whose occupation calls them to the river or the spring.

No antisepsis precautions are known: old rags, old clothing and the family bedding are used about the parturient.

Recently I saw a woman who gave a history of eclampsia, with the following treatment: while she was unconscious, she had been placed in a sitting position on a red-hot stove; when she regained

consciousness, she was suffering from a severe burn, which produced extensive loss of tissue, and scars larger than my two palms. It is said that this hot-stove treatment is quite common.

All sorts of superstitions are in vogue, concerning the care of the infant; it must be guarded from the "Aswang," and must be fed with curious concoctions; the cord is dressed with ashes, powdered cocoonut shell, or hot tallow. I saw one new-born child with many little cauterizations about the umbilicus, made with a hot bamboo as a cure for convulsions.

Not all of these customs are wholly bad; even some of the most crude are primitive expressions of a pathetic struggle after the light and blind effort toward self-preservation and the perpetuation of the race.

As young women are trained in the nurses training schools; as the young men and women are taking medical courses; and as all children and young people are being taught to think and reason and to seek scientific help in cases that are beyond the ordinary care, obstetric customs will change, and the Philippines will take her proper place in the preservation of her women and children.—*Bulletin of the Manila Medical Society.*

ECTOPIC GESTATION

In the *N. Y. State Jour. of Medicine*, Dr. Christopher Graham of Rochester, Minn., has a paper based on a study of 100 cases, which concludes with the following:

Differential Diagnosis.

1. In early abortion, pain usually comes on gradually; it is felt from the back or loin, increases in severity until expulsion of the embryo is complete. There is general pelvic pressure and pain which is continuous. The flow is free, not tarry, and firm large clots are abundant, if the embryo is found that is conclusive evidence. Pelvic examinations show greater uterine changes, a softer more velvety mucous membrane than in ectopic gestation, but if a tumor, a pyosalpinx or a hydrosalpinx be present the difficulty may be so great that a surgical operation only clears up the case.

2. Purulent inflammatory conditions of the pelvis may give pain, missed periods, change in the uterus and a tumor of the tube, but there is no external hemorrhage, no collapse. However, pelvic inflammation gives by rectal touch that thickened boardlike feel that scarcely exists in ectopic gestation. At times the difficulties are so great one is pardoned when he makes only a surgical diagnosis. Then, too, the kind of pain is different in ectopic gestation, colicky and severe. It radiates into the bowel, shoots into the rectum, a sickening pressure which is rather infrequent in pelvic inflammation.

3. In twisted pedicle with its pain and internal hemorrhage, with its occasional external bleeding, shock and collapse one may be undecided. The history is usually one of more or less prolonged pelvic disturbance, with sudden acute peritonitis and frequent bowel obstruction. A tumor with a long pedicle when lifted above the pelvic brim is in danger of twisted pedicle. Hence, it is apt to follow pregnancy, difficult examinations or childbirth. The history of previous tumor will be of aid. These, together with the absence of change in the uterus, breasts, and the mucous membrane, should help in diagnosis.

4. Gall stones, ruptured gall-bladder, perforating ulcers of the stomach or duodenum and appendicitis all have symptoms in common with extrauterine pregnancy, but the development of a careful history, and physical examination should leave few unmade diagnoses. In gall stones the history of many spells of sharp epigastric pain, radiating to the back with pressure, gas, vomiting and sudden cessation of symptoms and return to perfect health, without menstrual disturbance will place the diagnosis.

In ulcer of the stomach and duodenum we get a history of periods of attack; during the period of attack, pain coming two to four hours after meals with gas, sour eructations, vomiting, all eased by food, to again return two to four hours after food, each meal, each day, during the period, repeating the history of spells for years. If sudden pain and collapse appear the previous history will fix the diagnosis of perforation.

So, too, in appendicitis, general abdom-

inal pain, tenderness at McBurney's point, location of tumor in iliac fossa, fever, history of repeated attacks of a day, a few days, or weeks with menstruation undisturbed and no indication of sudden anaemia will make the differentiation.

In our series, fifty pregnancies were on the right side, forty-four on the left, one double, others not recorded. Sixty-six cases were diagnosed as ectopic, fourteen (three diagnosed fibroids and four with a question of appendicitis) as a pelvic tumor, with a question as to the cause, but no mention of ectopic pregnancy, three as appendicitis, four as twisted pedicle or extrauterine pregnancy, seven pelvic inflammation (pyosalpinx, hydrosalpinx, etc.). In some cases gall stones and perforations were considered in making the diagnosis, one being sent for gall stones only and gall stones were found. Five did not give a diagnosis, though most of them gave a clear history and were recommended to the hospital for surgical pelvic trouble.

Briefly, one gets (1) the history of a normal menstruation missed, usually but a few days (fourteen), possibly weeks; (2) there are more or less severe colicky pelvic or abdominal attacks, alternating irregularly with periods of perhaps normal health, (3) accompanying these painful attacks or immediately following them is a scanty, intermittently prolonged flow; (4) examination reveals pregnant changes in genital tract, smooth, velvety mucous membrane, softened cervix, enlarged uterus, a tumor, tender, localized and not large, before rupture. After rupture tender and large without a prolonged history to account for its size, and no history of infection. Vomiting, chills and fever with fainting and collapse attend the severer cases.

Careful history development and careful physical examination should leave fewer unmade diagnoses in extrauterine pregnancies.

Operation for cancer of the stomach after the diagnosis has been made by the presence of a palpable tumor can not be hoped to be curative. The hopeful cases are those in which diagnosis is made through an exploratory opening which may be made under cocaine and only large enough to admit the finger.—*American Journal of Surgery*.

OUR LANGUAGE GROWS.

And this is what we heard at a recent meeting: He was pirqueted, wassermannized and roentgenized. And the reporter of the case did not mean to be witty or epigrammatic.

And then one doctor asked if the patient was calmetted. And another one said that if the result of the wassermannizing was positive, he would ehrlichize him without hesitation.

And then one cruel doctor whispered that half of the members present could be oserlized without material loss to the profession or the community.—*Critic and Guide*.

AN ANONYMOUS TRIBUTE TO THE DOCTOR.

When in the cottage blessed with love's sweet store

A babe is born, and on the rustic door
Is hung the crown of motherhood and fair
Is all within—the Doctor's there.

When 'neath the pall of mystic death's weird spell
A mother's heart is broken by the knell
Of all that's dear—and on the stair
No baby feet—the Doctor's there.

When virtue flees—and ruthless lust
Eats into souls as does the gnawing rust
When no one else with her the shame can share
With father's touch—the Doctor's there.

Where blossoms life's sweet rose at blush of day
Where withered rose at evetide steals away
On the south wind—in joy and care
An uncrowned king—the Doctor's there.

—*Exchange*.

CORYZA.—Waxham, in *Denver Medical Times*, says that if given early the following acts almost as a specific:

℞ Quin. salicyl., gr. iss.
Acid. arsenious., gr. 1-120.
Ext. belladon., gr. 1-20.
Capsici, gr. ¼.

M. Sig.: Two capsules of this composition every hour for three hours, and then one every three hours.—*Monthly Cycloped. and Medical Bulletin*.

PERFORATION OF UTERUS.—E. GARD EDWARDS, La Junta, Colo., (*Journal A. M. A.*, January 21), reports a case of perforation of the uterus with transfixion of the contiguous mesentery and peritoncum by a bone crochet needle. The patient, a married woman, thinking herself in need of monthly regulation had introduced it herself and became anxious at its getting away from her. She suffered no pain but was much concerned in her mind. From lack of symptoms it was hard to convince her medical attendant of the conditions, especially since dilatation and exploration of the uterus failed to reveal any foreign body. She was brought to Dr. Edwards ninety miles by rail for an x-ray examination. There was some tenderness on pressure and soreness in the left pelvic region. The examination revealed conditions as stated above and operation relieved the patient, who made a satisfactory recovery. The lack of pain, shock, hemorrhage or infection makes the case noteworthy in its way.

The West Virginia Medical Journal

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

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

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Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

WANTED.—We will be under obligations if our readers can send us any of the following numbers of the Journal: Nos. 4, 7, and 11 of Vol. 2, No. 11 of Vol. 4, No. 4 of Vol. 5, No. 7 of Vol. 6. We return thanks to Drs. Shawkey and J. J. Goff for Journals sent us after a former request.

The Half Year's Work.

All well-wishers of the State Medical Association will be pleased to learn that a careful survey of conditions throughout the state is highly encouraging. Loyalty to the Association and to the spirit of organization is growing apace. One convincing evidence of this fact is found in our increase in numbers. On another page of the Journal the names of many new members will be found recorded. A tabulation made within the month by our efficient Secretary, Dr. Butt, shows almost twice as many members whose

dues are fully paid up as were found at this same period last year. The work done by the Councilors has been inspiring and fruitful. Sections that had seemed hitherto indifferent to the importance and value of an organized profession, seem to be awakening to the realization of the increase of power that comes from unity.

It is true that in one or two isolated centers dissatisfaction threatened because of divided opinion on the question of Medical Defense. Mature second thought came to the rescue, however, with the result of leaving this matter open for further discussion and deliberation, to receive final judgment only after it had been submitted to the test of experience. Although some few members dropped out because of this new feature, many new ones, on the other hand, are being drawn towards the society by it. At the coming meeting at White Sulphur Springs we will be better prepared to pass a seasoned judgment on the subject. The notable feature in the whole matter that is inspiring, is the evident purpose of the general membership to allow no transient difference of opinion on any matter of policy or action to ruffle the harmony of the Association. Convinced of the sincerity of purpose of all taking part in discussion and action, the men who doubted the expediency of our undertaking Medical Defense, are perfectly willing to let the test of time and experience, and the judgment of the majority, make the final decision.

The meeting at White Sulphur Springs promises to be a most notable one. This charming resort, while very distant from many parts of the state, has attractions which will repay any extra sacrifice involved in reaching it, and the attendance gives assurance of being very large and representative. The members are urged to send in to the Secretary at once the titles of their projected papers, so that the program may be arranged as early as possible. This will not only facilitate the grouping of papers on kindred subjects, but will enable the Secretary's committee to arrange for additional papers to round out the program.

A special word of congratulation must be offered to the County Secretaries,

They are the "hewers of wood and the drawers of water." They are the real working force of the Association, and too much praise cannot be given them for the splendid service they have done during the last half year. Upon them, the Councilors, and the State Secretary must rest the glory of the current year's success. Let us crown their work with an unprecedented attendance and an unsurpassed program at the White Sulphur Springs meeting. That much is due them, and anything less would savor of an ingratitude that would be unworthy of us and unmerited by them. C. A. W.

SEE HOW WE GROW!

Some Old Friends Back—Welcome.

The following new members have been received into the State Association this year, and the annual meeting is still five months away:

R. L. Osburn, Clarksburg; J. C. Lawson, Auburn; C. W. Maxon, New Cumberland; H. Damner, Reedy; S. D. Wise, Parkersburg; G. Gaynor, Parkersburg; Jas. Wilson, Parkersburg; A. H. Kunst, Parkersburg; Gale Samuels, Parkersburg; W. M. Paden, Parkersburg; Solomon Roberts, Parkersburg; G. W. Swimley, Bunker Hill; H. E. Sloan, Clarksburg; J. E. McDonal, Logan; S. H. Phillips, Blakeley; T. C. Smith, Cressmont; Glenn Harper, Wildell; A. W. Curry, Ronceverte; J. A. Jackson, Ronceverte; T. C. McClung, Ronceverte; W. H. Parker, Ronceverte; J. W. de Veber, Ronceverte; W. P. Fawcett, Alderson; T. J. Gilchrist, Pickaway; N. R. Price, Marlinton; J. W. R. Smith, Academy; J. R. Tuckweiler, Baxter; D. H. Thornton, Athens; F. H. Holroyd, Athens; W. I. Cautier, Athens; J. R. McClure, Huntington; H. C. Kincaide, Huntington; E. E. Schaffer, Huntington; W. R. Bender, Charles Town; F. X. Lilly, Fayette; S. P. Carter, Boomer; J. L. Davis, Elk Ridge; O. R. White, Williamson; W. C. Beard, Alderson; O. P. Argobrite, Alderson; A. E. Turner, Dunlevie; M. T. Cameron, Mace; M. F. Clark, White Sulphur Springs; Geo. I. Wyatt, White Sulphur Springs; S. A. McFerrer, Falling Springs; J. M. Yeager, Marlinton; J. Alfred Riffe, Hinton; C. N. Reger, Roanoke; W. H. Walcott, Needmore; L. W. Cobun, Morgantown; P. A. Gibbons, Morgantown; J. F. Trippett, Amos; D. W. Shirkey, Montgomery; Geo. S. Condit, Farmington; C. R. Ramage, Fairmont; J. M. Trach, Farmington; C. M. Hawes, Huntington; R. H. Pepper, Huntington; W. E. Slater, McComas; H. C. Hays, Princeton; W. W. Wallingford, Princeton.

Of the above sixty-one, a few are former members whom we are glad to welcome back into the fold, where we trust they will find the company so congenial

and profitable that they will long remain in it. We suggest that, during the Summer months in which the county societies will have better opportunities of holding their meetings, a determined effort be made by all to increase our membership, and if possible get into our ranks all eligible practitioners within the bounds of the organized territories. The outlook for the State Medical Association, notwithstanding some local discouragements, was never so bright as now. We have never had so many paid-up members so early in the year as at the present, and never as many new ones.

Malpractice.

We learn by letter that another of our State Association members has been sued for alleged malpractice. We cannot but wonder if his dues were paid in January. If not, he will no doubt lament the fact. A private letter to us says: "The benefits of our plan of malpractice defense will become evident to our members just as soon as a case turns up for defense, and a vigorous and successful effort is made by us in behalf of the defendant. This benefit will become even more evident when, perchance, some brother who is sued finds himself on account of his own delinquency in the payment of his dues, outside the Association's aid."

All had better "come in out of the rain." Smoke fewer cigars and pay the extra dollar which is to save yourself or some fellow practitioner many hundreds, and which will finally put an end to this whole blackmailing system.

Davis, W. Va., April 3, 1911.

To the Editor:

I understand we are to have a sanitarium for the tubercular. I am wondering if every neighborhood will scramble for the institution. Last week one of the most influential politicians of the state wrote here and proffered his aid to secure the location of the sanitarium here. He did not stop to ask if this was a good location, simply said go ahead and get it. My partner, Dr. Hardy and myself have been approached numbers of times regarding this matter. We have always opposed it vigorously, believing it to be a bad location.

It seems to me it would be nothing short of murder for an unsuitable neighborhood to try to secure this institution. Let us stand like men and do all we can for the sanitarium, not all we can against it. A. B. B.

RESULTS OF TUBERCULOSIS CRUSADE

The report of the Executive Secretary, Dr. Livingston Farrand, will be incorporated in a statement of the results of the crusade against tuberculosis in the United States for the last 10 years, which will be transmitted to the International Congress on Tuberculosis in Rome next September.

Dr. Farrand's report will show that 10 years ago there was only one organization in the United States for the education of the public about tuberculosis, the Pennsylvania Society for the Prevention of Tuberculosis. By September, 1911, the National Association says there will be over 500 such bodies. Ten years ago there were but five special dispensaries or clinics for the examination and instruction of needy tuberculosis patients, three of these being in New York City, one in Boston, and one in Providence. By September, 1911, the United States report will be able to list nearly 400 such institutions. In 1900 there were less than 100 hospitals, wards, and pavilions where tuberculosis patients could be treated, with not more than 6,500 beds all told. The National Association hopes to report by September at least 450 hospitals and sanatoria with an aggregate capacity of at least 30,000 beds.

Commenting on these possibilities, Dr. Farrand says that the educational campaign is directly responsible not only for the great growth in institutional provision but that it will also result in the next ten years in a striking fall in the death rate from tuberculosis. He adds, "What we need most at the moment is more hospitals, more dispensaries and more visiting nurses. We are working for these definite ends, and the next ten years will show results even more marked than those of the decade just passed."

In Denmark, the campaign against tuberculosis has been carried on systematically since 1895. The reporting of living cases of tuberculosis in Denmark has been more successful than in almost any other country of the world. The death rate from pulmonary tuberculosis has fallen from 19.32 to 13.33 per 10,000 from 1895 to 1908. There is now one sanatorium for every 1244 inhabitants and every tuberculosis patient is assured of treatment at a cost within reach of anyone. The state pays three-fourths of the expense of treatment and the patient and his community the remaining fourth.

TUBERCULOSIS CAUSES TEN PER CENT OF CHURCH DEATHS.

Statistics showing how serious a problem tuberculosis is to the ordinary church congregation were published to-day by the National Association for the Study and Prevention of Tuberculosis in a bulletin on Tuberculosis Day.

From reports received from over 725 churches, with a membership of over 312,000 communicants of twenty denominations, and from 208 cities and towns in 12 states in various parts of the country, out of nearly 7000 deaths in 1910, over 700 or 10.4 per cent were caused by tuberculosis. This means 2.24 deaths for every thousand members or communicants.

While the percentage of deaths from tuberculosis as compared with other diseases is not higher in the churches, according to these figures, than in the country at large, the tuberculosis death rate, as shown by the church returns, is higher per thousand communicants than that for the general population in the Registration Area of the United States, which the Census Bureau gave as 1.67 in 1909.

"The National Association," the bulletin says, "does not, however, consider the statistics received from ministers comparable from the point of view of accuracy with those reported by the Bureau of the Census. A sufficient number of returns from a great variety of churches have been received, nevertheless, to indicate that one of the most serious social problems the ordinary church has to consider, is that of the devastation of its membership by tuberculosis. The need for education from the pulpit and in the home is apparent. Every minister in the United States is asked to give this subject some attention during the next two weeks."

American Proctologic Society will hold its 13th annual meeting in Los Angeles, Cal., June 26 and 27, 1911. Headquarters, Hotel Alexandria.

The profession is cordially invited.

Officers—President, Geo. I. Cook, Indianapolis; Vice President, Jerome M. Lynch, New York City; Secretary-Treasurer, Lewis H. Adler, Jr., Philadelphia.

BEAVER COUNTY AND CONTRACT PRACTICE.

At its last meeting the Beaver County society amended the resolution noted last month, forbidding all forms of contract practice, and made it to forbid under penalty of expulsion, all forms of lodge practice and contracts with liability companies. This is right and will have followers in many counties for this class of work is detestable in every sense of the word and has no defenders, while other forms may have some redeeming factors that will bear discussion. We congratulate Beaver county, and now if they would get down to brass tacks, do the post-graduate work, depend on home talent for their monthly meetings and publish a bulletin they may yet hope to compete with live societies.—*Wash. Co. "Program."*

DON'T DO IT, SPECIALISTS.

Not infrequently we are unfolded a tale like unto the following: "I had one of my patients go to one of our nose and throat or eye men recently and he had the nerve to prescribe a tonic for her." Now, Mr. Specialist, if you are a real specialist who makes his living at the special work, and expect the profession to send you work, you will not do this, but will send them back to the old reliable family doctor, and the Lord knows he is constantly having his income curtailed in enough ways without you aiding and abetting in the work. The plot of the most recent tale of this kind was not laid in Pittsburgh.—*Wash. Co. "Program."*

THE UNITED STATES NEEDS A DEPARTMENT OF HEALTH.

And to Begin With, There Should Be a Committee of Public Health in the House of Representatives.

It is the duty and it should be the business of the United States to protect the health of human beings in this country.

There already exist Government departments that take care of the health of animals. Pigs, sheep, cows, goats, horses, chickens—all of these are watched by a Government which in their case is not afraid of "paternalism."

As a result of this watching, a great deal has been done and is done every year to protect the health of animals and birds. Many dangerous diseases have been stamped out entirely or made practically harmless by rigid quarantining and careful inspection.

This work has been worth millions upon millions to the farmers and to the national wealth.

The Government should have the intelligence to do—as far as it can properly and legitimately be done—for human beings in this country what the Government has long done for animals.

The Government should establish a department of public health. The ablest men in the world should give that department their advice.

There should be nothing but contempt for those that fight against this idea—for all of them are ignorant or selfish or dishonest.

There is no idea whatever of compelling any human being against his will to be made healthy if he doesn't want to. But there ought to be rules that would prevent one human being from needlessly risking the health and life of another—either through indifference or because he happens to cherish some asinine idea concerning disease.

As a first step there should be established in the House of Representatives a Committee on Public Health, similar to that which now exists in the United States Senate.

In this country, if a farmer has a young pig that is ill, or an old horse that has trouble with its teeth, he can get from the Agricultural Department, free of charge, the best possible advice about that young pig's illness or the old horse's teeth.

But if a woman has a young child that is ill, all the Government can do is to tell her to take care of it herself. And as for old men and women that are ill, having trouble with their teeth or any other kind of trouble, the attitude of the Government of the United States toward them is practically expressed in the words, "Why don't you go and die if you are old?"

The Government alone has the power to regulate communication between States. It alone has power to regulate the handling of immigrants and the problems which they present.

For the immigrant we have a medical department, of which the principal duty is to keep out those that are declared undesirable—and a very cruel duty it is.

If the Government has a right to establish a quarantine at the door of this country to con-

trol and turn back the unfortunates that come here for a refuge, surely the Government has a right elsewhere throughout the country to interest itself in the public health to take care of those that are ill at least by spreading information and to take care of those that are well by preventing the spreading of disease.—*N. Y. Evening Journal, Editorial.*

THE PRESIDENT'S MESSAGE.

Bureau of Health.

In my message of last year I recommended the creation of a Bureau of Health, in which should be embraced all those government agencies outside of the War and Navy departments which are now directed toward the preservation of public health or exercise functions germane to that subject, I renew this recommendation. I greatly regret that the agitation in favor of this bureau has aroused a counter agitation against its creation, on the ground that the establishment of such a bureau is to be in the interest of a particular school of medicine. It seems to me that this assumption is wholly unwarranted, and that those responsible for the government can be trusted to secure in the personnel of the bureau the appointment of representatives of all recognized schools of medicine, and in the management of the bureau entire freedom from narrow prejudice in this regard.

SENATOR OWEN'S STATEMENT.

Senate Bill 6049, to establish a Department of Health, merely brings into co-ordination the various health activities of the Federal Government, putting them under a responsible head whose dignity justifies his being a Cabinet Officer.

If it were impossible to have a Cabinet Officer, a Director General, independent of other supervision than that of the President, would suffice until this matter were more thoroughly appreciated.

I recently introduced an amendment doing away with Section 8, providing for the establishment of chemical and biological standards—since this was a stumbling block to some—and inserted in lieu of its provisions: first, that no employee of the Department should be discriminated against, in examination for qualification, on the ground of his being attached to any school or system of medicine; second, that no officer of this Department should perform any duty properly belonging to the several States under the constitutional law; and third, that no officer of this Department should enter any home without the invitation of the inmates thereof.

This removes every point of objection that has been raised against the bill, and leaves it entirely free from blame even by its most hypercritical adversaries.

ROBERT L. OWEN
WRITE YOUR CONGRESSMEN TO VOTE
FOR THE OWEN BILL TO ESTABLISH
A NATIONAL DEPARTMENT OF
HEALTH.

For wiring bones iron wire is stronger than silver, and can be had at any hardware store.—*American Journal of Surgery.*

State News

Dr. W. H. Wilson of St. Albans has returned from New York where he has recently taken a two months post-graduate course.

Dr. Alexander P. McKenzie of Blakeley, on Pine Creek has decided to locate at Follansbee.

Dr. L. C. Covington of Rocky Mount, North Carolina has located in Charleston to practice his specialty of eye, ear, nose and throat. Dr. Covington was formerly connected with the U. S. Marine Hospital service, Boston, Mass., and has recently finished a year's term of service as house surgeon to the Presbyterian Eye, Ear, Nose and Throat Hospital, Baltimore.

Dr. Wm. T. Turner, an old and highly respected practitioner of St. Albans, Died March 12th. He was born in Nelson county,, Virginia, seventy-two years ago and served in the Confederate army during the Civil war.

Dr. Simon W. Hill has removed from Switchback, W. Va., and is now located at Regent, North Dakota.

Dr. M. M. Reppard, one of our members at Middlebourne, has recently been nominated by the County Court of Tyler County for the seventh term as County Health Officer. When this term is completed, the doctor will have served in this capacity for a period of eighteen years, certainly an unusual and very creditable record. "You can't keep a good man down."

Drs. Oesterling, Fulton, Noome and Hupp and family of Wheeling, expect to attend the Los Angeles meeting of the Am. Med. Ass'n. Doubtless there are others who will later determine to go.

Dr. J. J. Duffy of Rosbys Rock, who has spent the past seven months in Baltimore in post-graduate work in general medicine and surgery, is again at home. His patrons are to be doubly congratulated—that the doctor is with them again, and that he is equipped to serve them better.

Society Proceedings

THE CABELL COUNTY MEDICAL SOCIETY.

Huntington, W. Va. April 22, 1911.

Dr. S. L. Jepson,
Wheeling, W. Va.

Dear Doctor Jepson:—

This society held its regular meeting in the Hotel Frederiek, April 13th. The evening's program consisted of Case Reports by Drs. J. A. Guthrie, Kessler and LeSage, with a discussion of the quinine and iron method of treating pneumonia.

Drs. C. M. Hawes and R. H. Pepper, both of Huntington, were elected to membership.

Fraternally yours,
JAS. R. BLOSS, Sec'y.

MERCER COUNTY SOCIETY

Bluefield, April 24th, 1911.

The Mercer County society had its second meeting this year in Bluefield on April 15th with a good attendance. The following program had

been prepared: "How Can We Get Doctors Interested in Society Meetings?" Dr. S. R. Holroyd, Athens. "Puerperal Infection," Dr. H. R. Fairfax, McComas. "Report of Obstetrical Monstrosity," Dr. C. M. Scott, Bluefield. "Report of Cases," Dr. W. H. St. Clair, Bluefield. "Report of Obstetrical Case," Dr. F. T. Ridley, Bluefield.

The papers and reports were interesting. The interest taken in the society by its members is very encouraging, and gives promise of a good year's work. Eight applications for membership were presented at this meeting. After the meeting we were served with a fine lunch which all very much enjoyed.

B. F. CORNETT, Secretary.

L. OHIO COUNTY SOCIETY. L.

April 3—Dr. Hupp read a very interesting paper on "The Surgery of the Tonsil" which was freely discussed by a number of the members. This paper will be published in full in the Journal.

April 10th After preliminary business, a lecture was given on "Hydrotherapy in General Practice" by Dr. James S. McClellan of Belaire, O. He described the various kinds of baths and the technic of their application, laying especial stress on the Brand bath and its use in typhoid fever. It is most important, in giving of this bath, to employ constant friction to the surface of the patient. The speaker also discussed the tonic effect of water externally applied, and its value in various nervous diseases, illustrating his point by reciting cases from his practice.

Dr. Burns, in opening the discussion, emphasized the importance of friction in giving the bath in acute febrile conditions, considering it the all-important feature of the Brand bath. He thinks it a good plan to place the patient between wet sheets for a few minutes after the bath, following this with an alcohol rub. In cases where the patient fails to respond to the sponge bath, he would advise the Brand bath. If patient still fails to respond, then use the ice pack. As a last resort the warm bath sometimes has the desired effect. Sponging and bathing reduce the chances of bed sores. The speaker has seen most excellent results from alcohol sponges in the diseases of children. Functional neuroses are very extensively treated with both cold and hot baths. The hot bath is especially valuable in nephritis cases, in which the patient should be placed in a very hot bath and there remain for fifteen or twenty minutes, then lie in hot blankets for some minutes, and after this receive the alcohol rub. A Turkish bath at least once a week in chronic nephritis is valuable, the temperature of the hot room being regulated by the condition of the patient's heart.

The lecture was also discussed by several other members. Adjourned.

HERSEY, Secretary.

To avoid troublesome hemorrhage in operations for tuberculous glands of the neck first expose the internal jugular vein.—*American Journal of Surgery.*

Reviews

DIFFERENTIAL DIAGNOSIS. — Presented Through an Analysis of 383 Cases. By RICHARD C. CABOT, M.D., *Assistant Professor of Clinical Medicine, Harvard Medical School.* Octavo of 753 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1911. Cloth, \$5.50 net. W. B. Saunders Company, Philadelphia and London.

In this book Dr. Cabot's style, direct, original and convincing, strongly reflects his own personality. He is versatile and vigorous both as a speaker and writer, and is an interested worker not only on strictly professional lines, but in those sociological questions which affect human life and living.

While a knowledge of the principles of medical science is necessary to one who would build a strong and stable professional character, the busy practitioner is impatient of fine-spun theories or stilted dogma. He wants something that has the freshness and vigor of personal knowledge and actual experience. Dr. Cabot aims to meet this want. He draws from a large experience and gives cases with histories and symptoms as they are found at the bedside. He analyzes these symptoms; eliminates the extraneous, the irrelevant; emphasizes the chief elements which enter into the case and putting them together, draws logical conclusions.

Dr. Cabot is not satisfied with anything less than the last analysis as the test of knowledge. This is well expressed in his own words:—"Experience shows that we are more apt to be right when we explain a clinical picture by one diagnosis rather than by two." And further:—"Correct diagnosis depends upon what enters the doctor's head as possible, and on what his head does to sift the possibilities after they have entered it." In other words it depends upon whether the doctor has brains, and whether these brains have been properly trained.

Dr. Cabot's work is not, perhaps, as well adapted to the student as to the man in active practice. He it is who is confronted with conditions as well as theories; he it is who is groping after the truth; he it is who realizes that upon his proper recognition of conditions and interpretations of symptoms, and correct conclusions, depends an intelligent application of remedies which may mean life or death to his patient.

The physician who reads carefully this work and will observe the methods employed by the author, will make a more careful diagnostician; he will not be satisfied with a superficial study of his cases, but will so study, analyze and group the symptoms as will lead to true conclusions.

L. S. B.

A MANUAL OF CYSTOSCOPY—By SQUIER AND BUGBEE. Paul B. Hoeber, New York, price \$3.00.

As the authors set forth in their preface the work is short and practical, furthermore it has the merit of being concise and definite as to detail. The essentials have been kept in view and fine-spun theories have no place in this work.

A brief but succinct history of Cystoscopy is given. The authors describe a home-made bladder phantom which will be of much benefit to the student of cystoscopy.

In the sterilization of cystoscopes attention is called to the value of soap and hot water rather than of chemical antiseptics. A number of colored plates enhance the value of the work. Mention is made of the numerous pitfalls that beset the path of the cystoscopist. Attention is called to the fact that the hypertrophied and trabeculated bladder is seldom seen except in men and as the result of enlarged prostate or the obstruction of stricture.

The usual caution is given about the avoidance of instrumentation in severe cystitis unless the indications are imperative. The same avoidance is applicable to gonorrhoeal cystitis. The introduction of any sort of instrument into the bladder in case of hypertrophied prostate may be the exciting cause of numerous complications. Few men practicing this specialty are so ready to admit the shortcomings of cystoscopy as are the authors of this book. They find the cystoscopic examination of the enlarged prostate to be often misleading. The indications for bladder examination are briefly, but thoroughly sketched. My inference from that is, the authors consider a cystoscopic examination to be of particular value in diagnosing calculi, tumors and foreign bodies.

The technique of ureteral catheterization is described with especial thoroughness. The authors advocate the use of the same instrument for both the male and the female bladder. For the expert this is well enough, but for the gynecologist who has only occasionally to do this work the dry method of Kelly commends itself.

I quote from the authors' concluding remarks the following, which sums up the subject admirably: "Cystoscopy and ureteral catheterization give positive data which are of extreme value in diagnosing pathological lesions and in deciding upon operative procedures of the urinary tract." Cannaday.

ANNUAL REPORT OF THE SURG. GEN'L OF THE U. S. PUBLIC HEALTH AND M. H. SERVICE FOR 1910.

In this report Surg. Gen'l Wyman outlines the operations of the service over which he presides with marked ability, and from the book one may learn the really valuable work that is being done for the advancement of medicine and the safety of the people.

FIRST BIENNIAL REPORT OF THE STATE BOARD OF CONTROL.

This report, in addition to many other items of interest, contains reports from all the asylums and Miners' Hospitals in the state. The book is well illustrated. Miners' Hospital No. 1, at Welch, Dr. C. F. Hicks, superintendent, admitted in 1908-'09, 610 patients, of whom 41 died. Daily average of patients 50. Hospital No. 2, at McKendree, Dr. B. B. Wheeler, superintendent had a daily average of 29 patients. Hospital No. 3, at Fairmont, Dr. J. W. McDonald, superintendent, admitted 549 patients in the two years,

deaths 36. These hospitals are doing a good work. We have never been able to see why the state should support such institutions. The "coal barons" are certainly abundantly able to care for their own sick and injured.

INTERNATIONAL CLINICS—A Quarterly of Illustrated Clinics and Especially Prepared Papers, by Leading Physicians of the World. Vo. I.—Twenty-first Series, 1911, J. B. Lippincott Company, Publishers, Philadelphia. \$2.00.

This series of books has been so long before the medical public that little need be said in commendation. The fact that this is its 21st year of publication indicates its success. The present volume contains papers on diagnosis and treatment in medicine, pediatrics, surgery, ophthalmology. Wechsman has a paper on the treatment of syphilis with salvarsan, the latest word from the most competent authority. C. K. Mills, Carl Beck, Geo. A. Piersol, Musser and Bloodgood are other contributors. A. A. Stevens and Musser give the progress of medicine during 1910 and Bloodgood that of surgery. These three articles—100 pages—constitute the present volume an exceptionally valuable one.

NEW AND NON-OFFICIAL REMEDIES—1911. Press of A. M. A.

This duodecimo volume of 300 pages contains descriptions of all articles which have been investigated and accepted by the Council in Pharmacy and Chemistry of the Am. Med. Ass'n down to the present year. It is well worth a place in the office of every practitioner.

LITORA ALIENA—Oct. 78 pages. Price 50 cents. W. M. Leonard Publisher, Boston.

This book is a reprint of letters of a physician traveling in Europe, written to the Boston Medical and Surgery Journal. There is extremely little in them that touches on medical topics, but that the writer is a keen observer and is a scholar, and wields the pen of a graceful and ready writer is evident on every page. We have greatly enjoyed the reading.

37th REPORT OF THE CIN. SANITARIUM.

This famous institution, under the direction of Dr. F. W. Langdon, has now reached a total of 5242 patients since its beginning, 182 of which were treated during the past year, a daily average of over 40. Seventy were discharged recovered, a good result when the class of cases admitted is considered.

THE WATCHFUL EYE, THE ALERT EAR, THE TACTFUL FINGER.

With all our varied instruments of precision, useful as they are, nothing can replace the watchful eye, the alert ear, the tactful finger and the logical mind which correlates the facts obtained through all these avenues of information, and so reaches an exact diagnosis.—W. W. Keen.

An apparently superficial tumor of the chest wall may be an intrathoracic growth that has reached the surface; an X-ray picture is indicated in any such tumor before its attempted removal.—*American Journal of Surgery.*

Medical Outlook

FOREIGN BODIES IN THE HEART AND LUNGS.—Dr. B. M. Ricketts reports these among others, in the *Indianapolis Journal*:

Among those most interesting is the case of Hamilton (1867) when a leaden ball was embedded in the wall of the right ventricle for twenty years, without the cyst becoming infected and without having caused death which was the result of pneumonia pure and simple.

Balch (1867) also reported a case in which the ball remained in the cavity of the heart for twenty years without infection. While Pool (1889) records a case which survived eleven days with a bullet embedded in the apex of the heart.

Retained foreign bodies in the lung and bronchi have been of more frequent occurrence.

Buchfield (1671) is among the earliest writers to publish cases of foreign bodies in the lungs. Since then a great variety of foreign bodies, among them leaden missiles, have been found within these organs. One of the earliest is that of Moore (1847), who states that he found a leaden missile in the lung, in which it had been buried for fifty years, without causing serious trouble. Warren (1857) found pistol balls suspended within the chest by the pleura eight years after their entrance. Thus it has been shown that death does not necessarily result from the presence of bullets within the more vital structures of the body. However, the question of their removal primarily or secondarily to their entrance into living tissues remains unsettled, though their locality may be definitely determined by means of x-ray. Such surgical treatment can only be determined in each individual case, with the presence of pain, discomfort, disability or infection, or all.

Eugene Coleman Savidge, M.D., of New York, read a paper before the New York Obstetrical Soc. on the subject: *WHAT WE MAY NOW TELL THE COMMUNITY REGARDING CANCER.*

Savidge thinks that people should avoid all *specific irritations* which are half causes of cancer and are easily controllable. He says: "Give the sewing women knowledge and a thimble. Lengthen the knowledge of the short stem of the pipe of the smoker. Teach the locomotive driver to shield his shins as the X-ray operator screens his integument from the deadly ray. The betel nut need not be chewed, and the hot oven on the abdomen may be insulated if it must be carried hot. Benign tumors, irritated moles, chronic ulcers which Crile calls "potential cancers," should be removed by prompt surgery. But surgery should be early before the precancer stage. It is because of this precancer condition that late surgery, electricity and local applications fail. Another cancer grows because there is yet the cachexia, the basal cause, remaining in the system.

He comes to the conclusion that if we remove the half cause, we may in a large proportion of cases, at least, be removing the whole cause at the same time. He says it is a maxim in sym-

pathetical medicine that "an incurable thing may sometimes be cured by curing all other curable things in sight." G. D. L.

A SAFE INTRANASAL METHOD OF OPENING THE FRONTAL SINUS—John A. Thompson, *The Laryngoscope*, August, 1910.

The method devised is to remove the anterior end of the middle turbinate and then pass a probe into the frontal sinus after injecting cocaine to secure anesthesia. Instead of chiseling away bone in front of the probe a pointed rasp with a groove in the back, so that it fits neatly and snugly over the probe, is guided up along the nasofrontal duct as far as it can be pushed by a reasonable pressure and then withdrawn, cutting away the bone downward and forward. By a repetition of this movement, inserting the rasp into the duct higher and higher each time, as the resistance is lessened by cutting away the bone, it is possible to work through into the frontal sinus within a very few minutes and with practically no pain to the patient. The bone is softened by the suppurative inflammation until its removal is very easily accomplished. As soon as the frontal sinus is opened, different sized rasps, currettes or forceps can be used to cut away all of the diseased bone in the anterior ethmoid cells without destroying the mucous membrane left in its natural position and with its nutrition unimpaired, no drainage tube is necessary and the free opening into the frontal sinus heals quickly.—*Am. Jour. Surgery*.

WHEN TO OPERATE IN APPENDICITIS—The following opinion of Stuart McGuire on this important question will bear repetition. It is quoted from an address before the Florida Medical Assoc. and printed in *New Albany Med. Herald* of Nov., 1910.

"The question of when to operate will perhaps never be satisfactorily settled. Personally I am convinced that Murphy was right in his bold and dogmatic statement made many years ago, that we should operate on all cases of appendicitis as soon as the diagnosis is made. There are, of course, a few cases where this rule will work hardship, but I am sure if it is rigidly followed, it will accomplish the greatest good to the greatest number, and that the surgeon who adopts it will, in the end, save more patients than the one who does not. The objections made to it are that we should not operate upon the convalescent or the moribund. The answer is that it is impossible to diagnosticate these cases. Patients apparently improving and on the road to recovery sometimes develop a fatal complication, and patients apparently dying sometimes get well by means of a timely operation, performed by a courageous surgeon.

"Ochsner, by his teaching, has, in my opinion, caused the death of more patients with appendicitis than his personal ability as an operator has enabled him to save, and this not because his teaching was wrong, but because it was misunderstood, and his treatment misapplied. Ochsner believes in operating on all cases of appendicitis, but in a certain class he advises waiting, employing gastric lavage, rectal alimentation and Fow-

ler's position, until the inflammation becomes localized and the patient in a more favorable condition for surgical intervention. Personally, I believe that Ochsner's treatment will save some cases which would otherwise be lost, but despite this fact, I am satisfied that it would be better for the profession and for the public if his teaching had never been disseminated. It has been seized upon by the general practitioner as a medical cure for appendicitis, and has been the excuse for procrastination which has filled many an untimely grave." G. D. L.

Miscellany

PHYSICIANS' INCOME.—If the conclusion be reached that we are not making income and outgo even equal, then it is for you to say whether there is: first, any logical remedy save an increase in the fees, and second, whether the key to the whole situation is not the question of personal loyalty to each other. No agreement as to the necessity of a change is worth anything if honorable competition is to degenerate into underhand and disgraceful attempts to get the better of one another by sneaking and secret methods. The propositions which I wish to lay down are as follows:

1. We are not getting a reasonable return on our investment.

2. Most of us are unable to adequately provide for the future.

3. These conditions are due to the increased cost of living which has not been balanced by an increase in our fees.

4. No agreement to make our fees uniform to all persons ought ever to be made, because individuals and families differ in their ability to pay. We shall always have to take care of the very poor for nothing, the poor for very small fees, and the moderately well to do with special rates when circumstances demand special consideration.

5. We should, however, raise our fees to those who have themselves benefited by the advance in wages or the prices of the commodities in which they deal.

6. Let us reflect that as a profession we are deficient, if not destitute, in personal loyalty and engaged in a destructive competition long since abandoned by wise men in other avocations. Also, that if we do not mend our ways, worse things will happen to us than now threaten us.

7. Finally, that as a profession we must never turn a deaf ear to the cry of distress. Never refuse to consider the claim of poverty on our charity and ever be willing to suffer wrong, if necessary, rather than surrender the high ideals which have guided us these many years. I believe, however, that by loyalty to each other and a reasonable and just attention to the economic conditions which confront us that we can put the profession on a sounder business basis without surrendering the legacy of our fathers or forfeiting our claim to the respect of the community. A half starved doctor with a half starved family loses half his ability for public service and more than half his efficiency.—A. T. B. Editorial in *N. Y. State Jour. of Med.*

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TREATMENT OF THE RECENTLY INSANE

Jas. R. Bloss, M.D., Huntington, W. Va.,
Ass't Phys. W. Va. Asylum.

(Read at annual meeting State Medical Ass'n,
Oct. 1910.)

During the discussion of certain papers at the Elkins meeting, the statement was made that "we do a lot of talking about the etiology, pathology, etc. of insanity but do not say what to do for the insane patient." Further the request was made that some one tell what to do for such cases. This paper is an attempt on the part of the writer to be of some assistance.

In the past, general practitioners did not regard it as a profession of ignorance to say that they "knew nothing about nervous and mental diseases." That day is rapidly passing. Now all medical schools of the first grade give special lectures and have clinics in this branch of medicine just as in pediatrics, surgery, etc. Again we find that many men engaged in general practice, with no special opportunities for study have begun to regard themselves in the light of specialists in this line, if we are to judge by the number who qualify as "experts" in insanity trials.

It has not been so very long since an insane person was regarded as being possessed of the devil, one to be incarcerated in jails and reformatories along with criminals and vagabonds. The disgrace in having a member of the family insane was thought to be as great as to have one of them a criminal. They were locked in

dungeons or cells with chains fastening them to the floors or walls, nothing being done for them, living and dying in misery and filth.

True, in the beginning asylums were established primarily to protect society from the insane; to protect the insane from themselves, and to economically provide care and support on the part of the state when needed. There were places of detention with no provision made for the application of any special therapy, which in fact was not thought necessary. Today the asylum is recognized as a hospital for those suffering with mental disease. Straight jackets, muffs, handcuffs and shackles have disappeared. Clean, airy bedrooms, dining rooms and halls with attractive walls, carpets and furniture have taken the place of the bare floor, depressing halls and wards of the past. Ignorant care-takers have been displaced by trained attendants, in many cases by graduate nurses specializing in this branch of their profession. We find schools established, out-of-door employment and so on displacing the deadly monotony of the past century.

The Superintendents and assistant physicians are, in the majority of instances, men trained to the special care of the insane. They are striving with every effort to use the methods and equipment at hand to restore dethroned reason. Gradually the idea seems to be dawning, even in the minds of politicians, that hospitals for the insane are not to be regarded in the light of spoils to be handed faithful lieutenants regardless of whether or not they are qualified for administering to the

welfare of those entrusted to their care.

In those asylums where advance seems slow, you will find that it is because of the over-crowding of public institutions; a niggardliness on the part of the legislatures to provide sufficient funds; the interference with good work which politics plays in nearly all of our states, and a lack of a sufficient number of trained medical assistants.

I have gone into the question of asylums a little extensively because I am connected with one of the W. Va Institutions. It is our wish to have your co-operation in dissipating the mistaken ideas concerning them, which may exist in the minds of persons so unfortunate as to have relatives in need of institutional care. Even now we have to combat the feeling that it is a disgrace to send a member of the family to a hospital for the insane. Indeed it is only of late that medical men have come to realize that insanity is a disease, and in a large per cent of cases curable when recognized early and properly treated. This false idea is an obstacle to the treatment of insanity, and one that it is particularly in the province of the family physician to dispel.

The phylactic treatment of insanity is not given a sufficient amount of consideration. A study of the etiology of mental disease will show that many of the injurious factors aiding in the development of these derangements are avoidable. It is our duty as physicians to guide the upbringing of children whose ancestry is tainted.

From the very beginning we must take them in hand. The milk of an anemic, neuropathic mother is not suitable nourishment for her babe; so at the outset we are confronted by the problem of nutrition with artificial food or a wet nurse.

During the early years of the child's life we should devote all our energies to developing the body; must employ a carefully regulated plain diet with the avoidance of tea, coffee and alcohol; insistence upon out-of-door life, a daily morning cold bath, hard beds with cool and well ventilated rooms to sleep in. Early in life these children are to be taught to obey and their morals strengthened; while passions and sensitiveness

should be repressed and calm and self-control under the varying events of life be inculcated.

The majority of children with a tainted heredity will show an abnormal mental development. Some will be precocious and their mental activities should be restrained; others will present a retarded mental development. With these we must be patient and avoid trying to crowd them. There should be no school for these before seven to nine years of age.

At puberty we must give especial care to these children, and even in the years before this pay careful attention to the abnormal development of the sexual instinct, which is prone to appear early and be excessive in these persons. As puberty approaches every physical ailment, even the slightest, must receive prompt treatment. It may be the connecting link in the chain of etiological factors which results in the final outburst of insanity.

Finally the selection of an occupation is most important. It should be a physical rather than a mental one; an outdoor rather than an in-door employment; preferably a life spent in the country to one in a city, that it may not be so subjected to changes of fortune and the stress of excitement that city life presents.

It is not often that a case of insanity develops without any premonitory warnings. Most often the onset slowly appears in the course of weeks or even months or years. Since this is the time when the disease is most readily overcome by treatment, the importance of detection and a realization of the seriousness of the condition to be grappled with is evident. This is the time when the physician should recognize the commencing insanity and take immediate steps to combat its further progress. It may be that the household surroundings are bad; the patient may be overworked or anemic; there may be a disturbance of the menstrual function or a gastric catarrh that we should treat. In the past physicians were too hasty in attributing such troubles to general depression, disappointed love, nervous weakness, etc. Happily we are now becoming alive to the gravity of the situa-

tion, and delays in diagnosis until too late are growing less frequent.

Having a case of incipient insanity to deal with, shall we endeavor to treat the patient in the home or send the patient to an institution? This is a much mooted question; some authorities maintaining that it is far better to treat the case in the home when possible, others advise strongly against this. Personally I do not think it is advisable to attempt the care of such a case amid the surroundings in which the trouble developed.

There are a number of reasons why it is best to place the patient in new surroundings. To begin with, the patient will exercise much more self-control among strangers. The discipline and routine of an institution contribute to this; the routine is favorable in that there is less to stimulate and annoy. Here a patient laboring under excitement is not threatened or punished as is too often the case at home. Then there is less introspection; he recognizes that those about him are similarly afflicted; he will often recognize the delusions of his neighbors and can criticize his own morbid ideas. By removing him from home we substitute the normal feeling of homesickness for the unnatural one and thus an additional reason for recovery is presented. Then again certain types of insanity are marked with increased sexual excitement, and indulgence of the marital relation hinders recovery. Finally the influence of an insane member of the family is bad upon the others, particularly the children, and there is always the uncertainty that a patient not actually dangerous, may become so suddenly through the development of new delusions.

There are numerous well equipped private institutions to which well-to-do patients may be sent. For the poor and those in only moderate circumstances, the State hospitals provide a much more favorable environment for cure than can be possibly secured in tenements or their own homes. So the whole question of sending a patient to an institution depends upon the possibility of cure, and yet there are so many prejudices against institutions, particularly State hospitals, that, as Maudsley expresses it, "they are rather burying grounds for ruined minds

than asylums for brain diseases."

"A great number of patients whose admission is demanded are already actually lost. The fault lies partly with the family and partly with the physician. The family is long in reaching the conclusion that the patient is really ill; and the physician requires a long time to reach the conclusion that the patient is insane; then the two together require a long time to decide that an alienist is necessary.

The first period of this delay is used to trouble and irritate the patient with distraction, persuasion, advice, criticism, etc. During the second period the irritation is combated by bleeding, cathartics, stimulation of the skin, etc. During the third period both parties wonder why the means employed have produced no result. Finally the alienist arrives, to find the strength of the patient exhausted, his digestion destroyed; mental excitement at an acme, or in the deepest melancholy, often even with the insane condition bordering upon incoherence. At this point the alienist is asked to help the patient." (Neumann.)

You will generally find that the case of insanity to which you are called will present either a varying degree of mental excitement, mental depression or mental weakness. Regardless of what the diagnosis may be, the indications for treatment are clear. We must endeavor to reduce excitement and build up the patient's self-control.

The first consideration in the treatment of an insane patient is that of securing suitable nurses. It is necessary that there should be two, one for day and the other for night duty. These nurses should be experienced in this line of work. If possible to secure them, graduates of an asylum school for nursing will be found most satisfactory. They have had the actual experience which is so necessary in teaching them to do just those things which are needed, in avoiding the useless attentions which only irritate or annoy the patient, and what to do to forestall accidents, etc.

Having secured suitable nurses the first thing to do in either excitement or depression is to put the patient to bed. Of course this will be a rather difficult thing to do with a patient who can not

understand that he is ill, one who feels his mental powers are normal and his physical strength to be so unlimited that he can move worlds, but a patient persistence will be rewarded finally with a compliance with our directions. Frequently it is more easy to get an excited patient to remain in bed if he is placed in a small ward. Here the example of the other patients lying quiet in bed aids in the gaining of self-control.

The advantages of rest in bed are the conservation of the patient's strength and calming of the excitement under which he may be laboring; finally it facilitates the supervision of the case and the carrying out of our directions. When it seems best not to insist on a continuous stay in bed, we may allow the patient to sit up for a few hours in the afternoon or even walk about the halls or porch; but for the first week or two I think it is far better to insist on a continuous stay in bed.

For the calming of excitement we have come to know that the judicious use of hydrotherapy will produce more satisfactory results, in the majority of instances, than any other treatment. Two methods particularly have been found advantageous. First wet packs, and secondly the use of the prolonged warm baths.

In the first instance the patient is wrapped in a sheet wrung out of cool water and over this a blanket is applied. The patient is left in the pack for two, three or four hours, or even all night if he drops quietly to sleep. To give the warm bath the tub is filled with water at 90° to 100° F., a suitable rest is provided for the head, and the patient is immersed; often an ice-bag to the head will be found very useful in aiding to calm the excitement. It is needless to say that a nurse must be constantly in attendance. This warm bath may be prolonged for hours or even days; indeed I have recently read an article where it was reported that the patient was in the warm bath for ten days continuously with excellent results. In cases of mild excitement an ice-bag to the head with a hot water bottle to the feet will be found sufficient. In cases in which the heart action is weak, this last procedure and the administration of

strychnine hypodermically will be found very satisfactory.

In private practice, particularly amid home surroundings with a raving, incoherent patient, the relatives will be insistent that something be given to secure quiet. It is much more desirable to secure rest without having to use depressing drugs that to sap the patient's diminished strength, which we are so desirous of preserving. Still there are a number of drugs which experience has shown to be very valuable. The most satisfactory ones in my experience have been opium, chloral, sulphonal, trional, veronal, hyoscine and paraldehyde.

Some authorities advise against the use of opium, claiming that chloral is preferable. I have placed opium first because it has given more satisfactory results than anything else. Generally $\frac{1}{8}$ to $\frac{1}{4}$ gr. doses of morphine are administered hypodermically and repeated if needed until the excitement is overcome; then chloral and bromide of soda are used to maintain the effect. I have had quite an extensive experience with the use of morphine and hyoscine, and while it is a valuable combination for securing quiet, yet some of the results have been so alarming that I am rather hesitant now in employing it. In cases of depressive insanity with restlessness and fear, tr. opii with bromide of soda by the mouth have given good results; but I do not use the aqueous extract hypodermically or opium pills or powder by the mouth. In reply to the objection that the opium habit may be formed I will say, that I have had no cases where any evil effects in this direction have followed its use.

When sleeplessness is the symptom which we are to overcome, I have found nothing equal to chloral hydrate in 12 to 15 gr. doses combined with 15 to 30 gr. doses of bromide of soda and given at bed-time. As the strength of the patient increases and nourishment is taken more liberally, you will find that there will be no trouble in removing the hypnotic. At this time a cup of hot milk, a glass of milk punch or hot malted milk or egg-nog will be efficient in inducing sleep and at the same time provide a certain amount of nourishment.

Sulphonal, trional and veronal are all good and are indicated when there is cardiac weakness prohibiting the administration of chloral. Bear in mind that sulphonal is a slow-acting hypnotic, but the effects are lasting, while trional is the opposite; so it is more satisfactory to combine them in 12 to 15 gr. doses of each. They possess the advantage of being tasteless, and so can be given in hot milk to patients who object to taking medicine. Veronal is regarded as being the safest of these drugs, but I have seen a case where 5 gr. doses were followed by great depression and cardiac embarrassment. Hyoscine, atropine and the other drugs of the solanaceae must be used very cautiously, as they may add hallucinations of various types to the excitement. Paraldehyde will be found safe in 1 to 3 dr. doses, but not more so nor more satisfactory than the others mentioned.

The diet is very important. It must consist of food that is easily assimilated. During the first few days a liquid diet is to be preferred. We may avoid monotony by giving milk, malted milk, broths of various kinds, freshly prepared beef juice, coca, chocolate, etc. It is best to give small amounts of these foods at shorter intervals, say a cupful or glassful every four hours.

There is another indication, besides the securing of rest, which I would emphasize, namely, that of elimination. You will generally find the alimentary tract is sadly in need of a thorough cleaning out. At the time of admission, unless there is some contra-indication, it is our custom to give 2 or 3 of the comp. cathartic pills and follow with either effervescing soda phos., magnesia sulph. or the Rochelle salt. Then keep the bowels moving freely with either efferv. sod. phos. or one dram doses of magnesia sulph. in the mornings. Enemas, particularly the high enemas and flushing of the colon, must not be neglected. Often it will be found a good thing to give 2 or 3 gr. doses of salol or 5 gr. doses of beta-naphthol three times a day. The elimination by way of the kidneys is to be stimulated by urging the ingestion of water: while the eliminative function of

the skin is to be increased by salt glows, alcohol rubs, etc.

There are certain other symptoms to which it is well to call attention. First is the tendency to suicide; of course the only thing to do here is to watch the patient constantly and to remove absolutely every article from the room that can in any possible way be used to a fatal effect. Then certain of these cases will be marked by inveterate masturbation. Here you may try large doses of bromide; applications to the genitals I think are useless; it may be that castration must be seriously considered. Then there may be either partial or complete refusal of food. In the first instance insistence on the taking of food or leaving food where the patients can get it when they think they are unobserved, may overcome the trouble. For the first few days it is better to get the bowels thoroughly cleaned out and not to try to give too much nourishment. But if there is complete refusal of food or the persistence in taking too small amounts, we are compelled to adopt mechanical feeding either with the stomach tube, by the nasal route, or by rectum.

Personally I much prefer to feed by the nasal method; all three have been tried, but unless there is some reason why the nasal route can not be used, it has the preference. When we must use mechanical feeding it is our custom to feed twice a day, giving from one pint to one quart of liquid nourishment in the form of milk with raw eggs, various broths, etc. Rectal feeding demands the use of small amounts at a time, but if necessary may be alternated with the others.

As the case improves give tonics as indicated: bitter tonics with nux vomica and the elix. iron, quinine and strychnine (U. S. P.) are useful. We must continue to carefully supervise the diet, which should be easily digested and as nutritious as possible. Long hours of rest must be insisted upon; be very cautious in advising exercise of a character that can easily prove exhausting, guarding carefully that the exercise allowed is not overdone.

It is during this period that psychotherapy will be productive of its best re-

sults. This is the only method we have of directly combating the patient's false ideas and we must administer psychotherapy *pro re nata*. Personally it is not thought that hypnotism in the commonly accepted meaning of this much used term is productive of benefit.

During convalescence let your patients vegetate mentally. Do not be led to encourage mental activities, regardless of the insistence on the part of the patient or his relatives that he be allowed to take up duties or recreations that are liable to prove mentally tiring. Be very cautious about advising travel; it is wearying and may bring about a relapse.

The treatment of mental depression does not differ materially from that of excitement. Of course it is far more easy to apply therapeutic procedures with a quiet and unresisting patient. These cases require a more complete application of the "rest cure" than the excited ones, for in the majority of instances they are greatly debilitated. The conditions demanding our especial attention in the depressive states are to stimulate peristalsis, to improve the circulation, and to increase the assimilation of nourishment by passive movements, massage, etc. Above all things let me insist that you do not allow any one to endeavor to "brace them up" mentally. Just let them rest and eat and sleep. Your results will be better and more permanent.

When the patient has recovered from his mental derangement and is discharged, we should not regard the case as being completed. There is always before us the frequent liability that there will be a recurrence. In some cases recurrence will be inevitable, e. g. general paralysis in remission. Others may have been due to some exciting cause that is removable. If this is avoided a recurrence is prevented. True, some other cause than the original one may give a recurrence, but prophylactic measures will be successful in preventing it in many cases. Finally, there are cases with no predisposition, due to avoidable causes; such are the psychoses due to alcohol, morphine, etc., and in them a recurrence is absolutely avoidable.

THE PHYSICIAN'S RESPONSIBILITY IN RELATION TO THE DEFECTIVE CLASSES.

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(Read at annual meeting of State Medical Ass'n, Oct. 1910.)

Whereas the province of the physician not only embraces the knowledge of the technic and application of rational and approved reparative procedures tending toward rehabilitation of the physical forces, but also a sense of the fitness of things, embracing the philosophy of cause and effect, therefore we have prominently thrust before us the extensive subject of Preventive Medicine, the limit of the horizon of which extends not only beyond our present knowledge, but possibly beyond even the range of our most lucid imagination, embodying a knowledge of much of the technic of collateral sciences. I wish today to invite your most careful attention to that branch of preventive medicine dealing with our responsibility in relation to the defective classes, which shall embrace reference to all classes and degrees of both those who are organically, somatically and psychically ill, as well as those who through functional deviations, either permanent or transitory, become sociologically ill.

In preventive medicine the privilege of the physician is not only that of a scientist investigating the facts, but of an educator to the public, teaching them how to avoid disease and the disaster concomitant therewith, both individually and to their posterity; especially in instructing the public to a complete recognition of their responsibility for the propagation and multiplication of the defective classes, for in education we have the most powerful prophylaxis, and in fact the only really rational means which might eventually tend to eliminate the larger percentage of the great mass of defectives. The public is now awakening to the great possibilities and advantages of normal physical and psychic health, and may easily be impressed with the terrible ravages progressing steadily with advancing momentum, recruiting its hundreds and thousands of physical and moral deviates as represented both within and without all our eleemosynary and penal institu-

tions. This is an indication that the time is now ripe for a campaign of education inaugurated and maintained by the leadership of the medical profession, as physicians individually and collectively represent the greatest practical philanthropy of the world. In no other profession or calling is there continually expressed throughout the entire professional career by their deeds so ample a consideration for, and so deep a love of humanity as is expressed by the physician in his daily routine life. Through the untiring efforts and personal sacrifices of comparatively a few scientific men, mostly physicians, have been induced our present knowledge of preventive medicine; and while the public is somewhat lax or indifferent in acquiring the knowledge offered them without expense or obligation on their part by the physician who willingly furnishes them this knowledge, the acquisition of which will not only increase their profits by curtailing their expense, but add to their health and their happiness and their longevity, yet the lessons are gradually becoming impressive and we shall see that the history of the present house fly will soon be similar to that of the past mosquito, and that "yellow jack," malaria and many other diseases will, ere long, have no other than historical significance. And so it will be with many other conditions of disease and defects now regarded as more or less necessary evils. The knowledge of their cause and the means of prevention are being worked out in our laboratories and scientific workshops, and through the medium of rational education, thoughtfulness and discretion will replace indifference and carelessness. Concomitant with the great effort that is being put forth at the present time to educate the masses against the spread and transmission of tuberculosis, should go education along similar lines embracing the knowledge of transmissible defective conditions which result in similar and dissimilar heredity. The knowledge that a single alcoholic intoxication in the parent may be the cause of epilepsy in the child, and that intrinsic auto-toxicosis prevalent at the time of conception or during pregnancy, producing conditions of exhaus-

tion in the parent, tends to transmit to the child a defective and unstable nervous organization upon which may be superimposed all kinds of defects and diseased conditions, should be established in the mind of every individual; and further, the full significance of these facts should be rendered indelible.

The physician is the man who knows these things, but they do not belong to him as a scientific asset only. He is in a position to continually disseminate this knowledge more or less to every individual who seeks his professional advice, and further to teach it in public at every opportunity available, and also he should be enjoined to make and encourage every opportunity possible to teach it. Our local state and national associations should be, as they are growing to be, leaders not only in thought but in action in every department of science pertaining to the physical, mental and moral attitude of the whole people. Thus the physician may hope eventually to come into his own, not only as a repairer of accidents and injuries, but one who by his wise counsel and careful judgment of matters has foreseen and prevented calamities, many of which might not only invalidate the individual more or less during the continuance of life, or shorten it, but produces in either instance the exhaustion which tends to transmit defective conditions to posterity.

The individual is personally responsible for violating the advice of his physician. The physician is responsible for withholding the advice from the individual. We are continually surrounded by people who need not only advice and suggestion, but who need education and re-education. These individuals represent an extensive aggregation whom we may conveniently classify as deviates the majority of whom are congenitally so, and undeniably of such physical basis as presents advancing degrees of degeneration. Among these is a large group, the constitutional psychopaths, who present from their childhood evident psychic anomalies, the significance of which is largely either misunderstood or misinterpreted. Hence a failure to arrest any morbid tendencies which must necessarily obtain. From the entire class of de-

fectives we must eliminate, for the purpose of this paper, four classes of degenerates, namely; hysterical subjects, paranoiacs, epileptics and the feeble-minded, who though closely identified scientifically with the psychopath, yet the pathological degeneration is so much more apparent and easily recognized as such that they will commonly come under competent medical supervision, and hence are less liable to be misunderstood and misdirected. The habitual mental state of the psychopath being less understood and frequently unrecognized as a psychic anomaly with some possibility of correction; even by the physician who has not considered the subject especially, and almost entirely by the parents or guardian and teachers, the deviate has little opportunity for salvation, and it appears no wonderment that they soon assume antisocial deportment. The principal psychic anomalies of the habitual mental states of the psychopath are those first of judgment, second of character, and third of conduct.

The disorders of judgment undoubtedly present the most important stigma of the psychopaths, wherein they fail to see things in their proper light; from which arises singular notions, absurdities, and the participation in ridiculous enterprises. They may present distinct mental debility, impotent memory, weakness of attention, sluggishness in the association of ideas, and some poverty of imagination; and yet some cases are practically normal or even brilliant in memory and imagination with artistic aptitude. These abilities, however, can not be turned to account by reason of lack of judgment. Thus in most instances the psychopaths, when not actually feeble-minded, are mentally unbalanced, and the anomalies of character, though varied, generally include pessimism. The individual is only able to recognize a dark aspect, and all occurrences create painful impressions upon their minds, but the dominating note, the one feature of the character of psychopaths which should be immediately recognized, is the extreme mobility of the sentiments, vacillating from exuberant joy to fathomless desolation, from the most aggressive activity to profound discouragement, from exaggerated ego-

tism to an equally exaggerated generosity and devotion, from affection to hatred, or *vice versa*. Hence the term, "mentally unbalanced," is in no way a misnomer. The conduct is marked by its contradictions, its insufficiency of judgment and instability of emotions. The psychopath attempts diverse occupations but is unsuccessful with any, from which he is inclined to pose as a victim, attributing his lack of success to the irony of fate or the injustice of fellow men, and thus he may be aptly designated as "a ne'er-do-well," and in the absence of personal resources he is most likely to become a human parasite or a vagabond.

In reviewing these abnormalities you will recognize many encountered in the normal individual, the distinction, however, arises from the combination of many of these in the psychopath. The psychopaths are further distinguished by the anomalies of their sexual lives, anomalies of degree, erotism, frigidity, anomalies of nature, sexual perversion and sexual inversion, masturbation, sadism, masochism, bestiality, and finally obsessions, including the phobias, etc. These psychical anomalies are usually concomitant with the physical ones which constitute the physical stigmata of degeneration embracing cranial malformation, macrocephaly, microcephaly, scaphocephaly, extreme brachycephaly or dolichocephaly, cranio-asymmetry, harelip, malformation of the palate, dental anomalies, congenital absence of one or more teeth, irregularities of implantation, malformation, as Hutchinson's teeth, anomalies of auricle, defective lobule, abnormal development of the Darwinian tubercle, absence of the helix, irregular pigmentation of the iris, strabismus, malformation of the external genital organs, infantilism, pseudo-hermaphroditism, anomalies in the length of the limbs, oligodactylism, etc., etc., which are inherent together with one acquired sign, namely, tattoo marks, which are so frequently observed among the insane and among criminals, as to class this among the signs of degeneration.

The habitual mental state of the psychopath is easily recognized by any observer of ordinary aptitude. Classification is not essential except to denote the

extent of the degeneration. Every physician, therefore, should keep his observation alert not only in reference to the patients who come under his supervision, but the other members of the family or community. A word of warning to the parents or guardian might result in much future good by interesting the parents in the rational understanding and proper education of the defective. Some of these conditions through proper education may be deprived of their viciousness, or be controlled almost to the point of apparent liberation from it, and others which still persist, but within the range of conscious understanding by the patient, he may frequently be taught how to control to an extent that they become apparently harmless.

Many acquired diseased conditions superimposed upon the congenital or acquired psycho-somatic conditions still further hamper the possibilities of these deviates, and among those conditions which are needlessly so rapidly and so dangerously growing, are those conditions of extrinsic autotoxiosis, mainly those induced by the use of alcoholic and other narcotic drugs, as well as habits of excesses both vicious; and those outgrowing from common social customs. The toxic states which accrue from defective metabolic processes all induce marked degrees of exaggeration of effect over the normal reaction in these patients. The early recognition of these defective conditions, the warning to the parent, the instruction to the parent or guardian or teacher not only as to the nature of the anomaly but the suggestion of curative possibilities, if possible, before fixed habits accrue and the patient has assumed so anti-socially a condition as to be considered more or less incorrigible, should result in a permanent benefit to the patient, the family and society in general. This would tend to eliminate, I am sure, a gradually increasing percentage of the criminal classes, and the victims of moral insanity with which our social conditions are burdened. By reason of its complexity the moral sense, which is the most delicate and most vulnerable function of the mind, we find altered in most of the psychoses and especially in those

accompanied by intellectual enfeeblement.

Possibly the term moral insanity might, in a way be generally misleading, when one stops to consider that somewhere along the line of all moral insanities there can be demonstrated psycho-somatic anomalies extending beyond the moral sphere, and these may be recognized early in life. Moral insanity finds early expression in perversities of character and conduct. The child is naughty, cruel, deceitful, irritable, and may become violent under insufficient provocation, or on the contrary present a condition of contrariness, become taciturn and dissembling. Education commonly fails to modify such natures for obvious reasons. The moral sense is absent and is not constructed upon notions acquired through intellectual culture. The moral sense is the result of a special sensibility, a psychomatic function concomitant with the normal functioning mentality. When this apparatus is absent the most favorable facilities and surroundings fail in their influences and we characterize the individual as immoral, when it seems to me they are in reality amoral. An immoral individual is one who violates the tenets of social ethics and who possesses a relative knowledge of the value of the anti-social act which he commits, but from the delusion that his conduct is only a secret vice, he is led to indulge in such conduct until frequent repetition establishes a habit engendering indifference and carelessness. Thus, true moral insanity may be acquired without any inherent defects, but the moral individual is destined without recognition and restriction to drift into that voluminous class who are quite irresponsible, derelicts on the sea of life, drifting rudderless hither and thither, a prey to their own vacillating impulses or dominated by the will of others; becoming either victims or tools and a menace both to society and themselves. The animal impulses exaggerated with no possibility of inhibition or regulation, frequently obsessed by a single idea with no sense of gratitude and a very finite conception of relative values. These individuals are commonly abandoned by their families or early abandon the family. Unable to see

things in a normal light, they are misunderstood and their conduct is interpreted as purely vicious. In all of these cases one recognizes the combination of numerous psycho-somatic symptoms, characterizing the psychopath, many of whom are moral imbeciles displaying obsessions of kleptomania, dipsomania, pyromania, with suicidal and homicidal tendencies, and in some cases individuals obey their impulses without any resistance, a few, however, are reported to struggle against the impulse but finally are overcome and yield. The whole class, however, present the unconditional evidence of either reduced responsibility or absolute irresponsibility, which is evidently the result only of the psychopathic entity. There are a multiplicity of persons in every day life whom one can recall, who are not below the middle grade capacity of moral imbecility, or those who ascend in the scale toward a higher grade of intelligence of the degenerate class, those who the more nearly they approach the normal the more dangerous they become to society and themselves, for, as we have seen, the psychopath with degenerations may possess certain precocity and even those of the lower grades who are unable to learn to read and write are nevertheless capable of education; in some instances to a degree of considerable art through manual training. The higher intellectual degenerate, equally precocious, is capable of more perfect attainments, and unhampered by any conscientious scruples, is a greater potential cause of evil. Hence the more ambitious the work attempted and accomplished. These may become accomplished artists in criminal practices, while if opportunity occurs and by way of diverting attention from their crimes they will entertain you with the most logical discussion of moral matters. This fact leads to a failure of understanding and much dispute both in and out of the medical profession in reference to the factor of responsibility. Many people fail to see or recognize the degeneration or its result, entire absence of the moral sense, by virtue of the brilliancy displayed in an adroitly accomplished act, and fail to recognize these vicious conditions as the result of defective or diseased states.

The physician's responsibility obtains in analyzing and classifying these conditions to a sufficient extent as to be able to present the matter to the laity in an understandable form, and thus assist them to attempt to arrest the morbid processes obtaining in their children, by seeking the rational means of prevention or restoration, when possible, or reasonable protection when necessary or advisable, under competent counsel. Thus we will protect the deviate against society and society against the deviate.

DISCUSSION.—*Dr. Jepson* remarked on the dearth of papers from our asylums. *Dr. A. H. Kunst* many years ago presented a paper while at the Weston Asylum, and later *Dr. Hood* from the same institution. At one of our asylums we have a superintendent who seems to lack interest in medical matters, for he has never even sought membership in this medical association. It would seem to be good public policy for the governors to appoint none but those who have sufficient interest in medical progress to join medical organizations and attend the meetings. (Applause.) *Dr. Bloss* has shown sufficient interest in the patients under his care to make a close study of their diseases, and thus far he has shown himself to be a progressive man, the best in this respect of the asylum officials. His energy and interest in his work are to be highly commended. (Applause.)

Dr. Henry criticized the delay in sending patients to the hospitals for the insane. The state has not made sufficient provision for the care of these patients. He believed in appointing none but young, active, well qualified men to these public positions, men who will study their cases and show their interest by giving to the medical profession the result of their investigations. (Applause.)

Dr. Yeakley said that appropriations can be secured for diseased trees and cattle, but not enough for a new dining-room at the Weston Asylum. As to the treatment of insanity he thought that the parents and guardians of the young should be educated so as to see that they were surrounded by proper influences. The first sign of insanity or departure from the normal is often seen about the time of puberty, when the young should be especially guarded from bad influences. The routine in high schools is hard on many, especially those with inherited nervous defects. Such children can not be expected to make the same progress as the normal child, and should not be required to pursue the same course. It is not unusual to notice defects even in the primary grades, but not as often as later in the school course, when the pressure is much greater. Physicians should use their influence in regulating the schools, since prophylaxis is most important. After the mental break-down comes, the special institution is the place for the patient. We should strive to diminish prejudice against these institutions. Patients should not be permitted to remain at home. Even the trained nurse knows nothing about the proper management of these

mental cases, and proper early management is all important.

Dr. Wise remarked on the large number of cases of insanity that are due to alcohol or cocaine.

Dr. Wingenter: Papers like those under discussion are of especial value to us. We must learn a lesson from our experience with tuberculosis; we stood helpless before it until we grasped the idea that it was not hereditary; that what is hereditary is only a tendency, a physical tendency to it. We must now learn the same thing concerning insanity, which is increasing because of the stress of our modern life and the inertness of the profession in prophylactic measures in the matter of insanity. We are handicapped in part of our work by the drag-chain of politics. As an instance of what I mean, one county health officer told me that in his service of a very few years he knew of 100 cases of plain delirium tremens which were jailed on a lunacy warrant so that the committing justice might collect the fees. After the patient was better the victim was declared sane by the county physician, called in at this point. We must bear well in mind that defectives are always cases with a physical basis; development has been halted somewhere, but it is a halt in physical processes. Body and spirit make a biological unit; if the bodily development is incomplete, the spirit, which is never incomplete, being a simple substance, becomes handicapped; just as a master pianist would be by a piano with broken or untuned strings. The study of the internal secretions is furnishing us with potent weapons to promote the processes which are halting or threatening to halt. Of course psychotherapy and education have a great influence in the management of the cases under discussion, but it is only one of the means at our disposal, and not the all important one at that. The speaker reported three typical cases illustrating phases of the matter. One was of a young man whose early intellectual development was too rapid, his emotional nature being stunted because of his environment, with the result of only half a man, well educated and capable so far as his purely mental functions were concerned, but unable to mingle and cope with the world of other men. A young girl 15 years old had the mental development of a child of six years only, but was without any moral development and had very little logical faculty. Another, aged 14 years, had neither logical nor moral faculties in evidence. The first case, the young man, is being much benefitted by psychotherapy aimed at the development of his emotional nature, going from the known to the related unknown; and the two young girls are improving markedly by the administration of thyroid and thymus glands. The speaker had no doubt that the improvement would be more marked were he not restricted by the imperfect knowledge of the internal secretions and the fact that his administration of remedies is being done along experimental lines. The point he wished to emphasize is that we are at the beginning of a scientific advance in this matter, and must first be rid of the old notion that our hands are inextricably tied by heredity. He told, in closing, of a family in the state whose uniform record was that the first child born of

every woman of the family proved to be a defective, while subsequent children were normal. Now we know that pregnancy stimulates the pituitary body to increased function and size. Why not, in a case like that noted, stimulate the pituitary by remedies given by the physician, instead of waiting for the pregnancy to do it? Why not save all these first children when it is in our power to do so? The speaker had seen habitual abortion cured in two cases by the administration of mercury in small doses continued for months, and in one case, the new mother, thin and scrawny, had gained 35 lbs. in weight during her gestation.

Dr. McQueen thought that closer attention should be given to pregnant mothers. Few receive any advice. Prenatal influences causing nerve strain may exert a bad influence on the fetus. Breeders of horses are careful to have pleasant surroundings for their brood mares. The same should be secured for our prospective mothers. Early instruction after birth is also of importance.

Dr. Beebe, (Cincinnati): Psychiatry covers the broadest field in medicine. Important along sociological as well as legal lines. Heredity, education and environment make us what we are. Heredity may be discussed indefinitely. What is insanity? We may define it as a group of symptoms arising from defective cell action. A study of anatomy and physiology is a necessity in any disease, and no less so in insanity. The brain contains millions of cells. Mind is the result of the total activity of all of these cells. Heredity has a most important bearing in relation to causation. The mercury used by *Dr. Wingenter* may have hit a luetic etiology in his cases. The doctors should move in these matters. The county societies should get busy, hold public meetings, inform the public as to the necessities. When our legislators are properly informed they are generally ready to do the right thing as to protecting the public health and caring for the unfortunate sick. Prevention is better than cure, and we can do much in this direction.

Dr. J. A. Campbell thought that our authorities sometimes appoint to the asylums incompetent men for political reasons. Better results would be secured if these appointees were chosen on the recommendation of this association.

Dr. Benton, closing, is glad that our members seem to appreciate the possibility of improvement in our defectives. We should have *hospitals* and not *asylums* for our insane. We know how to do things properly, but have not the means supplied us for the proper care and treatment of the defective classes.

Dr. Bloss, closing, said that the constant effort of the authorities to cut down the per capita expense greatly interferes with the best treatment. He wanted the profession to understand that the institution at Huntington is no longer simply a place for incurables, but a place for the treatment of the insane as are the other asylums. Cripples can not be received there unless mentally defective. The members get enthusiastic here in our meeting, but they should not let this enthusiasm wane. You should go home and buttonhole your legislative representatives, and endeavor to convince them of the necessity for more liberal ap-

propriations. Politics should be eliminated from the management of our public institutions. He referred, with approval, to the examinations as held in New York as a requirement for appointment.

TUBERCULOSIS AMONG THE NEZ PERCES INDIANS OF IDAHO

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Just what time tuberculosis made its appearance among the Nez Perces Indians of Idaho is very difficult to determine. It is very hard to get any accurate data from the old Indians who are still living. Each one will tell a different story. Indeed the stories of the same men will not agree if a period of several months is allowed to lapse between the tellings of them. It is the tendency of all Indians to give the whites credit for introducing tuberculosis among their people. But after a careful investigation covering a period of several years, I am inclined to believe that the disease was known among these people before the white race appeared on the scene. There is a history of tubercular adenitis in this section as early as 1830. And all the old Indians agree that a few cases of the disease occurred before the white man invaded this country. But one fact appears very prominently, namely, that the disease has spread very rapidly during the past forty years. Its greater activity among these people in recent years has been such that their extermination is threatened.

The first official report we have of tuberculosis among the Nez Perces was in 1872. The Hon. John Monteith, U. S. Indian agent, made the following report: "There has been considerable sickness among the Indians, and what is very unusual, many have died with consumption during the past winter, a disease which has lately come among them. The Indians as a general rule, remain closer to home than heretofore. It has been their old custom to move off to near the Snake river to be near fire wood. But in recent years the Indians have begun to live in permanent homes." This official report was recorded just forty years ago.

Notice the contrast of an official re-

port made by Dr. Murphy two years ago: "Of four hundred families visited on the reservation, but ten were free from tuberculosis, and as near as I can determine at least 75% of all the Nez Perces are afflicted with some form of tuberculosis."

A careful study of the causes of death among these people for the past ten years, revealed the startling fact that 90% of all the deaths are due, directly or indirectly, to tuberculosis. Now what has caused this change to come about I will try to explain the best I can.

At the time of their historic expedition, Lewis and Clark estimated the number of the Nez Perces at 8,000. In 1895 the Census showed the population to be 2,200. In 1905 it was but 1,300. Last year the death rate from this disease alone was forty to the thousand. During the past fourteen years at least one thousand have died from this disease.

Causes of the spread of this disease. Tuberculosis is known among these people as "the hidden disease," and from its insidious onset it is well named. In order to understand why the disease has increased so rapidly among these people during recent years, we must study the habits of the Indians and the changes that have taken place. Formerly they roamed over a tract of land that extended from eastern Montana to western Oregon. They made periodical excursions to the east to kill buffalo, to the Falls of the Columbia to spear salmon, and to the adjacent plains to dig camass, a plant whose bulbs were used as food. The winters were spent in the valleys, the summers in the mountains. Warfare was carried on with the neighboring tribes. In those days these people were a very busy and industrious people. The tepee was their home, and the top being open, the ventilation was perfect night and day. The search for food and their conflicts with the enemy furnished exercises that gave strength to bone and sinew. Their camps were frequently changed. When one place became filthy, they moved on and allowed nature to disinfect. Their wandering provided a change of scenery, and their temporary homes did not provide a breeding place for disease. The sick fell by

the way and did not remain with the well, to prove a constant source of infection. These Indians came in contact with neighboring tribes with whom they intermarried, and thus they were constantly introducing new blood into the tribe.

Now let us consider what has taken place during recent years. The Indian was shut up on a closed reservation. Finally he was allotted land, and began to make a permanent home. His lands were leased and he no longer worked for a living. He became an idle man, having no occupation, and giving his time to leading a life of dissipation. He no longer hunted for food, but was content to live on the canned goods of the Yankees.

Small, ill-ventilated houses were built. The sick and the well lived together. Their houses became filthy and proved an ideal place for the germs of the disease to live and multiply. Ambition gone, occupation gone, the Indian lived a life of idleness. Their bodily resistance became weak. The people no longer mingled to any extent with neighboring tribes. Marriages among themselves went on to such an extent that inbreeding is one of the most serious causes of their physical decay.

Causes of the Infection:—Ventilation is completely foreign to an Indian's nature. It is with great difficulty that you can get them to pay any attention to this important part of sanitation. I have known twenty or thirty to gather in a small room where an advanced case of tuberculosis had been housed for months, and close all the doors and windows, even plugging up the key hole. There they would remain for hours inhaling the dust-laden air over and over again. The principal source of infection is the dust-laden air of their filthy and ill-ventilated rooms. No attention was paid to the sputum. The sick and the well alike expectorated on the floor, and the sputa soon dried and was carried by the dust of the room to the Indians' bronchial tubes.

Infection from tubercular milk can be eliminated in a few words. Milk has never entered nor does it today enter into the diet of the Indian. I have visited a number of tribes and find that very little

milk is consumed by the Indian. In the spread of the disease among the Indians I do not think bovine tuberculosis has played any part. I believe that the infection is chiefly a house infection. Several years ago I knew two large Indian families who lived about four miles apart. The other Indians remarked that these two families were just like the whites, as none of their children died with the "hidden disease." One family had twelve children, the other eight. All the children were in excellent health. About nine years ago a niece of the larger family was sent home from a non-reservation school suffering from tuberculosis. She made her home with her aunt. The disease process arrested, she, to some extent, regained her health. She married into the family of eight children and made her home alternately with both families. One year after marriage she gave birth to a child, after which her disease became active. The family of twelve children contracted the disease, and one by one all died including the father. Six out of the family of eight passed away from the same cause. The woman gave birth to three children, all of whom died, she herself finally dying, after having herself seen two families practically go out of existence from the infection which she introduced.

The Indian race has not developed the resistance to disease to the same degree that the white man has. Measles, small pox and erysipelas are very serious diseases with them.

Forms of the disease. Fully ninety per cent of all cases are of the pulmonary form. Bone tuberculosis is very rare. Gastro-intestinal infection is not common. Although the majority of the children contract the disease the first year, the prevailing type is pulmonary. Only two cases of tubercular peritonitis have come under my observation, and both cases were in the aged. Tubercular adenitis is very common under the twentieth year. The glands of the neck and the bronchial glands are generally infected. The glands at the angle of the jaw and just in front of the sterno-cleido-mastoid muscle often ulcerate and break down. The majority of all old Indians' necks are scarred

up, which bears witness to the ravages of tubercular adenitis in their youth.

Prognosis: It is useless for me to state that this is bad, but it is surprising how many recover; at least the process is arrested. Most of the cases are the chronic ulcerative type. Very few have the acute or galloping form. I think of all the children born, fully fifty per cent die with this disease within the first two years of their life.

Fifty per cent of all the school children are afflicted. But many who are afflicted for years finally recover and become strong. After the twenty-first year the disease decreases very rapidly, though some of all ages die. The disease often becomes active during pregnancy. A close examination of nearly all the old Indians will reveal some evidence of the disease, viz: irregular chest, scars, dull patches at the apexes, etc. I have observed many advanced cases arrested and the patients live in fair health for years. All cases improve when the Indians go on camping trips in the mountains during the summer months.

I feel I have recited enough facts to make it clear that unless there is a change it will not be many years till the small Indian tribes will be exterminated.

What shall be done? is the most important question. How can we combat this deadly disease and limit the infection? In answering this question I would state that it is a very difficult problem.

We are all familiar with the obstacles we meet in trying to stamp out the same disease among the whites. But it is an easy task compared with what confronts the U. S. Indian Medical Service.

Consider for a moment a race of people who are self-satisfied, who imagine their knowledge of disease exceeds that of the most scientific white physicians; a race of people who are ignorant of sanitary laws and do not want to be informed on the subject; a people who have for years been under the influence of the native medicine man, who attributes all diseases to evil spirits, and thinks the only way to get rid of them is to charm or scare them out of the body by hideous noises and dancing; a people who are indifferent, selfish, and only care for them-

selves; a race of people who do not believe in isolating the sick; a race that is intemperate in all things, giving away to their passions on all occasions; and a race full of superstition. They will burn all the belongings of the dead, and in many places the very sick are carried out to some isolated place and left alone to die. This race is very suspicious of the white man for they have long learned that the white man has only made agreements with their people to break them. This race, if it only had the power, would wipe the white man off the earth.

These are some of the difficulties that one has to contend with when he starts a campaign of education to eradicate the "great white plague" from among the red men. For a number of years the school children have been taught all elementary principles of sanitation. The churches have preached ventilation. Field matrons have gone from house to house teaching the Indians how to clean up and put their places in a sanitary condition.

The danger of the infected sputum has been thoroughly explained to them, and how to destroy the sputum is known by all the school boys. But the work has advanced very slowly. About one year ago I distributed anti-tubercular literature among all the Indian homes in this tribe. I believe more attention was given to these small tracts than anything that has been done here.

It is an easy matter to explain so all will understand, but to get the people to follow one's instructions is a very difficult task. Some two years ago I called a number of the leaders of the tribe together and explained the danger from the tubercular sputum. I told them how to destroy the same; also advised them to try to break up the habit of spitting which is so common among them.

I called for a vote and told every one to say yes who would try to stop spitting. Every one answered in the affirmative, but nearly every one expectorated on the floor immediately after.

But one can see some good from the long teaching. I often see the windows of homes open at night, and the Indians will sometimes come for a disinfectant to

use in their house after one of their family has died with the disease.

On the evidence that so many of the children recovered from the disease, the Department finally decided about two years ago to establish a tubercular sanatorium here for Indian school children. A fifty bed institution was opened. During the first year fifty-two patients were treated in the institution, the most of them incipient cases, with the following results, viz:

Total enrollment	52
Number improved	40
Number of deaths	4
Number discharged as cured	2
Number discharged improved	6

The results were so satisfactory that it was decided to make it a national institution and increase the capacity to one hundred and fifty beds. We have ten different states represented this year, and so far have had only one death, and the patients are doing very nicely. Nearly all the incipient cases will recover. Our patients sleep out on porches. It has been so mild here the past winter that every night our patients have slept out. We give them strict personal attention and each patient is detailed every morning according to the physical condition. We have a beautiful location in the valley between the mountains. The farm consists of twelve hundred acres. We have our own dairy, chickens and fruit, and we raise our own vegetables. I think the institution will prove a great blessing to the orphan Indian children in the U. S. who are afflicted with tuberculosis. Heretofore they have been sent out to die, often without friends or money. Here we care for them, and many will be restored to health and happiness.

March 1, 1911.

If a patient with acute gonorrhoea is kept in bed on a restricted diet, the saving of time in the cure will amply repay him for the confinement.—*American Journal of Surgery.*

The filiform bougie is not used to good advantage if employed after the passage of a sound or large instrument, as splits of the mucous membrane are produced into which the filiform finds its way. It should be the first instrument employed.—*American Journal of Surgery.*

SURGICAL TREATMENT OF THE HYPERTROPHIED PROSTATE WITH SOME OF THE ADVANTAGES OF A TWO-STAGE OPERATION.

John Egerton Cannaday, M.D., Charleston, W. Va., Surgeon to Charleston and McMillan Hospitals.

(Read at annual meeting of West Virginia Medical Association at Parkersburg, W. Va., October 6, 1910.)

Though a man hath the wealth of the Indies, what availeth it all if he cannot pass his water. A very prominent and successful West Virginian who lived in this vicinity once remarked that he spent the first half of his life trying to make money and the latter half in trying to make water. Had he lived in these latter days of specialists—genito-urinary and otherwise—he might have passed his later decades in peace and plenty enjoying the autumn of a well spent life.

It is peculiarly unfortunate that masculine old age should be so filled with a grievous pathology. Woman as a rule has her most disagreeable troubles earlier in life when youth and strength are better fitted to cope with them. No one has satisfactorily explained the cause of prostatic enlargement, but it must be due to civilization, to our deviation from the standards set by nature.

The symptoms urgently calling for surgical relief are retention, residual urine, and infection. These in time come in every prostatiker. In times past a legion of methods have been employed to combat these. I will mention a few. Cystotomy, suprapubic or perineal, with the establishment of a permanent fistula for drainage, was for a long time the only hope held out by surgery. Hunter McGuire was the master spirit of the suprapubic epoch. He perfected this operation and achieved results that were far from poor, judging them by the present day standards. He devised an obturator for the sinus that kept the patient in a condition of comparative comfort and cleanliness. Later Bottini, Young, and others cut a good sized channel through the obstructing lobe with an electric cauter, and for a time the urine ran smooth

ly, but this method usually gave but temporary relief. A few years more and the trouble was attacked in its real stronghold, some making use of the perineal method, while others removed the prostate transvesically (through a suprapubic incision.) There have been modifications of this and that operation until we now have numerous prostatectomists in the ranks of the surgical profession.

Freyer in England, and Young in this country have led the two opposing camps, one of which advocated the suprapubic and the other the perineal route. The differences, like those of chloroform and ether, appear in many instances to be geographical. As regards the completed operation at one sitting, the perineal prostatectomy undoubtedly gives a slightly lower operative mortality than the suprapubic operation; but with a reasonable selection of cases and a two-stage operation the suprapubic mortality should be zero.

The suprapubic operation permits inspection of the mechanical obstruction under direct vision. If reasonable care is taken there should be no obstruction in any case after this operation. After this operation, too, the patient should be fully able to empty his bladder, he should be continent, and his suprapubic fistula should close promptly. He should be potent in the majority of cases. After the perineal operation some cases have had permanent incontinence. The obstruction is not always relieved. The drainage fistula may remain open most stubbornly and persistently.

When we come to the immediate effects of bladder drainage we will see that a suprapubic opening drains quite as well as one through the perineum. Formerly it was held that gravity was the all-powerful force in drainage, but now it is known that these drainage fluids go in the direction of least resistance.

The bladder sinus remains open for three weeks or more, but this is desirable, as it gives the distended, thinned bladder wall a much needed rest, it gives time for the resumption of tone and muscular stability.

Generally speaking a two-stage pros-

tatectomy cuts the operative mortality to nearly nothing.

The removal of every enlarged prostate is not by any means necessary or desirable. There are many cases in which urinary antiseptics, irrigation, and a sane catheter life are preferable. I refer to those whose years and arteries will not permit radical interference. When I propose to treat a case surgically the patient is given urinary antiseptics such as formin and sodium benzoate in full doses one hour after each meal, and advised to drink large quantities of water. The bladder is irrigated daily with normal salt solution. After about a week of this treatment the preliminary operation of opening the bladder suprapublically is done under novocaine local anesthesia. A large calibered short soft-rubber drainage tube is attached in the bladder opening so that the bladder end just passes the vesical mucosa. Previously to inserting this the freshly-made wound is swabbed with pure tincture of iodine to prevent the absorption of the pus and urine. The bladder is irrigated two or three times a day, the urinary antiseptics are continued, and the patient built up into the best possible physical condition. Generally after a week or ten days of this treatment the prostate is enucleated under a brief ether anesthesia. In many cases the work can be done under primary ether anesthesia.

The keynote to the after treatment of these cases is the lavish use of water. The bladder should be irrigated with hot saline solution until the bleeding stops, afterwards continuous irrigation with warm saline solution for at least twenty-four hours. For several days thereafter irrigation should be frequent enough to keep the bladder clear. A very important part of the after treatment of a suprapubic prostatectomy patient is the passage of large sounds of about twenty-eight size French every ten days or two weeks for the first two months; after that about once every six weeks for the first year. The preliminary and post-operative treatment is of more importance than the operation itself. The continuous irrigation at first is a necessity for the prevention of toxemia and infection from urin-

ary absorption. Unless sounds are passed the patient may develop a long narrow stricture that will be difficult to overcome.

Capitol City Bank Bldg.

Discussion.

Dr. Hupp desired to emphasize the importance of getting these patients out of bed as early after operation as possible. They can often get up as early as 48 hours after. Long stay in bed is apt to be followed by bad results. He called on Freyer in London and saw his great array of tumors that had been removed from the mighty men of many lands, earls, dukes, etc., some coming even from Turkey. Freyer spoke well of Young's operations, admiring his statistics. He admitted that he had not done this operation. The two operations were discussed in the meeting of the genito-urinary surgeons, and, as he recalled, only Young and Cabot preferred it. To perform it well one must know his anatomy well. He had done a few cases by the suprapubic method. One patient of 90 years he had out of bed in 48 hours.

Dr. Timberlake preferred the perineal route. The Freyer method should be pursued by the novices, as it is much simpler. It is not necessary to open the bladder suprapubically to explore the bladder, as this can be done by the use of the cystoscope in experienced hands. Stones, diverticulae, hypertrophied lobules, can all be seen. Where this instrument has not been used the combined operation is a good one. Agrees with Dr. Hupp that patients should be out of bed as soon as possible. Even change of position in bed is important.

Dr. Cannaday had seen Freyer operate, which he does very rapidly, sometimes in a minute and a half. The double operation, that done in two stages, has its advantages. To drain by catheter in urethra causes a rise in the temperature.

A MEDICAL SOCIETY—A CLEARING HOUSE.

The well conducted medical society represents a clearing house in which every physician of the district receives his intellectual rating and in which he finds out his professional assets and liabilities.—Osler.

THE NOBILITY OF MEDICINE.

M. M. Hoff, M.D., Philippi, W. Va.

(Annual Presidential Address to Barbour-Randolph-Tucker Society, Jan. 5, 1911.)

In assuming the duties of the presiding officer of this Tri-County Medical Society, I must confess that it is with a feeling of great diffidence. When I reflect upon the names of my predecessors who have occupied this chair, their great achievements in medicine, the high rank to which they attained, and the good which they accomplished, it is no wonder that I assume the work with embarrassment. You will, therefore, permit me to offer you my very sincere thanks for the honor which you have conferred upon me. In assuming the duties as your chairman, I hope to be just to all, and if at any time my work should appear otherwise, please attribute it to my head rather than my heart.

Every man should regard his profession with pride. He should see in it something to challenge his admiration and win his affection. He should seek to view it on its sunny side and in its fairest aspects. He should feel that love and regard for it that inspired him with energy and enthusiasm in its pursuit, that enable him to triumph over its difficulties, and to glory and revel in its charms. He who looks upon his profession with disfavor, who thinks meanly of its labors, and speaks with dishonor of those who belong to it, will inevitably be a drone, and the action of all his powers will be sluggish, and in despising the pleasures of professional pride, he misses the finest enjoyment of active life. To perform with fidelity the duties of the profession to which, for a time, Providence has called us, should indeed be the object of our solicitude.

But when we compare the results which the different callings in life are capable of producing, we discover that there are different degrees of dignity to which each is entitled. Aside from the purity of a man's heart, and the fidelity with which he discharges his duties, there are the effects which his labors may produce upon those about him and upon society. The

callings of life also have their comparative value, and exert their respective influence in the economy of the world's progress. Beyond the claims of the personal dignity of the individual, and of integrity and honor which should be cultivated in every profession, there are grounds of distinction in the results of his labors. But the man on whose skill and energy the permanent improvement, the mental growth of large numbers of human beings depend, has a higher destiny. The noblest object for which any man can live is, without doubt, the cultivation of that part of him which is imperishable. We are created with the special design of improving our gifts, and we have only to refer to the country physician, who travels through all kinds of weather, over all kinds of roads, and at all times of the year, in the day or the night, who certainly is entitled to the homage of his fellow man. Oftentimes with no friendly brother to aid him, without the necessary instruments, without precedent or previous experience to guide him, without the time or opportunity to consult even the small library he owns at home, he is compelled to act alone, promptly and courageously, if he is to save the life that may be fast passing away before him. Thus we may have a just conception of the dignity and value of the practice of medicine and the relation it sustains to the world's thinking.

Dr. T. W. Moore, late president of our State Medical Association, so splendidly, in his address before the last annual meeting, made clear and pointed the most excellent progress of many advancements and developments in West Virginia, and it was well said when he marked the line so clearly to the future dignity and successful work of the physician; and I hope every physician in this State will read the address, as he may with profit

The unfolding of the leaves of the professional book for the year 1911 should be our greatest pride. We cannot, therefore, but look at our profession as equal, if not superior to any other in success, in profit of labor, and in all of its benefits. We should, therefore, awaken to increased professional activity and realize a greater year in the practice of medicine

than ever before. There is a grandeur in the profession of medicine which is hardly equalled among the callings of life. It is the business of the physician to search out the facts which enable him to be successful in his work. We can scarcely conceive a more exalted idea than that of medicine in all its branches. All know the trials of the physician. Who can recount the burdens that he bears on his bosom during his waking moments and the perplexities that disturb his midnight slumbers? What profession is there in which the serious responsibilities are as great, or in which the future teems with results so momentous? No man can put confidence in a physician and entrust to him important duties without assurance of his ability to perform them. He should, therefore, seek first of all liberal ideas as to the successful conduct of his calling. Too often disease and conditions existing about him are overlooked from sheer neglect. One should be accurate in observation, careful in details, honest in his professional work. Though his labors are not apparent, and he does not create so much noise and stir in the world as some who are engaged in other occupations, yet the physician's duties are not on this account the less arduous and real. We know that many people manifest a disposition to confide in one who boasts loudly and who is possessed with the idea that he has superior qualifications, rather than in one who, by long study and experience, has prepared himself for a responsible position, and puts forth his pretensions with modesty. In the ordinary human mind there seems to be a defect that insensibly draws many people to the quack. Let a man come into a town with a name spelled with a continental combination of letters, and post upon the corners of the streets flaming advertisements setting forth that he is a great somebody from a great city somewhere, and that he has letters from innumerable sick folks who have been miraculously cured of their illness by the use of his all-curing and never-failing medicine, and instantly those afflicted with every kind and degree of disease, without any other knowledge of his character or any acquaintance

than that which they can secure from the trumpet which he himself blows, rush forward, eager to see which shall trouble the waters first, and without murmuring, they pay any sum which he in his caprice may demand; while the well-read physician at our doors, who has spent many and the best years of his life in a careful study of diseases and remedies, who is acquainted with the hereditary taints and temperaments of the families in the community, who in sunshine or in storm, by night or by day, is ready with a willing heart to turn out and administer to the sufferings of the people who have often tested his skill, is passed by or paid grudgingly for his services.. But with determination and courage such faithful men pursue their calling for with such minds nothing is higher than truth itself, nothing more noble than to do right. Without such splendid character, which belongs to and goes along with true manhood, how little there would be of note and interest in the history of medicine. The life of the earnest and true physician everywhere is one of sacrifice, of labor, of worry, and of courageous action.

In conclusion, I hope the ushering in of the new year, 1911, will bring you success, and may the future life of each and all of you be one of peace and perfect happiness, and may God grant to all a long life filled with good deeds.

HERPES ZOSTER OPHTHALMICUS CAUSING BILATERAL PTOSIS.

C. F. Mahood, M.D., Alderson, W. Va.

The rarity of this condition, especially in children, prompts my reporting the following case:

Raymond D——. boy of five years, was brought to me on March 19th, 1911, with a vesicular eruption on face alae of nose, the eyelids, around the orbital regions, forehead, and extending back to the lobes of ear. Along with this condition was a decided drooping of both upper lids, and in a few days the ptosis was complete, as is shown in the accompanying photograph, which does not show the herpetic eruption. At this time there was no involvement of the ocular conjunctivae or cornea. Later there was

for a few days a decided conjunctivitis, which cleared up promptly under a simple collyrium. There was no interference with the pupillary reflex or the ocular muscles.

The child had never complained of any noticeable pain. His temperature and pulse were both normal and he was apparently in good health and had never had any serious or recent illness. The parents were both healthy and no history of a syphilitic taint could be obtained. Had the herpes been present without the ptosis, my diagnosis would very likely have been eczema. Blepharospasm and lagophthalmos were both excluded. The trouble came on rather suddenly and almost simultaneously with the herpes the ptosis developed. The herpetic patches were small and rather numerous, and, after healing, tended to leave scars. In attempting to see, the child would elevate the head and with fingers lift the lids.



The trouble was evidently due to peripheral irritation of the first branch of the fifth nerve, supplying the parts, and was followed by paresis of the motor oculi branches, supplying the levator palpebrae superioris.

The literature at my command is not great, but I note that Fuchs in his Text Book states that paralysis of the motor oculi occurs sometimes as a result of zoster ophthalmicus. And much more serious results are sometimes noted. Stelwagon states that in this form of herpes "disastrous consequences sometimes ensue, even to the extent of complete destruction of the eye, pyemia, meningitis, and death." And Scaumberg says: "In herpes zoster ophthalmicus

severe destructive inflammation of the cornea, iris, and, indeed, of the entire eye may occur in rare cases.

Treatment was symptomatic and expectant. A mercurial purge was given twice at the onset of the trouble, and the child was placed on a tonic of iron, quinine and strychnia. When the vesicles ruptured they were touched with a 1% solution of silver nitrate, and ammoniated mercury ointment was applied locally, and the herpes was apparently cured at the end of the second week. Stimulation by electricity was given over the course of the nerves every third day, and at the end of the second week the child was placed on increasing doses of potassium iodide, which was suggested by Dr. J. A. White of Richmond, to whom I had written concerning the case.

The improvement in the ptosis was gradual, but complete after a period of about five weeks from the beginning of the trouble. The child is now to all appearances perfectly well.

CENTRAL TEAR OF PERINEUM.

Morgantown, W. Va., May 14, 1911.

Editor W. Va. Medical Journal:

In consultation with Dr. M. Livey I saw the case described below. Mrs. M., American, mother of two children, first one born three years ago, gives a history of having been torn at that time, and has been in poor health ever since. The second child was born April 28th, 1911, before the physician arrived at her home. On examination he found a large central tear of the floor of the vagina and a puncture of the perineum, the rent extending to both sulci of the vagina, through the anal sphincter extending around the anal orifice.

The vulva was not dilated, so the child, weighing five pounds, was born through the perineal puncture.

In looking up the literature on the subject, I find that seventy-five such cases have been reported.

This case was repaired at once, but not under favorable conditions, and hence healing was not complete. She is to be taken to a hospital and given further attention.

Very truly,

R. H. EDMONDSON, M.D.

Correspondence

LETTER FROM VIENNA.

Vienna, Austria, May 7, 1911.

Editor W. Va. Medical Journal:

I did not visit any clinics until I reached Rome, where I had the good fortune to become acquainted with a native physician who speaks excellent English. The doctor took me through their beautiful hospital, The Policlinico, which has recently been erected at a cost of nearly \$12,000,000 (60,000,000 lire).

I was very much surprised at the completeness and thoroughly modern arrangement of this institution which is exclusively for the poor. Patients who are able to pay either the physician or a portion of the hospital fee are not admitted.

The central building has over the main entrance a large bas relief, said to be a fine work of art, representing Lister explaining asepsis to the world. This extends the full width of the building.

Each department is complete and independent of all other departments. For example, in the ear, nose and throat department, on my first visit I was shown to a room where they were administering salvarsan. This room is used only for giving drugs by injection, which by the way is a very prevalent method here. This department is under Prof. Ferreri whom I had met several years ago in New York, and who received me with the greatest courtesy. There are several operating rooms, a bacteriological, and X-Ray, a transilluminating, and numerous other rooms complete for the special work for which they are used.

I saw numerous cases where laryngotomy had been performed for the atresia that so often follows intubation. They follow a method similar to that of Chevalier Jackson of Pittsburg, by keeping the larynx open until it is covered by epidermis and then close it by a plastic operation. Ferreri has his own dilating apparatus which differs materially from Jackson's tubes.

In Rome, where it is said that you are never out of the sound of falling water, you are not surprised that the entire hos-

pital is so constructed that each room can be flooded with a hose, after operations, etc. You know that a few years ago when the amphitheatre of the Medico-Chirurgical College was so built, it attracted much attention.

Another feature of the hospital of which the Romans seemed very proud is, that each building is so arranged that it can be completely surrounded by water in case they desire to isolate it on account of contagious disease. I am unable to appreciate the practical importance of this measure, but it must have some advantage, as it adds greatly to the cost of construction.

The buildings are heated by air which is brought in through large chimneys erected in the gardens. It is filtered and heated and forced into the wards, the impure air being carried away through the roof. The temperature is regulated by a thermostat in each ward, the dial being turned to the degree of heat desired.

In the eye clinic I was much impressed by Prof. Circincione and the work he is doing. The medical students, who must spend six years in the medical department of the University, are taught to operate, and the morning I visited this clinic I witnessed about fifteen operations, under the professor's direction, he performing only the intra-ocular ones. He is very dextrous and thorough, and it was remarkable to me how skillfully the students did the work. Prof. Circincione is quite ingenious and has invented a knife for separating the lachrymal sac from its attachment in the bony canal, which impressed me very much. He also has an instrument for measuring the accommodation, which is much more convenient than the rules we use at home.

This department is equally as complete as the other ones in this hospital. A feature that awakened my enthusiasm was the drawings, being made in colors by artists, of rare ophthalmological conditions either microscopic, ophthalmoscopic, or of external diseases. This is not common and in the United States it is difficult to avail ourselves of the services of any one competent to do such work.

I am told that the work in Prof.

Durando's surgical clinic is equal to the best done anywhere in the world.

In the gynecological amphitheatre the arena is entirely separated from the surrounding seats by a glass partition that extends to the ceiling, thus preventing dust, etc., from being carried by the observing students.

Chloroform is used altogether as a general anesthetic in Rome, and I am informed is preferred all over Italy, while in Vienna there seems to be a division of opinion, some operators preferring chloroform while other surgeons of equal ability use Billroth's mixture (A. C. E.) which is not our old 1, 2, 3 formula, that I had been taught to call the A. C. E. mixture, but as follows: Chloroform 80 parts, alcohol and ether each 10 parts. I have been here now three weeks, and think that I have averaged seeing at least two operations a day, and have not seen ether used one time. This is very encouraging to the unprogressives like myself who have never been able to appreciate the advantages of the latter.

The Romans, it is said, cannot do anything on a small scale, and their hospital seems to verify this statement. At the beginning of this letter I mentioned the cost of what has so far been done. There is now appropriated \$2,000,000 (10,000,000 lire) for additions to the hospital, so when completed they will have over 3,000 beds in this great institution.

The nursing does not begin to come up to this work with us, but they have recently brought English nurses to the institution, who will take charge and establish proper methods of training.

Dr. Harris of Randolph county came on the steamer *Ville Franche*, to join his wife, who crossed with us. He had finished his work in Vienna and contemplated visiting other European clinics until his return home.

I saw where Dr. J. H. Doyle and his wife, Dr. Anna Doyle, were registered in Rome. They had been in Vienna for nine months and were bound for Fall River, Mass., their future home. I am sure that all who have been identified with medical organization in our state will deeply regret their loss to the West Virginia medical profession.

T. W. MOORE.

Selections

FUNCTIONAL ALBUMINURIA.

I. O. Nellis, M.D., Herkimer, N. Y.

Probably the importance of making a differential diagnosis as between the different species of functional albuminuria, namely, Dietetic, Malassimilative, Uric Acid, Severe Exercise and true Albuminuria, or Contracted Kidney cannot be overestimated.

In dietetic albuminuria albumen is found in the urine only after certain articles of diet are ingested, such as cheese, eggs, etc., and therefore it is not constantly present, but occurs at special periods, say, after dinner or supper, and can only follow the taking of food, and, as a rule, appears very promptly and is attended by no other symptom of disease. A very important factor to remember in making a diagnosis is that albumen is never found in the urine before breakfast and that the nervous system is never disturbed, as in other forms of kidney trouble.

The sp. gr. of the urine is high, and this condition seems to be invariable in these cases, and in fact a high sp. gr. in any urine is good evidence that it is not from a case of true albuminuria, except in those advanced cases where the solids are diminished, but it is more than offset by the decrease in water, which increases the sp. gr., and again it very frequently happens that high sp. gr. is associated with harmless albuminuria.

Again, the absence of albumen in the early morning urine in dietetic albuminuria becomes a matter of great importance both in examinations for life insurance and civil service examinations.

A case to illustrate: A young man aged 19 presented himself for examination for life insurance at 2 p. m. Urine voided in my presence. Reaction highly acid. Sp. gr. 1026. Albumen, yes. Sugar, no. Dinner, cheese sandwich and glass of beer. Repeated the examination the next day at 9 a. m., same result. Breakfast, eggs, toast and coffee. Next day had urine voided first thing in the morning. Reaction acid. Sp. gr. 1020. Albumen none. Sugar none. Second trial, same result. Here was a case of true dietetic

albuminuria, due in our opinion, to the plasma of the blood becoming nearly acid, thereby allowing it to pass through the membrane of the kidney, carrying its albumen with it, for it has been shown that in order that the blood is to be retained within the arterial walls it must be alkaline in a high degree.

Dr. Pavy, of London, cites a case occurring in his practice, when a young man seeking a position in the English civil service was rejected on the ground of the presence of albumen in the urine. His medical adviser thought of the possibility of dietetic albuminuria, and found that his urine passed on rising in the morning was perfectly normal in its constituents. This applies in this country with great force to candidates for life insurance.

The albuminuria of severe physical exercise is similar to the dietetic form, but differs from it in the fact that it occurs only after strenuous excitation, the digestive and nervous systems not being disturbed. Here, again, we have the alkalinity of the blood decreased, thereby allowing the blood plasma to readily ooze through the arterial walls, resulting in transient albuminuria.

It is difficult to distinguish between dietetic albuminuria and that form due to malassimilation. In that form of albuminuria due to or resulting from excessive uric acid formation we have the following train of symptoms: There is indisposition to mental or physical exertion; great anxiety about condition; bladder irritable; albumen is found in the urine, frequently being most marked in the afternoon evacuations; epithelial casts are occasionally found; urine is acid in reaction, with a sp. gr. rarely below 1020, and often deposits quantities of "brick dust." This form of albuminuria may be so marked as to be mistaken for true Bright's disease, particularly when bodily waste, fatigue, headache and vertigo are associated. But the cardiac lesions of Bright's are absent, as also are the eye lesions and dropsy, and the actual character of the urine is most significant, and in making a differential diagnosis we are to be governed first of all by a urine having a high sp. gr., but being normal in amount or possibly lessened; the sp. gr. generally rang-

ing from 1020 to 1030, but it has persisted at a higher degree. Urine on standing deposits urates, and sometimes uric acid, and frequently mucus. Sometimes in the deposits, instead of the urates, we find crystals of oxalate of calcium. Uric acid does not of necessity show itself in urates, and from this fact it is best to chemically treat for it. The solids are increased. Salts normal. Chlorides increased and not diminished as in Bright's. Phosphates normal or increased. Urea not deficient.

Now as to the amount of albumen in these cases of uric acid excess, we find the amount generally small, but it varies with the time of day. It is generally more frequent after breakfast, and it is at times absent, especially in the evening urine. But here, as in other cases of so-called intermittent albuminuria, there is this fallacy—the albumen is not absent really but only greatly diminished. A fine test, such as the use of acetic acid to acidulate the urine, and then the use of Tanret's test, may bring it out: casts are scanty or absent; in character they are hyaline or epithelial; rarely granular, never fatty.

The great trouble in diagnosis of these cases of uric acid albuminuria is from cases of contracted kidney with obscure beginnings, where the amount of albumen is extremely small and at first intermittent. But even here we have the low sp. gr. of urine of contracted kidney to guide us; and the crippled organ does not pass off abundantly urea, urates or oxalates; with contracted kidney once established there is no trouble—the heart symptoms and the retinal changes are too significant.

The pathological condition which gives rise to the albumen of uric acid and oxaluria is essentially a congestion of the kidney, with slight local inflammatory changes in the vascular cortex from the irritating effects of recent amounts of ill-formed or broken down tissues in the form of urates, urea, or these imperfectly oxidized oxalates. In other terms, the kidneys are not the primary cause of the trouble, but simply the kidneys suffer because they are compelled to throw off irritating waste products. Anything that lowers vitality and disturbs the ner-

vous system may increase the difficulty of assimilation, and with it the irritation and congestion which produces the albuminuria.

The question whether this variety of albuminuria passes into the true organic affection of the kidneys is of serious importance. It is possible, of course, but considering the force of the irritating agent, it is far rarer in occurrence than would be supposed at first thought. When this does happen, it is brought about by constant irritation, leading to slow fibroid changes, and gradually developing interstitial nephritis.

When we reach the important question of treatment of these forms of albuminuria we must bear in mind that we are dealing with a special disease, one in which malassimilation is the main element and the kidney affection only a conspicuous expression. The treatment must not be, therefore, purely that of Bright's disease as we meet it commonly, but largely that of the underlying state, a condition with which we are chiefly familiar, as lithemia or as oxaluria. The lines of treatment are, it is true, largely parallel. Thus it is just as essential in this form of albuminuria as in ordinary forms of Bright's disease to lessen the work of the kidneys by calling the various emunctories into play. In fact, it is more essential, for the kidneys have not only their usual work, but largely more than their share of work thrown upon them, and this extra work leads to damage. Their labor can be much lessened, and the blood conditions and the character of the excretions altered by close attention to diet, which is, in the main, almost the treatment of Bright's disease, although it is stricter as regards the ordinary carbohydrates, and, on the other hand, does not insist so much on milk.

Vegetables, especially the green vegetable and fruits, are freely allowed; coffee and cocoa are sanctioned if sweetened but slightly; so are small quantities of oatmeal, corn cakes, rice, bread and butter; also oysters and fish. The white meat of poultry and game can be eaten with moderation, but the meats containing much nitrogen, such as mutton and beef, are to be avoided. I find, however, that where the patient indulges

in considerable exercise, especially in young men, that meats may be eaten in careful amounts without damage. Milk is especially useful in these cases; in fact there are a number of cases on record where a strict vegetable diet effected permanent cures after an exclusive milk diet had left the urine albuminous. Eggs may not be forbidden, but should be given in moderation, and the yellow portion alone eaten. It is well to be strict as to sugars, for most commonly they aggravate the symptoms; hence beets and rhubarb should be forbidden. Salt, however, should be freely taken. It is important to keep the kidneys flushed, hence the free use of pure water, plain or aerated, and the mild diuretic waters, such as Poland, Saratoga Vichy are always of service.

Drinking hot water at bedtime has often a most happy diuretic effect, which makes it doubly serviceable, for uric acid is largely excreted during the morning hours. Alcoholic drinks should be avoided, or, if used, restricted to light non-acid wines. No beer should be used.

The use of baths, not too cold, followed by systematic skin friction, is indicated, and the value of exercise in open air is excellently shown in many cases. Cold douches to the spine are recommended by some observers.

Among medicines, laxatives are very important: Rochelle salts, cream of tartar, phosphate of sodium. Mercury before the saline is often of excellent effect. So is iron, especially tartrate of iron and potassium. Nitro-muriatic acid in oxaluria is a standby, and is recommended in uric acid cases. The heart must not be forgotten, for the poorly oxidized elements circulating in the blood and the irregularity it exhibits may have to be met by digitalis, cactus or strychnia.

As to the prognosis, it is as a rule, favorable when we can make the treatment effective. Thus we have a form of albuminuria which has been rescued from the list of Bright's disease. It teaches us that in the examination of urine it is not sufficient to make simply the ordinary tests for albumen, but the investigation must be pushed further. If the urine is examined in a routine way the patient is often condemned by the ap-

parent condition of his urine when it is wholly unjustified.—*N. Y. State Jour. of Med.*

HOW TO HOLD YOUR PATIENTS.

W. Stuart Leech, M.D., Portland, Oreg.

One of the greatest things to know in the practice of our profession is not how to get new patients but how to retain them after they are once gotten. Like friends, it is not the number we make but the old we are able to hold. There are various ways of building up a practice. This remains a good deal to the individual, each man being a law unto himself. The surgeon can court the profession by his unerring judgment and successful operations, but the practitioner caters principally to the laity. 'Tis to them he looks for sustenance, and, if he wins the friendship of the world, the ethical brother will probably be with him.

Be friendly with everybody, intimate with no one. To make friends one must show himself friendly. These are the substance of old saws, and are applicable in our case. First of all, keep away from saloons and billiard halls, don't be a loafer, don't be a promoter of dances, excursions and balls, don't brag about the number of your surgical or confinement cases, don't speak evil of your competitor or slightly of the old physician; remember you are growing older every day. An acquaintance who visited me frequently could never remain more than five minutes; as an explanation of his haste he was expecting two or three cases of labor and would have to hurry to his office. If he called on me every day that would be his excuse, while as a matter of fact, I knew he only had fifteen or twenty cases during the whole year. If you are visiting socially, don't hurry away to your office as though humanity couldn't breathe without your assistance. Go away from home occasionally and give your patients an opportunity to recover. Never neglect a serious patient; having taken charge you must see him through. Study human nature continually. "Know thyself." Keep your ears open, and be slow about using your

tongue when questioned at the bedside; words unfitly spoken, like dust thrown against the wind, will return again. Condescend to the poorest; be humane to all. The great middle class and the honest poor are better pay than the rich; endeavor to always render them value received; be long suffering, have a radiant face, smile on your enemy, in truth be a man.

When a patient enters your office, watch his gait, form, countenance, be on the alert for the unusual, in this you may be able to detect his ailment. Greet him pleasantly; as soon as he is seated, request his name; if perchance, it is a woman or miss and she seems timid, do all you can to make her feel at ease; gain her confidence. Let her know by your demeanor that you are kind, gentle, sympathetic, serious, and are to be trusted. Let your examination be systematic, thorough and to the point. If you see at a glance that a fifty cent prescription will remedy the indigestion, constipation, bronchitis, or whatever the trouble may be, don't desist with your examination, think not of the pencil and blanks but make that examination thorough, and as a result the patient will be satisfied and will more readily pay one or two dollars for the perfect examination than fifty cents for the superficial. If your patient's circumstances permit you to charge for only one prescription when it is necessary to give two, write both on one blank and charge accordingly; if otherwise, write on two, if necessary, three, and the patient will feel more like he was getting value received. Write your prescriptions in either all Latin or all English, and let your charges be uniform. Have no interruptions when you are writing, always give the patient some vague idea of what to expect from the medicine. Be explicit in your directions, but do not deliver a medical lecture. After you have given the necessary directions take your time in folding and passing over the prescription, but if the patient has purse in hand or is reaching in pocket for it you need not delay. If you deem it necessary to have patient return at some future time, set the day for him; it is bad policy to leave it to his judgment. You must impress him that you

feel an interest in his case, and when this impression takes hold and as long as it continues, he is your patient and you are his physician. Collect your bills without wounding anyone's feelings. Soon as your case is dismissed, be prompt in sending your account. Do not make out your bill on note heads or grocery blanks. If no attention is paid to bill when sent, repeat the dun every thirty days, or what is better, collect in person. If patient refuses to pay and threatens to sue you for malpractice, be quick, sue him and get judgment. Soon as judgment is rendered in your favor the court will not entertain a suit for malpractice. It is too late for him to sue you after you have gotten judgment. In this case the early bird undoubtedly catches the worm.

Have your office clean, neat, comfortable, walls free from nude or suggestive pictures, keep instruments out of sight. Study medicine, and be a reader of many journals, both medical and secular.—*Wisconsin Med. Record.*

WHAT COUNTS.

Did you tackle the trouble that came your way

With a resolute heart and cheerful,

Or hide your face from the light of day

With a craven heart, and fearful?

Oh, a trouble's a ton or a trouble's an ounce,

Or a trouble is what you make it;

And it isn't the fact that you're hurt that counts,

But only, how did you take it?

You're beaten to earth. Well, well, what's that?

Come up with a smiling face.

It's nothing against you to fall down flat,

But to lie there—that's disgrace.

The harder you're thrown, why, the higher you bounce;

Be proud of your blackened eye.

It isn't the fact that you're licked that counts,

It's how did you fight, and why.

And though you be done to death, what then?

If you battled the best you could,

If you played your part in the world of men,

Why, the Critic will call it good.

Death comes with a crawl or comes with a pounce,

And whether he's slow or spry.

It isn't the fact that you're dead that counts,

But only, how did you die?

—Edmund Vance Cook.

Mental discords, such as envy, hatred and unkind thoughts, destroy life, they waste energies, kill happiness, destroy our power to attract, and drive away friends. Therefore, let us express kindness toward all and hatred toward none.

The West Virginia Medical Journal

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Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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Editorial

ASIATIC CHOLERA.

This is a disease with which, fortunately, but few American practitioners have had any practical experience. In 1873 Wheeling was visited by this disease, then sometimes called "The Southwestern Cholera," because, instead of entering the country via one of our eastern sea-ports, it entered by way of New Orleans, traveling northward and eastward, Johnstown, Pa., being, we believe, the most eastern point reached. Thirty-five cases were officially reported to the Health Office here, of which the writer was the incumbent. Of these 22 died, one after an illness of but six hours. Another did her own marketing at the market house at 7 a. m. and was dead at the same hour in the evening. Nearly all of those reported were seen personally by the Health Officer, who, after a lapse of 38 years, still retains most vivid impressions of the horrors of the disease—the suffering of the patients, the icy coldness of their clammy skin, the blue lips

and fingers, the pinched features, the "choleraic voice," the thready pulse—all a few hours after the appearance of health and vigor.

Thoughts of this last visit of the disease to the state have been aroused by reading of cholera as it is now prevailing in the far east. Russia had a wide-spread epidemic last year, thousands of deaths occurring. It the week ending July 23rd, no fewer than 13,374 cases were reported, with 6,000 deaths. It is generally understood that more than once the disease entered at least one of our own ports, but owing to our efficient sanitary management it was controlled at the point of entry. We have no assurance that other cases may not be imported at any time; and it may not always be as well managed as heretofore. Therefore a few words on the subject may not be amiss, in view of the possibility of having to face the disease ere the present summer is ended.

Cholera is an intestinal infection due, as shown by Koch in 1883, to the presence of the vibrio cholerae Asiaticae. This is of a comma-shaped bacillus which is found either in the contents or walls of the intestines. It is "a short, slightly curved rod of about 1.5 microns in length and 0.4micron in width. By juxtaposition of two or more curved organisms may result spirals, S-shaped, U-shaped, or other forms." (McLaughlin) Without the entrance of these bacilli into the human digestive tract there can be no Asiatic cholera. The disease is therefore not contagious, and need not be alarming, for if we keep it from entering our mouths we are safe.

But there are certain difficulties in the way of its easy and perfect control. As with typhoid fever, so with this disease, there may be "carriers," persons who harbor the vibrios without themselves developing the symptoms of the disease. It has long been known that an acid medium is not favorable to the growth of cholera germs, and a difference in the condition of the human stomach may account for the non-development of the disease in some persons in whose intestine the vibrios may be present.

Then there are very mild cases, as there are of diphtheria or scarlatina,

which escape the attention of any physician. As an example of this we recall the case of a medical student—now one of our leading physicians—who, while suffering with a bad diarrhea, came from Cincinnati in 1873 when cholera existed there, and who, en route to his suburban home, was compelled to resort to a country privy. In a few days six cases similar to his own occurred in a family using the same out-house. None died, but we have always regarded these as cases of mild cholera. And later we traced a number of similar cases in the city that were never officially reported to the Health Department.

We must also keep in mind the influence of house flies in the propagation of disease, and the difficulty in completely controlling them. The careless housewife needs to be educated in the best methods of getting rid of these pests. Cleanliness in all parts of the house, but especially the dining room and kitchen, will do much to minimize the danger from flies. If they can find no food to devour, they cease to be a menace.

The cholera vibrios are present chiefly in the excreta from the intestines—much less frequently in matters ejected from the stomach; and the germs are much more abundant in the excreta early in the disease. They are easily killed by heat or acid disinfectants. They soon die after the excreta have dried, but it is not advisable to permit them to lie exposed until drying takes place. Safety lies in immediate destruction, by heat or other means, of all discharges that come from the patient, and disinfection of soiled bed and body clothing, spoons, cups, and all utensils used by the patient. No uncooked food should be eaten. There is no danger from contact with the sick if the utensils used in cooking one's food and in eating it, be kept scrupulously clean, and one's hands be also well washed in hot water immediately before eating. To catch cholera, in short, one must eat or drink it. The nature of this disease is now so well known, that the prevention of epidemics is neither difficult nor very expensive; and hence their occurrence is rather a crime than a misfortune.

As to treatment of individual cases,

although the mortality is still very high, some advance in therapeutics has been made. Of great importance is the prompt treatment, always in bed, of every person who has diarrhea, however mild, during a cholera epidemic. The remedies commonly used in diarrhea are sufficient for this purpose; as opiates, ipecac, lead, bismuth, tannin solution by enema, etc. The diet must be restricted. This treatment will doubtless prevent the development of active cholera symptoms in many cases. After the appearance of these less is to be expected from medical treatment. The patient must be kept stimulated by external heat, and hypodermic morphia will be needed to control pain, which is often most severe in abdomen and muscles. Nothing will be retained by the stomach.

Favorable reports come from Manila and other eastern points as to good results from the intra-venous injections of saline solution. Rogers prefers a solution stronger than the normal salt solution. Others believe that the latter is sufficiently strong, as it is the lost water that needs to be restored to the blood current. For two years ending in 1905, under the old treatment Rogers had a mortality of 59%. With the use of the normal salt solution it fell to 51%, rising again to 59.5% after this was discontinued. After two years' observation among 294 cases with the intra-venous injection of a hypertonic salt solution, the mortality dropped to 32.6%, "thus affording conclusive evidence of the great life-saving value of the new method." Rogers later began the use of permanganate solution. Patients were allowed to drink at pleasure of a solution at first of one grain to the pint. Later this was increased to 4 to 6 grs. Calcium permanganate was preferred, and it was given in 2 gr. pills, made up with kaolin and vaselin, and coated so as to pass the acid stomach undissolved.

"Rogers gives one pill every quarter of an hour for the first two hours, and then every half-hour until the stools are colored green and become less copious, which usually occurs in about twelve hours. In mild cases they need only be given during alternate four-hour periods. Barley water may also be administered to maintain the strength, as it is not readily acted on by the permanganates. At the beginning of the second day eight more pills are given, and in severe cases this is repeated on the third day in order

to avoid relapses, which have occurred in three cases. They all promptly yielded to a renewal of the permanganate treatment, however, thus furnishing an additional reason for believing its action to be directly curative. The internal administration of permanganates in cholera for the purpose of destroying the specific toxins within the alimentary tract was commenced by Rogers in August, 1909. By the end of the year 17 cases, including 10 severe attacks requiring transfusion, had been treated, with only one death."—(J. A. M. A.)

These are the latest points we have seen touching the management of cholera, and as not all of them have yet found their way into the books we have thought it worth while to present them here, in view of the possibility of cholera reaching us during the coming summer. We have such confidence, however, in the ability and activity of the Health Departments at our sea ports, that we do not expect to have this disease to treat very soon.

S. L. J.

THANKS.

We return thanks to Dr. Amick of Charleston and Dr. Henry of Fairmont for Journals sent us. This kindness is appreciated. We have frequent calls for back numbers of the Journal and cannot always supply them. Dr. Henry writes: "Twenty-eight years ago this month I became a member of the State Medical Association at Grafton, Dr. B. W. Allen of Morgantown, retiring as President and Dr. Gerstell of Piedmont was elected as his successor. Many present at that meeting have passed to their reward. I hope to be with you at our coming meeting, to which I look forward with pleasure, as I do to all of our annual meetings." Thus speaks a loyal son of our Association, who does not allow any little disappointment to lessen his zeal in the society's interest.

ONE FOR US.

The publishers of *Spondylotherapy* have this to say of reviews of the work:

"Of all the reviews of *Spondylotherapy*, *The West Virginia Medical Journal* has most fully grasped its significance, in the following:

There are fifty pages scattered throughout the volume, any one of which could be torn out and be used as a starting point and an inspiration for most valuable research work. The possessor of this book has a rich mine of startlingly sug-

gestive knowledge, but the lazy practitioner and the superficial reader had better leave it alone, for it will be a constant reproach to both; but to the man of study who strives to reach ever better and more fruitful methods of investigation and cure of disease this book will be most welcome."

ANNUAL MEETING.

Committees are at work in preparation for our next meeting, which is to be held at the famous White Sulphur Springs. Those who were at either of the two former meetings at this beautiful resort will remember what an ideal place for our meeting it is. It is desirable that the meeting be held before the regular close of "the season" at the Springs, and the time will probably be either the 13th or 20th of September. A definite announcement will be made in our next issue. In the meantime let all who contemplate presenting papers at the meeting get to work, that a first class program may be presented. Do not wait for an invitation other than this, for all members have equal rights, and the man whose subject gets to the secretary first will stand the best chance of getting a good place on the program.

REGARDING MALPRACTICE DEFENSE BY THE STATE SOCIETY.

Medical defense by the state medical societies is in successful operation in sixteen states at present. Note the following by Dr. Philip Mills Jones, a trustee of the American Medical Association. He expresses in a few words the success attained by the California State Society.

"To read the stuff the physicians' defense companies write to physicians when they refuse to pay unnecessary sums into the profits of the companies, one would think that they had a corner on all the brains, common sense and legal acumen the world ever produced. But the fact has recently been demonstrated that the protection of the state society is the best.

"If, however, you want to pay money to an insurance company, as a sort of philanthropic proposition, then go ahead; but you do not need to do so—the State Society Medical Defense really defends.—Washington Co. Program.

RIGHT YOU ARE, OLD BUCK.

Lodge Practice. The argument that a young physician can get into a practice by this method is true enough, but it will not prove to be the kind of practice that he will wish for later, and one must needs consider also that he jeopardizes his standing amongst the profession, and his chances of admission to the various medical societies, so that argument does not stand. The community at large will also place him in the lower standing in the profession, if the people are of the average intelligence. It is surprising how quickly a phy-

sician is judged after he settles in a community, and it behooves him to consider well before accepting an offer to become a lodge physician, no matter how alluring seems the sum per annum. —Medical Monthly, Bucks County, via Washington County Program.

PROGRESS IN PREVENTIVE MEDICINE.

Thus Spoke President Taft Before Philadelphia Medical Club.

And now we have a division of 18,000 men in Texas and California. They have been there for two months living under the canvas and in a country soaked with rain and deep with profanity-provoking mud. But so effective have been the regulative and preventive methods adopted to reduce sickness that the percentage of sick men is less than it was in the posts from which these men were mobilized. I need not recall the dreadful record of sickness from typhoid fever at the camps at Chickamauga and other camps established during the Spanish-American war. The percentage of typhoid cases was so high that it is hard to believe. Of 120,000 men there were 20,000 cases, with a case mortality of 7 per cent. Of the volunteer regiments mobilized during the Spanish-American war 90 per cent became affected with typhoid fever within eight weeks from the date of mobilization. Today, two months after mobilization, with the modern health regulations and by the use of vaccination against typhoid, not one case of typhoid fever has appeared in the entire force, except that of one teamster, who was not vaccinated. It is hard to credit the accuracy of such a record. But, as I have it directly from the war office, I can assert it as one more instance of the marvelous efficacy of recent medical discoveries and practice.

When we consider how in times past the efficiency of an army has been reduced by large percentages through disease we can realize what an important part of the army the Medical Corps has become. But, without reference to war, when we consider the enormous advances made in the discovery of methods of preventing disease in the tropics, by members of the Medical Corps and under government auspices, and all within the last thirteen years, I think we may take pardonable pride in the record.

We expended many lives and much money in the Spanish war and in the discharge of the responsibilities that have followed that war. But they are as nothing compared with the benefits to the human race that have already accrued and will continue to accrue from the discoveries made under the conditions and necessities which the exigencies of that war and the governmental burdens following it presented.

I congratulate the Medical Corps of the Army, I congratulate the medical profession at large, (for these discoveries were not all made by army doctors), that they have had the opportunity, and have seized it, to make such progress in relieving the sufferings of the human race and in becoming, in so conspicuous a way, the benefactors of mankind.

"SEDATING A TURBULENT BRAIN."

When a physician remembers that Neurosine is a well balanced formula, (contains no opium, morphine, chloral, or cocaine), each fluid ounce representing 40 grains each of the chemically pure bromides of potassium, sodium and ammonium; one grain of the bromide of zinc; 32 grains of the extract of lupulus; 40 minims fluid extract cascara sagrada; .075 grains each of extracts of henbane and belladonna; 60 grains of cannabis indica; .060 grains oil of bitter almonds and five per cent alcohol with aromatic elixirs, he will at once appreciate its excellence as an anodyne and soporific. Each constituent of Neurosine, possessing positive therapeutic properties, lends aid to its congeners and contributes to make the whole the most efficient calming agent at the physician's command. Whilst Neurosine is employed for a host of purposes and in a wide range of conditions, it may be said that its power to sedate a turbulent brain and to allay extreme nerve irritability, gives it distinctive qualities and raises it head and shoulders over anything else in the same department of therapeutics. For procuring rest during typhoid or other fevers, or soothing a woman experiencing the nervous trials attendant upon her peculiar monthly function, Neurosine will give the best of results. Its palatability and the ease with which it may be taken over long continued periods, eminently qualifies Neurosine to take a leading role in the treatment of epilepsy and it is particularly recommended for this condition.

THE BUGBEAR OF "INDIGESTION."

"It is often said that ours is 'a nation of dyspeptics.' Medical men appreciate how apt this statement is, and never was there a time when it was more true. Only yesterday one of them remarked, with a touch of humor, that 'people are living so fast today that they do not stop to masticate their food'—a wise observation, we must admit.

"And besides—in the matter of eating have we not as a race departed from the so-termed simple life? Have we not in more than one way become denatured rather than civilized? It seems that the things people eat today are censored to tickle the palate, rather than nourish and upbuild the body,—and the consequence of such pleasurable and improper eating is a disordered stomach."—From Brochure on Taka-Diastase.

The brochure tells how the Taka-Diastase came to be—tells how it is made and in the language of the distinguished chemist and scientist who evolved and gave to the world this valuable ferment. It explains, in attractive, readable form, how Taka-Diastase acts in defective starch-digestion, in gastritis, in diarrhea and constipation, in wasting diseases and in the diet of infants. It contains a full list of Taka-Diastase products and gives hints as to dosage. Altogether it is an important little work, and one that readers of the West Virginia Medical Journal are advised to send for. A copy may be obtained by any phy-

sician by addressing a request for the "Taka-Diastase Brochure" to the publishers, Parke, Davis & Co., at their home offices in Detroit—providing, of course, that the edition has not previously been exhausted.

State News

STATE BOARD OF HEALTH.

This Board held its last meeting in Huntington April 10, 11 and 12. Twenty-four candidates for licensure were examined, of whom 17 were successful. Of the seven rejected, two were from the Baltimore College of P. and S., two from the Eclectic Medical College of Cincinnati, one from Chattanooga Medical College, one from the University of Louisville, and one from Detroit Homeopathic Medical College. Those who passed the examination are as follows:

J. W. Cowherd—School of graduation, University College of Medicine; residence, Cumberland Md.

L. C. Covington—School of graduation, University College of Medicine; residence, Rocky Mount, N. C.

J. C. Ellis—School of graduation, Howard University; residence, Washington, D. C.

W. H. A. Barrett—School of graduation, Howard University; residence, Washington, D. C.

C. D. Wainwright—School of graduation Howard University; residence, Charles Town, W. Va.

O. S. Campbell—Coll. of P. and S., Baltimore; residence, Volga, W. Va.

W. S. Gray—School of graduation, University of Pa.; residence, Capon, W. Va.

P. D. Spohn—University of Toronto; residence, Corpus Christi, Texas.

J. V. Harsha, School of graduation, West, Pa. Medical College; residence, McKeesport, Pa.

J. A. Jackson—School of graduation, University of Louisville; residence, Ronceverte, W. Va.

W. P. Wood—School of graduation, Geo. Washington University; residence, Matewan, W. Va.

A. L. Coyle—School of graduation, University of Michigan; residence, Oil City, Pa.

J. W. Lyons—School of graduation, University of Pa.; residence, Philadelphia, Pa.

C. M. Buckner—School of graduation, University of Pa.; residence, Barboursville, W. Va.

I. Fawcett—School of graduation, University of Pa.; residence, Wheeling, W. Va.

S. A. Smith—School of graduation, Meharry Med. College; residence, Cedarville, O.

S. H. Bays—School of graduation, Baltimore Med. College; residence, Miller, W. Va.

The next meeting of the Board will be held in Charleston, July 10th, 11th and 12th.

The questions of the Board at the last meeting follow:

CHEMISTRY AND MEDICAL JURISPRUDENCE.

1. Explain the following terms: acid, base, salt, efflorescence and deliquescence. 2. Name three compounds of mercury, and give their formulas and uses. 3. What is the chemical name for each of the following: Oil of vitriol, sugar of lead, copperas, saltpetre, blue-stone, lunar caustic and common salt? 4. Name four gases which are poisonous, and four gases which are not poison-

ous. 5. What are proteids, the carbohydrates, and fats? Give examples of foods which are rich in each of these constituents. 6. What is the composition of milk? Give its specific gravity. 7. Give tests for sugar and albumen in urine. 8. Differentiate death from carbon monoxide gas and potassium cyanid. 9. What qualifications are required for the legal practice of medicine in West Virginia. 10. Give your views as to capital punishment, methods, etc.

DR. L. S. BROCK (Examiner).

SURGERY.

1. Describe the clinical manifestations of carcinoma of the breast in the early stages. 2. Describe the clinical symptoms of rupture of a middle meningeal artery due to trauma without an external wound. 3. Describe the common forms of anal fistula and their treatment. 4. Give the pathology, symptoms and treatment of a felon. 5. Given a wound of the scalp, what investigation of the wound is necessary? Describe in detail the surgical treatment. 6. What are the symptoms and treatment of a gunshot wound of the kidney? 7. Give and explain the symptoms of a strangulated inguinal hernia. 8. How would you differentiate between a fracture at the neck of the femur without impaction and a dislocation. Give Bryant's and Nelaton's lines for making the measurements. 9. Describe the different avenues through which the urinary bladder in the male may be emptied surgically. 10. What are hemorrhoids, what causes them and how treated (give palliative treatment and treatment for radical cure)?

DR. R. E. VICKERS (Examiner).

OBSTETRICS AND GYNECOLOGY.

1. When would you use forceps and how? 2. Give the indications for version and detail the operation. 3. What symptoms would lead you to suspect a threatened miscarriage? 4. Name the principal diseases and conditions during pregnancy, said to be caused by that condition. 5. How and how long would you treat a babe apparently dead when born? 6. Describe varicose veins of pregnancy. Give dangers of same. Give treatment. 7. Give the cause, prognosis and treatment of pernicious vomiting of pregnancy. 8. Patient fifty-four years old, give symptoms of malignancy of the uterus. 9. Define ectopic gestation, name varieties, give diagnosis, prognosis and treatment. 10. Define leucorrhoea and give three causes.

DR. H. M. RYMER (Examiner).

MATERIA MEDICA AND THERAPEUTICS.

1. How do the simple bitters aid digestion? Name one of the most common. 2. Purgatives: Name two saline, two drastic and two cholagogue, with doses of each. 3. Give mode of applying heat as a remedy, physiological effect and therapy. Define massage. Give method, physiological effect and therapy. 5. What are cerebral sedatives? Name four with indications for use. 6. *Pilocarpus*: Physiological action and therapy, with dose. 7. Anthelmintics: Name four. Dose of each for six-year-old child. 8. Name three new remedies, with use and dose of each. 9. Poulitices: How and of what made? Action and uses. 10. Write prescription for diarrhoea in adult.

DR. A. R. WARREN (Examiner).

PRACTICE OF MEDICINE AND PEDIATRICS.

1. Name possible causes of dropsical conditions

of the abdomen and lower extremities. 2. Differentiate renal and hepatic colic. 3. Give the character of the fever course in chronic tuberculosis. 4. What is an exanthematous fever? 5. Give the outlines of the liver as revealed by percussion when the patient is in the recumbent position. 6. Diagnose and treat gastric ulcer. 7. Describe and give treatment of cancer of the stomach. 8. Intestinal worms, their varieties, symptoms and treatment. 9. What is modified milk, how prepared, indications for use? 10. Diagnose and treat cholera infantum.

DR. A. N. FRAME (Examiner).

PHYSIOLOGY AND HISTOLOGY.

1. Large intestine: Describe it and give function. 2. Heart sounds: Describe them and give causes. 3. Animal heat: How produced and how regulated? 4. Glycogen: Where produced and give its use? 5. Seventh or facial nerve: Give origin, distribution and function. 6. Pancreas: Describe it and give function. 7. White blood corpuscles: Describe them and give function. 8. What does the presence of indican in the urine indicate? 9. Give histology of a human tooth. 10. Describe histology of kidney.

DR. J. E. ROBINS (Examiner).

ANATOMY AND EMBRYOLOGY.

1. Name the bones of the head. Mention the coverings of the brain. 2. Give the branches of the common iliac artery. 3. Give the boundaries of Scarpa's triangle. 4. Give the blood and nerve supply of the stomach. 5. Describe the jugular vein and mention its surgical significance. 6. Give the origin and insertion of the sartorius muscle. 7. Name the divisions of the alimentary tract. 8. Name the ligaments of the knee joint. 9. Describe the cervical plexus of nerves. 10. What is the vitelline membrane?

DR. M. V. GODBEY (Examiner).

SPECIAL MEDICINE.

1. Define vocal fremitus. Name conditions that increase and diminish this sign. 2. Describe physical signs and make diagnosis of mitral incompetency. 3. Discuss sudden loss of vision. 4. Diagnose and treat infected wounds of the eye. 5. Describe fully technic of nasal examination. 6. How may the exanthemata affect the nasal mucosa? 7. Discuss the importance of acute laryngitis in constitutional diseases. 8. Name the indications for tracheotomy. Describe operation. 9. Describe technic and give diagnostic value of lumbar puncture. 10. Describe loss of tendon reflexes, exaggeration of same. Pathology and diagnostic value.

DR. C. W. HALTERMAN (Examiner).

BACTERIOLOGY AND HYGIENE

1. What is the difference between an antiseptic and a disinfectant? 2. Give reasons for and against vaccination. 3. Name five contagious diseases. Name three infectious diseases. 4. Give four modes of administering anti-tetanic serum. 5. What is tuberculin? What is its use? 6. What is a fair average death rate in the country; in towns of 5,000 to 20,000; in large cities? 7. What diseases are propagated by drinking water? 8. Name six preventable diseases. 9. How can malarial districts be made healthy? 10. How long does vaccination last?

DR. JOHN L. DICKEY (Examiner).

PRACTICE OF MEDICINE AND PEDIATRICS

(Homeopathic).

1. Dysentery: Etiology, complications and sequelae; treat. 2. Cirrhosis of Liver: Etiology, symptoms and treatment. 3. Etiology and treatment of hemoptysis. 4. Rheumatism: Give different forms; treat. 5. Intussusception: Define, diagnose and treat. 6. Tonsillitis: Differentiate from diphtheria, symptoms and treatment. 7. What diseases does meningitis complicate in children? 8. Intestinal catarrh of children: Symptoms and treatment. 9. Describe the lumbricoides and give origin, symptoms and treatment. 10. Endocarditis in children: Etiology, symptoms and treatment.

DR. GEO. LOUNSBERY (Examiner).

MATERIA MEDICA AND THERAPEUTICS.

(Homeopathic).

1. What is a medicine? How are homeopathic medicines prepared? 2. Name four medicines whose effects are general upon the human organism and give their action. 3. Give examples of four drugs whose effects are comparatively local or single. 4. Mention three or four drugs whose action is chiefly upon the brain and spinal marrow. Describe their effects. 5. Name four drugs whose effects are chiefly upon the digestive tract and give symptoms. 6. What symptoms are of most importance in making a prescription? 7. Differentiate between uranium nitrate and phosphoric acid in diabetes. 8. What symptoms would lead you to prescribe Merc. Binioid, and in what diseases would you think of it? 9. What are the throat symptoms of Apis Mel, Lachesis and Phytolacca? 10. Give the headache of Cannabis Indica.

DR. GEO. LOUNSBERY (Examiner).

MATERIA MEDICA AND THERAPEUTICS (Eclectic).

1. Give properties, therapeutic indications and dose of specific gelsemium, veratrum. 2. Give the indications for aconite, belladonna, arsenic, nuxvomica. 3. Define anodyne, anthelmintic, cholagogue, emmenagogue. Name two drugs of each class giving dose. 4. Give properties, dose and therapeutic indications for potassium acetate, sodium sulphate, echinacea, bryonia. 5. Discuss physiological action and therapeutic application of the nitrites. 6. Write a prescription for a stimulating expectorant. 7. Describe the physiological action and therapeutic use of digitalis. 8. What remedies are usually indicated in acute catarrhal affections of the respiratory tract? 9. Define hemoptysis. How treat? 10. What remedies are commonly indicated in catarrh of the bile passages.

DR. C. W. HALTERMAN (Examiner).

PRACTICE OF MEDICINE AND PEDIATRICS (Eclectic).

1. Give the etiology, symptoms, diagnosis and treatment of chorea. 2. Define empyema. Diagnose and treat. 3. Give etiology, diagnosis and treat scoliosis. 4. Diagnose and treat incipient pulmonary tuberculosis. 5. Define tetanus. Give the etiology, symptoms and treatment. 6. What symptoms would lead you to suspect malignant disease of the stomach? 7. Describe symptoms, diagnose and treat infantile spinal paralysis. 8. Discuss meningitis. Make diagnosis and give treatment. 9. Describe management of "summer diarrheas" of children. 10. Discuss convulsions in children. Give treatment.

DR. C. W. HALTERMAN (Examiner).

Dr. A. M. Fredlock has been elected mayor of Elkins for a term of two years. He has been twice mayor of this city before.

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Dr. Sites of Martinsburg was in Elkins recently on professional business.

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Dr. C. L. Moore of Harding has returned from Europe.

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Dr. O. H. Hoffman of Thomas received a very painful accident by tearing a piece of semilunar cartilage from his knee.

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Dr. G. C. Rodgers of Elkins was in Philadelphia in April.

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Some years ago, while making a trip along the Norfolk & Western railroad through Mingo and McDowell counties, I was greatly impressed with the courtesy of a young physician who was in the same car with me. The train stopped for some minutes at a little station the name of which I do not recall. An old woman with a shawl over her head entered the car, walked hurriedly to the physician and began talking to him about her daughter who, it seems, was very ill. The woman was very poorly dressed and she was evidently illiterate. But the instant she spoke to the physician he arose to his feet, took off his hat, and stood with his hat in his hand until the train was about to move on. Then, having told the woman what to do for her daughter until he could come back on the next train to see her, he said "Good day, Madam," replaced his hat on his head and took his seat.

I inquired the name of the man whose innate politeness I had seen so beautifully expressed, and I was told that he was Dr. Hatfield. This gentleman is now president of the West Virginia State Senate.—*W. Va. School Journal.*

* * *

News was received recently to the effect that Dr. Owen Davis died suddenly at his home in Beckley. He was one of the leading men of Raleigh county. He formerly practiced medicine but of late years had been engaged in business. He was a leader among the Republicans of Raleigh county and was 42 years of age. The cause of his death was a tumor of the brain. The doctor was the tenth of 13 children. His first symptoms occurred while undergoing an examination at a New York college. He leaves a widow and son.

* * *

Dr. C. Covington, who has recently located in Charleston for the practice of eye, ear, nose and throat, has been appointed Chief Oculist to the Kanawha & Michigan Railway.

* * *

Dr. Quimby has installed in his office, in the Schmulbach Building, Wheeling, West Va., a new type of X-Ray machine which has been creating such a revolution in X-Ray diagnosis recently.

It is a radical departure from the older constructions, consisting of a motor generator working in synchronism with a high tension switch that receives the current from a closed magnetic transformer. This particular type of machine

is known as the Snook Roentgen Generator and enables the operator to take pictures with very brief exposures, allowing most all work to be done with exposures of less than two seconds. It has greatly widened the field of Roentgen diagnosis, especially of such organs as the heart, lungs, stomach and bowels.

Society Proceedings

BARBOUR-RANDOLPH-TUCKER SOCIETY,
ELKINS, W. VA.

The May meeting was held at Elkins May 9th. More than one-third of the entire membership were present.

Dr. McIntosh read a paper on Glaucoma. The doctor covered the subject as thoroughly as it could be done before a society meeting. All members present either discussed it or asked intelligent questions. Dr. McIntosh said a case of glaucoma occurring in the practice of a general practitioner should be treated with eserine and probably paracentesis should a specialist not be available.

Dr. Rodgers on the subject of "Toxemia of Pregnancy" dwelt mostly on the prevention of toxemia and the treatment of eclampsia. The opinion of those present was that pregnant women would not consent to be properly treated during pregnancy, and some means of education should be brought about whereby they would be led to know their serious condition. Almost all present agreed that the curative treatment of eclampsia had not been discovered yet to the satisfaction of a majority of the men of authority.

Dr. H. Yokum read a paper on the "Treatment of Diphtheria," this paper being his graduation "Thesis" at the Jefferson Medical College in 1885. It goes without saying that his paper was very interesting.

Dr. Ladwig read a paper on "Rheumatic Fever." This being a very good paper, it brought up interesting discussion. Many said the disease is undoubtedly due to infection; others say the disease is improperly named, and in the next few years the name "Rheumatism" would not appear in the text-books.

Dr. Butt discussed fractures of the lower extremity. He talked mostly on treatment of fractures and advised more operating in displaced fractures and less amputating. In discussing the paper many coincided with his line of treatment and some differing as to more operating on fractures.

Next meeting in Tucker county in July.

T. JUD McBEE, Secretary.

EASTERN PANHANDLE SOCIETY.

MARTINSBURG, W. VA., May 8, 1911.

Editor W. Va. Medical Journal:

The Eastern Panhandle Medical Society held its bi-monthly meeting at Hancock on Wednesday, May 3rd. Dr. W. T. Henshaw of Martinsburg in the presidential chair. The meeting was largely attended and was very interesting. The papers read were as follows: "The Cystoscope—Its Uses and Limitation" by Dr. Page D. Edmonds of Baltimore. "The Diagnosis and Treat-

ment of Gonorrhoea in the Male" by Dr. Nelson Osburn of Martinsburg. "The Diagnosis and Treatment of Syphilis" by Dr. G. Timberlake of Baltimore. Great interest is taken in the society, which on this occasion was entertained at the home of Dr. and Mrs. T. Elwood Stigers, where a bountiful dinner was served.

The following physicians were present in addition to those already mentioned: Sites, Eagle, Oates, Miller, Clay, Bitner and Duff of Martinsburg; Venning, Neill, Skinner, Albin and Phillips of Charles Town; Howard Osborn of Rippon; E. B. LeFevre of Inwood; George Swimley and Max Hoffman of Bunker Hill; D. P. Frye of Hedgesville; A. J. Lemaster of Bedington; J. H. Hodges of Harpers Ferry, and Dr. Holmes Yeakley of Keyser.

The next meeting of the society will be held at Rippon, Jefferson county, in July, when Dr. Howard Osborn will entertain the doctors at his beautiful home.

Fraternally yours,

A. BRUCE EAGLE, *Secretary.*

GRANT-HAMPSHIRE-HARDY-MINERAL SOCIETY.

BURLINGTON, WEST VA., May 17, 1911.

Editor W. Va. Medical Journal:

This society held its regular meeting in Burlington on May 11th, as seen by the following program:

Disease of Gall Bladder and Bile Ducts—Dr. C. S. Hoffman. Discussion opened by Dr. W. M. Babb.

Cirrhosis of Liver—Dr. W. H. Yeakley. Discussion opened by Dr. J. F. Scott.

"Salvarsan"—Dr. Dayton J. Long. Discussion opened by Dr. E. H. Parsons.

The papers were of high order. Dr. J. H. Ravenscraft was elected to membership. Nearly all of our old members have paid up their dues and two new ones added. None have objected to the extra dollar for malpractice defense.

Adjourned to meet in Moorefield in August. We have under consideration the printing of a quarterly Journal of the Society Proceedings.

M. F. WRIGHT, *Secretary.*

OHIO COUNTY SOCIETY.

MAY 1ST. Dr. Reed lectured on "Hernial Surgery." He laid especial stress on the conditions responsible for recurrence. The safeguards recurrence he divides into three classes: I. Freedom from infection. II. Having a perfectly clean and clear canal. III. Perfect coaptation of the wound, especially of the fasciae. He prefers overlapping and the subcuticular stitch. The first stitch is most important, and is through the fascia of the external oblique, then through the internal oblique and the transversalis, then over and through Poupart's ligament. In direct hernia the cord should always be transplanted. In ventral hernia cure invariably results when the implication method, as perfected by Wm. Mayo, is used. In femoral hernia the technic is simple, and Ochsner contends that all that is necessary is a thorough dissection of the sac up to Poupart's ligament, and the use of the purse-string suture.

Dr. J. Caldwell discussed the common compli-

cations of hernia: I, of the sac; II, of the vessels; III, of the nerves. The sac may vary greatly in size, thickness, and contents. It may contain considerable omentum; also the appendix. On the left side we may encounter the sigmoid. Even the bladder may be encountered at times. Dr. Hildreth II discussed cryptorchidism, and described in a general way the embryology and anatomy, citing a case in his practice. He stated that 36 per cent of these cases become malignant, and 20 per cent may or will have peritoneal hernia. Dr. Hupp discussed suture material, expressing a preference for kangaroo tendon in this class of work. Dr. Jepson reported a case of hernia to illustrate the importance of thorough exploration of whole abdomen before making a diagnosis. A foreigner, speaking no English, came under his care in the City Hospital for persistent hiccough. There was a history of alcoholism. The case was thought to be a result of gastric disturbance. In a day or two a hernia was found, not strangulated but rather difficult of reduction, and reduction did not stop the hiccough. In a few days death occurred, after an operation for the cure of the hernia, and an autopsy revealed a general peritonitis which was pronounced to be tubercular. Dr. Reed, in closing, stated that there is a place for the truss. In children under four years a good truss may render an operation unnecessary; and in old people with poor general health a truss can be made to answer.

MAY 8TH. Dr. Noome addressed the society on "Pelvic Pus." He desired to bring out the various methods of establishing drainage, and the methods of attacking a pelvic abscess. He thinks that the majority of cases of "pelvic cellulitis" are from puerperal infection. Has had three cases of secondary accumulation of pus: the result of peri-appendicular abscess. These he drained through a puncture in the anterior rectal wall. He described in detail the anatomy of the space between rectum and the *levator ani* muscle, and the importance of considering this space in making secondary drainage. Dr. Hupp expressed his surprise that any modern surgeon would advocate draining a pelvic abscess by the rectum, a method that was known ages ago, and long abandoned by reputable surgeons. Most cases of pelvic pus in women are of two classes: I, those following the use of infected instruments in the uterus; II, gonococcus infection. He warned against the use of the curette after the uterus is empty, as great damage is sometimes the result. In regard to diagnosis, he agreed with Kelly that a "stony hardness"—not met with by Dr. Noome—is sometimes present, a mass that has the feel of a mass of plaster of Paris. Dr. Fulton does not believe in the rectal puncture, and thinks it will not be necessary if a careful and complete radical primary operation is done. In his experience an operation for long-standing inflammatory process in the pelvis can generally be closed without any drainage, especially so if the infection is of gonorrhoeal origin. Dr. Jepson reported a case now under his care, of a woman with a history of pelvic pain, who recently has had an acute attack of tubal inflammation after exposure and hard work during

menstruation. A mass was formed that could be distinctly felt in both iliacs, but which was most prominent in the rectum, feeling like a large potato. Perfect quiet, hot douches, ichthyol tampons, etc., was the treatment. In about two weeks from the first symptoms an abscess broke into the rectum, and the case is progressing favorably. The speaker did not think an operation indicated at any time in this case, but it may be needed hereafter. Also referred to a case of abscess after a curetting to remove an adherent placenta after abortion. This also broke into the rectum, with complete recovery, and a full-term pregnancy after. No surgery has ever been necessary in this case.

HERSEY, *Secretary.*

Reviews

COLLECTED PAPERS BY THE STAFF OF ST. MARY'S HOSPITAL, Mayo Clinic, Rochester, Minnesota, 1905-1909. Octavo of 668 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50 net.

Someone has said that the Mayos are great surgeons because they are good anatomists. This, however, explains only partly the great success of the Rochester surgeons. Modern surgery is vastly different from the surgery of fifty years ago. In those days a surgeon was called on principally to do emergency surgery, such as amputations, strangulated hernia, operations for intestinal obstruction, etc. Gradually, however, the cavities of the body were invaded one after the other, beginning with the pelvic cavity and adding successively the abdominal, then the cranial, and finally the thoracic cavity. The surgery of the organs contained in these various cavities depends in the main on an early and correct diagnosis; and here is where modern surgery is branching out far beyond the limits and expectations of the surgery of years ago. Bacteriology, physiology, and the living pathology which has been made possible through the means of modern asepsis have opened up a field for intra vitam diagnosis, the limits of which we cannot begin to estimate at the present time. The modern surgeon, then, must be well versed in the chemistry and physiology of the digestion; he must know a great deal about the construction of the nervous system; he must be well informed about the physiology of respiration and circulation in order to make a diagnosis which may enable him to correct pathological changes in their very earliest stages. Such a set of men are the Mayos with their effective staff of specialists, and the work done in Rochester is looked upon by the whole world as the most efficient at the present time. The book under discussion deals mainly with the surgery of the digestive tract in which William J. Mayo is doubtless peerless, while his brother, Charles Mayo, has a number of valuable articles on the successful surgical treatment of simple and exophthalmic goiter; a number of valuable articles on removal of bladder neoplasms, on the value of ureter catheterization, on tumors of the breast, and other interesting topics are added

by such collaborators as Dr. E. S. Judd, Louis B. Wilson, William Carpenter, McCarthy and others. The collection is a most valuable one and its perusal will give the reader much valuable practical information.

SCHWINN.

MODERN OTOLOGY.—Second Edition Revised. 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., *Clinical Professor of Otology, Laryngology and Rhinology, Indiana University School of Medicine*. Second edition revised. Octavo of 598 pages, with 305 original illustrations, many in colors. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50; half morocco, \$7.00 net.

The authors have given to the student and general practitioner of medicine, as well as the otologist, an excellent work on otology.

The simplicity, clearness and directness of the text, and the wide range of good illustrations, make the book a most valuable work on modern otology, especially for students and physicians in the wide field of general medicine.

A great mass of technical otological knowledge, suited only to the specialist, is wisely omitted from the book. It is a good, practical, modern otology, and possessing this, the general practitioner will need no other.

J. M. S.

STATE BOARD QUESTIONS AND ANSWERS—By R. MAX GOEPP, M.D., *Professor of Clinical Medicine at the Philadelphia Polyclinic*. Second Edition Revised. Octavo volume of 715 pages. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$4.00 net; Half Morocco, \$5.50 net.

Dr. Goepf supplies in this work an opportunity for the exchange of views and opinions between medical examiners as to what constitutes fair and reasonable questions for a practical test of applicants to practice medicine in its various branches. It affords a source of information whereby the examiner, with a minimum of reading and study, can acquaint himself with the work of licensing boards throughout the United States. The author has compiled the best and what in his judgment is the most practical from many sources, and has arranged a series of questions on the subjects treated, making an excellent review of the work done by various State Boards and other examining bodies of recognized merit. The questions asked and answered are not original with the compiler of the work, the questions being mainly those used by representative State Boards, at final examinations in medical schools, and for hospital appointments; and in making answer to these, men of recognized ability have lent their aid, and standard works on the different branches have been freely consulted. I would seriously question the propriety of such a book original with one man, the author no doubt being of the same opinion, since the scope of the work and the manner in which he has thought best to compile it and present it argues as much. The examiner has in this book an opportunity to broaden his views and add to his knowledge relative

to a proper and reasonable test of the applicant. The applicant, a graduate qualified for admission to an examination and having the time for review, will find in this compend for the refreshing of his memory, many of the essentials pertaining to his profession. In a word we have here a summing up, a recapitulation, of a vast amount of work done by representative boards and other examining bodies throughout the states, a review of which in my opinion, can only add to the proficiency of examiner and applicant alike.

C. W. H.

PRACTICAL TREATMENT (Volume II).—

A Handbook of Practical Treatment. In three volumes. By 79 eminent specialists. Edited by JOHN H. MUSSER, M.D., *Professor of Clinical Medicine, University of Pennsylvania*; and A. O. J. KELLY, M.D., *Assistant Professor of Medicine, University of Pennsylvania*. Volume II: Octavo of 865 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Per volume: Cloth, \$6.00 net; Half Morocco, \$7.50 net.

We gave a favorable notice of Vol. I in a late issue of this JOURNAL, and after an examination of Vol. II now before us can heartily endorse our former opinion as to the high character of the work. The first volume was largely introductory, dealing with general principles and laying a foundation upon which to erect a noble structure. We now have presented a very full exposition of individual diseases. The entire cardiovascular system is exhaustively treated in a chapter of 170 pages. That it is well done goes without saying when it is stated that Sir Clifford Allbutt is the author. We can not spare time or space to give an adequate review of this most excellent work. It must suffice to name some of the writers, which will indicate the generally high character of the work done.

Pneumonia is treated by Hobart A. Hare; Cerebrospinal fever, cholera and the plague by Lewellys F. Barker; Yellow fever and dengue by James Carroll; Influenza and rheumatism by Alfred Stengel; Tetanus, rabies, anthrax, etc., by Bloodgood and McGlannan; and other diseases by authors of equally high standing. A number of features are found in this volume not generally present in works on medical practice. The surgery of the heart, toxemia, septicemia and pyemia, gonococcal infection; the ocular and aural complications of the infectious diseases; surgical treatment of the joint complications of the infectious diseases are among these, and as these are written by such men as Edw'd Martin, de Schweinitz, Richardson and Finney, they add greatly to the character of the work.

The practitioner who possesses these volumes will get the latest information by the highest authorities, and will not need another work on Practice soon.

When attempting to loosen with a hook a foreign body almost or quite obstructing the auditory canal, the passage of the instrument along the antero-inferior aspect of the canal involves the least risk to the drum membrane.—*American Journal of Surgery*.

Medical Outlook

LARYNGEAL SIGNS OF TUBERCULOSIS

—C. L. Minor, Asheville, N. C. (*Journal A. M. A.*, November 19), says that no examination of the tuberculous patient can be said to be satisfactory or thorough without inspection of the larynx, and it would be better if the physician were always able to do this for himself. A review of the literature shows that the laryngeal conditions usually recognized are not those early and curable changes which can be seen with the laryngoscope, but the later formidable symptoms generally considered tantamount to a death sentence to the patient. The symptoms of early laryngeal tuberculosis are limited in number and not so valuable as the signs. The earliest is usually a mere weakening of the voice, which may appear long before hoarseness is noted. Next to this he would note a sense of dryness in the throat followed by a localized tickling or pricking. Pain on swallowing is not usually an early symptom in his experience. The subjective symptoms, however, are relatively unimportant as compared with the objective signs. He has not found pallor of the mucous membrane often as an early sign, and he believes that catarrh with hyperemia is usually the first sign, though it is not diagnostic. It is only when it becomes unilateral and persistent that it becomes really suspicious. An obstinate patchy catarrh confined to one cord is highly suspicious, and in a patient whose lungs are tuberculous may be safely counted as tuberculous itself. Next to this he would note as significant a grayish wrinkling of the posterior commissure, which he thinks is the commonest early finding, but it is not diagnostic. The earliest real diagnostic symptom is, in his experience, a table-like elevation of the mucous membrane in the posterior commissure, and this he believes is pathognomonic. These tend to break down into ulcers and, with their abundant granulations, they may pass for tuberculomata. Next as a site of early changes is the vocal process, the posterior insertion of one cord or the body of the cord itself, where ulcers tend to appear which may be scattered along the edge. He finds some involvement of the arytenoid region very early in the disease, localized congestions or thickenings. Thickening of the ary-epiglottic folds is a more advanced change, but when present is pathognomonic. Another early change, though a rare one, is the protrusion of a small point of red granulation beneath the anterior commissure, and when seen its diagnostic value is great. In the therapeutics of this stage Minor insists first on absolute rest of the voice, not allowing even whispering; next, the avoidance of all irritants, especially smoking, and third, cleanliness; fourth, the use of astringents. He warns untrained physicians against resorting to endolaryngeal applications with the cotton-tipped laryngeal sound in the treatment of ulcerations. They should be used only by the expert.

BROMIDES IN EPILEPSY. Dr. Wm. Lee-son thus summarizes his views as to the value of

this form of medication in a paper in *American Medicine* for April, 1910.

(1) The value of the bromides in epilepsy has been greatly overrated.

(2) The dosage commonly employed is not only excessive, but deleterious when its administration is prolonged.

(3) Small doses produce as good results as larger ones.

(4) Half of our favorable cases responded to treatment without any bromide being prescribed.

(5) When employed without ordering a salt free diet the use of the bromides is almost valueless.

(6) Any decided amount of salt in the blood acts as an irritant to the cerebrum and increases the frequency and severity of the attacks.

(7) While we do not know why the exclusion of salt from our patients' diet is so beneficial in the treatment of epilepsy, we do know that equally brilliant results are obtained by its prohibition in chorea.

(8) Less than 10 per cent of all cases of epilepsy are curable and only 50 per cent of carefully selected cases were benefited by prolonged treatment.

(9) The writer does not presume to explain the brilliant results obtained in cases 1 and 2 and in many others that responded similarly to treatment.

TONSILLAR HEMORRHAGE—SURGICAL TREATMENT.—JACKSON (*Annals of Surgery*), December, 1907) concludes after a study of this subject that tonsillectomy is less likely to be followed by hemorrhage than tonsillotomy.

Oozing after tonsillectomy is exceedingly rare. It is bleeding from a vessel concealed back of the anterior pillar that is usually mistaken for oozing.

The use of ice to the neck and face, or locally over the wound, and other hemostatics, is unsurpassed and liable to be followed by secondary hemorrhage.

A gauze sponge pushed into the cavity left by the removal of the tonsil will stop slight bleeding, but should never be used when the bleeding is from a vessel large enough to be twisted. If there is not a sufficient cavity to permit the retention by the anterior and posterior pillars of a gauze sponge the size of a walnut the tonsil is not all out, and the operation is incomplete.

Hemostasis with hemostats, promptly done while the vessels are plainly visible by their bleeding immediately after they are severed, promptly arrests hemorrhage and the torsion forestalls secondary hemorrhage.

Any hemorrhage not controllable by torsion can be and should be immediately stopped by rendering the whole area anemic by the ligation of the external carotid artery.

An anterior pillar retractor and a few long hemostats are an absolute essential to every tonsillectomy armamentarium.

SYPHILIS AND NICOTINE AS FACTORS IN CARDIOVASCULAR DISEASE—Paper read before Med. Soc. of Virginia, Oct., 1910, by Alex. G. Brown, Jr., M.D., of Richmond, pub. in *Virginia Med. Semi-Monthly*.

Brown calls attention to those cases in which syphilitic infection has produced various cardiovascular changes and in which sudden death is to be feared, particularly when there is concurrent acute disease, as influenza, pneumonia, pleurisy, typhoid, etc., by these cases the remedies ordinarily used may prove not only useless, but actually harmful. Changes in the heart and arteries are to be looked for early in syphilitic infection.

“Nicotine poisoning in confirmed middle-aged tobacco users shows itself in the form of a stenocardia, or angina pectoris. Such cardiac symptoms are accompanied by tachycardia, palpitation, precordial pain and irregularity in heart action.”

G. D. L.

Preparatory to, and following, operations upon the brain or spinal cord hexamethylenamin (“urotropin”) should be administered in liberal doses; Crowe has shown that formaldehyde then appears in the cerebrospinal fluid, and thereby minimizes the danger of infection.—*American Journal of Surgery*.

MEDICAL EDITORS TO MEET IN LOS ANGELES, CAL.

The 42nd Annual Meeting of the American Medical Editors' Association will be held at the Alexandria Hotel, Los Angeles, on June 26th and 27th, under the Presidency of Dr. J. McDonald, Jr., of New York, with the annual banquet on the evening of Monday, June 26th, at the above hotel. Among the papers to be presented at this meeting are the following, all of which are of interest to Medical Editors, and all doctors who are journalistically interested are invited to attend this session. “Relation of the Medical Press to the Public Health and Marine Hospital Service” by Walter Wyman, Surgeon General. “The Advisability of Newspapers and Magazines Having Medical Editors on their Staff” by Edgar A. Vander Veer, M.D. “Some Things I Have Learned As a Western Medical Editor” by Edward C. Hill, M.D. “Some Elements of Success in Medical Journalism” by J. M. French, M.D. “The Medical Reporter from His Own Standpoint” by E. Franklin Smith, M.D. “Physical Therapeutics in the Medical Press” by Arnold Snow, M.D. “What Shall We Publish?” by J. R. Phelan, M.D. “The Extension of Advertising in Medical Journals” by S. DeWitt Clough. “Medical Expert Testimony” by R. B. H. Gradwohl, M.D. “The Hospital Bulletin as a Factor in Medical Journalism” by George W. Kosmac, M.D. “The Literary Side of Medical Journalism” by T. D. Crothers, M.D. “Private Owned Medical Journals” by Henry F. Coe, M.D. “The Influence of Medical Journalism for Medical Progress” by W. Benham Snow, M.D. “Editorial Independence” by T. G. Atkinson, M.D.

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